

## Compilation of Changes to the CPC Scheme Between 2022.02 and 2022.05

### Presentation Details

- |   |  |
|---|--|
| Entries for new symbols and headings:     | <i>Black text in italics</i>                           |
| Entries for existing symbols and headings |  |
| —text insertions:                         | <i>Green text in italics with yellow background</i>    |
| —text deletions:                          | <del>Red strikethrough text with grey background</del> |
| Entries for deleted symbols and headings: | <del>Black strikethrough text</del>                    |
- Entries arranged by project.
  - In cases when the originating project cannot be found, "N/A" is given for the Project information (e.g. the change could be due to an Editorial Correction).
  - Projects ending in "-F" indicate finalisation after reclassification was completed.

### Project: MP10318 (C12N)

M C12N

**MICROORGANISMS OR ENZYMES; COMPOSITIONS THEREOF; PROPAGATING, PRESERVING, OR MAINTAINING MICROORGANISMS; MUTATION OR GENETIC ENGINEERING; CULTURE MEDIA (microbiological testing media [C12Q 1/00](#))**

#### NOTE

1. Attention is drawn to Notes (1) to (3) following the title of class [C12](#).
2. Biocidal, pest repellent, pest attractant or plant growth regulatory activity of compounds or preparations is further classified in subclass [A01P](#).
3. Therapeutic activity of single-cell proteins or enzymes is further classified in subclass [A61P](#).
4. When classifying in this subclass, classification is also made in group [B01D 15/08](#) insofar as subject matter of general interest relating to chromatography is concerned.
1. Documents relating to the use of vectors or hosts for the preparation of specific peptides, e.g. enzymes, are classified in subclass [C07K](#) or in group [C12N 9/00](#) according to the peptides, with the appropriate indexing codes.
5. In this subclass, it is desirable to add the indexing codes of subclass [C12R](#).
2. Attention is drawn to Notes (1) to (3) following the title of Class [C12](#).
3. When classifying in this group, classification is also made in group [B01D 15/08](#) insofar as subject matter of general interest relating to chromatography is concerned.
6. {Documents relating to the use of vectors or hosts for the preparation of specific peptides, e.g. enzymes, are classified in subclass [C07K](#) or in group [C12N 9/00](#) according to the peptides, with the appropriate indexing codes.}
7. {In this subclass, combination sets [C-Sets] are used. The detailed information about the C-Sets construction and the associated syntax rules is present in the definitions of [C12N](#).}

#### WARNINGS

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

<a href="#">C12N 1/11</a>	covered by	<a href="#">C12N 15/79</a>
<a href="#">C12N 1/13</a>	covered by	<a href="#">C12N 15/79</a>
<a href="#">C12N 1/15</a>	covered by	<a href="#">C12N 15/80</a>
<a href="#">C12N 1/19</a>	covered by	<a href="#">C12N 15/81</a>
<a href="#">C12N 1/21</a>	covered by	<a href="#">C12N 15/74</a>
<a href="#">C12N 5/02</a>	covered by	<a href="#">C12N 5/0006</a> , <a href="#">C12N 5/04</a> - <a href="#">C12N 5/166</a>
<a href="#">C12N 5/07</a> - <a href="#">C12N 5/095</a>	covered by	<a href="#">C12N 5/06</a>

C12N 5/18	covered by	<a href="#">C12N 5/16</a>
C12N 5/20	covered by	<a href="#">C12N 5/163</a>
C12N 5/22	covered by	<a href="#">C12N 5/16</a>
C12N 5/24	covered by	<a href="#">C12N 5/163</a>
C12N 5/26	covered by	<a href="#">C12N 5/166</a>
C12N 5/28	covered by	<a href="#">C12N 5/166</a>
C12N 15/53	covered by	<a href="#">C12N 9/0004</a>
C12N 7/01	covered by	<a href="#">C12N 7/00</a>
C12N 9/02-C12N 9/08	covered by	<a href="#">C12N 9/0004</a>
C12N 9/26	covered by	<a href="#">C12N 9/2408</a>
C12N 9/28-C12N 9/30	covered by	<a href="#">C12N 9/2414</a> - <a href="#">C12N 9/242</a>
C12N 9/32	covered by	<a href="#">C12N 9/2422</a>
C12N 9/34	covered by	<a href="#">C12N 9/2428</a>
C12N 9/36	covered by	<a href="#">C12N 9/2462</a>
C12N 9/38	covered by	<a href="#">C12N 9/2468</a>
C12N 9/40	covered by	<a href="#">C12N 9/2465</a>
C12N 9/42	covered by	<a href="#">C12N 9/2434</a>
C12N 9/44	covered by	<a href="#">C12N 9/2451</a>
C12N 9/46	covered by	<a href="#">C12N 9/2454</a>
C12N 9/56	covered by	<a href="#">C12N 9/54</a>
C12N 9/66	covered by	<a href="#">C12N 9/6448</a>
C12N 9/68	covered by	<a href="#">C12N 9/6435</a>
C12N 9/70	covered by	<a href="#">C07K 14/3153</a>
C12N 9/72	covered by	<a href="#">C12N 9/6462</a>
C12N 9/74	covered by	<a href="#">C12N 9/6429</a>
C12N 9/76	covered by	<a href="#">C12N 9/6427</a>
C12N 15/05	covered by	<a href="#">C12N 5/14</a>
C12N 15/06	covered by	<a href="#">C12N 5/16</a>
C12N 15/07	covered by	<a href="#">C12N 5/16</a>
C12N 15/08	covered by	<a href="#">C12N 5/166</a>
C12N 15/12	covered by	<a href="#">C07K 14/435</a>
C12N 15/13	covered by	<a href="#">C07K 16/00</a>
C12N 15/14	covered by	<a href="#">C07K 14/765</a>
C12N 15/15	covered by	<a href="#">C07K 14/81</a>
C12N 15/16	covered by	<a href="#">C07K 14/575</a>
C12N 15/17	covered by	<a href="#">C07K 14/62</a>
C12N 15/18	covered by	<a href="#">C07K 14/61</a>
C12N 15/19	covered by	<a href="#">C07K 14/52</a>
C12N 15/20	covered by	<a href="#">C07K 14/555</a>
C12N 15/21	covered by	<a href="#">C07K 14/56</a>
C12N 15/22	covered by	<a href="#">C07K 14/565</a>
C12N 15/23	covered by	<a href="#">C07K 14/57</a>
C12N 15/24	covered by	<a href="#">C07K 14/54</a>
C12N 15/25	covered by	<a href="#">C07K 14/545</a>
C12N 15/26	covered by	<a href="#">C07K 14/55</a>
C12N 15/27	covered by	<a href="#">C07K 14/53</a>
C12N 15/28	covered by	<a href="#">C07K 14/525</a>
C12N 15/29	covered by	<a href="#">C07K 14/415</a>
C12N 15/30	covered by	<a href="#">C07K 14/44</a>
C12N 15/31	covered by	<a href="#">C07K 14/195</a> , <a href="#">C07K 14/005</a>
C12N 15/32	covered by	<a href="#">C07K 14/325</a>

C12N 15/33	covered by	<a href="#">C07K 14/005</a>
C12N 15/34	covered by	<a href="#">C07K 14/01</a>
C12N 15/35	covered by	<a href="#">C07K 14/015</a>
C12N 15/36	covered by	<a href="#">C07K 14/02</a>
C12N 15/37	covered by	<a href="#">C07K 14/025</a>
C12N 15/38	covered by	<a href="#">C07K 14/03</a>
C12N 15/39	covered by	<a href="#">C07K 14/065</a>
C12N 15/40	covered by	<a href="#">C07K 14/08</a>
C12N 15/41	covered by	<a href="#">C07K 14/085</a>
C12N 15/42	covered by	<a href="#">C07K 14/09</a>
C12N 15/43	covered by	<a href="#">C07K 14/105</a>
C12N 15/44	covered by	<a href="#">C07K 14/11</a>
C12N 15/45	covered by	<a href="#">C07K 14/115</a>
C12N 15/46	covered by	<a href="#">C07K 14/14</a>
C12N 15/47	covered by	<a href="#">C07K 14/145</a>
C12N 15/48	covered by	<a href="#">C07K 14/15</a>
C12N 15/49	covered by	<a href="#">C07K 14/155</a>
C12N 15/50	covered by	<a href="#">C07K 14/165</a>
C12N 15/51	covered by	<a href="#">C07K 14/02</a> , <a href="#">C07K 14/10</a> , <a href="#">C07K 14/18</a>
C12N 15/53	covered by	<a href="#">C12N 9/0004</a>
C12N 15/54	covered by	<a href="#">C12N 9/10</a>
C12N 15/55	covered by	<a href="#">C12N 9/14</a>
C12N 15/56	covered by	<a href="#">C12N 9/24</a>
C12N 15/57	covered by	<a href="#">C12N 9/48</a>
C12N 15/58	covered by	<a href="#">C12N 9/6456</a>
C12N 15/59	covered by	<a href="#">C12N 9/6483</a>
C12N 15/60	covered by	<a href="#">C12N 9/88</a>
C12N 15/61	covered by	<a href="#">C12N 9/90</a>
C12N 15/83	covered by	<a href="#">C12N 15/82</a>
C12N 15/84	covered by	<a href="#">C12N 15/82</a>

2. In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

## U C12N 5/00

**Undifferentiated human, animal or plant cells, e.g. cell lines; Tissues; Cultivation or maintenance thereof; Culture media therefor; (plant reproduction by tissue culture techniques [A01H 4/00](#))**

### NOTE

In this group, the following words are used with the meanings indicated:

- a "totipotent" cell can differentiate into all somatic lineages (ectoderm, mesoderm, endoderm), the germ line and extra-embryonic tissues such as the placenta;
- a "pluripotent" cell is a somatic stem cell which can differentiate into cells of at least two of the three somatic lineages (ectoderm, mesoderm, endoderm);
- a "multipotent" cell is restricted to one lineage;
- "progenitor" and "precursor" cells are further restricted within the lineage. If not explicitly foreseen, totipotent cells are classified with pluripotent cells. Multipotent cells should not be classified with pluripotent cells. Unless provided for otherwise, committed progenitors are classified with their progeny.

M	C12N 5/06	<ul style="list-style-type: none"> <li>{Animal cells or tissues; Human cells or tissues (preservation of living cells or tissues <a href="#">A01N 1/02</a>)}</li> </ul> <p><b>NOTE</b></p> <p>{In this group, the following words are used with the meanings indicated:</p> <ul style="list-style-type: none"> <li>a "totipotent" cell can differentiate into all somatic lineages (ectoderm, mesoderm, endoderm), the germ line and extra-embryonic tissues such as the placenta;</li> <li>a "pluripotent" cell is a somatic stem cell which can differentiate into cells of at least two of the three somatic lineages (ectoderm, mesoderm, endoderm);</li> <li>a "multipotent" cell is restricted to one lineage.</li> </ul> <p>"Progenitor" and "precursor" cells are further restricted within the lineage. If not explicitly foreseen, totipotent cells are classified with pluripotent cells. Multipotent cells should not be classified with pluripotent cells. <i>The last place priority rule does not apply between the subgroups of this group</i></p>
U	C12N 15/00	<p><b>Mutation or genetic engineering; DNA or RNA concerning genetic engineering, vectors, e.g. plasmids, or their isolation, preparation or purification; Use of hosts therefor (mutants or genetically engineered microorganisms, per se <a href="#">C12N 1/00</a>, <a href="#">C12N 5/00</a>, <a href="#">C12N 7/00</a>; new plants per se <a href="#">A01H</a>; plant reproduction by tissue culture techniques <a href="#">A01H 4/00</a>; new animals per se <a href="#">A01K 67/00</a>; use of medicinal preparations containing genetic material which is inserted into cells of the living body to treat genetic diseases, gene therapy <a href="#">A61K 48/00</a>)</b></p>
U	C12N 15/09	<ul style="list-style-type: none"> <li>Recombinant DNA-technology</li> </ul>
M	C12N 15/10	<ul style="list-style-type: none"> <li>Processes for the isolation, preparation or purification of DNA or RNA (chemical preparation of DNA or RNA <a href="#">C07H 21/00</a>; preparation of non-structural polynucleotides from microorganisms or with enzymes <a href="#">C12P 19/34</a>)</li> </ul> <p><b>NOTE</b></p> <p><i>After the symbol C12N 15/10 – C12N 15/1096, and separated therefrom by a + sign, it is desirable to add the indexing codes selected from groups C12Q 2500/00 – C12Q 2565/634, relating to relevant technical features of the invention. When more than one indexing code is selected, the different codes are separated by a + sign. Example : C12N 15/1037 + C12Q 2537/125 + C12Q 2521/537</i></p> <p><i>{In groups C12N 15/10 - C12N 15/1096, C-Sets are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Definitions of C12N}.</i></p>
U	C12N 15/63	<ul style="list-style-type: none"> <li>Introduction of foreign genetic material using vectors; Vectors; Use of hosts therefor; Regulation of expression</li> </ul>
M	C12N 15/64	<ul style="list-style-type: none"> <li>General methods for preparing the vector, for introducing it into the cell or for selecting the vector-containing host</li> </ul> <p><b>NOTE</b></p> <p><i>{In the group C12N 15/64, C-Sets are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Definitions of C12N}</i></p>
M	C12N 15/65	<ul style="list-style-type: none"> <li>using markers (enzymes used as markers <a href="#">C12N 15/52</a>)</li> </ul> <p><b>NOTE</b></p> <p><i>{In the group C12N 15/65, C-Sets are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Definitions of C12N}</i></p>

M C12N 15/66

- • • General methods for inserting a gene into a vector to form a recombinant vector using cleavage and ligation; Use of non-functional linkers or adaptors, e.g. linkers containing the sequence for a restriction endonuclease

NOTE

1. In this group, the following expression is used with the meaning indicated:

- "non-functional linkers" means DNA sequences which are used to link DNA sequences and which have no known function of structural gene or regulating function.

2. *{In the group C12N 15/66, C-Sets are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Definitions of C12N}*

M C12N 2310/00

**Structure or type of the nucleic acid**NOTE

*In groups C12N 2310/00 - C12N 2310/533, C-Sets are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Definitions of C12N.*

**Project: MP10319 (C12Q)**

M C12Q

**MEASURING OR TESTING PROCESSES INVOLVING ENZYMES, NUCLEIC ACIDS OR MICROORGANISMS (immunoassay [G01N 33/53](#)); COMPOSITIONS OR TEST PAPERS THEREFOR; PROCESSES OF PREPARING SUCH COMPOSITIONS; CONDITION-RESPONSIVE CONTROL IN MICROBIOLOGICAL OR ENZYMOLOGICAL PROCESSES**

NOTES

1. This subclass does not cover the observation of the progress or of the result of processes specified in this subclass by any of the methods specified in groups [G01N 3/00](#) - [G01N 29/00](#), which is covered by subclass [G01N](#).
2. In this subclass, the following expression is used with the meaning indicated: "involving", when used in relation to a substance, includes the testing for the substance as well as employing the substance as a determinant or reactant in a test for a different substance.
3. Attention is drawn to Notes (1) to (3) following the title of class [C12](#).
4. In this subclass, test media are classified in the appropriate group for the relevant test process.

~~5. Documents describing the use of an electrode for analysis of a specific analyte are classified in C12Q 1/001 or subgroups and not according to the last place rule~~

~~6. Documents relating to new peptides, e.g. enzymes, or new DNA or its corresponding mRNA, encoding for the peptides, and their use in measuring or testing processes are classified in subclass C07K or in group C12N 9/00 according to the peptides, with the appropriate indexing codes relating to their use in diagnostics. However where the new nucleic acids are principally used in~~

diagnostic processes, e.g. PCR, hybridisation reactions, the documents are also classified in group C12Q 1/68

5. In this subclass, it is desirable to add the indexing codes of subclass C12R.

7. When classifying in groups C12Q 1/68 - C12Q 1/70 it is desirable to classify with symbols from groups C12Q 2500/00 - C12Q 2565/634, relating to relevant technical features of the invention, using Combination Sets.

6. {Documents describing the use of an electrode for analysis of a specific analyte are classified in C12Q 1/001 or subgroups and not according to the last place rule.}

8-7. In groups {Documents C12Q 1/6876 - relating to C12Q 1/6895 new peptides, e.g. enzymes, or new DNA or its corresponding mRNA, encoding for the peptides, and C12Q 1/70 - their use C12Q 1/708 it is desirable in measuring or testing processes are classified in subclass to add the C07K or in group C12N 9/00 according to the peptides, with the appropriate indexing codes C12Q 2600/00 - relating to C12Q 2600/178 which reflect the use of the product in combination with the virus groups only if the application refers to products their use in diagnostics. However, where the new nucleic acids are principally used in diagnostic processes, e.g. PCR, hybridisation reactions, the documents are also classified in group C12Q 1/68.}

8. {In groups C12Q 1/6876 - C12Q 1/6895 and C12Q 1/701 - C12Q 1/708 it is compulsory to add the indexing codes C12Q 2600/00 - C12Q 2600/178 which reflect the use of the product in combination with the virus groups only if the document relates to products.}

9. {In this subclass, combination sets [C-Sets] are used. The detailed information about the C-Sets construction and the associated syntax rules is present in the definitions of C12Q.}

#### WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

#### M C12Q 1/00

**Measuring or testing processes involving enzymes, nucleic acids or microorganisms (measuring or testing apparatus with condition measuring or sensing means, e.g. colony counters, C12M 1/34); Compositions therefor; Processes of preparing such compositions**

#### NOTE

{In this group, C-Sets are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Definitions of C12Q.}

#### M C12Q 1/68

- involving nucleic acids

#### NOTE

1. In this group, classification is made according to the most relevant feature irrespective of the last place priority rule.

2. {In groups C12Q 1/68 - C12Q 1/6874, and C12Q 1/6897, C-Sets are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Definitions of C12Q.}

#### M C12Q 1/70

- involving virus or bacteriophage {(immunoassay for viruses G01N 33/56983)}

#### NOTES

1. {In this group, classification is made according to the most relevant feature irrespective of the last place priority rule.}

2. {In this group, C-Sets are used for classification. The detailed information about the C-Sets construction and the associated syntax rules are found in the Definitions of C12Q.}



**M C12Q 2500/00 Analytical methods involving nucleic acids****NOTE**

*Indexing codes C12Q 2500/00 - C12Q 2565/634 are only used as subsequent symbols in C-Sets and are not allocated as single symbols. The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C12Q.*

**Project: MP10320 (H03C)****M H03C**

**MODULATION** (~~measuring, testing G01R;~~ masers; ~~or~~ lasers **H01S**; ~~modulators specially adapted for use in the amplifiers H03F 3/38; modulating pulses H03K 7/00; so-called modulators capable only of a switching between predetermined states of amplitude, frequency or phase H03K 17/00, H04L~~; coding, decoding or code conversion, ~~in general H03M~~; ~~synchronous modulators specially adapted for colour television H04N 9/65~~)

**NOTES**

1. This subclass covers only modulation, keying, or interruption of sinusoidal oscillations or electromagnetic waves, the modulating signal having any desired waveform.
2. In this subclass, circuits usable both as modulator and demodulator are classified in the group dealing with the type of modulator involved.

**WARNING**

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

**H03C 1/38 - H03C 1/44** covered by **H03C 1/36**

2. ~~In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.~~

**U H03C 1/00**

**Amplitude modulation** (**H03C 5/00, H03C 7/00** take precedence)

**M H03C 1/46**

- Modulators with mechanically ~~or acoustically~~-driven ~~or acoustically~~-driven parts

**M H03C 1/52**

- Modulators in which carrier or one ~~side-band are~~ **sideband is** wholly or partially suppressed (**H03C 1/28 - H03C 1/34, H03C 1/46, H03C 1/48** take precedence)

**M H03C 1/54**

- • Balanced modulators, e.g. bridge type, ring type; ~~or~~ double balanced type

**U H03C 3/00**

**Angle modulation** (**H03C 5/00, H03C 7/00** take precedence)

**U H03C 3/02**

- Details

**M H03C 3/06**

- • Means for changing frequency deviation-~~{(for demodulation H03D 3/003, H03D 3/242)}~~

**M H03C 7/00**

**Modulating electromagnetic waves** (~~modulating light G02F 1/00; for generating oscillations H03B, H03K~~ **devices or arrangements for the modulation of light G02F 1/00**)

**M H03C 7/02**

- in transmission ~~line, waveguide, cavity resonator or radiation field of antenna~~ **lines, waveguides, cavity resonators or radiation fields of antennas**

**Project: MP10326 (H04L)****U H04L 25/00**

**Baseband systems**

**M H04L 25/02**

- Details ~~{(in-line transmission systems H04B 3/02); Arrangements~~ **arrangements** for supplying electrical power along data transmission lines (systems for transmitting signals via power distribution lines **H04B 3/54**)}

- M H04L 25/03
- Shaping networks in transmitter or receiver, e.g. adaptive shaping networks ~~for Receiver-end arrangements for processing baseband signals~~
- U H04L 27/00** **Modulated-carrier systems**
- U H04L 27/10
- Frequency-modulated carrier systems, i.e. using frequency-shift keying ([H04L 27/32](#) takes precedence)
- M H04L 27/103
- {Chirp modulation (for spread spectrum techniques [H04B 1/69](#); ~~for spread spectrum using chirp H04B 2001/6912~~)}
- M H04L 27/12
- Modulator circuits; Transmitter circuits ~~{continuous phase modulation H04L 27/20}~~
- M H04L 27/14
- Demodulator circuits; Receiver circuits ~~{for continuous phase modulation systems H04L 27/22}~~

**Project: MP10329 (F24C)**

- M F24C 13/00** **Stoves or ranges with additional provisions for heating water** ~~(mounting arrangements of water heaters or water-heating elements F24H 1/00)~~
- U F24C 15/00** **Details**
- U F24C 15/02
- Doors specially adapted for stoves or ranges
- M F24C 15/021
- {sealings for doors or transparent ~~panels~~ *panel*} ~~{sealings for wings in general E06B 7/16}~~
- M F24C 15/022
- {Latches ~~(in general E05C)~~}
- M F24C 15/023
- {Mounting of doors, e.g. hinges, counterbalancing ~~(in general E05D, E05F)~~}
- M F24C 15/024
- {Handles ~~(in general E05B)~~}
- U F24C 15/20
- Removing cooking fumes (parts, details or accessories of cooking-vessels for withdrawing or condensing cooking vapours from such vessels [A47J 36/38](#))
- M F24C 15/2042
- {Devices for removing cooking fumes structurally associated with a cooking range *e.g. downdraft* ([F24C 15/2007](#) takes precedence)}

**Project: RP0318-F (G03G)**

- U G03G 9/00** **Developers**
- U G03G 9/08
- with toner particles
- NOTES
1. In the subgroups of {[G03G 9/0802](#) - [G03G 9/1355](#)}, the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the last appropriate place.
2. {In the subgroups of [G03G 9/0835](#) - [G03G 9/0839](#), [G03G 9/08786](#) - [G03G 9/08797](#), [G03G 9/0926](#) - [G03G 9/0928](#) and [G03G 9/10](#) - [G03G 9/10884](#) the common rule is applied.}
- M G03G 9/10
- characterised by carrier particles
- WARNING**  
Group G03G 9/10 is impacted by reclassification into group G03G 9/103. Groups G03G 9/10 and G03G 9/103 should be considered in order to perform a complete search.
- M G03G 9/103
- {Glass particles}
- WARNING**  
Group G03G 9/103 is incomplete pending reclassification of documents from group G03G 9/10.



Groups G03G 9/10 and G03G 9/103 should be considered in order to perform a complete search.

M G03G 9/107

- • • having magnetic components

**WARNING**

Group G03G 9/107 is impacted by reclassification into groups G03G 9/1075 - G03G 9/10884.

All groups listed in this Warning should be considered in order to perform a complete search.

M G03G 9/1075

- • • {Structural characteristics of the carrier particles, e.g. shape or crystallographic structure}

**WARNING**

Group G03G 9/1075 is incomplete pending reclassification of documents from group G03G 9/107.

Groups G03G 9/107 and G03G 9/1075 should be considered in order to perform a complete search.

M G03G 9/108

- • • {Ferrite carrier, e.g. magnetite}

**WARNING**

Groups G03G 9/108 - G03G 9/1085 are incomplete pending reclassification of documents from group G03G 9/107.

Groups G03G 9/107 and G03G 9/108 - G03G 9/1085 should be considered in order to perform a complete search.

M G03G 9/1087

- • • {Specified elemental magnetic metal or alloy, e.g. alnico comprising iron, nickel, cobalt, and aluminum, or permalloy comprising iron and nickel}

**WARNING**

Group G03G 9/1087 is incomplete pending reclassification of documents from group G03G 9/107.

Groups G03G 9/107 and G03G 9/1087 should be considered in order to perform a complete search.

M G03G 9/1088

- • • {Binder-type carrier}

**WARNING**

Groups G03G 9/1088 - G03G 9/10884 are incomplete pending reclassification of documents from group G03G 9/107.

All groups listed in this Warning should be considered in order to perform a complete search.

**Project: RP0344-F (C25D)**

M C25D 5/00

**Electroplating characterised by the process; Pretreatment or after-treatment of workpieces**

**WARNING**

Group C25D 5/00 is impacted by reclassification into groups C25D 5/60, C25D 5/605, C25D 5/611, C25D 5/615, C25D 5/617, C25D 5/619, C25D 5/623, C25D 5/625, C25D 5/627, and C25D 5/67.

All groups listed in this Warning should be considered in order to perform a complete search.

D	C25D 5/006 —(Frozen)	<ul style="list-style-type: none"> <li>• {Electroplating with applied electromagnetic field, not locally, e.g. for plating magnetic layers}</li> </ul> <p><u>WARNING</u> Group C25D 5/006 is no longer used for the classification of documents as of August 1, 2020. The content of this group is being reclassified into groups C25D 5/007, C25D 5/009, C25D 5/011, and C25D 5/013. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	C25D 5/007	<ul style="list-style-type: none"> <li>• {Electroplating using magnetic fields, e.g. magnets}</li> </ul> <p><u>WARNING</u> Group C25D 5/007 is incomplete pending reclassification of documents from group C25D 5/006. Groups C25D 5/006 and C25D 5/007 should be considered in order to perform a complete search.</p>
M	C25D 5/009	<ul style="list-style-type: none"> <li>• {Deposition of ferromagnetic material}</li> </ul> <p><u>WARNING</u> Group C25D 5/009 is incomplete pending reclassification of documents from group C25D 5/006. Groups C25D 5/006 and C25D 5/009 should be considered in order to perform a complete search.</p>
M	C25D 5/011	<ul style="list-style-type: none"> <li>• {Electroplating using electromagnetic wave irradiation (using locally applied electromagnetic radiation <a href="#">C25D 5/024</a>)}</li> </ul> <p><u>WARNING</u> Group C25D 5/011 is incomplete pending reclassification of documents from group C25D 5/006. Groups C25D 5/006 and C25D 5/011 should be considered in order to perform a complete search.</p>
M	C25D 5/013	<ul style="list-style-type: none"> <li>• {Wavelengths other than ultra-violet [UV], visible or infra-red [IR], e.g. X-rays or microwaves}</li> </ul> <p><u>WARNING</u> Group C25D 5/013 is incomplete pending reclassification of documents from group C25D 5/006. Groups C25D 5/006 and C25D 5/013 should be considered in order to perform a complete search.</p>
M	C25D 5/08	<ul style="list-style-type: none"> <li>• Electroplating with moving electrolyte e.g. jet electroplating {(using locally applied jets of electrolyte <a href="#">C25D 5/026</a>)}</li> </ul> <p><u>WARNING</u> Group C25D 5/08 is impacted by reclassification into groups C25D 5/60, C25D 5/605, C25D 5/611, C25D 5/615, C25D 5/617, C25D 5/619, C25D 5/623, C25D 5/625, and C25D 5/627. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	C25D 5/10	<ul style="list-style-type: none"> <li>• Electroplating with more than one layer of the same or of different metals (for bearings <a href="#">C25D 7/10</a>)</li> </ul> <p><u>WARNING</u> Group C25D 5/10 is impacted by reclassification into groups C25D 5/60, C25D 5/605, C25D 5/611, C25D 5/615, C25D 5/617, C25D 5/619, C25D 5/623, C25D 5/625, and C25D 5/627.</p>

All groups listed in this Warning should be considered in order to perform a complete search.

M C25D 5/12

- at least one layer being of nickel or chromium

**WARNING**

Group C25D 5/12 is impacted by reclassification into groups C25D 5/60; C25D 5/605, C25D 5/611, C25D 5/615, C25D 5/617, C25D 5/619; C25D 5/623, C25D 5/625, and C25D 5/627.

All groups listed in this Warning should be considered in order to perform a complete search.

M C25D 5/14

- two or more layers being of nickel or chromium, e.g. duplex or triplex layers

**WARNING**

Group C25D 5/14 is impacted by reclassification into groups C25D 5/60; C25D 5/605, C25D 5/611, C25D 5/615, C25D 5/617, C25D 5/619; C25D 5/623, C25D 5/625, and C25D 5/627.

All groups listed in this Warning should be considered in order to perform a complete search.

M C25D 5/16

- Electroplating with layers of varying thickness

**WARNING**

Group C25D 5/16 is impacted by reclassification into groups C25D 5/60; C25D 5/605, C25D 5/611, C25D 5/615, C25D 5/617, C25D 5/619, C25D 5/623; C25D 5/625, and C25D 5/627.

All groups listed in this Warning should be considered in order to perform a complete search.

M C25D 5/18

- Electroplating using modulated, pulsed or reversing current

**WARNING**

Group C25D 5/18 is impacted by reclassification into groups C25D 5/60; C25D 5/605, C25D 5/611, C25D 5/615, C25D 5/617, C25D 5/619, C25D 5/623; C25D 5/625, and C25D 5/627.

All groups listed in this Warning should be considered in order to perform a complete search.

M C25D 5/20

- Electroplating using ultrasonics {, vibrations}

**WARNING**

Group C25D 5/20 is impacted by reclassification into groups C25D 5/60; C25D 5/605, C25D 5/611, C25D 5/615, C25D 5/617, C25D 5/619, C25D 5/623; C25D 5/625, and C25D 5/627.

All groups listed in this Warning should be considered in order to perform a complete search.

M C25D 5/22

- Electroplating combined with mechanical treatment during the deposition

**WARNING**

Group C25D 5/22 is impacted by reclassification into groups C25D 5/60; C25D 5/605, C25D 5/611, C25D 5/615, C25D 5/617, C25D 5/619, C25D 5/623; C25D 5/625, and C25D 5/627.

All groups listed in this Warning should be considered in order to perform a complete search.

M C25D 5/60

- {Electroplating characterised by the structure or texture of the layers}

**WARNING**

Group C25D 5/60 is incomplete pending reclassification of documents from groups C25D 5/00, C25D 5/08, C25D 5/10, C25D 5/12, C25D 5/14, C25D 5/16; C25D 5/18, C25D 5/20, and C25D 5/22.

All groups listed in this Warning should be considered in order to perform a complete search.

- M C25D 5/605      • {Surface topography of the layers, e.g. rough, dendritic or nodular layers}

**WARNING**

Group C25D 5/605 is incomplete pending reclassification of documents from groups C25D 5/00, C25D 5/08, C25D 5/10, C25D 5/12, C25D 5/14, C25D 5/16, C25D 5/18, C25D 5/20, and C25D 5/22.

All groups listed in this Warning should be considered in order to perform a complete search.

- M C25D 5/611      • • {Smooth layers}

**WARNING**

Group C25D 5/611 is incomplete pending reclassification of documents from groups C25D 5/00, C25D 5/08, C25D 5/10, C25D 5/12, C25D 5/14, C25D 5/16, C25D 5/18, C25D 5/20, and C25D 5/22.

All groups listed in this Warning should be considered in order to perform a complete search.

- M C25D 5/615      • {Microstructure of the layers, e.g. mixed structure}

**WARNING**

Group C25D 5/615 is incomplete pending reclassification of documents from groups C25D 5/00, C25D 5/08, C25D 5/10, C25D 5/12, C25D 5/14, C25D 5/16, C25D 5/18, C25D 5/20, and C25D 5/22.

All groups listed in this Warning should be considered in order to perform a complete search.

- M C25D 5/617      • • {Crystalline layers}

**WARNING**

Group C25D 5/617 is incomplete pending reclassification of documents from groups C25D 5/00, C25D 5/08, C25D 5/10, C25D 5/12, C25D 5/14, C25D 5/16, C25D 5/18, C25D 5/20, and C25D 5/22.

All groups listed in this Warning should be considered in order to perform a complete search.

- M C25D 5/619      • • {Amorphous layers}

**WARNING**

Group C25D 5/619 is incomplete pending reclassification of documents from groups C25D 5/00, C25D 5/08, C25D 5/10, C25D 5/12, C25D 5/14, C25D 5/16, C25D 5/18, C25D 5/20, and C25D 5/22.

All groups listed in this Warning should be considered in order to perform a complete search.

- M C25D 5/623      • {Porosity of the layers}

**WARNING**

Group C25D 5/623 is incomplete pending reclassification of documents from groups C25D 5/00, C25D 5/08, C25D 5/10, C25D 5/12, C25D 5/14, C25D 5/16, C25D 5/18, C25D 5/20, and C25D 5/22.

All groups listed in this Warning should be considered in order to perform a complete search.

- M C25D 5/625      • {Discontinuous layers, e.g. microcracked layers}

**WARNING**

Group C25D 5/625 is incomplete pending reclassification of documents from groups C25D 5/00, C25D 5/08, C25D 5/10, C25D 5/12, C25D 5/14, C25D 5/16, C25D 5/18, C25D 5/20, and C25D 5/22.

All groups listed in this Warning should be considered in order to perform a complete search.

- M C25D 5/627
- {Electroplating characterised by the visual appearance of the layers, e.g. colour, brightness or mat appearance}

**WARNING**

Group C25D 5/627 is incomplete pending reclassification of documents from groups C25D 5/00, C25D 5/08, C25D 5/10, C25D 5/12, C25D 5/14, C25D 5/16, C25D 5/18, C25D 5/20, and C25D 5/22.

All groups listed in this Warning should be considered in order to perform a complete search.

- M C25D 5/67
- {Electroplating to repair workpiece}

**WARNING**

Group C25D 5/67 is incomplete pending reclassification of documents from group C25D 5/00.

Groups C25D 5/00 and C25D 5/67 should be considered in order to perform a complete search.

**Project: RP0417-F (B60C)**

- U B60C 23/00
- Devices for measuring, signalling, controlling, or distributing tyre pressure or temperature, specially adapted for mounting on vehicles; Arrangement of tyre inflating devices on vehicles, e.g. of pumps or of tanks; Tyre cooling arrangements**

- U B60C 23/001
- {Devices for manually or automatically controlling or distributing tyre pressure whilst the vehicle is moving}

- M B60C 23/003
- • {comprising rotational joints between vehicle-mounted pressure sources and the tyres}

**WARNING**

Group B60C 23/003 is impacted by reclassification into groups B60C 23/00305 – B60C 23/0039.

All groups listed in this Warning should be considered in order to perform a complete search.

- M B60C 23/00305
- • {Wheel circumventing supply lines, e.g. not through or about the axles}

**WARNING**

Group B60C 23/00305 is incomplete pending reclassification of documents from group B60C 23/003.

Groups B60C 23/003 and B60C 23/00305 should be considered in order to perform a complete search.

- M B60C 23/00309
- • {characterised by the location of the components, e.g. valves, sealings, conduits or sensors}

**WARNING**

Groups B60C 23/00309 – B60C 23/00336 are incomplete pending reclassification of documents from group B60C 23/003.

Groups B60C 23/00309 – B60C 23/00336 should be considered in order to perform a complete search.

- M B60C 23/00345
- • {Details of the rotational joints}

**WARNING**

Groups B60C 23/00345 and B60C 23/00347 are incomplete pending reclassification of documents from group B60C 23/003.

Groups B60C 23/00345, B60C 23/00347 and B60C 23/003 should be considered in order to perform a complete search.

M B60C 23/00354 . . . {Details of valves}

**WARNING**

Group B60C 23/00354 is incomplete pending reclassification of documents from group B60C 23/003.  
Groups B60C 23/00354 and B60C 23/003 should be considered in order to perform a complete search.

M B60C 23/00363 . . . {Details of sealings}

**WARNING**

Group B60C 23/00363 is incomplete pending reclassification of documents from group B60C 23/003.  
Groups B60C 23/00363 and B60C 23/003 should be considered in order to perform a complete search.

M B60C 23/00372 . . . {characterised by fluid diagrams}

**WARNING**

Group B60C 23/00372 is incomplete pending reclassification of documents from group B60C 23/003.  
Groups B60C 23/00372 and B60C 23/003 should be considered in order to perform a complete search.

M B60C 23/00381 . . . {specially adapted for steerable wheels}

**WARNING**

Group B60C 23/00381 is incomplete pending reclassification of documents from group B60C 23/003.  
Groups B60C 23/00381 and B60C 23/003 should be considered in order to perform a complete search.

M B60C 23/0039 . . . {specially adapted for driven wheels}

**WARNING**

Group B60C 23/0039 is incomplete pending reclassification of documents from group B60C 23/003.  
Groups B60C 23/0039 and B60C 23/003 should be considered in order to perform a complete search.

U B60C 23/02 . Signalling devices actuated by tyre pressure {(hand-held tyre pressure gauges [G01L 17/00](#))}

U B60C 23/04 . . . mounted on the wheel or tyre

U B60C 23/0491 . . . {Constructional details of means for attaching the control device}

M B60C 23/0498 . . . . {for rim attachments ([B60C 23/0494](#), [B60C 23/0496](#) take precedence)}

**WARNING**

Group B60C 23/0498 is impacted by reclassification into group B60C 23/04985.  
Groups B60C 23/0498 and B60C 23/04985 should be considered in order to perform a complete search.

M B60C 23/04985 . . . . {using straps surrounding the rims}

**WARNING**

Group B60C 23/04985 is incomplete pending reclassification of documents from group B60C 23/0498.



Groups B60C 23/04985 and B60C 23/0498 should be considered in order to perform a complete search.

- U B60C 23/10      • Arrangement of tyre-inflating pumps mounted on vehicles
- M B60C 23/12      • • operated by a running wheel

WARNING

Group B60C 23/12 is impacted by reclassification into groups B60C 23/121–B60C 23/137.  
All groups listed in this Warning should be considered in order to perform a complete search.

- M B60C 23/121      • • {the pumps being mounted on the tyres}

WARNING

Groups B60C 23/121 – B60C 23/124 are incomplete pending reclassification of documents from group B60C 23/12.  
Groups B60C 23/121 – B60C 23/124 and B60C 23/12 should be considered in order to perform a complete search.

- M B60C 23/126      • • {the pumps being mounted on the wheel rims}

WARNING

Group B60C 23/126 is incomplete pending reclassification of documents from group B60C 23/12.  
Groups B60C 23/126 and B60C 23/12 should be considered in order to perform a complete search.

- M B60C 23/127      • • {the pumps being mounted on the hubs}

WARNING

Group B60C 23/127 is incomplete pending reclassification of documents from group B60C 23/12.  
Groups B60C 23/127 and B60C 23/12 should be considered in order to perform a complete search.

- M B60C 23/129      • • {the pumps being mounted on wheel spokes}

WARNING

Group B60C 23/129 is incomplete pending reclassification of documents from group B60C 23/12.  
Groups B60C 23/129 and B60C 23/12 and B60C 23/129 should be considered in order to perform a complete search.

- M B60C 23/131      • • {activated by force of gravity}

WARNING

Group B60C 23/131 is incomplete pending reclassification of documents from group B60C 23/12.  
Groups B60C 23/131 and B60C 23/12 should be considered in order to perform a complete search.

- M B60C 23/133      • • {activated by centrifugal force}

WARNING

Group B60C 23/133 is incomplete pending reclassification of documents from group B60C 23/12.  
Groups B60C 23/133 and B60C 23/12 should be considered in order to perform a complete search.

- M B60C 23/135      • • • {activated due to tyre deformation}

WARNING

Group B60C 23/135 is incomplete pending reclassification of documents from group B60C 23/12.  
Groups B60C 23/135 and B60C 23/12 should be considered in order to perform a complete search.

- M B60C 23/137      • • • {comprising cam driven pistons}

WARNING

Group B60C 23/137 is incomplete pending reclassification of documents from group B60C 23/12.  
Groups B60C 23/137 and B60C 23/12 should be considered in order to perform a complete search.

**Project: RP0418-F (C08K)**

- U C08K 5/00      Use of organic ingredients**

NOTE

In this group, C-Sets are used. The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of [C08K](#).

- U C08K 5/54      • Silicon-containing compounds {([C08K 5/0091](#) takes precedence)}
- M C08K 5/544      • • containing nitrogen

WARNING

Group C08K 5/544 is impacted by reclassification into group C08K 5/5445.  
Groups C08K 5/544 and C08K 5/5445 should be considered in order to perform a complete search.

- M C08K 5/5445      • • • containing at least one Si-N bond

WARNING

Group C08K 5/5445 is incomplete pending reclassification of documents from group C08K 5/544.  
Groups C08K 5/544 and C08K 5/5445 should be considered in order to perform a complete search.

**Project: RP0421-F (H01M)**

- U H01M 10/00      Secondary cells; Manufacture thereof**

NOTE

In this group, secondary cells are accumulators receiving and supplying electrical energy by means of reversible electrochemical reactions.

- M H01M 10/04      • Construction or manufacture in general ([H01M 10/058](#), [H01M 10/12](#), [H01M 10/28](#), [H01M 10/38](#) take precedence)

WARNING

Group H01M 10/04 is impacted by reclassification into group H01M 10/058.  
Groups H01M 10/04 and H01M 10/058 should be considered in order to perform a complete search.

- U H01M 10/05      • Accumulators with non-aqueous electrolyte ([H01M 10/39](#) takes precedence)

M H01M 10/058

- Construction or manufacture

**WARNING**

Group H01M 10/058 is incomplete pending reclassification of documents from group H01M 10/04.  
Groups H01M 10/04 and H01M 10/058 should be considered in order to perform a complete search.

M H01M 12/00

**Hybrid cells; Manufacture thereof (hybrid capacitors [H01G 11/00](#))****NOTES**

1. This group does not cover hybrid cells comprising capacitor electrodes and battery electrodes, which are covered by group [H01G 11/00](#).
2. In this group, hybrid cells are electrochemical generators having two different types of half-cells, the half-cell being an electrode-electrolyte combination of either a primary, a secondary or a fuel cell.

**WARNING**

Group H01M 12/00 is impacted by reclassification into group H01G 11/00 – H01G 11/86.  
All groups listed in this Warning should be considered in order to perform a complete search.

D H01M 12/005  
—(Frozen)

- {composed of a half-cell of the capacitor type and of a half-cell of the primary or secondary battery type (hybrid capacitors H01G 9/155)}

**WARNING**

Group H01M 12/005 is no longer used for the classification of documents as of January 1, 2019.  
The content of this groups is being reclassified into H01G 11/00 - H01G 11/86.  
All groups listed in this Warning should be considered in order to perform a complete search.

**Project: RP0469-F (G07F)**

M G07F 9/00

**Details other than those peculiar to special kinds or types of apparatus (coin inlet arrangements [G07F 1/00](#); coin-actuated mechanisms, interlocks [G07F 5/00](#))****WARNING**

Group G07F 9/00 is impacted by reclassification into groups G07F 9/001, G07F 9/002, and G07F 9/009.  
All groups listed in this Warning should be considered in order to perform a complete search.

M G07F 9/001

- {Interfacing with vending machines using mobile or wearable devices}

**WARNING**

Group G07F 9/001 is incomplete pending reclassification of documents from groups G07F 9/00 and G07F 9/002.  
Groups G07F 9/00, G07F 9/002, and G07F 9/001 should be considered in order to perform a complete search.

M G07F 9/002

- {Vending machines being part of a centrally controlled network of vending machines}

**WARNING**

Group G07F 9/002 is incomplete pending reclassification of documents from group G07F 9/00.  
Group G07F 9/002 is also impacted by reclassification into group G07F 9/001.

~~Groups G07F 9/00, G07F 9/002, and G07F 9/001 should be considered in order to perform a complete search.~~

M G07F 9/009

- {User recognition or proximity detection}

WARNING

~~Group G07F 9/009 is incomplete pending reclassification of documents from group G07F 9/00.~~

~~Groups G07F 9/00 and G07F 9/009 should be considered in order to perform a complete search.~~

U G07F 9/02

- Devices for alarm or indication, e.g. when empty; Advertising arrangements in coin-freed apparatus (alarms or warning devices indicating the interruption of flow to be metered [G07F 15/10](#))

M G07F 9/023

- • {Arrangements for display, data presentation or advertising}

WARNING

~~Group G07F 9/023 is impacted by reclassification into group G07F 9/0235.~~

~~Groups G07F 9/023 and G07F 9/0235 should be considered in order to perform a complete search.~~

M G07F 9/0235

- • • {the arrangements being full-front touchscreens}

WARNING

~~Group G07F 9/0235 is incomplete pending reclassification of documents from group G07F 9/023.~~

~~Groups G07F 9/023 and G07F 9/0235 should be considered in order to perform a complete search.~~

**M G07F 11/00**

**Coin-freed apparatus for dispensing, or the like, discrete articles**

WARNING

~~Group G07F 11/00 is impacted by reclassification into group G07F 11/004.~~

~~Groups G07F 11/00 and G07F 11/004 should be considered in order to perform a complete search.~~

M G07F 11/004

- {Restocking arrangements therefor}

WARNING

~~Group G07F 11/004 is incomplete pending reclassification of documents from group G07F 11/00.~~

~~Groups G07F 11/00 and G07F 11/004 should be considered in order to perform a complete search.~~

U G07F 11/02

- from non-movable magazines

U G07F 11/04

- • in which magazines the articles are stored one vertically above the other

M G07F 11/16

- • • Delivery means

WARNING

~~Group G07F 11/16 is impacted by reclassification into group G07F 11/163.~~

~~Groups G07F 11/16 and G07F 11/163 should be considered in order to perform a complete search.~~

M G07F 11/163

- • • • {characterised by blocking access to the output bins}

WARNING

~~Group G07F 11/163 is incomplete pending reclassification of documents from group G07F 11/16.~~

~~Groups G07F 11/16 and G07F 11/163 should be considered in order to perform a complete search.~~

- M G07F 11/165      • • • {using xyz-picker or multi-dimensional article picking arrangements}

WARNING

Group G07F 11/165 is impacted by reclassification into groups G07F 11/1653 and G07F 11/1657.  
Groups G07F 11/165, G07F 11/1653, and G07F 11/1657 should be considered in order to perform a complete search.

- M G07F 11/1653      • • • {the picking arrangements being collecting buckets}

WARNING

Group G07F 11/1653 is incomplete pending reclassification of documents from group G07F 11/165.  
Groups G07F 11/165 and G07F 11/1653 should be considered in order to perform a complete search.

- M G07F 11/1657      • • • {the picking arrangements using suction}

WARNING

Group G07F 11/1657 is incomplete pending reclassification of documents from group G07F 11/165.  
Groups G07F 11/165 and G07F 11/1657 should be considered in order to perform a complete search.

**U G07F 17/00      Coin-freed apparatus for hiring articles; Coin-freed facilities or services**

- U G07F 17/10      • for means for safe-keeping of property, left temporarily, e.g. by fastening the property

- M G07F 17/12      • comprising lockable containers, e.g. for accepting clothes to be cleaned

WARNING

Group G07F 17/12 is impacted by reclassification into group G07F 17/13.  
Groups G07F 17/12 and G07F 17/13 should be considered in order to perform a complete search.

- M G07F 17/13      • • {the containers being a postal pick-up locker}

WARNING

Group G07F 17/13 is incomplete pending reclassification of documents from group G07F 17/12.  
Groups G07F 17/12 and G07F 17/13 should be considered in order to perform a complete search.

**Project: RP0484-F (A01H)**

**M A01H 5/00      Angiosperms, i.e. flowering plants, characterised by their plant parts; Angiosperms characterised otherwise than by their botanic taxonomy**

WARNING

Group A01H 5/00 is impacted by reclassification into groups A01H 6/00, A01H 6/02, A01H 6/024, A01H 6/028, A01H 6/04, A01H 6/045, A01H 6/06, A01H 6/064, A01H 6/068, A01H 6/08, A01H 6/084, A01H 6/088, A01H 6/10, A01H 6/12, A01H 6/14, A01H 6/1408, A01H 6/1416, A01H 6/1424, A01H 6/1432, A01H 6/144, A01H 6/1448, A01H 6/1456, A01H 6/1464, A01H 6/1472, A01H 6/148, A01H 6/1488, A01H 6/1496, A01H 6/16, A01H 6/165, A01H 6/18, A01H 6/185, A01H 6/20, A01H 6/201, A01H 6/202, A01H 6/203, A01H 6/204, A01H 6/205, A01H 6/206, A01H 6/207, A01H 6/22, A01H 6/223, A01H 6/225, A01H 6/228, A01H 6/24, A01H 6/26, A01H 6/264, A01H 6/268, A01H 6/28, A01H 6/30, A01H 6/305, A01H 6/32, A01H 6/324, A01H 6/328, A01H 6/34, A01H 6/342, A01H 6/344, A01H 6/346, A01H 6/348, A01H 6/36, A01H 6/364, A01H 6/368, A01H 6/38, A01H 6/385, A01H 6/40, A01H 6/42, A01H 6/425,

A01H 6/44, A01H 6/444, A01H 6/448, A01H 6/46, A01H 6/4606, A01H 6/4612, A01H 6/4618, A01H 6/4624, A01H 6/463, A01H 6/4636, A01H 6/4642, A01H 6/4648, A01H 6/4654, A01H 6/466, A01H 6/4666, A01H 6/4672, A01H 6/4678, A01H 6/4684, A01H 6/469, A01H 6/48, A01H 6/50, A01H 6/502, A01H 6/504, A01H 6/506, A01H 6/508, A01H 6/52, A01H 6/525, A01H 6/54, A01H 6/541, A01H 6/542, A01H 6/543, A01H 6/544, A01H 6/545, A01H 6/546, A01H 6/547, A01H 6/56, A01H 6/564, A01H 6/568, A01H 6/58, A01H 6/60, A01H 6/604, A01H 6/608, A01H 6/62, A01H 6/64, A01H 6/66, A01H 6/68, A01H 6/70, A01H 6/72, A01H 6/74, A01H 6/7409, A01H 6/7418, A01H 6/7427, A01H 6/7436, A01H 6/7445, A01H 6/7454, A01H 6/7463, A01H 6/7472, A01H 6/7481, A01H 6/749, A01H 6/7499, A01H 6/76, A01H 6/78, A01H 6/785, A01H 6/80, A01H 6/82, A01H 6/821, A01H 6/822, A01H 6/823, A01H 6/824, A01H 6/825, A01H 6/826, A01H 6/827, A01H 6/84, A01H 6/86, and A01H 6/88.  
All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 5/02

• Flowers

WARNING

Group A01H 5/02 is impacted by reclassification into groups A01H 6/00, A01H 6/02, A01H 6/024, A01H 6/028, A01H 6/04, A01H 6/045, A01H 6/06, A01H 6/064, A01H 6/068, A01H 6/08, A01H 6/084, A01H 6/088, A01H 6/10, A01H 6/12, A01H 6/14, A01H 6/1408, A01H 6/1416, A01H 6/1424, A01H 6/1432, A01H 6/144, A01H 6/1448, A01H 6/1456, A01H 6/1464, A01H 6/1472, A01H 6/148, A01H 6/1488, A01H 6/1496, A01H 6/16, A01H 6/165, A01H 6/18, A01H 6/185, A01H 6/20, A01H 6/201, A01H 6/202, A01H 6/203, A01H 6/204, A01H 6/205, A01H 6/206, A01H 6/207, A01H 6/22, A01H 6/223, A01H 6/225, A01H 6/228, A01H 6/24, A01H 6/26, A01H 6/264, A01H 6/268, A01H 6/28, A01H 6/30, A01H 6/305, A01H 6/32, A01H 6/324, A01H 6/328, A01H 6/34, A01H 6/342, A01H 6/344, A01H 6/346, A01H 6/348, A01H 6/36, A01H 6/364, A01H 6/368, A01H 6/38, A01H 6/385, A01H 6/40, A01H 6/42, A01H 6/425, A01H 6/44, A01H 6/444, A01H 6/448, A01H 6/46, A01H 6/4606, A01H 6/4612, A01H 6/4618, A01H 6/4624, A01H 6/463, A01H 6/4636, A01H 6/4642, A01H 6/4648, A01H 6/4654, A01H 6/466, A01H 6/4666, A01H 6/4672, A01H 6/4678, A01H 6/4684, A01H 6/469, A01H 6/48, A01H 6/50, A01H 6/502, A01H 6/504, A01H 6/506, A01H 6/508, A01H 6/52, A01H 6/525, A01H 6/54, A01H 6/541, A01H 6/542, A01H 6/543, A01H 6/544, A01H 6/545, A01H 6/546, A01H 6/547, A01H 6/56, A01H 6/564, A01H 6/568, A01H 6/58, A01H 6/60, A01H 6/604, A01H 6/608, A01H 6/62, A01H 6/64, A01H 6/66, A01H 6/68, A01H 6/70, A01H 6/72, A01H 6/74, A01H 6/7409, A01H 6/7418, A01H 6/7427, A01H 6/7436, A01H 6/7445, A01H 6/7454, A01H 6/7463, A01H 6/7472, A01H 6/7481, A01H 6/749, A01H 6/7499, A01H 6/76, A01H 6/78, A01H 6/785, A01H 6/80, A01H 6/82, A01H 6/821, A01H 6/822, A01H 6/823, A01H 6/824, A01H 6/825, A01H 6/826, A01H 6/827, A01H 6/84, A01H 6/86, and A01H 6/88.  
All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 5/04

• Stems

WARNING

Group A01H 5/04 is impacted by reclassification into groups A01H 6/00, A01H 6/02, A01H 6/024, A01H 6/028, A01H 6/04, A01H 6/045, A01H 6/06, A01H 6/064, A01H 6/068, A01H 6/08, A01H 6/084, A01H 6/088, A01H 6/10, A01H 6/12, A01H 6/14, A01H 6/1408, A01H 6/1416, A01H 6/1424, A01H 6/1432, A01H 6/144, A01H 6/1448, A01H 6/1456, A01H 6/1464, A01H 6/1472, A01H 6/148, A01H 6/1488, A01H 6/1496, A01H 6/16, A01H 6/165, A01H 6/18, A01H 6/185, A01H 6/20, A01H 6/201, A01H 6/202, A01H 6/203, A01H 6/204, A01H 6/205, A01H 6/206, A01H 6/207, A01H 6/22, A01H 6/223, A01H 6/225, A01H 6/228, A01H 6/24, A01H 6/26, A01H 6/264,



A01H 6/268, A01H 6/28, A01H 6/30, A01H 6/305, A01H 6/32, A01H 6/324, A01H 6/328, A01H 6/34, A01H 6/342, A01H 6/344, A01H 6/346, A01H 6/348, A01H 6/36, A01H 6/364, A01H 6/368, A01H 6/38, A01H 6/385, A01H 6/40, A01H 6/42, A01H 6/425, A01H 6/44, A01H 6/444, A01H 6/448, A01H 6/46, A01H 6/4606, A01H 6/4612, A01H 6/4618, A01H 6/4624, A01H 6/463, A01H 6/4636, A01H 6/4642, A01H 6/4648, A01H 6/4654, A01H 6/466, A01H 6/4666, A01H 6/4672, A01H 6/4678, A01H 6/4684, A01H 6/469, A01H 6/48, A01H 6/50, A01H 6/502, A01H 6/504, A01H 6/506, A01H 6/508, A01H 6/52, A01H 6/525, A01H 6/54, A01H 6/541, A01H 6/542, A01H 6/543, A01H 6/544, A01H 6/545, A01H 6/546, A01H 6/547, A01H 6/56, A01H 6/564, A01H 6/568, A01H 6/58, A01H 6/60, A01H 6/604, A01H 6/608, A01H 6/62, A01H 6/64, A01H 6/66, A01H 6/68, A01H 6/70, A01H 6/72, A01H 6/74, A01H 6/7409, A01H 6/7418, A01H 6/7427, A01H 6/7436, A01H 6/7445, A01H 6/7454, A01H 6/7463, A01H 6/7472, A01H 6/7481, A01H 6/749, A01H 6/7499, A01H 6/76, A01H 6/78, A01H 6/785, A01H 6/80, A01H 6/82, A01H 6/821, A01H 6/822, A01H 6/823, A01H 6/824, A01H 6/825, A01H 6/826, A01H 6/827, A01H 6/84, A01H 6/86, and A01H 6/88.  
All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 5/06

• Roots

WARNING

Group A01H 5/06 is impacted by reclassification into groups A01H 6/00, A01H 6/02, A01H 6/024, A01H 6/028, A01H 6/04, A01H 6/045, A01H 6/06, A01H 6/064, A01H 6/068, A01H 6/08, A01H 6/084, A01H 6/088, A01H 6/10, A01H 6/12, A01H 6/14, A01H 6/1408, A01H 6/1416, A01H 6/1424, A01H 6/1432, A01H 6/144, A01H 6/1448, A01H 6/1456, A01H 6/1464, A01H 6/1472, A01H 6/148, A01H 6/1488, A01H 6/1496, A01H 6/16, A01H 6/165, A01H 6/18, A01H 6/185, A01H 6/20, A01H 6/201, A01H 6/202, A01H 6/203, A01H 6/204, A01H 6/205, A01H 6/206, A01H 6/207, A01H 6/22, A01H 6/223, A01H 6/225, A01H 6/228, A01H 6/24, A01H 6/26, A01H 6/264, A01H 6/268, A01H 6/28, A01H 6/30, A01H 6/305, A01H 6/32, A01H 6/324, A01H 6/328, A01H 6/34, A01H 6/342, A01H 6/344, A01H 6/346, A01H 6/348, A01H 6/36, A01H 6/364, A01H 6/368, A01H 6/38, A01H 6/385, A01H 6/40, A01H 6/42, A01H 6/425, A01H 6/44, A01H 6/444, A01H 6/448, A01H 6/46, A01H 6/4606, A01H 6/4612, A01H 6/4618, A01H 6/4624, A01H 6/463, A01H 6/4636, A01H 6/4642, A01H 6/4648, A01H 6/4654, A01H 6/466, A01H 6/4666, A01H 6/4672, A01H 6/4678, A01H 6/4684, A01H 6/469, A01H 6/48, A01H 6/50, A01H 6/502, A01H 6/504, A01H 6/506, A01H 6/508, A01H 6/52, A01H 6/525, A01H 6/54, A01H 6/541, A01H 6/542, A01H 6/543, A01H 6/544, A01H 6/545, A01H 6/546, A01H 6/547, A01H 6/56, A01H 6/564, A01H 6/568, A01H 6/58, A01H 6/60, A01H 6/604, A01H 6/608, A01H 6/62, A01H 6/64, A01H 6/66, A01H 6/68, A01H 6/70, A01H 6/72, A01H 6/74, A01H 6/7409, A01H 6/7418, A01H 6/7427, A01H 6/7436, A01H 6/7445, A01H 6/7454, A01H 6/7463, A01H 6/7472, A01H 6/7481, A01H 6/749, A01H 6/7499, A01H 6/76, A01H 6/78, A01H 6/785, A01H 6/80, A01H 6/82, A01H 6/821, A01H 6/822, A01H 6/823, A01H 6/824, A01H 6/825, A01H 6/826, A01H 6/827, A01H 6/84, A01H 6/86, and A01H 6/88.  
All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 5/08

• Fruits

WARNING

Group A01H 5/08 is impacted by reclassification into groups A01H 6/00, A01H 6/02, A01H 6/024, A01H 6/028, A01H 6/04, A01H 6/045, A01H 6/06, A01H 6/064, A01H 6/068, A01H 6/08, A01H 6/084, A01H 6/088, A01H 6/10, A01H 6/12, A01H 6/14, A01H 6/1408, A01H 6/1416, A01H 6/1424, A01H 6/1432, A01H 6/144, A01H 6/1448, A01H 6/1456, A01H 6/1464,

A01H 6/1472, A01H 6/148, A01H 6/1488, A01H 6/1496, A01H 6/16,  
A01H 6/165, A01H 6/18, A01H 6/185, A01H 6/20, A01H 6/201, A01H 6/202,  
A01H 6/203, A01H 6/204, A01H 6/205, A01H 6/206, A01H 6/207, A01H 6/22,  
A01H 6/223, A01H 6/225, A01H 6/228, A01H 6/24, A01H 6/26, A01H 6/264,  
A01H 6/268, A01H 6/28, A01H 6/30, A01H 6/305, A01H 6/32, A01H 6/324,  
A01H 6/328, A01H 6/34, A01H 6/342, A01H 6/344, A01H 6/346, A01H 6/348,  
A01H 6/36, A01H 6/364, A01H 6/368, A01H 6/38, A01H 6/385, A01H 6/40,  
A01H 6/42, A01H 6/425, A01H 6/44, A01H 6/444, A01H 6/448, A01H 6/46,  
A01H 6/4606, A01H 6/4612, A01H 6/4618, A01H 6/4624, A01H 6/463,  
A01H 6/4636, A01H 6/4642, A01H 6/4648, A01H 6/4654, A01H 6/466,  
A01H 6/4666, A01H 6/4672, A01H 6/4678, A01H 6/4684, A01H 6/469,  
A01H 6/48, A01H 6/50, A01H 6/502, A01H 6/504, A01H 6/506, A01H 6/508,  
A01H 6/52, A01H 6/525, A01H 6/54, A01H 6/541, A01H 6/542, A01H 6/543,  
A01H 6/544, A01H 6/545, A01H 6/546, A01H 6/547, A01H 6/56, A01H 6/564,  
A01H 6/568, A01H 6/58, A01H 6/60, A01H 6/604, A01H 6/608, A01H 6/62,  
A01H 6/64, A01H 6/66, A01H 6/68, A01H 6/70, A01H 6/72, A01H 6/74,  
A01H 6/7409, A01H 6/7418, A01H 6/7427, A01H 6/7436, A01H 6/7445,  
A01H 6/7454, A01H 6/7463, A01H 6/7472, A01H 6/7481, A01H 6/749,  
A01H 6/7499, A01H 6/76, A01H 6/78, A01H 6/785, A01H 6/80, A01H 6/82,  
A01H 6/821, A01H 6/822, A01H 6/823, A01H 6/824, A01H 6/825, A01H 6/826,  
A01H 6/827, A01H 6/84, A01H 6/86, and A01H 6/88.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 5/10

• Seeds

WARNING

Group A01H 5/10 is impacted by reclassification into groups A01H 6/00,  
A01H 6/02, A01H 6/024, A01H 6/028, A01H 6/04, A01H 6/045, A01H 6/06,  
A01H 6/064, A01H 6/068, A01H 6/08, A01H 6/084, A01H 6/088, A01H 6/10,  
A01H 6/12, A01H 6/14, A01H 6/1408, A01H 6/1416, A01H 6/1424,  
A01H 6/1432, A01H 6/144, A01H 6/1448, A01H 6/1456, A01H 6/1464,  
A01H 6/1472, A01H 6/148, A01H 6/1488, A01H 6/1496, A01H 6/16,  
A01H 6/165, A01H 6/18, A01H 6/185, A01H 6/20, A01H 6/201, A01H 6/202,  
A01H 6/203, A01H 6/204, A01H 6/205, A01H 6/206, A01H 6/207, A01H 6/22,  
A01H 6/223, A01H 6/225, A01H 6/228, A01H 6/24, A01H 6/26, A01H 6/264,  
A01H 6/268, A01H 6/28, A01H 6/30, A01H 6/305, A01H 6/32, A01H 6/324,  
A01H 6/328, A01H 6/34, A01H 6/342, A01H 6/344, A01H 6/346, A01H 6/348,  
A01H 6/36, A01H 6/364, A01H 6/368, A01H 6/38, A01H 6/385, A01H 6/40,  
A01H 6/42, A01H 6/425, A01H 6/44, A01H 6/444, A01H 6/448, A01H 6/46,  
A01H 6/4606, A01H 6/4612, A01H 6/4618, A01H 6/4624, A01H 6/463,  
A01H 6/4636, A01H 6/4642, A01H 6/4648, A01H 6/4654, A01H 6/466,  
A01H 6/4666, A01H 6/4672, A01H 6/4678, A01H 6/4684, A01H 6/469,  
A01H 6/48, A01H 6/50, A01H 6/502, A01H 6/504, A01H 6/506, A01H 6/508,  
A01H 6/52, A01H 6/525, A01H 6/54, A01H 6/541, A01H 6/542, A01H 6/543,  
A01H 6/544, A01H 6/545, A01H 6/546, A01H 6/547, A01H 6/56, A01H 6/564,  
A01H 6/568, A01H 6/58, A01H 6/60, A01H 6/604, A01H 6/608, A01H 6/62,  
A01H 6/64, A01H 6/66, A01H 6/68, A01H 6/70, A01H 6/72, A01H 6/74,  
A01H 6/7409, A01H 6/7418, A01H 6/7427, A01H 6/7436, A01H 6/7445,  
A01H 6/7454, A01H 6/7463, A01H 6/7472, A01H 6/7481, A01H 6/749,  
A01H 6/7499, A01H 6/76, A01H 6/78, A01H 6/785, A01H 6/80, A01H 6/82,  
A01H 6/821, A01H 6/822, A01H 6/823, A01H 6/824, A01H 6/825, A01H 6/826,  
A01H 6/827, A01H 6/84, A01H 6/86, and A01H 6/88.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 5/12

• Leaves

WARNING

Group A01H 5/12 is impacted by reclassification into groups A01H 6/00, A01H 6/02, A01H 6/024, A01H 6/028, A01H 6/04, A01H 6/045, A01H 6/06, A01H 6/064, A01H 6/068, A01H 6/08, A01H 6/084, A01H 6/088, A01H 6/10, A01H 6/12, A01H 6/14, A01H 6/1408, A01H 6/1416, A01H 6/1424, A01H 6/1432, A01H 6/144, A01H 6/1448, A01H 6/1456, A01H 6/1464, A01H 6/1472, A01H 6/148, A01H 6/1488, A01H 6/1496, A01H 6/16, A01H 6/165, A01H 6/18, A01H 6/185, A01H 6/20, A01H 6/201, A01H 6/202, A01H 6/203, A01H 6/204, A01H 6/205, A01H 6/206, A01H 6/207, A01H 6/22, A01H 6/223, A01H 6/225, A01H 6/228, A01H 6/24, A01H 6/26, A01H 6/264, A01H 6/268, A01H 6/28, A01H 6/30, A01H 6/305, A01H 6/32, A01H 6/324, A01H 6/328, A01H 6/34, A01H 6/342, A01H 6/344, A01H 6/346, A01H 6/348, A01H 6/36, A01H 6/364, A01H 6/368, A01H 6/38, A01H 6/385, A01H 6/40, A01H 6/42, A01H 6/425, A01H 6/44, A01H 6/444, A01H 6/448, A01H 6/46, A01H 6/4606, A01H 6/4612, A01H 6/4618, A01H 6/4624, A01H 6/463, A01H 6/4636, A01H 6/4642, A01H 6/4648, A01H 6/4654, A01H 6/466, A01H 6/4666, A01H 6/4672, A01H 6/4678, A01H 6/4684, A01H 6/469, A01H 6/48, A01H 6/50, A01H 6/502, A01H 6/504, A01H 6/506, A01H 6/508, A01H 6/52, A01H 6/525, A01H 6/54, A01H 6/541, A01H 6/542, A01H 6/543, A01H 6/544, A01H 6/545, A01H 6/546, A01H 6/547, A01H 6/56, A01H 6/564, A01H 6/568, A01H 6/58, A01H 6/60, A01H 6/604, A01H 6/608, A01H 6/62, A01H 6/64, A01H 6/66, A01H 6/68, A01H 6/70, A01H 6/72, A01H 6/74, A01H 6/7409, A01H 6/7418, A01H 6/7427, A01H 6/7436, A01H 6/7445, A01H 6/7454, A01H 6/7463, A01H 6/7472, A01H 6/7481, A01H 6/749, A01H 6/7499, A01H 6/76, A01H 6/78, A01H 6/785, A01H 6/80, A01H 6/82, A01H 6/821, A01H 6/822, A01H 6/823, A01H 6/824, A01H 6/825, A01H 6/826, A01H 6/827, A01H 6/84, A01H 6/86, and A01H 6/88.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/00

Angiosperms, i.e. flowering plants, characterised by their botanic taxonomy

WARNING

Group A01H 6/00 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/02

• Amaranthaceae or Chenopodiaceae, e.g. beet or spinach

WARNING

Group A01H 6/02 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/024

• {Beta vulgaris [beet]}

WARNING

Group A01H 6/024 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M	A01H 6/028	<ul style="list-style-type: none"> <li>• {Spinacia oleracea [spinach]}</li> </ul> <p><u>WARNING</u> Group A01H 6/028 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/04	<ul style="list-style-type: none"> <li>• Amaryllidaceae, e.g. onion</li> </ul> <p><u>WARNING</u> Group A01H 6/04 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. Group A01H 6/04 is also impacted by reclassification into groups A01H 6/045. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/045	<ul style="list-style-type: none"> <li>• {Allium cepa [onion]}</li> </ul> <p><u>WARNING</u> Group A01H 6/045 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/04. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/06	<ul style="list-style-type: none"> <li>• Apiaceae, e.g. celery or carrot</li> </ul> <p><u>WARNING</u> Group A01H 6/06 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/064	<ul style="list-style-type: none"> <li>• {Apium graveolens [celery]}</li> </ul> <p><u>WARNING</u> Group A01H 6/064 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/068	<ul style="list-style-type: none"> <li>• {Daucus carota [carrot]}</li> </ul> <p><u>WARNING</u> Group A01H 6/068 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/08	<ul style="list-style-type: none"> <li>• Apocynaceae, e.g. Madagascar periwinkle</li> </ul> <p><u>WARNING</u> Group A01H 6/08 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.</p>

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/084

- {Catharanthus, e.g. Madagascar periwinkle}

WARNING

Group A01H 6/084 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/088

- {Mandevilla}

WARNING

Group A01H 6/088 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/10

- Aroideae, e.g. Zantedeschia

WARNING

Group A01H 6/10 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/12

- Asparagaceae, e.g. Hosta

WARNING

Group A01H 6/12 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/14

- Asteraceae or Compositae, e.g. safflower, sunflower, artichoke or lettuce

WARNING

Group A01H 6/14 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. Group A01H 6/14 is also impacted by reclassification into groups A01H 6/1408, A01H 6/1416, A01H 6/1424, A01H 6/1432, A01H 6/144, A01H 6/1448, A01H 6/1456, A01H 6/1464, A01H 6/1472, A01H 6/148, A01H 6/1488, and A01H 6/1496.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/1408

- {Aster}

WARNING

Group A01H 6/1408 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/14.

All groups listed in this Warning should be considered in order to perform a complete search.

- |                  |  |
|------------------|--|
| M    A01H 6/1416 | <ul style="list-style-type: none"> <li>• • {<i>Carthamus tinctorius</i> [safflower]}</li> </ul> <div style="border: 1px solid #ccc; background-color: #f0f0f0; padding: 10px; margin-top: 5px;"> <p><b><u>WARNING</u></b><br/> Group A01H 6/1416 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/14.<br/> All groups listed in this Warning should be considered in order to perform a complete search.</p> </div> |
| M    A01H 6/1424 | <ul style="list-style-type: none"> <li>• • {<i>Chrysanthemum</i>}</li> </ul> <div style="border: 1px solid #ccc; background-color: #f0f0f0; padding: 10px; margin-top: 5px;"> <p><b><u>WARNING</u></b><br/> Group A01H 6/1424 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/14.<br/> All groups listed in this Warning should be considered in order to perform a complete search.</p> </div>                    |
| M    A01H 6/1432 | <ul style="list-style-type: none"> <li>• • {<i>Cynara cardunculus</i> [artichoke]}</li> </ul> <div style="border: 1px solid #ccc; background-color: #f0f0f0; padding: 10px; margin-top: 5px;"> <p><b><u>WARNING</u></b><br/> Group A01H 6/1432 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/14.<br/> All groups listed in this Warning should be considered in order to perform a complete search.</p> </div>   |
| M    A01H 6/144  | <ul style="list-style-type: none"> <li>• • {<i>Dahlia</i>}</li> </ul> <div style="border: 1px solid #ccc; background-color: #f0f0f0; padding: 10px; margin-top: 5px;"> <p><b><u>WARNING</u></b><br/> Group A01H 6/144 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/14.<br/> All groups listed in this Warning should be considered in order to perform a complete search.</p> </div>                            |
| M    A01H 6/1448 | <ul style="list-style-type: none"> <li>• • {<i>Echinacea</i>}</li> </ul> <div style="border: 1px solid #ccc; background-color: #f0f0f0; padding: 10px; margin-top: 5px;"> <p><b><u>WARNING</u></b><br/> Group A01H 6/1448 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/14.<br/> All groups listed in this Warning should be considered in order to perform a complete search.</p> </div>                        |
| M    A01H 6/1456 | <ul style="list-style-type: none"> <li>• • {<i>Gerbera</i>}</li> </ul> <div style="border: 1px solid #ccc; background-color: #f0f0f0; padding: 10px; margin-top: 5px;"> <p><b><u>WARNING</u></b><br/> Group A01H 6/1456 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/14.<br/> All groups listed in this Warning should be considered in order to perform a complete search.</p> </div>                          |
| M    A01H 6/1464 | <ul style="list-style-type: none"> <li>• • {<i>Helianthus annuus</i> [sunflower]}</li> </ul> <div style="border: 1px solid #ccc; background-color: #f0f0f0; padding: 10px; margin-top: 5px;"> <p><b><u>WARNING</u></b><br/> Group A01H 6/1464 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/14.<br/> All groups listed in this Warning should be considered in order to perform a complete search.</p> </div>    |



- M A01H 6/1472
- {Lactuca sativa [lettuce]}
- WARNING  
Group A01H 6/1472 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/14.  
All groups listed in this Warning should be considered in order to perform a complete search.
- M A01H 6/148
- {Osteospermum}
- WARNING  
Group A01H 6/148 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/14.  
All groups listed in this Warning should be considered in order to perform a complete search.
- M A01H 6/1488
- {Stevia}
- WARNING  
Group A01H 6/1488 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/14.  
All groups listed in this Warning should be considered in order to perform a complete search.
- M A01H 6/1496
- {Tagetes [marigold]}
- WARNING  
Group A01H 6/1496 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/14.  
All groups listed in this Warning should be considered in order to perform a complete search.
- M A01H 6/16
- Balsaminaceae, e.g. Impatiens
- WARNING  
Group A01H 6/16 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. Group A01H 6/16 is also impacted by reclassification into group A01H 6/165.  
All groups listed in this Warning should be considered in order to perform a complete search.
- M A01H 6/165
- {Impatiens}
- WARNING  
Group A01H 6/165 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/16.  
All groups listed in this Warning should be considered in order to perform a complete search.
- M A01H 6/18
- Begoniaceae, e.g. Begonia
- WARNING  
Group A01H 6/18 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. Group A01H 6/18 is also impacted by reclassification into group A01H 6/185.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/185

- {Begonia}

WARNING

Group A01H 6/185 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/18.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/20

- Brassicaceae, e.g. canola, broccoli or rucola

WARNING

Group A01H 6/20 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/201

- {Brassica juncea}

WARNING

Group A01H 6/201 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/202

- {Brassica napus [canola]}

WARNING

Group A01H 6/202 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/203

- {Brassica oleraceae, e.g. broccoli or kohlrabi}

WARNING

Group A01H 6/203 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/204

- {Brassica rapa}

WARNING

Group A01H 6/204 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/205

- {Eruca sativa [rucola, arugula or rocket]}

WARNING

Group A01H 6/205 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/206

- {Raphanus sativus [radish]}

WARNING

Group A01H 6/206 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/207

- {Sinapis alba [white mustard]}

WARNING

Group A01H 6/207 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/22

- Bromeliaceae

WARNING

Group A01H 6/22 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/223

- {Aechmea fasciata}

WARNING

Group A01H 6/223 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/225

- {Guzmania}

WARNING

Group A01H 6/225 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/228

- {Vriesea}

WARNING

Group A01H 6/228 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/24

- Cactaceae, e.g. cactus or Easter cactus

WARNING

Group A01H 6/24 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/26

- Campanulaceae

WARNING

Group A01H 6/26 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/264

- {Campanula}

WARNING

Group A01H 6/264 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/268

- {Lobelia}

WARNING

Group A01H 6/268 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/28

- Cannabaceae, e.g. cannabis

WARNING

Group A01H 6/28 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/30

- Caryophyllaceae

WARNING

Group A01H 6/30 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. Group A01H 6/30 is also impacted by reclassification into group A01H 6/305.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/305

- {Dianthus carnations}

WARNING

Group A01H 6/305 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/30.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/32

- Crassulaceae

WARNING

Group A01H 6/32 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10,

and A01H 5/12. Group A01H 6/32 is also impacted by reclassification into groups A01H 6/324 and A01H 6/328.  
All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/324

- {Kalanchoe}

**WARNING**

Group A01H 6/324 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/32.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/328

- {Sedum}

**WARNING**

Group A01H 6/328 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/32.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/34

- Cucurbitaceae, e.g. bitter melon, cucumber or watermelon

**WARNING**

Group A01H 6/34 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/342

- {Citrullus lanatus [watermelon]}

**WARNING**

Group A01H 6/342 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/344

- {Cucumis melo [melon]}

**WARNING**

Group A01H 6/344 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/346

- {Cucumis sativus[cucumber]}

**WARNING**

Group A01H 6/346 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M	A01H 6/348	<ul style="list-style-type: none"> <li>• {Cucurbita, e.g. squash or pumpkin}</li> </ul> <p><u>WARNING</u> Group A01H 6/348 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/36	<ul style="list-style-type: none"> <li>• Ericaceae, e.g. azalea, cranberry or blueberry</li> </ul> <p><u>WARNING</u> Group A01H 6/36 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/364	<ul style="list-style-type: none"> <li>• {Rhododendron, e.g. Azalea}</li> </ul> <p><u>WARNING</u> Group A01H 6/364 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/368	<ul style="list-style-type: none"> <li>• {Vaccinium, e.g. cranberry, blueberry}</li> </ul> <p><u>WARNING</u> Group A01H 6/368 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/38	<ul style="list-style-type: none"> <li>• Euphorbiaceae, e.g. Poinsettia</li> </ul> <p><u>WARNING</u> Group A01H 6/38 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. Group A01H 6/38 is also impacted by reclassification into group A01H 6/385. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/385	<ul style="list-style-type: none"> <li>• {Euphorbia, e.g. Poinsettia}</li> </ul> <p><u>WARNING</u> Group A01H 6/385 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/38. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/40	<ul style="list-style-type: none"> <li>• Gentianaceae, e.g. Exacum</li> </ul> <p><u>WARNING</u> Group A01H 6/40 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.</p>



All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/42

- Geraniaceae, e.g. Geranium

WARNING

Group A01H 6/42 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. Group A01H 6/42 is also impacted by reclassification into group A01H 6/425.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/425

- {Pelargonium [Geranium]}

WARNING

Group A01H 6/425 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/42.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/44

- Gesneriaceae, e.g. African violet

WARNING

Group A01H 6/44 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. Group A01H 6/44 is also impacted by reclassification into groups A01H 6/444 and A01H 6/448.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/444

- {Saintpaulia [African violet]}

WARNING

Group A01H 6/444 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/44.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/448

- {Streptocarpus}

WARNING

Group A01H 6/448 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/44.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/46

- Gramineae or Poaceae, e.g. ryegrass, rice, wheat or maize

WARNING

Group A01H 6/46 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

- M A01H 6/4606
- {Agrostis [bentgrass]}
- WARNING  
Group A01H 6/4606 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.  
All groups listed in this Warning should be considered in order to perform a complete search.
- M A01H 6/4612
- {Cynodon [Bermudagrass]}
- WARNING  
Group A01H 6/4612 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.  
All groups listed in this Warning should be considered in order to perform a complete search.
- M A01H 6/4618
- {Fescue}
- WARNING  
Group A01H 6/4618 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.  
All groups listed in this Warning should be considered in order to perform a complete search.
- M A01H 6/4624
- {Hordeum vulgare [barley]}
- WARNING  
Group A01H 6/4624 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.  
All groups listed in this Warning should be considered in order to perform a complete search.
- M A01H 6/463
- {Lolium [ryegrass]}
- WARNING  
Group A01H 6/463 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.  
All groups listed in this Warning should be considered in order to perform a complete search.
- M A01H 6/4636
- {Oryza sp. [rice]}
- WARNING  
Group A01H 6/4636 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.  
All groups listed in this Warning should be considered in order to perform a complete search.
- M A01H 6/4642
- {Panicum [switchgrass]}
- WARNING  
Group A01H 6/4642 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.  
All groups listed in this Warning should be considered in order to perform a complete search.

- M A01H 6/4648
- {Paspalum}
- WARNING  
Group A01H 6/4648 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.  
All groups listed in this Warning should be considered in order to perform a complete search.
- M A01H 6/4654
- {Pennisetum [pearl millet]}
- WARNING  
Group A01H 6/4654 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.  
All groups listed in this Warning should be considered in order to perform a complete search.
- M A01H 6/466
- {Poa, e.g. bluegrass}
- WARNING  
Group A01H 6/466 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.  
All groups listed in this Warning should be considered in order to perform a complete search.
- M A01H 6/4666
- {Sorghum, e.g. sudangrass}
- WARNING  
Group A01H 6/4666 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.  
All groups listed in this Warning should be considered in order to perform a complete search.
- M A01H 6/4672
- {Triticale}
- WARNING  
Group A01H 6/4672 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.  
All groups listed in this Warning should be considered in order to perform a complete search.
- M A01H 6/4678
- {Triticum sp. [wheat]}
- WARNING  
Group A01H 6/4678 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.  
All groups listed in this Warning should be considered in order to perform a complete search.
- M A01H 6/4684
- {Zea mays [maize]}
- WARNING  
Group A01H 6/4684 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.  
All groups listed in this Warning should be considered in order to perform a complete search.

M	A01H 6/469	<ul style="list-style-type: none"> <li>• {Zoysia}</li> </ul> <p><u>WARNING</u> Group A01H 6/469 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/48	<ul style="list-style-type: none"> <li>• Hydrangeaceae, e.g. Hydrangea</li> </ul> <p><u>WARNING</u> Group A01H 6/48 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/50	<ul style="list-style-type: none"> <li>• Lamiaceae, e.g. lavender, mint or chia</li> </ul> <p><u>WARNING</u> Group A01H 6/50 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/502	<ul style="list-style-type: none"> <li>• {Lavendula, e.g. lavender}</li> </ul> <p><u>WARNING</u> Group A01H 6/502 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/504	<ul style="list-style-type: none"> <li>• {Mentha sp., e.g. mint}</li> </ul> <p><u>WARNING</u> Group A01H 6/504 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/506	<ul style="list-style-type: none"> <li>• {Ocimum basilicum [basil]}</li> </ul> <p><u>WARNING</u> Group A01H 6/506 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/508	<ul style="list-style-type: none"> <li>• {Salvia sp., e.g. chia}</li> </ul> <p><u>WARNING</u> Group A01H 6/508 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. All groups listed in this Warning should be considered in order to perform a complete search.</p>

M	A01H 6/52	<ul style="list-style-type: none"> <li>• Lauraceae, e.g. avocado</li> </ul> <p><u>WARNING</u> Group A01H 6/52 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. Group A01H 6/52 is also impacted by reclassification into group A01H 6/525. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/525	<ul style="list-style-type: none"> <li>• {Persea [avocado]}</li> </ul> <p><u>WARNING</u> Group A01H 6/525 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/52. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/54	<ul style="list-style-type: none"> <li>• Leguminosae or Fabaceae, e.g. soybean, alfalfa or peanut</li> </ul> <p><u>WARNING</u> Group A01H 6/54 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. Group A01H 6/54 is also impacted by reclassification into groups A01H 6/541, A01H 6/542, A01H 6/543, A01H 6/544, A01H 6/545, A01H 6/546, and A01H 6/547. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/541	<ul style="list-style-type: none"> <li>• {Arachis hypogaea [peanut]}</li> </ul> <p><u>WARNING</u> Group A01H 6/541 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/54. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/542	<ul style="list-style-type: none"> <li>• {Glycine max [soybean]}</li> </ul> <p><u>WARNING</u> Group A01H 6/542 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/54. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/543	<ul style="list-style-type: none"> <li>• {Lupinus}</li> </ul> <p><u>WARNING</u> Group A01H 6/543 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/54. All groups listed in this Warning should be considered in order to perform a complete search.</p>

M	A01H 6/544	<ul style="list-style-type: none"> <li>• {Medicago sativa [alfalfa]}</li> </ul> <p><u>WARNING</u> Group A01H 6/544 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/54. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/545	<ul style="list-style-type: none"> <li>• {Phaseolus, e.g. kidney beans, scarlet runners or spotted beans}</li> </ul> <p><u>WARNING</u> Group A01H 6/545 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/54. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/546	<ul style="list-style-type: none"> <li>• {Pisum sativum [pea]}</li> </ul> <p><u>WARNING</u> Group A01H 6/546 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/54. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/547	<ul style="list-style-type: none"> <li>• {Vigna [cowpea]}</li> </ul> <p><u>WARNING</u> Group A01H 6/547 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/54. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/56	<ul style="list-style-type: none"> <li>• Liliaceae, e.g. Alstroemeria or Lilium</li> </ul> <p><u>WARNING</u> Group A01H 6/56 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. Group A01H 6/56 is also impacted by reclassification into groups A01H 6/564 and A01H 6/568. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/564	<ul style="list-style-type: none"> <li>• {Alstroemeria}</li> </ul> <p><u>WARNING</u> Group A01H 6/564 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/56. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/568	<ul style="list-style-type: none"> <li>• {Lilium}</li> </ul> <p><u>WARNING</u> Group A01H 6/568 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12, and A01H 6/56.</p>

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/58

- Linaceae, e.g. flax

WARNING

Group A01H 6/58 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/60

- Malvaceae, e.g. cotton or hibiscus

WARNING

Group A01H 6/60 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/604

- {Gossypium [cotton]}

WARNING

Group A01H 6/604 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/608

- {Hibiscus}

WARNING

Group A01H 6/608 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/62

- Orchidaceae [Orchid family]

WARNING

Group A01H 6/62 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/64

- Papaveraceae, e.g. poppy

WARNING

Group A01H 6/64 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/66

- Pedaliaceae, e.g. sesame

WARNING

Group A01H 6/66 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.



All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/68

- Plantaginaceae, e.g. Antirrhinum

WARNING

Group A01H 6/68 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/70

- Polemoniaceae, e.g. Phlox

WARNING

Group A01H 6/70 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/72

- Ranunculaceae, e.g. Clematis

WARNING

Group A01H 6/72 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/74

- Rosaceae, e.g. strawberry, apple, almonds, pear, rose, blackberries or raspberries

WARNING

Group A01H 6/74 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. Group A01H 6/74 is also impacted by reclassification into groups A01H 6/7409, A01H 6/7418, A01H 6/7427, A01H 6/7436, A01H 6/7445, A01H 6/7454, A01H 6/7463, A01H 6/7472, A01H 6/7481, A01H 6/749, and A01H 6/7499.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/7409

- {Fragaria, i.e. strawberries}

WARNING

Group A01H 6/7409 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/74.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/7418

- {Malus domestica, i.e. apples}

WARNING

Group A01H 6/7418 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/74.

All groups listed in this Warning should be considered in order to perform a complete search.

M	A01H 6/7427	<ul style="list-style-type: none"><li>• {Prunus, e.g. almonds}</li></ul> <p><u>WARNING</u> Group A01H 6/7427 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/74. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/7436	<ul style="list-style-type: none"><li>• {Apricots}</li></ul> <p><u>WARNING</u> Group A01H 6/7436 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/74. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/7445	<ul style="list-style-type: none"><li>• {Cherries}</li></ul> <p><u>WARNING</u> Group A01H 6/7445 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/74. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/7454	<ul style="list-style-type: none"><li>• {Nectarines}</li></ul> <p><u>WARNING</u> Group A01H 6/7454 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/74. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/7463	<ul style="list-style-type: none"><li>• {Peaches}</li></ul> <p><u>WARNING</u> Group A01H 6/7463 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/74. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/7472	<ul style="list-style-type: none"><li>• {Plums}</li></ul> <p><u>WARNING</u> Group A01H 6/7472 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/74. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/7481	<ul style="list-style-type: none"><li>• {Pyrus, i.e. pears}</li></ul> <p><u>WARNING</u> Group A01H 6/7481 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/74. All groups listed in this Warning should be considered in order to perform a complete search.</p>

M	A01H 6/749	<ul style="list-style-type: none"> <li>• {Rosa, i.e. roses}</li> </ul> <p><u>WARNING</u> Group A01H 6/749 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/74. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/7499	<ul style="list-style-type: none"> <li>• {Rubus, e.g. blackberries or raspberries}</li> </ul> <p><u>WARNING</u> Group A01H 6/7499 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/74. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/76	<ul style="list-style-type: none"> <li>• Rubiaceae, e.g. Pentas</li> </ul> <p><u>WARNING</u> Group A01H 6/76 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/78	<ul style="list-style-type: none"> <li>• Rutaceae, e.g. lemons or limes</li> </ul> <p><u>WARNING</u> Group A01H 6/78 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. Group A01H 6/78 is also impacted by reclassification into group A01H 6/785. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/785	<ul style="list-style-type: none"> <li>• {Citrus, e.g. lemons or limes}</li> </ul> <p><u>WARNING</u> Group A01H 6/785 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, A01H 5/12 and A01H 6/78. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/80	<ul style="list-style-type: none"> <li>• Saxifragaceae, e.g. Heuchera</li> </ul> <p><u>WARNING</u> Group A01H 6/80 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A01H 6/82	<ul style="list-style-type: none"> <li>• Solanaceae, e.g. pepper, tobacco, potato, tomato or eggplant</li> </ul> <p><u>WARNING</u> Group A01H 6/82 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.</p>

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/821

- {Calibrachoa}

WARNING

Group A01H 6/821 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/822

- {Capsicum sp. [pepper]}

WARNING

Group A01H 6/822 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/823

- {Nicotiana, e.g. tobacco}

WARNING

Group A01H 6/823 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/824

- {Petunia}

WARNING

Group A01H 6/824 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/825

- {Solanum lycopersicum [tomato]}

WARNING

Group A01H 6/825 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/826

- {Solanum melongena [eggplant]}

WARNING

Group A01H 6/826 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/827

- {Solanum tuberosum [potato]}

WARNING

Group A01H 6/827 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/84

- Urticaceae, e.g. ramie

**WARNING**

Group A01H 6/84 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/86

- Verbenaceae, e.g. Verbena

**WARNING**

Group A01H 6/86 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

M A01H 6/88

- Vitaceae, e.g. Vitus [grape]

**WARNING**

Group A01H 6/88 is incomplete pending reclassification of documents from groups A01H 5/00, A01H 5/02, A01H 5/04, A01H 5/06, A01H 5/08, A01H 5/10, and A01H 5/12.

All groups listed in this Warning should be considered in order to perform a complete search.

**Project: RP0570-F (C02F)**

U C02F 11/00

**Treatment of sludge; Devices therefor**

M C02F 11/12

- by de-watering, drying or thickening

**WARNING**

Groups C02F 11/12 - C02F 11/128 are impacted by reclassification into groups C02F 11/13, C02F 11/131, and C02F 11/15.

All groups listed in this Warning should be considered in order to perform a complete search.

M C02F 11/13

- • by heating

**WARNING**

Group C02F 11/13 is incomplete pending reclassification of documents from groups C02F 11/12, C02F 11/121, C02F 11/122, C02F 11/123, C02F 11/125, C02F 11/126, C02F 11/127, C02F 11/128, C02F 11/18, and C02F 11/185.

All groups listed in this Warning should be considered in order to perform a complete search.

M C02F 11/131

- • using electromagnetic or ultrasonic waves

**WARNING**

Group C02F 11/131 is incomplete pending reclassification of documents from groups C02F 11/12, C02F 11/121, C02F 11/122, C02F 11/123, C02F 11/125, C02F 11/126, C02F 11/127, C02F 11/128, C02F 11/18, and C02F 11/185.

All groups listed in this Warning should be considered in order to perform a complete search.

M	C02F 11/14	<ul style="list-style-type: none"> <li>• with addition of chemical agents</li> </ul> <p><b>WARNING</b> Group C02F 11/14 is impacted by reclassification into groups C02F 11/143, C02F 11/145, C02F 11/147, and C02F 11/148. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	C02F 11/143	<ul style="list-style-type: none"> <li>• using inorganic substances (<a href="#">C02F 11/148</a> takes precedence)</li> </ul> <p><b>WARNING</b> Group C02F 11/143 is incomplete pending reclassification of documents from group C02F 11/14. Groups C02F 11/14 and C02F 11/143 should be considered in order to perform a complete search.</p>
M	C02F 11/145	<ul style="list-style-type: none"> <li>• using calcium compounds</li> </ul> <p><b>WARNING</b> Group C02F 11/145 is incomplete pending reclassification of documents from group C02F 11/14. Groups C02F 11/14 and C02F 11/145 should be considered in order to perform a complete search.</p>
M	C02F 11/147	<ul style="list-style-type: none"> <li>• using organic substances (<a href="#">C02F 11/148</a> takes precedence)</li> </ul> <p><b>WARNING</b> Group C02F 11/147 is incomplete pending reclassification of documents from group C02F 11/14. Groups C02F 11/14 and C02F 11/147 should be considered in order to perform a complete search.</p>
M	C02F 11/148	<ul style="list-style-type: none"> <li>• Combined use of inorganic and organic substances, being added in the same treatment step</li> </ul> <p><b>WARNING</b> Group C02F 11/148 is incomplete pending reclassification of documents from group C02F 11/14. Groups C02F 11/14 and C02F 11/148 should be considered in order to perform a complete search.</p>
M	C02F 11/15	<ul style="list-style-type: none"> <li>• by treatment with electric, magnetic or electromagnetic fields; by treatment with ultrasonic waves (for the purpose of heating <a href="#">C02F 11/131</a>)</li> </ul> <p><b>WARNING</b> Group C02F 11/15 is incomplete pending reclassification of documents from groups C02F 11/12, C02F 11/121, C02F 11/122, C02F 11/123, C02F 11/125, C02F 11/126, C02F 11/127, C02F 11/128, C02F 11/18, and C02F 11/185. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	C02F 11/18	<ul style="list-style-type: none"> <li>• by thermal conditioning (by pyrolysis <a href="#">C02F 11/10</a>)</li> </ul> <p><b>WARNING</b> Group C02F 11/18 is impacted by reclassification into groups C02F 11/13, C02F 11/131, and C02F 11/15. All groups listed in this Warning should be considered in order to perform a complete search.</p>

M C02F 11/185

- • {by pasteurisation}

**WARNING**

Group C02F 11/185 is impacted by reclassification into groups C02F 11/13, C02F 11/131, and C02F 11/15.

All groups listed in this Warning should be considered in order to perform a complete search.

**Project: RP0587-F (B63H)**

U B63H 5/00

**Arrangements on vessels of propulsion elements directly acting on water**

U B63H 5/07

- of propellers (forming part of outboard units {or Z-drives} [B63H 20/00](#))

M B63H 5/125

- • movably mounted with respect to hull, e.g. adjustable in direction {, e.g. podded azimuthing thrusters} ({outboard units or Z-drives [B63H 20/00](#); } movably mounted for steering purposes only, {rudders carrying propellers} [B63H 25/42](#))

**WARNING**

Group B63H 5/125 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.

All groups listed in this Warning should be considered in order to perform a complete search.

M B63H 5/1252

- • • {the ability to move being conferred by gearing in transmission between prime mover and propeller and the propulsion unit being other than in a "Z" configuration}

**WARNING**

Group B63H 5/1252 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.

All groups listed in this Warning should be considered in order to perform a complete search.

M B63H 2005/1254

- • • {Podded azimuthing thrusters, i.e. podded thruster units arranged inboard for rotation about vertical axis}

**WARNING**

Group B63H 2005/1254 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.

All groups listed in this Warning should be considered in order to perform a complete search.

M B63H 2005/1256

- • • • {with mechanical power transmission to propellers}

**WARNING**

Group B63H 2005/1256 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.

All groups listed in this Warning should be considered in order to perform a complete search.

M B63H 2005/1258

- • • • {with electric power transmission to propellers, i.e. with integrated electric propeller motors}

**WARNING**

Group B63H 2005/1258 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.

All groups listed in this Warning should be considered in order to perform a complete search.



M	B63H 20/00	<p><b>Outboard propulsion units, e.g. outboard motors or Z-drives; Arrangements thereof on vessels</b></p> <p><u>WARNING</u></p> <p>Group B63H 20/00 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B63H 20/001	<ul style="list-style-type: none"> <li>• {Arrangements, apparatus and methods for handling fluids used in outboard drives (for handling exhaust gas <a href="#">B63H 20/24</a>; for handling cooling-water <a href="#">B63H 20/28</a>; cooling outboard marine engines <a href="#">F01P 3/202</a>; air intakes for outboard marine engines <a href="#">F02M 35/167</a>)}</li> </ul> <p><u>WARNING</u></p> <p>Group B63H 20/001 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B63H 20/002	<ul style="list-style-type: none"> <li>• {for handling lubrication liquids (in engines, e.g. outboard marine engines, <a href="#">F01M</a>)}</li> </ul> <p><u>WARNING</u></p> <p>Group B63H 20/002 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B63H 20/003	<ul style="list-style-type: none"> <li>• {Arrangements of two, or more outboard propulsion units}</li> </ul> <p><u>WARNING</u></p> <p>Group B63H 20/003 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B63H 20/005	<ul style="list-style-type: none"> <li>• {Arrangements of two or more propellers, or the like on single outboard propulsion units}</li> </ul> <p><u>WARNING</u></p> <p>Group B63H 20/005 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B63H 20/006	<ul style="list-style-type: none"> <li>• {of coaxial type, e.g. of counter-rotative type}</li> </ul> <p><u>WARNING</u></p> <p>Group B63H 20/006 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B63H 20/007	<ul style="list-style-type: none"> <li>• {Trolling propulsion units (trolling plates for slowing down <a href="#">B63H 25/50</a>; dynamo-electric machines of trolling units <a href="#">H02K</a>)}</li> </ul> <p><u>WARNING</u></p> <p>Group B63H 20/007 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.</p>

		All groups listed in this Warning should be considered in order to perform a complete search.
M	B63H 2020/008	<ul style="list-style-type: none"><li>• {Tools, specially adapted for maintenance, mounting, repair, or the like of outboard propulsion units, e.g. of outboard motors or Z-drives}</li></ul> <p><u>WARNING</u> Group B63H 2020/008 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B63H 20/02	<ul style="list-style-type: none"><li>• Mounting of propulsion units (<a href="#">B63H 20/08</a> takes precedence)</li></ul> <p><u>WARNING</u> Group B63H 20/02 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B63H 2020/025	<ul style="list-style-type: none"><li>• {Sealings specially adapted for mountings of outboard drive units; Arrangements thereof, e.g. for transom penetrations}</li></ul> <p><u>WARNING</u> Group B63H 2020/025 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B63H 20/04	<ul style="list-style-type: none"><li>• in a well</li></ul> <p><u>WARNING</u> Group B63H 20/04 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B63H 20/06	<ul style="list-style-type: none"><li>• on an intermediate support</li></ul> <p><u>WARNING</u> Group B63H 20/06 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B63H 20/08	<ul style="list-style-type: none"><li>• Means enabling movement of the position of the propulsion element, e.g. for trim, tilt or steering; Control of trim or tilt (initiating means for steering <a href="#">B63H 25/02</a>)</li></ul> <p><u>WARNING</u> Group B63H 20/08 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B63H 20/10	<ul style="list-style-type: none"><li>• Means enabling trim or tilt, or lifting of the propulsion element when an obstruction is hit; Control of trim or tilt</li></ul> <p><u>WARNING</u> Group B63H 20/10 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.</p>

All groups listed in this Warning should be considered in order to perform a complete search.

- M B63H 2020/103
  - • {using a flexible member for enabling or controlling tilt or lifting, e.g. a cable}

**WARNING**

Group B63H 2020/103 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.  
All groups listed in this Warning should be considered in order to perform a complete search.

- M B63H 20/106
  - • {Means enabling lifting of the propulsion element in a substantially vertical, linearly sliding movement}

**WARNING**

Group B63H 20/106 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.  
All groups listed in this Warning should be considered in order to perform a complete search.

- M B63H 20/12
  - • Means enabling steering

**WARNING**

Group B63H 20/12 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.  
All groups listed in this Warning should be considered in order to perform a complete search.

- M B63H 20/14
  - Transmission between propulsion power unit and propulsion element

**WARNING**

Group B63H 20/14 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.  
All groups listed in this Warning should be considered in order to perform a complete search.

- M B63H 2020/145
  - • {comprising means for permitting telescoping movement of components of the outboard propulsion unit, e.g. telescoping movement of power leg}

**WARNING**

Group B63H 2020/145 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.  
All groups listed in this Warning should be considered in order to perform a complete search.

- M B63H 20/16
  - • allowing movement of the propulsion element in a horizontal plane only, e.g. for steering

**WARNING**

Group B63H 20/16 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.  
All groups listed in this Warning should be considered in order to perform a complete search.

- M B63H 20/18
  - • allowing movement of the propulsion element about a longitudinal axis, e.g. the through transom shaft ([B63H 20/22](#) takes precedence)

**WARNING**

Group B63H 20/18 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.  
All groups listed in this Warning should be considered in order to perform a complete search.

M	B63H 20/20	<ul style="list-style-type: none"> <li>• with provision for reverse drive</li> </ul> <p><u>WARNING</u> Group B63H 20/20 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B63H 20/22	<ul style="list-style-type: none"> <li>• allowing movement of the propulsion element about at least a horizontal axis without disconnection of the drive, e.g. using universal joints</li> </ul> <p><u>WARNING</u> Group B63H 20/22 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B63H 20/24	<ul style="list-style-type: none"> <li>• {Arrangements, apparatus and methods for handling exhaust gas in outboard drives, e.g.} exhaust gas outlets {(in engines, e.g. outboard marine engines, <a href="#">F01N</a>)}</li> </ul> <p><u>WARNING</u> Group B63H 20/24 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B63H 20/245	<ul style="list-style-type: none"> <li>• {Exhaust gas outlets (<a href="#">B63H 20/26</a> takes precedence)}</li> </ul> <p><u>WARNING</u> Group B63H 20/245 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B63H 20/26	<ul style="list-style-type: none"> <li>• {Exhaust gas outlets} passing through the propeller or its hub</li> </ul> <p><u>WARNING</u> Group B63H 20/26 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B63H 20/28	<ul style="list-style-type: none"> <li>• {Arrangements, apparatus and methods for handling cooling-water in outboard drives, e.g.} cooling-water intakes {(cooling circuits for outboard marine engines <a href="#">F01P 3/202</a>)}</li> </ul> <p><u>WARNING</u> Group B63H 20/28 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B63H 20/285	<ul style="list-style-type: none"> <li>• {Cooling-water intakes (<del>B63H 20/28 takes precedence</del>)}</li> </ul> <p><u>WARNING</u> Group B63H 20/285 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28. All groups listed in this Warning should be considered in order to perform a complete search.</p>

- M B63H 20/30
- {Cooling-water intakes} for flushing {(circuits for flushing outboard marine engines [F01P 3/205](#))}
- WARNING**  
Group B63H 20/30 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.  
All groups listed in this Warning should be considered in order to perform a complete search.
- M B63H 20/32
- Housings {(air intakes for outboard engines [F02M 35/167](#))}
- WARNING**  
Group B63H 20/32 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.  
All groups listed in this Warning should be considered in order to perform a complete search.
- M B63H 2020/323
- {Gear cases}
- WARNING**  
Group B63H 2020/323 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.  
All groups listed in this Warning should be considered in order to perform a complete search.
- M B63H 2020/326
- {having a dividing plane substantially in plane with the axes of the transmission shafts}
- WARNING**  
Group B63H 2020/326 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.  
All groups listed in this Warning should be considered in order to perform a complete search.
- M B63H 20/34
- comprising stabilising fins {, foils, anticavitation plates, splash plates, or rudders (rudders carrying propellers [B63H 25/42](#); rudders carrying jets [B63H 25/46](#))}
- WARNING**  
Group B63H 20/34 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.  
All groups listed in this Warning should be considered in order to perform a complete search.
- M B63H 20/36
- Transporting or testing stands {(hand carts for transporting outboard units [B62B](#); measuring torque [G01L 3/00](#), measuring thrust of propellers [G01L 5/133](#), testing in general [G01M](#)); Use of outboard propulsion units as pumps}; Protection of power legs {, e.g. when not in use}
- WARNING**  
Group B63H 20/36 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.  
All groups listed in this Warning should be considered in order to perform a complete search.
- U B63H 21/00**
- Use of propulsion power plant or units on vessels**

**NOTE**

This group comprises arrangements of propulsion power plant or units on vessels and to some extent it includes adaptations of such plant or units to facilitate such arrangements

- M B63H 21/12
- the vessels being motor-driven ([B63H 21/175](#), [B63H 21/18](#) take precedence; {cooling circuits with liquid-to-liquid heat-exchange relative to marine vessels [F01P 3/207](#)})
- WARNING**  
Group B63H 21/12 is no longer used for classification of vessels being motor-driven by electric motor, powered by land vehicle supported by vessel, and powered by nuclear energy. These documents are in the process of being reorganised to groups B63H 21/17, B63H 21/175, and B63H 21/18 respectively
- U B63H 21/24
- {the vessels being small craft, e.g. racing boats}
- D B63H 21/26  
—(Frozen)
- {of outboard type; Outboard propulsion power units movably installed for steering, reversing, tilting, or the like (transom panels for outboard motors for inflatable boats B63B 7/087; floating propeller units B63B 35/665)}
- WARNING**  
Group B63H 21/26 is no longer used for the classification of documents as of May 1, 2020.  
The content of this group is being reclassified into groups B63H 5/125, B63H 5/1252, B63H 2005/1254, B63H 2005/1256, B63H 2005/1258, B63H 20/00, B63H 20/001, B63H 20/002, B63H 2020/003, B63H 2020/005, B63H 2020/006, B63H 20/007, B63H 2020/008, B63H 20/02, B63H 2020/025, B63H 20/04, B63H 20/06, B63H 20/08, B63H 20/10, B63H 2020/103, B63H 20/106, B63H 20/12, B63H 20/14, B63H 2020/145, B63H 20/16, B63H 20/18, B63H 20/20, B63H 20/22, B63H 20/24, B63H 20/245, B63H 20/26, B63H 20/28, B63H 20/285, B63H 20/30, B63H 20/32, B63H 2020/323, B63H 2020/326, B63H 20/34, B63H 20/36, B63H 25/42, and B63H 2025/425.  
All groups listed in this Warning should be considered in order to perform a complete search.
- D B63H 21/265  
—(Frozen)
- {Steering or control devices for outboards (steering by rudders B63H 25/06; control handles for boats B63H 21/213)}
- WARNING**  
Group B63H 21/265 is no longer used for the classification of documents as of May 1, 2020.  
The content of this group is being reclassified into groups B63H 5/125, B63H 5/1252, B63H 2005/1254, B63H 2005/1256, B63H 2005/1258, B63H 20/00, B63H 20/001, B63H 20/002, B63H 2020/003, B63H 2020/005, B63H 2020/006, B63H 20/007, B63H 2020/008, B63H 20/02, B63H 2020/025, B63H 20/04, B63H 20/06, B63H 20/08, B63H 20/10, B63H 2020/103, B63H 20/106, B63H 20/12, B63H 20/14, B63H 2020/145, B63H 20/16, B63H 20/18, B63H 20/20, B63H 20/22, B63H 20/24, B63H 20/245, B63H 20/26, B63H 20/28, B63H 20/285, B63H 20/30, B63H 20/32, B63H 2020/323, B63H 2020/326, B63H 20/34, B63H 20/36, B63H 25/42, and B63H 2025/425.  
All groups listed in this Warning should be considered in order to perform a complete search.
- D B63H 21/28  
—(Frozen)
- {Arrangements of transmission between propulsion power unit and propulsive element}
- WARNING**  
Group B63H 21/28 is no longer used for the classification of documents as of May 1, 2020.  
The content of this group is being reclassified into groups B63H 5/125, B63H 5/1252, B63H 2005/1254, B63H 2005/1256, B63H 2005/1258, B63H 20/00, B63H 20/001, B63H 20/002, B63H 2020/003, B63H 2020/005, B63H 2020/006, B63H 20/007, B63H 2020/008, B63H 20/02,

B63H 21/28

(Frozen)

(continued)

B63H 2020/025, B63H 20/04, B63H 20/06, B63H 20/08, B63H 20/10, B63H 2020/103, B63H 20/106, B63H 20/12, B63H 20/14, B63H 2020/145, B63H 20/16, B63H 20/18, B63H 20/20, B63H 20/22, B63H 20/24, B63H 20/245, B63H 20/26, B63H 20/28, B63H 20/285, B63H 20/30, B63H 20/32, B63H 2020/323, B63H 2020/326, B63H 20/34, B63H 20/36, B63H 25/42, and B63H 2025/425.

All groups listed in this Warning should be considered in order to perform a complete search.

U B63H 25/00

**Steering; Slowing-down otherwise than by use of propulsive elements (using movably-installed outboard propulsion units [B63H 20/00](#)); Dynamic anchoring, i.e. positioning vessels by means of main or auxiliary propulsive elements**

M B63H 25/42

- Steering or dynamic anchoring by propulsive elements (by jets [B63H 25/46](#)); Steering or dynamic anchoring by propellers used therefor only; Steering or dynamic anchoring by rudders carrying propellers

**WARNING**

Group B63H 25/42 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.

All groups listed in this Warning should be considered in order to perform a complete search.

M B63H 2025/425

- {Propulsive elements, other than jets, substantially used for steering or dynamic anchoring only, with means for retracting, or otherwise moving to a rest position outside the water flow around the hull}

**WARNING**

Group B63H 2025/425 is incomplete pending reclassification of documents from groups B63H 21/26, B63H 21/265, and B63H 21/28.

All groups listed in this Warning should be considered in order to perform a complete search.

**Project: RP0611-F (C12N)**

U C12N 11/00

**Carrier-bound or immobilised enzymes; Carrier-bound or immobilised microbial cells; Preparation thereof**

U C12N 11/02

- Enzymes or microbial cells immobilised on or in an organic carrier

M C12N 11/08

- • the carrier being a synthetic polymer

**WARNING**

Group C12N 11/08 is impacted by reclassification into groups C12N 11/082, C12N 11/084, C12N 11/087, C12N 11/089, C12N 11/091, C12N 11/093, C12N 11/096, and C12N 11/098.

All groups listed in this Warning should be considered in order to perform a complete search.

M C12N 11/082

- • • obtained by reactions only involving carbon-to-carbon unsaturated bonds

**WARNING**

Groups C12N 11/082, C12N 11/084, and C12N 11/087 are incomplete pending reclassification of documents from group C12N 11/08.

Groups C12N 11/08, C12N 11/082, C12N 11/084 and C12N 11/087 should be considered in order to perform a complete search.



- M C12N 11/089
- • • obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds
- WARNING  
Groups C12N 11/089, C12N 11/091, C12N 11/093 and C12N 11/096 are incomplete pending reclassification of documents from group C12N 11/08. Groups C12N 11/08, C12N 11/089, C12N 11/091, C12N 11/093 and C12N 11/096 should be considered in order to perform a complete search.
- M C12N 11/098
- • • formed in the presence of the enzymes or microbial cells
- WARNING  
Group C12N 11/098 is incomplete pending reclassification of documents from group C12N 11/08. Groups C12N 11/08 and C12N 11/098 should be considered in order to perform a complete search.

**Project: RP0634-F (C05G)**

- U C05G 3/00**      **Mixtures of one or more fertilisers with additives not having a specially fertilising activity**
- M C05G 3/20
- for preventing the fertilisers being reduced to powder; Anti-dusting additives
- WARNING  
Group C05G 3/20 is impacted by reclassification into group C05G 3/30. Groups C05G 3/20 and C05G 3/30 should be considered in order to perform a complete search.
- M C05G 3/30
- Anti-agglomerating additives; Anti-solidifying additives
- WARNING  
Group C05G 3/30 is incomplete pending reclassification of documents from group C05G 3/20. Groups C05G 3/20 and C05G 3/30 should be considered in order to perform a complete search.
- M C05G 3/50
- Surfactants; Emulsifiers
- WARNING  
Group C05G 3/50 is incomplete pending reclassification of documents from group C05G 3/70. Groups C05G 3/70 and C05G 3/50 should be considered in order to perform a complete search.
- M C05G 3/70
- for affecting wettability, e.g. drying agents
- WARNING  
Group C05G 3/70 is impacted by reclassification into group C05G 3/50. Groups C05G 3/70 and C05G 3/50 should be considered in order to perform a complete search.
- M C05G 5/00**      **Fertilisers characterised by their form**
- WARNING  
Group C05G 5/00 is impacted by reclassification into groups C05G 5/10, C05G 5/12, C05G 5/14, C05G 5/16, C05G 5/18, C05G 5/30, and C05G 5/40. All groups listed in this Warning should be considered in order to perform a complete search.

M	C05G 5/10	<ul style="list-style-type: none"> <li>• Solid or semi-solid fertilisers, e.g. powders (layered or coated <a href="#">C05G 5/30</a>, incorporated into a matrix <a href="#">C05G 5/40</a>)</li> </ul> <p><b>WARNING</b>  Group C05G 5/10 is incomplete pending reclassification of documents from group C05G 5/00.  Groups C05G 5/00 and C05G 5/10 should be considered in order to perform a complete search.</p>
M	C05G 5/12	<ul style="list-style-type: none"> <li>• Granules or flakes</li> </ul> <p><b>WARNING</b>  Group C05G 5/12 is incomplete pending reclassification of documents from group C05G 5/00.  Group C05G 5/12 is also impacted by reclassification into groups C05G 5/14.  Groups C05G 5/00, C05G 5/12, and C05G 5/14 should be considered in order to perform a complete search.</p>
M	C05G 5/14	<ul style="list-style-type: none"> <li>• Tablets, spikes, rods, blocks or balls</li> </ul> <p><b>WARNING</b>  Group C05G 5/14 is incomplete pending reclassification of documents from groups C05G 5/00, C05G 5/12, and C05G 5/45.  All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	C05G 5/16	<ul style="list-style-type: none"> <li>• Films or sheets; Webs; Fibres</li> </ul> <p><b>WARNING</b>  Group C05G 5/16 is incomplete pending reclassification of documents from group C05G 5/00 and C05G 5/45.  Groups C05G 5/00, C05G 5/45, and C05G 5/16 should be considered in order to perform a complete search.</p>
M	C05G 5/18	<ul style="list-style-type: none"> <li>• Semi-solid fertilisers, e.g. foams or gels</li> </ul> <p><b>WARNING</b>  Group C05G 5/18 is incomplete pending reclassification of documents from groups C05G 5/00 and C05G 5/45.  Groups C05G 5/00, C05G 5/45, and C05G 5/18 should be considered in order to perform a complete search.</p>
M	C05G 5/20	<ul style="list-style-type: none"> <li>• Liquid fertilisers (layered or coated <a href="#">C05G 5/30</a>; incorporated into a matrix <a href="#">C05G 5/40</a>)</li> </ul> <p><b>WARNING</b>  Group C05G 5/20 is impacted by reclassification into groups C05G 5/23, C05G 5/27, C05G 5/30, and C05G 5/40.  All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	C05G 5/23	<ul style="list-style-type: none"> <li>• Solutions</li> </ul> <p><b>WARNING</b>  Group C05G 5/23 is incomplete pending reclassification of documents from group C05G 5/20.  Groups C05G 5/20 and C05G 5/23 should be considered in order to perform a complete search.</p>

- M C05G 5/27
- Dispersions, e.g. suspensions or emulsions
- WARNING**  
Group C05G 5/27 is incomplete pending reclassification of documents from group C05G 5/20.  
Groups C05G 5/20 and C05G 5/27 should be considered in order to perform a complete search.
- M C05G 5/30
- Layered or coated, e.g. dust-preventing coatings
- NOTE**  
{Apparatus for applying layers or coatings are classified in this group}
- WARNING**  
Group C05G 5/30 is incomplete pending reclassification of documents from group C05G 5/00, C05G 5/20, and C05G 5/45.  
All groups listed in this Warning should be considered in order to perform a complete search.
- M C05G 5/40
- Fertilisers incorporated into a matrix
- WARNING**  
Group C05G 5/40 is incomplete pending reclassification of documents from group C05G 5/00 and C05G 5/20.  
Groups C05G 5/00, C05G 5/20, and C05G 5/40 should be considered in order to perform a complete search.
- M C05G 5/45
- {Form not covered by groups [C05G 5/10](#) - [C05G 5/18](#), [C05G 5/20](#) - [C05G 5/27](#), [C05G 5/30](#) - [C05G 5/38](#) or [C05G 5/40](#), e.g. soluble or permeable packaging}
- WARNING**  
Group C05G 5/45 is impacted by reclassification into groups C05G 5/14, C05G 5/16, C05G 5/18, and C05G 5/30.  
All groups listed in this Warning should be considered in order to perform a complete search.

## Project: RP0666-F (D01H)

- U D01H 1/00
- Spinning or twisting machines in which the product is wound-up continuously (open-end spinning machines [D01H 4/00](#) {; doubling of yarns [B65H 54/00+T](#); doubled, plied or cabled threads [D02G 3/28](#), e.g. using hollow spindles [D02G 3/283](#); spin-twisting [D02G 3/281](#); threads with alternately "S" and "Z" direction of twist, e.g. self-twist process, [D02G 3/286](#); wrapping strands of filaments or staple fibres by a binder yarn [D02G 3/38](#)})
- M D01H 1/10
- for imparting multiple twist, e.g. two-for-one twisting
- WARNING**  
Group D01H 1/10 is impacted by reclassification into group D07B 3/022.  
Groups D01H 1/10 and D07B 3/022 should be considered in order to perform a complete search.

## Project: RP0666-F (D03D)

- M D03D 13/00
- Woven fabrics characterised by the special disposition of the warp or weft threads, e.g. with curved weft threads, with discontinuous warp threads, with diagonal warp or weft
- WARNING**  
Group D03D 13/00 is impacted by reclassification into group D07B 7/021.

Groups D03D 13/00 and D07B 7/021 should be considered in order to perform a complete search.

**Project: RP0666-F (D07B)**

**M D07B 1/00 Constructional features of ropes or cables**

WARNING

Group D07B 1/00 is impacted by reclassification into group D07B 1/24.  
Groups D07B 1/00 and D07B 1/24 should be considered in order to perform a complete search.

- M D07B 1/14
- Ropes or cables with incorporated auxiliary elements, e.g. for marking, extending throughout the length of the rope or cable

WARNING

Group D07B 1/14 is impacted by reclassification into group D07B 1/24.  
Groups D07B 1/14 and D07B 1/24 should be considered in order to perform a complete search.

- M D07B 1/145
- {comprising elements for indicating or detecting the rope or cable status}

WARNING

Group D07B 1/145 is impacted by reclassification into group D07B 1/24.  
Groups D07B 1/145 and D07B 1/24 should be considered in order to perform a complete search.

- M D07B 1/22
- Flat or flat-sided ropes; Sets of ropes consisting of a series of parallel ropes

WARNING

Group D07B 1/22 is impacted by reclassification into group D07B 5/045.  
Groups D07B 1/22 and D07B 5/045 should be considered in order to perform a complete search.

- M D07B 1/24
- {Ropes or cables with a prematurely failing element}

WARNING

Group D07B 1/24 is incomplete pending reclassification of documents from groups D07B 1/00, D07B 1/14, and D07B 1/145.  
All groups listed in this Warning should be considered in order to perform a complete search.

**U D07B 3/00 General-purpose machines or apparatus for producing twisted ropes or cables from component strands of the same or different material**

- M D07B 3/02
- in which the supply reels rotate about the axis of the rope or cable {or in which a guide member rotates about the axis of the rope or cable to guide the component strands away from the supply reels in fixed position}

WARNING

Group D07B 3/02 is impacted by reclassification into group D07B 3/022.  
Groups D07B 3/02 and D07B 3/022 should be considered in order to perform a complete search.

- M D07B 3/022
- {with provision for imparting two or more twists to the filaments for each revolution of the guide member}

WARNING

Group D07B 3/022 is incomplete pending reclassification of documents from groups D07B 3/02 and D01H 1/10.  
Groups D07B 3/02, D01H 1/10, and D07B 3/022 should be considered in order to perform a complete search.

<b>U</b>	<b>D07B 5/00</b>	<b>Making ropes or cables from special materials or of particular form</b>
<b>M</b>	D07B 5/04	<ul style="list-style-type: none"> <li>• Rope bands</li> </ul> <p><u>WARNING</u> Group D07B 5/04 is impacted by reclassification into group D07B 5/045. Groups D07B 5/04 and D07B 5/045 should be considered in order to perform a complete search.</p>
<b>M</b>	D07B 5/045	<ul style="list-style-type: none"> <li>• {Belts comprising additional filaments for laterally interconnected load bearing members}</li> </ul> <p><u>WARNING</u> Group D07B 5/045 is incomplete pending reclassification of documents from groups D07B 1/22 and D07B 5/04. Groups D07B 1/22, D07B 5/04, and D07B 5/045 should be considered in order to perform a complete search.</p>
<b>U</b>	<b>D07B 7/00</b>	<b>Details of, or auxiliary devices incorporated in, rope- or cable-making machines; Auxiliary apparatus associated with such machines</b>
<b>M</b>	D07B 7/02	<ul style="list-style-type: none"> <li>• Machine details; Auxiliary devices</li> </ul> <p><u>WARNING</u> Group D07B 7/02 is impacted by reclassification into group D07B 7/021. Groups D07B 7/02 and D07B 7/021 should be considered in order to perform a complete search.</p>
<b>M</b>	D07B 7/021	<ul style="list-style-type: none"> <li>• {Guiding means for filaments, strands, ropes or cables}</li> </ul> <p><u>WARNING</u> Group D07B 7/021 is incomplete pending reclassification of documents from groups D07B 7/02 and D03D 13/00. Groups D07B 7/02, D03D 13/00, and D07B 7/021 should be considered in order to perform a complete search.</p>
<b>M</b>	<b>D07B 9/00</b>	<b>Binding or sealing ends, e.g. to prevent unravelling</b>
		<p><u>WARNING</u> Group D07B 9/00 is impacted by reclassification into group D07B 9/001. Groups D07B 9/00 and D07B 9/001 should be considered in order to perform a complete search.</p>
<b>M</b>	D07B 9/001	<ul style="list-style-type: none"> <li>• {combined with cutting or severing}</li> </ul> <p><u>WARNING</u> Group D07B 9/001 is incomplete pending reclassification of documents from group D07B 9/00. Groups D07B 9/00 and D07B 9/001 should be considered in order to perform a complete search.</p>

**Project: RP0699-F (A42B)**

<b>M</b>	<b>A42B 1/00</b>	<b>Hats; Caps; Hoods</b>
		<p><u>WARNING</u> Group A42B 1/00 is incomplete pending reclassification of documents from group A42B 1/203. Group A42B 1/00 is also impacted by reclassification into groups A42B 1/009, A42B 1/011, A42B 1/014, A42B 1/017, A42B 1/0175, A42B 1/019, A42B 1/0192 and A42B 1/0195.</p>

All groups listed in this Warning should be considered in order to perform a complete search.

M A42B 1/006

- convertible or adaptable for uses other than as headgear

WARNING

Group A42B 1/006 is incomplete pending reclassification of documents from group A42B 1/206.

Groups A42B 1/206 and A42B 1/006 should be considered in order to perform a complete search.

M A42B 1/009

- with means for light reflection

WARNING

Group A42B 1/009 is incomplete pending reclassification of documents from group A42B 1/00.

Groups A42B 1/00 and A42B 1/009 should be considered in order to perform a complete search.

M A42B 1/011

- Arrangements for deodorising or perfuming

WARNING

Group A42B 1/011 is incomplete pending reclassification of documents from group A42B 1/00.

Groups A42B 1/00 and A42B 1/011 should be considered in order to perform a complete search.

M A42B 1/014

- specially adapted for protection against insects

WARNING

Group A42B 1/014 is incomplete pending reclassification of documents from group A42B 1/00.

Groups A42B 1/00 and A42B 1/014 should be considered in order to perform a complete search.

M A42B 1/017

- specially adapted for promoting health, e.g. with means for pressing on acupuncture points

WARNING

Groups A42B 1/017 and A42B 1/0175 are incomplete pending reclassification of documents from group A42B 1/00.

Groups A42B 1/00, A42B 1/017, and A42B 1/0175 should be considered in order to perform a complete search.

M A42B 1/018

- with means for protecting the eyes, ears or nape, e.g. sun or rain shields; with air-inflated pads or removable linings

WARNING

Group A42B 1/018 is incomplete pending reclassification of documents from group A42B 1/06.

All groups listed in this Warning should be considered in order to perform a complete search.

M A42B 1/0186

- with means for protecting the ears or nape

WARNING

Group A42B 1/0186 is impacted by reclassification into group A42B 1/06.

All groups listed in this Warning should be considered in order to perform a complete search.

M	A42B 1/019	<ul style="list-style-type: none"> <li>characterised by their material</li> </ul> <p><b>WARNING</b> Groups A42B 1/019 and A42B 1/0195 are incomplete pending reclassification of documents from group A42B 1/00. Groups A42B 1/00, A42B 1/019 and A42B 1/0195 should be considered in order to perform a complete search.</p>
M	A42B 1/0192	<ul style="list-style-type: none"> <li>Paper; Cardboard</li> </ul> <p><b>WARNING</b> Group A42B 1/0192 is incomplete pending reclassification of documents from groups A42B 1/00 and A42B 1/208. Groups A42B 1/00, A42B 1/208 and A42B 1/0192 should be considered in order to perform a complete search.</p>
U	A42B 1/04	<ul style="list-style-type: none"> <li>Soft caps; Hoods</li> </ul>
M	A42B 1/041	<ul style="list-style-type: none"> <li>Peakless soft head coverings, e.g. turbans or berets (<a href="#">A42B 1/045</a>, <a href="#">A42B 1/046</a> take precedence)</li> </ul> <p><b>WARNING</b> Group A42B 1/041 is impacted by reclassification into group A42B 1/049. Groups A42B 1/041 and A42B 1/049 should be considered in order to perform a complete search.</p>
M	A42B 1/045	<ul style="list-style-type: none"> <li>fastened under the chin, e.g. bonnets (<a href="#">millinery A42B 1/16</a>)</li> </ul> <p><b>WARNING</b> Group A42B 1/045 is impacted by reclassification into groups A42B 1/049 and A42B 1/16. Groups A42B 1/045, A42B 1/049 and A42B 1/16 should be considered in order to perform a complete search.</p>
M	A42B 1/049	<ul style="list-style-type: none"> <li>Nightcaps (hair nets or hair-protecting caps <a href="#">A45D 8/40</a>)</li> </ul> <p><b>WARNING</b> Group A42B 1/049 is incomplete pending reclassification of documents from groups A42B 1/041 and A42B 1/045. Groups A42B 1/041, A42B 1/045 and A42B 1/049 should be considered in order to perform a complete search.</p>
M	A42B 1/06	<ul style="list-style-type: none"> <li>Caps with flaps; Motoring caps</li> </ul> <p><b>WARNING</b> Group A42B 1/06 is incomplete pending reclassification of documents from group A42B 1/0186. Group A42B 1/06 is also impacted by reclassification into group A42B 1/018. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A42B 1/16	<ul style="list-style-type: none"> <li>Millinery</li> </ul> <p><b>WARNING</b> Group A42B 1/16 is incomplete pending reclassification of documents from group A42B 1/045. Groups A42B 1/045 and A42B 1/16 should be considered in order to perform a complete search.</p>



M	A42B 1/201	<ul style="list-style-type: none"> <li>• Collapsible or foldable</li> </ul> <p><b>WARNING</b> Group A42B 1/201 is incomplete pending reclassification of documents from group A42B 1/203. Groups A42B 1/203 and A42B 1/201 should be considered in order to perform a complete search.</p>
M	A42B 1/203	<ul style="list-style-type: none"> <li>• Inflatable</li> </ul> <p><b>WARNING</b> Group A42B 1/203 is impacted by reclassification into groups A42B 1/00, A42B 1/201, A42B 1/205, A42B 1/206 and A42B 1/208. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	A42B 1/205	<ul style="list-style-type: none"> <li>• made of separable parts</li> </ul> <p><b>WARNING</b> Group A42B 1/205 is incomplete pending reclassification of documents from group A42B 1/203. Groups A42B 1/203 and A42B 1/205 should be considered in order to perform a complete search.</p>
M	A42B 1/206	<ul style="list-style-type: none"> <li>• Transformable, convertible or reversible hats (for uses other than as headgear <a href="#">A42B 1/006</a>)</li> </ul> <p><b>WARNING</b> Group A42B 1/206 is incomplete pending reclassification of documents from group A42B 1/203. Group A42B 1/206 is also impacted by reclassification into group A42B 1/006. Groups A42B 1/203, A42B 1/206 and A42B 1/006 should be considered in order to perform a complete search.</p>
M	A42B 1/208	<ul style="list-style-type: none"> <li>• made from a flat sheet</li> </ul> <p><b>WARNING</b> Group A42B 1/208 is incomplete pending reclassification of documents from group A42B 1/203. Group A42B 1/208 is also impacted by reclassification into group A42B 1/0192. Groups A42B 1/203, A42B 1/208 and A42B 1/0192 should be considered in order to perform a complete search.</p>

**Project: RP10399 (A61M)**

U	A61M 1/00	<p>Suction or pumping devices for medical purposes; Devices for carrying-off, for treatment of, or for carrying-over, body-liquids; Drainage systems (catheters <a href="#">A61M 25/00</a>; tube connectors, tube couplings, valves or branch units specially adapted for medical use <a href="#">A61M 39/00</a>; devices for taking samples of blood <a href="#">A61B 5/15</a>; filters implantable into blood vessels <a href="#">A61F 2/01</a>)</p>
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- C A61M 1/14
- Dialysis systems; Artificial kidneys; Blood oxygenators (*semi-permeable membranes characterised by the material, manufacturing processes therefor B01D 71/00*) ; {Reciprocating systems for treatment of body fluids, e.g. single needle systems for *haemofiltration, pheris hemofiltration or pheresis*} (*haemofiltration using non-reciprocating systems A61M 1/34; extracorporeal blood circuit aspects A61M 1/36*); (processes of separation using semi-permeable membranes B01D 61/00; semi-permeable membranes characterised by the material, manufacturing processes therefor B01D 71/00)
- WARNING**  
Group A61M 1/14 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.
- N A61M 1/15
- {with a cassette forming partially or totally the flow circuit for the treating fluid, e.g. the dialysate fluid circuit or the treating gas circuit}
- WARNING**  
Groups A61M 1/15 - A61M 1/1566 are incomplete pending reclassification of documents from groups A61M 1/14, A61M 1/16 - A61M 1/267, A61M 1/30 - A61M 1/362. All groups listed in this Warning should be considered in order to perform a complete search.
- N A61M 1/152
- • • {Details related to the interface between cassette and machine}
- N A61M 1/1522
- • • • {the interface being evacuated interfaces to enhance contact}
- N A61M 1/1524
- • • • {the interface providing means for actuating on functional elements of the cassette, e.g. plungers}
- N A61M 1/153
- • • {the cassette being adapted for heating or cooling the treating fluid, e.g. the dialysate or the treating gas}
- N A61M 1/154
- • • {with sensing means or components thereof}
- N A61M 1/155
- • • {with treatment-fluid pumping means or components thereof}
- N A61M 1/156
- • • {Constructional details of the cassette, e.g. specific details on material or shape}
- N A61M 1/1561
- • • • {at least one cassette surface or portion thereof being flexible, e.g. the cassette having a rigid base portion with preformed channels and being covered with a foil}
- WARNING**  
Group A61M 1/1561 is incomplete pending reclassification of documents from group A61M 1/14. Groups A61M 1/14 and A61M 1/1561 should be considered in order to perform a complete search.
- N A61M 1/1562
- • • • {Details of incorporated reservoirs}
- N A61M 1/15625
- • • • • {the reservoirs acting as balance chambers}
- WARNING**  
Group A61M 1/15625 is incomplete pending reclassification of documents from group A61M 1/14. Groups A61M 1/14 and A61M 1/15625 should be considered in order to perform a complete search.
- N A61M 1/1563
- • • • {Details of incorporated filters}
- N A61M 1/15632
- • • • • {the filter being a dialyser}
- N A61M 1/1565
- • • • {Details of valves}

- N A61M 1/1566 . . . {Means for adding solutions or substances to the treating fluid}
- N A61M 1/159 . . . {specially adapted for peritoneal dialysis}
- WARNING  
Group [A61M 1/159](#) is incomplete pending reclassification of documents from groups [A61M 1/14](#), [A61M 1/16](#) - [A61M 1/362](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- C A61M 1/16 . . with membranes ~~{(A61M 1/30 takes precedence; membranes per se B01D 69/00, B01D 71/00)}~~
- WARNING  
Group [A61M 1/16](#) is impacted by reclassification into groups [A61M 1/15](#) - [A61M 1/159](#), [A61M 1/1657](#), [A61M 1/3401](#) and [A61M 1/3622](#) - [A61M 1/3623](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- C A61M 1/1601 . . . {Control or regulation}
- WARNING  
Group [A61M 1/1601](#) is impacted by reclassification into groups [A61M 1/15](#) - [A61M 1/159](#), [A61M 1/1657](#), [A61M 1/3401](#) and [A61M 1/3622](#) - [A61M 1/3623](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- C A61M 1/1603 . . . {Regulation parameters}
- WARNING  
Group [A61M 1/1603](#) is impacted by reclassification into groups [A61M 1/15](#) - [A61M 1/159](#), [A61M 1/1657](#), [A61M 1/3401](#) and [A61M 1/3622](#) - [A61M 1/3623](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- C A61M 1/1605 . . . . {Physical characteristics of the dialysate fluid}
- WARNING  
Group [A61M 1/1605](#) is impacted by reclassification into groups [A61M 1/15](#) - [A61M 1/159](#), [A61M 1/1657](#), [A61M 1/3401](#) and [A61M 1/3622](#) - [A61M 1/3623](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- C A61M 1/1607 . . . . . {before use, *i.e. upstream of dialyser*}
- WARNING  
Group [A61M 1/1607](#) is impacted by reclassification into groups [A61M 1/15](#) - [A61M 1/159](#), [A61M 1/1657](#), [A61M 1/3401](#) and [A61M 1/3622](#) - [A61M 1/3623](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- C A61M 1/1609 . . . . . {after use, *i.e. downstream of dialyser*}
- WARNING  
Group [A61M 1/1609](#) is impacted by reclassification into groups [A61M 1/15](#) - [A61M 1/159](#), [A61M 1/1657](#), [A61M 1/3401](#) and [A61M 1/3622](#) - [A61M 1/3623](#).

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/1611 . . . . {Weight of the patient}

**WARNING**

*Group A61M 1/1611 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/1613 . . . . {Profiling or modelling of patient or predicted treatment evolution or outcome}

**WARNING**

*Group A61M 1/1613 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/1615 . . . . {using measurements made at different flow rates}

**WARNING**

*Group A61M 1/1615 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/1617 . . . . {using measurements made during a temporary variation of a characteristic of the fresh dialysis fluid}

**WARNING**

*Group A61M 1/1617 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/1619 . . . . {Sampled collection of used dialysate, i.e. obviating the need for recovery of whole dialysate quantity for post-dialysis analysis}

**WARNING**

*Group A61M 1/1619 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/1621 . . . . {Constructional aspects thereof (~~B01D 69/00, B01D 71/00 take precedence~~ semi-permeable membranes for separation processes characterised by their properties B01D 69/00; semi permeable membranes characterised by their material B01D 71/00)}

**WARNING**

*Group A61M 1/1621 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401, A61M 1/3622 - A61M 1/3623 and A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/1623 . . . {Disposition ~~of membranes~~ or location of membranes relative to fluids}

**WARNING**

*Group A61M 1/1623 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/1625 . . . {Dialyser of the outside perfusion type, i.e. blood flow outside hollow membrane fibres or tubes}

**WARNING**

*Group A61M 1/1625 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/1627 . . . {Dialyser of the inside perfusion type, i.e. blood flow inside hollow membrane fibres or tubes}

**WARNING**

*Group A61M 1/1627 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/1629 . . . {with integral heat exchanger}

**WARNING**

*Group A61M 1/1629 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/1631 . . . {having non-tubular membranes, e.g. sheets}

**WARNING**

*Group A61M 1/1631 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/1633 . . . {with more than one ~~dialyzer~~ dialyser unit}

**WARNING**

*Group A61M 1/1633 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/1635 . . . {with volume chamber balancing devices between used and fresh dialysis fluid}
- WARNING  
*Group A61M 1/1635 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/1637 . . . {containing the whole volume of dialysis fluid used during a treatment session}
- WARNING  
*Group A61M 1/1637 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/1639 . . . {linked by membranes}
- WARNING  
*Group A61M 1/1639 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/1641 . . . {linked by pistons}
- WARNING  
*Group A61M 1/1641 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/1643 . . . {with weighing of fresh and used dialysis fluid}
- WARNING  
*Group A61M 1/1643 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/1645 . . . {with mechanically linked peristaltic dialysis fluid pumps one upstream, the other one downstream of the dialyser}
- WARNING  
*Group A61M 1/1645 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*



- C A61M 1/1647 . . . {with flow rate measurement of the dialysis fluid, upstream and downstream of the dialyser}
- WARNING  
*Group A61M 1/1647 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/1649 . . . {with pulsatile dialysis fluid flow}
- WARNING  
*Group A61M 1/1649 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/165 . . . {with a dialyser bypass on the dialysis fluid line}
- WARNING  
*Group A61M 1/165 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/1652 . . . {Holding or locking systems for the membrane unit}
- WARNING  
*Group A61M 1/1652 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/1654 . . . {Dialysates therefor}
- WARNING  
*Group A61M 1/1654 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/1656 . . . {Apparatus for preparing dialysates ~~(with regeneration of dialysates A61M-1/1696)~~}
- WARNING  
*Group A61M 1/1656 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*



- N A61M 1/1657 . . . . {with centralised supply of dialysate or constituent thereof for more than one dialysis unit}
- WARNING  
Group [A61M 1/1657](#) is incomplete pending reclassification of documents from groups [A61M 1/14](#), [A61M 1/16](#) - [A61M 1/267](#), [A61M 1/30](#) - [A61M 1/362](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- C A61M 1/1658 . . . . {Degasification ~~(in general B01D 19/00)~~}
- WARNING  
Group [A61M 1/1658](#) is impacted by reclassification into groups [A61M 1/15](#) - [A61M 1/159](#), [A61M 1/1657](#), [A61M 1/3401](#) and [A61M 1/3622](#) - [A61M 1/3623](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- C A61M 1/166 . . . . {Heating (for sterilisation [A61M 1/1686](#))}
- WARNING  
Group [A61M 1/166](#) is impacted by reclassification into groups [A61M 1/15](#) - [A61M 1/159](#), [A61M 1/1657](#), [A61M 1/3401](#) and [A61M 1/3622](#) - [A61M 1/3623](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- C A61M 1/1662 . . . . . {with heat exchange between fresh and used dialysate}
- WARNING  
Group [A61M 1/1662](#) is impacted by reclassification into groups [A61M 1/15](#) - [A61M 1/159](#), [A61M 1/1657](#), [A61M 1/3401](#) and [A61M 1/3622](#) - [A61M 1/3623](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- C A61M 1/1664 . . . . . {with temperature control}
- WARNING  
Group [A61M 1/1664](#) is impacted by reclassification into groups [A61M 1/15](#) - [A61M 1/159](#), [A61M 1/1657](#), [A61M 1/3401](#) and [A61M 1/3622](#) - [A61M 1/3623](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- C A61M 1/1666 . . . . . {by dissolving solids}
- WARNING  
Group [A61M 1/1666](#) is impacted by reclassification into groups [A61M 1/15](#) - [A61M 1/159](#), [A61M 1/1657](#), [A61M 1/3401](#) and [A61M 1/3622](#) - [A61M 1/3623](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- C A61M 1/1668 . . . . . {Details of containers}
- WARNING  
Group [A61M 1/1668](#) is impacted by reclassification into groups [A61M 1/15](#) - [A61M 1/159](#), [A61M 1/1657](#), [A61M 1/3401](#) and [A61M 1/3622](#) - [A61M 1/3623](#).

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/167 . . . . {Flexible packaging for solid concentrates}

**WARNING**

*Group A61M 1/167 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/1672 . . . . {using membrane filters, e.g. for sterilising the dialysate}

**WARNING**

*Group A61M 1/1672 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/1674 . . . . {using UV radiation sources for sterilising the dialysate}

**WARNING**

*Group A61M 1/1674 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/1676 . . . . {containing proteins, e.g. albumin}

**WARNING**

*Group A61M 1/1676 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/1678 . . . {intracorporal (~~A61M 1/28 and A61F 2/022 take precedence~~ peritoneal dialysis A61M 1/28)}

**WARNING**

*Group A61M 1/1678 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/168 . . . {Sterilisation or cleaning before or after use (~~sterilisation of materials in general A61L; cleaning or sterilisation of membrane modules apart from the machine B01D 65/02~~)}

**WARNING**

*Group A61M 1/168 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/1682      • • • {both machine and membrane module, i.e. also the module blood side}
- WARNING  
*Group A61M 1/1682 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/1684      • • • {Checking the module characteristics before reuse}
- WARNING  
*Group A61M 1/1684 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/1686      • • • {by heat}
- WARNING  
*Group A61M 1/1686 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/1688      • • • {with recirculation of the sterilising fluid}
- WARNING  
*Group A61M 1/1688 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/169      • • • {using chemical substances}
- WARNING  
*Group A61M 1/169 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/1692      • • • {Detection of blood traces in dialysate ~~(testing of the membrane modules B01D 65/10; investigating fluid-tightness of structures in general G01M 3/00)}~~}
- WARNING  
*Group A61M 1/1692 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/1694      • • • {with recirculating dialysing liquid}
- WARNING  
*Group A61M 1/1694 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/1696 . . . {with dialysate regeneration}

**WARNING**

*Group A61M 1/1696 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/1698 . . . {Blood oxygenators with or without heat-exchangers (~~A61M 1/1678 takes precedence; membranes therefor B01D 67/00, B01D 69/00; B01D 71/00~~intracorporal A61M 1/1678; manufacturing of membranes therefor B01D 67/00; semi-permeable membranes for separation processes characterised by their properties B01D 69/00; semi-permeable membranes characterised by their material B01D 71/00)}

**WARNING**

*Group A61M 1/1698 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/26 . . . {and internal elements} which are moving

**WARNING**

*Group A61M 1/26 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/262 . . . {rotating}

**WARNING**

*Group A61M 1/262 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/265 . . . {inducing ~~TAYLOR~~ Taylor vortices}

**WARNING**

*Group A61M 1/265 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/267 . . . {used for pumping}

**WARNING**

*Group A61M 1/267 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/28      • • • Peritoneal dialysis {; Other peritoneal treatment, e.g. oxygenation}

**WARNING**

*Group A61M 1/28 is incomplete pending reclassification of documents from groups A61M 1/281, A61M 1/282, A61M 1/284, A61M 1/285, A61M 1/287 and A61M 1/288.*

*Group A61M 1/28 is also impacted by reclassification into group A61M 1/159.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/281      • • • {Instillation other than by gravity}

**WARNING**

*Group A61M 1/281 is impacted by reclassification into groups A61M 1/28 and A61M 1/159.*

*Groups A61M 1/281, A61M 1/28 and A61M 1/159 should be considered in order to perform a complete search.*

- C A61M 1/282      • • • {Operational modes}

**WARNING**

*Group A61M 1/282 is impacted by reclassification into groups A61M 1/28 and A61M 1/159.*

*Groups A61M 1/282, A61M 1/28 and A61M 1/159 should be considered in order to perform a complete search.*

- C A61M 1/284      • • • {Continuous flow peritoneal dialysis [CFPD]}

**WARNING**

*Group A61M 1/284 is impacted by reclassification into groups A61M 1/28 and A61M 1/159,*

*Groups A61M 1/284, A61M 1/28 and A61M 1/159 should be considered in order to perform a complete search.*

- C A61M 1/285      • • • {Catheters therefor}

**WARNING**

*Group A61M 1/285 is impacted by reclassification into groups A61M 1/28 and A61M 1/159.*

*Groups A61M 1/285, A61M 1/28 and A61M 1/159 should be considered in order to perform a complete search.*

- C A61M 1/287      • • • {Dialysates therefor}

**WARNING**

*Group A61M 1/287 is impacted by reclassification into groups A61M 1/28 and A61M 1/159.*

*Groups A61M 1/287, A61M 1/28 and A61M 1/159 should be considered in order to perform a complete search.*

- C A61M 1/288      • • • {Priming (priming in extracorporeal blood circuits [A61M 1/3643](#))}

**WARNING**

*Group A61M 1/288 is impacted by reclassification into groups A61M 1/28 and A61M 1/159.*

*Groups A61M 1/288, A61M 1/28 and A61M 1/159 should be considered in order to perform a complete search.*

- C A61M 1/30
- • *Single needle dialysis* {; { Reciprocating systems, alternately withdrawing blood from and returning it to the patient, e.g. single-lumen-needle dialysis or single needle systems for *haemofiltration*, *hemofiltration* or pheresis}
- WARNING  
*Group A61M 1/30 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/301
- • • {Details}
- WARNING  
*Group A61M 1/301 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/302
- • • {having a reservoir for withdrawn untreated blood}
- WARNING  
*Group A61M 1/302 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/303
- • • {having a reservoir for treated blood to be returned}
- WARNING  
*Group A61M 1/303 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/304
- • • {Treatment chamber used as reservoir, e.g. centrifuge bowl or filter with movable membrane}
- WARNING  
*Group A61M 1/304 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/305
- • • {Control of inversion point between collection and re-infusion phase}
- WARNING  
*Group A61M 1/305 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.*



- C A61M 1/306      . . . . {Pressure control, e.g. using substantially rigid closed; **or** gas buffered or elastic reservoirs}
- WARNING  
*Group A61M 1/306 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.  
 All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/307      . . . . {Time control}
- WARNING  
*Group A61M 1/307 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.  
 All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/308      . . . . {Volume control, e.g. with open or flexible containers, by counting the number of pump revolutions, weighing}
- WARNING  
*Group A61M 1/308 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.  
 All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/309      . . . . {with trans-membrane pressure [TMP] increasing substantially continuously during arterial phase}
- WARNING  
*Group A61M 1/309 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.  
 All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/32      . . Oxygenators without membranes
- WARNING  
*Group A61M 1/32 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.  
 All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/322      . . . {Antifoam; Defoaming}
- WARNING  
*Group A61M 1/322 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.  
 All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/325      . . . . {Surfactant coating; Improving wettability}
- WARNING  
*Group A61M 1/325 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*



*All groups listed in this Warning should be considered in order to perform a complete search.*

C A61M 1/327

- • {using catalytic production of oxygen}

**WARNING**

*Group A61M 1/327 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

C A61M 1/34

- Filtering material out of the blood by passing it through a membrane, i.e. ~~haemofiltration, diafiltration~~ {hemofiltration or diafiltration (A61M 1/30 takes precedence; extracorporeal blood circuit aspects A61M 1/36)}

**WARNING**

*Group A61M 1/34 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.*

N A61M 1/3401

- • {Cassettes therefor}

**WARNING**

*Group A61M 1/3401 is incomplete pending reclassification of documents from groups A61M 1/14, A61M 1/16 - A61M 1/267, A61M 1/30 - A61M 1/362. All groups listed in this Warning should be considered in order to perform a complete search.*

C A61M 1/3403

- • {Regulation parameters}

**WARNING**

*Group A61M 1/3403 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.*

C A61M 1/3406

- • {Physical characteristics of the filtrate, e.g. urea}

**WARNING**

*Group A61M 1/3406 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

C A61M 1/341

- • {by measuring the filtrate rate, or volume}

**WARNING**

*Group A61M 1/341 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

C A61M 1/3413

- • {Diafiltration}

**WARNING**

*Group A61M 1/3413 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/3417      • • • {using distinct filters for dialysis and ultra-filtration}

**WARNING**

*Group A61M 1/3417 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/342      • • {Adding solutions to the blood, e.g. substitution solutions (for preventing coagulation [A61M 1/3672](#))}

**WARNING**

*Group A61M 1/342 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/3424      • • • {Substitution fluid path}

**WARNING**

*Group A61M 1/3424 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/3427      • • • • {back through the membrane, e.g. by inverted trans-membrane pressure [TMP]}

**WARNING**

*Group A61M 1/3427 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/3431      • • • • {upstream **of** the filter}

**WARNING**

*Group A61M 1/3431 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/3434      • • • • • {with pre-dilution and post-dilution}

**WARNING**

*Group A61M 1/3434 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/3437      • • • {downstream *of* the filter, e.g. post-dilution with filtrate}
- WARNING  
*Group A61M 1/3437 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3441      • • • {Substitution rate control as a function of the ultrafiltration rate}
- WARNING  
*Group A61M 1/3441 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3444      • • • {in which the collected ultra-filtrate expels an equal volume of substitution fluid from a reservoir}
- WARNING  
*Group A61M 1/3444 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3448      • • • {by ~~mechanical~~*mechanically* linked pumps in both ultra-filtrate and substitution flow line}
- WARNING  
*Group A61M 1/3448 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3451      • • • {the difference in weight between both ultra-filtrate and substitution reservoir being used as control signal}
- WARNING  
*Group A61M 1/3451 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3455      • • • {Substitution fluids}
- WARNING  
*Group A61M 1/3455 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/3458      • • • {having electrolytes not present in the dialysate}
- WARNING  
*Group A61M 1/3458 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.  
 All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3462      • • • {Circuits for the preparation thereof}
- WARNING  
*Group A61M 1/3462 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.  
 All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3465      • • • {using dialysate as substitution fluid}
- WARNING  
*Group A61M 1/3465 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.  
 All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3468      • • • {using treated filtrate as substitution fluid}
- WARNING  
*Group A61M 1/3468 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.  
 All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3472      • • {with treatment of the filtrate}
- WARNING  
*Group A61M 1/3472 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.  
 All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3475      • • • {with filtrate treatment agent in the same enclosure as the membrane}
- WARNING  
*Group A61M 1/3475 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.  
 All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3479      • • • {by **dialyzing** **dialysing** the filtrate}
- WARNING  
*Group A61M 1/3479 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.  
 All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/3482
- • • {by filtrating the filtrate using another cross-flow filter, e.g. a membrane filter}
- WARNING**  
*Group A61M 1/3482 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3486
- • • {Biological, chemical treatment, e.g. chemical precipitation; treatment by absorbents}
- WARNING**  
*Group A61M 1/3486 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3489
- • • • {by biological cells, e.g. bioreactor}
- WARNING**  
*Group A61M 1/3489 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3493
- • • {using treatment agents in suspension}
- WARNING**  
*Group A61M 1/3493 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3496
- • {Plasmapheresis; Leucopheresis; Lymphopheresis ([A61M 1/3472](#) takes precedence; ~~single-needle processes A61M 1/30~~)}
- WARNING**  
*Group A61M 1/3496 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/36
- Other treatment of blood in a by-pass of the natural circulatory system, e.g. temperature adaptation, irradiation {; Extra-corporeal blood circuits}
- WARNING**  
*Group A61M 1/36 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3601
- • {Extra-corporeal circuits in which the blood fluid passes more than once through the treatment unit}
- WARNING**  
*Group A61M 1/3601 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

C A61M 1/3603

- • • {in the same direction}

**WARNING**

*Group A61M 1/3603 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

C A61M 1/3604

- • • {in opposite directions}

**WARNING**

*Group A61M 1/3604 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

C A61M 1/3606

- • {Arrangements for blood-volume reduction of extra-corporeal circuits}

**WARNING**

*Group A61M 1/3606 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.*

C A61M 1/3607

- • {Regulation parameters}

**WARNING**

*Group A61M 1/3607 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.*

C A61M 1/3609

- • • {Physical characteristics of the blood, e.g. haematocrit, urea}

**WARNING**

*Group A61M 1/3609 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

C A61M 1/361

- • • • {before treatment}

**WARNING**

*Group A61M 1/361 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

C A61M 1/3612

- • • • {after treatment}

**WARNING**

*Group A61M 1/3612 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623.*



*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/3613      • {Reperfusion, e.g. of the coronary vessels, e.g. retroperfusion}

**WARNING**

*Group A61M 1/3613 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/3615      • {Cleaning blood contaminated by local chemotherapy of a body part temporarily isolated from the blood circuit}

**WARNING**

*Group A61M 1/3615 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/3616      • {Batch-type treatment}

**WARNING**

*Group A61M 1/3616 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/3618      • {Magnetic separation}

**WARNING**

*Group A61M 1/3618 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/362      • {changing physical properties of target cells by binding them to added particles to facilitate their subsequent separation from other cells, e.g. immunoaffinity}

**WARNING**

*Group A61M 1/362 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/3621      • {Extra-corporeal blood circuits (single-needle circuits [A61M 1/30](#))}

**WARNING**

*Group A61M 1/3621 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.*

- N A61M 1/3622      • • {with a cassette forming partially or totally the blood circuit}

**WARNING**

*Groups [A61M 1/3622](#) - [A61M 1/362266](#) are incomplete pending reclassification of documents from groups [A61M 1/14](#), [A61M 1/16](#) - [A61M 1/267](#), [A61M 1/30](#) - [A61M 1/387](#).*

*All groups listed in this Warning should be considered in order to perform a complete search.*



- N A61M 1/36222 . . . . {Details related to the interface between cassette and machine}
- N A61M 1/362223 . . . . . {the interface being evacuated interfaces to enhance contact}
- N A61M 1/362227 . . . . . {the interface providing means for actuating on functional elements of the cassette, e.g. plungers}
- N A61M 1/36223 . . . . . {the cassette being adapted for heating or cooling the blood}
- N A61M 1/36224 . . . . . {with sensing means or components thereof}
- N A61M 1/36225 . . . . . {with blood pumping means or components thereof}
- N A61M 1/36226 . . . . . {Constructional details of cassettes, e.g. specific details on material or shape}
- N A61M 1/362261 . . . . . {at least one cassette surface or portion thereof being flexible, e.g. the cassette having a rigid base portion with preformed channels and being covered with a foil}
- N A61M 1/362262 . . . . . {Details of incorporated reservoirs}
- N A61M 1/362263 . . . . . {Details of incorporated filters}
- N A61M 1/362264 . . . . . . {the filter being a blood filter}
- N A61M 1/362265 . . . . . {Details of valves}
- N A61M 1/362266 . . . . . {Means for adding solutions or substances to the blood}
- N A61M 1/3623 . . . {Means for actively controlling temperature of blood}

WARNING

Group [A61M 1/3623](#) is incomplete pending reclassification of documents from groups [A61M 1/14](#), [A61M 1/16](#) - [A61M 1/267](#), [A61M 1/30](#) - [A61M 1/387](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- C A61M 1/3624 . . . {Level detectors; Level control}

WARNING

Group [A61M 1/3624](#) is impacted by reclassification into groups [A61M 1/3622](#) - [A61M 1/3623](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- C A61M 1/3626 . . . {Gas bubble detectors (~~blood leak detection by change of transparency of dialysate A61M 1/1692~~; in infusion devices A61M 5/365; observing bubbles in a liquid pool for leak detection, in general G01M 3/06)}

WARNING

Group [A61M 1/3626](#) is impacted by reclassification into groups [A61M 1/3622](#) - [A61M 1/3623](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- C A61M 1/3627 . . . {Degassing devices; Buffer reservoirs; Drip chambers; Blood filters (~~priming A61M 1/3643~~; ~~blood filters for infusion A61M 5/165~~)}

WARNING

Group [A61M 1/3627](#) is impacted by reclassification into groups [A61M 1/3622](#) - [A61M 1/3623](#).

All groups listed in this Warning should be considered in order to perform a complete search.

C	A61M 1/3629	<ul style="list-style-type: none"> <li>• • • {degassing by changing pump speed, e.g. during priming}</li> </ul> <p><u>WARNING</u>  Group A61M 1/3629 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.  All groups listed in this Warning should be considered in order to perform a complete search.</p>
C	A61M 1/363	<ul style="list-style-type: none"> <li>• • • {Degassing by using vibrations}</li> </ul> <p><u>WARNING</u>  Group A61M 1/363 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.  All groups listed in this Warning should be considered in order to perform a complete search.</p>
C	A61M 1/3632	<ul style="list-style-type: none"> <li>• • • {Combined venous-cardiotomy reservoirs}</li> </ul> <p><u>WARNING</u>  Group A61M 1/3632 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.  All groups listed in this Warning should be considered in order to perform a complete search.</p>
C	A61M 1/3633	<ul style="list-style-type: none"> <li>• • • {Blood component filters, e.g. leukocyte filters}</li> </ul> <p><u>WARNING</u>  Group A61M 1/3633 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.  All groups listed in this Warning should be considered in order to perform a complete search.</p>
C	A61M 1/3635	<ul style="list-style-type: none"> <li>• • • • {Constructional details}</li> </ul> <p><u>WARNING</u>  Group A61M 1/3635 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.  All groups listed in this Warning should be considered in order to perform a complete search.</p>
C	A61M 1/3636	<ul style="list-style-type: none"> <li>• • • • • {having a flexible housing}</li> </ul> <p><u>WARNING</u>  Group A61M 1/3636 is impacted by reclassification into groups A61M 1/3622, A61M 1/36222 and A61M 1/3622 - A61M 1/3623.  All groups listed in this Warning should be considered in order to perform a complete search.</p>
C	A61M 1/3638	<ul style="list-style-type: none"> <li>• • • {with a vapour trap}</li> </ul> <p><u>WARNING</u>  Group A61M 1/3638 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.  All groups listed in this Warning should be considered in order to perform a complete search.</p>
C	A61M 1/3639	<ul style="list-style-type: none"> <li>• • • {Blood pressure control, pressure transducers specially adapted therefor}</li> </ul> <p><u>WARNING</u>  Group A61M 1/3639 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.</p>

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/3641 . . . {Pressure isolators}

**WARNING**

*Group A61M 1/3641 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/3643 . . {Priming, rinsing before or after use}

**WARNING**

*Group A61M 1/3643 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/3644 . . . {Mode of operation}

**WARNING**

*Group A61M 1/3644 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/3646 . . . . {Expelling the residual body fluid after use, e.g. back to the body}

**WARNING**

*Group A61M 1/3646 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/3647 . . . . {with recirculation of the priming solution}

**WARNING**

*Group A61M 1/3647 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/3649 . . . . {using dialysate as priming or rinsing liquid}

**WARNING**

*Group A61M 1/3649 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/365 . . . . {through membranes, e.g. by inverted trans-membrane pressure [TMP]}

**WARNING**

*Group A61M 1/365 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/3652      • • • • {using gas, e.g. air}
- WARNING  
*Group A61M 1/3652 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.  
 All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3653      • • • {Interfaces between patient blood circulation and extra-corporal blood circuit}
- WARNING  
*Group A61M 1/3653 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.  
 All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3655      • • • • {Arterio-venous shunts; *or* fistulae}
- WARNING  
*Group A61M 1/3655 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.  
 All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3656      • • • • {Monitoring patency or flow at connection sites; Detecting disconnections}
- WARNING  
*Group A61M 1/3656 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.  
 All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3658      • • • • {Indicating the amount of purified blood recirculating in the fistula or shunt}
- WARNING  
*Group A61M 1/3658 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.  
 All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3659      • • • • {Cannulae pertaining to extracorporeal circulation}
- WARNING  
*Group A61M 1/3659 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.  
 All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3661      • • • • {for haemodialysis}
- WARNING  
*Group A61M 1/3661 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.  
 All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/3663      • • • {Flow rate transducers; Flow integrators ~~(measuring the flow in general G01F)~~}
- WARNING  
Group A61M 1/3663 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.  
All groups listed in this Warning should be considered in order to perform a complete search.
- C A61M 1/3664      • • • {for preparing cardioplegia solutions}
- WARNING  
Group A61M 1/3664 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.  
All groups listed in this Warning should be considered in order to perform a complete search.
- C A61M 1/3666      • • • {Cardiac or cardiopulmonary bypass, e.g. heart-lung machines}
- WARNING  
Group A61M 1/3666 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.  
All groups listed in this Warning should be considered in order to perform a complete search.
- C A61M 1/3667      • • • • {with assisted venous return}
- WARNING  
Group A61M 1/3667 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.  
All groups listed in this Warning should be considered in order to perform a complete search.
- C A61M 1/3669      • • • {Electrical impedance measurement of body fluids; transducers specially adapted therefor}
- WARNING  
Group A61M 1/3669 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.  
All groups listed in this Warning should be considered in order to perform a complete search.
- C A61M 1/367      • • • {Circuit parts not covered by the preceding subgroups of group A61M 1/3621}
- WARNING  
Group A61M 1/367 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.  
All groups listed in this Warning should be considered in order to perform a complete search.
- C A61M 1/3672      • • {Means preventing coagulation}
- WARNING  
Group A61M 1/3672 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.  
All groups listed in this Warning should be considered in order to perform a complete search.

- C A61M 1/3673      • • • {Anticoagulant coating, e.g. Heparin coating}
- WARNING  
*Group A61M 1/3673 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.  
 All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3675      • • • {Deactivation}
- WARNING  
*Group A61M 1/3675 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.  
 All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3676      • • • {by interposing a liquid layer between blood and air}
- WARNING  
*Group A61M 1/3676 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.  
 All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3678      • • {Separation of cells using wave pressure; Manipulation of individual corpuscles}
- WARNING  
*Group A61M 1/3678 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.  
 All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3679      • • {by absorption ([A61M 1/3675](#) takes precedence)}
- WARNING  
*Group A61M 1/3679 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.  
 All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3681      • • {by irradiation}
- WARNING  
*Group A61M 1/3681 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.  
 All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3683      • • • {using photoactive agents}
- WARNING  
*Group A61M 1/3683 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.  
 All groups listed in this Warning should be considered in order to perform a complete search.*
- C A61M 1/3686      • • • • {by removing photoactive agents after irradiation}
- WARNING  
*Group A61M 1/3686 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.*



*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/3687      • • {Chemical treatment ([A61M 1/3675](#) takes precedence)}

**WARNING**

*Group [A61M 1/3687](#) is impacted by reclassification into groups [A61M 1/3622](#) - [A61M 1/3623](#).*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/3689      • • • {by biological cells}

**WARNING**

*Group [A61M 1/3689](#) is impacted by reclassification into groups [A61M 1/3622](#) - [A61M 1/3623](#).*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/369      • • {Temperature treatment (~~heating or cooling infusion media [A61M 5/44](#)~~)}

**WARNING**

*Group [A61M 1/369](#) is impacted by reclassification into groups [A61M 1/3622](#) - [A61M 1/3623](#).*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/3692      • • {Washing or rinsing blood or blood constituents}

**WARNING**

*Group [A61M 1/3692](#) is impacted by reclassification into groups [A61M 1/3622](#), [A61M 1/36222](#), [A61M 1/362223](#), [A61M 1/362227](#), [A61M 1/36223](#), [A61M 1/36224](#), [A61M 1/36225](#), [A61M 1/36226](#), [A61M 1/362261](#), [A61M 1/362262](#), [A61M 1/362263](#), [A61M 1/362264](#), [A61M 1/362265](#), [A61M 1/362266](#) and [A61M 1/3623](#).*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/3693      • • {using separation based on different densities of components, e.g. centrifuging}

**WARNING**

*Group [A61M 1/3693](#) is impacted by reclassification into groups [A61M 1/3622](#) - [A61M 1/3623](#).*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/3695      • • • {with sedimentation by gravity}

**WARNING**

*Group [A61M 1/3695](#) is impacted by reclassification into groups [A61M 1/3622](#) - [A61M 1/3623](#).*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/3696      • • • {with means for adding or withdrawing liquid substances during the centrifugation, e.g. continuous centrifugation}

**WARNING**

*Group [A61M 1/3696](#) is impacted by reclassification into groups [A61M 1/3622](#) - [A61M 1/3623](#).*



*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/3698
- • {Expressing processed fluid out from the turning rotor using another fluid compressing the treatment chamber; Variable volume rotors}

**WARNING**

*Group A61M 1/3698 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/38
- • Removing constituents from donor blood and {storing or} returning remainder to body {, e.g. for transfusion}

**WARNING**

*Group A61M 1/38 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/382
- • • {~~Optimization~~Optimisation of blood component yield}

**WARNING**

*Group A61M 1/382 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/385
- • • {taking into account of the patient characteristics}

**WARNING**

*Group A61M 1/385 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- C A61M 1/387
- • • {taking into account of the needs or inventory}

**WARNING**

*Group A61M 1/387 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.*

*All groups listed in this Warning should be considered in order to perform a complete search.*

**Project: RP10402 (B60Q)**

**M B60Q**

**ARRANGEMENT OF SIGNALLING OR LIGHTING DEVICES, THE MOUNTING OR SUPPORTING THEREOF OR CIRCUITS THEREFOR, FOR VEHICLES IN GENERAL**

**NOTES**

1. This subclass also ~~covers~~covers the operation and control of lighting devices, for example:

- arrangement or adaptation of lighting switches or signal-initiating means for vehicles.;

- control of lighting devices in relation to the vehicle as a whole, e.g. for levelling, swivelling or aiming.

2. This subclass does not cover optical, mechanical, thermal or electrical arrangement of elements within lighting devices, which are covered by groups [F21S 41/00](#) – [F21S 45/00](#).

3. Attention is drawn to the Note following the title of class [B60](#).

~~4. Attention is drawn to the following places:~~

~~5:~~

<del>B60K 28/00</del>	<del>Safety devices, e.g. sleeping driver</del>
<del>B60R 25/00</del>	<del>Anti-theft</del>
<del>B62D</del>	<del>Driving assistance</del>
<del>B62D 15/02</del>	<del>Steering aids</del>
<del>B60K 31/0008</del>	<del>Cruise control</del>
<del>G01S</del>	<del>Infrared night vision</del>
<del>G01S 13/931</del>	<del>Anti-collision</del>
<del>G05D 1/00</del>	<del>Automatic pilot</del>
<del>G06K 9/00</del>	<del>Pattern recognition</del>
<del>G06T 3/00</del>	<del>Image transformation</del>
<del>G06T 5/00</del>	<del>Image enhancement</del>
<del>G06T 7/00</del>	<del>Image analysis</del>
<del>G08B 21/00</del>	<del>Alarms in general</del>
<del>G08G</del>	<del>Traffic control</del>
<del>G08G 1/16</del>	<del>Anti-collision systems</del>
<del>H04N</del>	<del>Television systems</del>

#### WARNING

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

<a href="#">B60Q 1/128</a>	covered by	<a href="#">B60Q 1/124</a>
<a href="#">B60Q 1/132</a>	covered by	<a href="#">B60Q 1/124</a>
<a href="#">B60Q 1/136</a>	covered by	<a href="#">B60Q 1/124</a>

~~2. In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme:~~

M	B60Q 1/00	<b>Arrangements or adaptations</b> <b>Arrangement</b> of optical signalling or lighting devices, <b>the mounting or supporting thereof or circuits therefor</b> (for lighting vehicle interior <a href="#">B60Q 3/00</a> <del>}; circuit arrangements for electric light sources in general H05B 47/00</del> )
M	B60Q 1/0005	• {Devices preventing the lights from becoming dirty or damaged, <b>e.g. protection grids or cleaning by air flow</b> <del>(protecting lighting devices from damage in general F21V 15/00), e.g. protection grids (fastening of grids or protective cages in general F21V 17/00), cleaning by air flow</del> (windshield wipers for cleaning optical devices of vehicles <a href="#">B60S 1/04</a> )}
M	B60Q 1/0011	• {with light guides for distributing the light between several lighting or signalling devices <del>(using light guides inside a single device F21S 8/00, light guides per se G02B 6/0001)</del> }
M	B60Q 1/0064	• {with provision for maintenance, e.g. changing the light bulb (swivel arrangements <a href="#">B60Q 1/0425</a> ; <del>fastening of covers F21S 41/50; changing light sources in general F21V 19/04; fastening of light sources or lamp holders F21S 41/19, F21S 43/19</del> )}
M	B60Q 1/007	• {via a removable cap <del>(fastening of the light source by a cap holding the light source F21S 41/19, F21S 43/19)</del> }

M	B60Q 1/0076	<ul style="list-style-type: none"> <li>• {Switches therefor (<a href="#">B60Q 1/1446</a>, <a href="#">B60Q 1/343</a>, <a href="#">B60Q 1/40</a> take precedence; <del>arrangements or fitting of control knobs on dashboard B60K 37/06</del>)}</li> </ul>
M	B60Q 1/0088	<ul style="list-style-type: none"> <li>• {Details of electrical connections (<a href="#">B60Q 1/305</a> takes precedence; <del>electrical connectors in general H01R</del>; electrical connection of the light source itself <a href="#">F21S 41/192</a>, <a href="#">F21S 43/195</a>)}</li> </ul>
M	B60Q 1/0094	<ul style="list-style-type: none"> <li>• {Arrangement of electronic circuits separated from the light source, e.g. <u>mounting of housings for starter circuits for discharge lamps</u> (<del>; e.g. mounting of housings for starter circuits for discharge lamps, circuits per se H05B, arrangements being part of the light source holder F21V 17/06, F21S 41/192, F21S 43/195</del> <u>arrangements being part of the light source holder F21V 17/06, F21S 43/195</u>)}</li> </ul>
U	B60Q 1/02	<ul style="list-style-type: none"> <li>• the devices being primarily intended to illuminate the way ahead or to illuminate other areas of way or environments</li> </ul>
U	B60Q 1/04	<ul style="list-style-type: none"> <li>• the devices being headlights</li> </ul>
U	B60Q 1/0408	<ul style="list-style-type: none"> <li>• {built into the vehicle body, e.g. details concerning the mounting of the headlamps on the vehicle body (<a href="#">B60Q 1/0491</a>, <a href="#">B60Q 1/05</a> take precedence, integrated front ends <a href="#">B62D 25/00</a>)}</li> </ul>
M	B60Q 1/045	<ul style="list-style-type: none"> <li>• {with provision for adjusting the alignment of the headlamp housing with respect to the vehicle body (<del>adjusting the light beam B60Q 1/06</del>)}</li> </ul>
M	B60Q 1/0458	<ul style="list-style-type: none"> <li>• {the front cover being directly mounted onto the vehicle body (<del>mounting the cover on the housing F21S 41/50</del>)}</li> </ul>
C	B60Q 1/0491	<ul style="list-style-type: none"> <li>• {Shock absorbing devices therefor (<del>resilient mounting of lighting devices in general F21V 15/04; shock absorbing devices in general F16F 15/04</del>)}</li> </ul> <p><b>WARNING</b>  Group <a href="#">B60Q 1/0491</a> is impacted by reclassification into group <a href="#">B60Q 1/0495</a>.  Groups <a href="#">B60Q 1/0491</a> and <a href="#">B60Q 1/0495</a> should be considered in order to perform a complete search.</p>
N	B60Q 1/0495	<ul style="list-style-type: none"> <li>• {Frangible brackets}</li> </ul> <p><b>WARNING</b>  Group <a href="#">B60Q 1/0495</a> is incomplete pending reclassification of documents from group <a href="#">B60Q 1/0491</a>.  Groups <a href="#">B60Q 1/0491</a> and <a href="#">B60Q 1/0495</a> should be considered in order to perform a complete search.</p>
M	B60Q 1/06	<ul style="list-style-type: none"> <li>• adjustable, e.g. remotely <del>controlled</del> from inside vehicle (<a href="#">B60Q 1/05</a> takes precedence <del>; controlling the distribution of the light emitted by adjustment of elements F21V 14/00</del>)</li> </ul>
M	B60Q 1/14	<ul style="list-style-type: none"> <li>• having dimming means (<del>lighting power supply circuits in general H05B</del>)</li> </ul>
M	B60Q 1/1407	<ul style="list-style-type: none"> <li>• {General lighting circuits comprising dimming circuits (<del>dimming circuits per se B60Q 1/1415</del>)}</li> </ul>
M	B60Q 1/1438	<ul style="list-style-type: none"> <li>• {Actuating means for dimming masks or screens (<del>adjustable screens per se F21V 11/04</del>)}</li> </ul>
C	B60Q 1/24	<ul style="list-style-type: none"> <li>• for lighting other areas than only the way ahead</li> </ul> <p><b>WARNING</b>  Group <a href="#">B60Q 1/24</a> is impacted by reclassification into groups <a href="#">B60Q 1/245</a>, <a href="#">B60Q 1/247</a> and <a href="#">B60Q 1/249</a>.  All groups listed in this Warning should be considered in order to perform a complete search.</p>

T	B60Q 1/245	<ul style="list-style-type: none"> <li>• • • {<del>using spotlights</del> <i>Searchlights, e.g.</i> adjustable from within the vehicle (adjustable headlights <a href="#">B60Q 1/06</a>)}</li> </ul> <p><b>WARNING</b>  Group <a href="#">B60Q 1/245</a> is incomplete pending reclassification of documents from group <a href="#">B60Q 1/24</a>.  Groups <a href="#">B60Q 1/24</a> and <a href="#">B60Q 1/245</a> should be considered in order to perform a complete search.</p>
N	B60Q 1/247	<ul style="list-style-type: none"> <li>• • • {for illuminating the close surroundings of the vehicle, e.g. to facilitate entry or exit (for reverse drive <a href="#">B60Q 1/22</a>; by opening a side door <a href="#">B60Q 1/323</a>)}</li> </ul> <p><b>WARNING</b>  Group <a href="#">B60Q 1/247</a> is incomplete pending reclassification of documents from group <a href="#">B60Q 1/24</a>.  Groups <a href="#">B60Q 1/24</a> and <a href="#">B60Q 1/247</a> should be considered in order to perform a complete search.</p>
N	B60Q 1/249	<ul style="list-style-type: none"> <li>• • • {for illuminating the field of view of a sensor or camera}</li> </ul> <p><b>WARNING</b>  Group <a href="#">B60Q 1/249</a> is incomplete pending reclassification of documents from group <a href="#">B60Q 1/24</a>.  Groups <a href="#">B60Q 1/24</a> and <a href="#">B60Q 1/249</a> should be considered in order to perform a complete search.</p>
M	B60Q 1/26	<ul style="list-style-type: none"> <li>• the devices being primarily intended to indicate the vehicle, or parts thereof, or to give signals, to other traffic <del>{(means for the lighting or illuminating of aerials; e.g. for purpose of warning H01Q 1/06)}</del></li> </ul>
M	B60Q 1/2611	<ul style="list-style-type: none"> <li>• • {Indicating devices mounted on the roof of the vehicle <del>{(flashing light sources in general F21S 10/06)}</del>}</li> </ul>
M	B60Q 1/2657	<ul style="list-style-type: none"> <li>• • {mounted on a shaft, e.g. telescopic <del>{(lamps on antennas or powerlines F21S 8/085)}</del>}</li> </ul>
M	B60Q 1/2661	<ul style="list-style-type: none"> <li>• • {mounted on parts having other functions (on wheels <del><a href="#">B60Q 1/323</a></del> <a href="#">B60Q 1/326</a>)}</li> </ul>
M	B60Q 1/2665	<ul style="list-style-type: none"> <li>• • • {on rear-view mirrors (lighting devices for vehicle interior on or for rear-view mirrors <a href="#">B60Q 3/258</a>; rear-view mirror arrangements <a href="#">B60R 1/02</a>; mirror assemblies combined with lamps <a href="#">B60R 1/1207</a>; adaptations or arrangements of mirrors for use on cycles <a href="#">B62J 29/00</a>)}</li> </ul>
M	B60Q 1/2669	<ul style="list-style-type: none"> <li>• • • {on door or boot handles (lighting devices for vehicle interior on door handles <a href="#">B60Q 3/267</a>; vehicle doors <a href="#">B60J 5/00</a>; illuminating devices on or for locks or keys <a href="#">E05B 17/10</a>; keyhole finders <a href="#">E05B 15/08</a>)}</li> </ul>
M	B60Q 1/2673	<ul style="list-style-type: none"> <li>• • • {on parts worn by the driver, e.g. clothes; <i>gloves or bags, specially adapted to provide auxiliary vehicle signalling</i>} <del>{(professional or sporting clothes with reflecting or luminous means A41D 13/01); gloves (protective gloves with reflecting or luminous means A41D 19/0157); or bags, specially adapted to provide auxiliary vehicle signalling}</del></li> </ul>
M	B60Q 1/2676	<ul style="list-style-type: none"> <li>• • • {Helmets <del>{(helmets in general A42B 3/00; helmets with signalling or lighting devices A42B 3/0433)}</del>}</li> </ul>
M	B60Q 1/268	<ul style="list-style-type: none"> <li>• • • {on windscreens or windows (<a href="#">B60Q 1/302</a> takes precedence; lighting devices for vehicle interior on or for windows <a href="#">B60Q 3/208</a>; <del>windows or windscreens in general B60J 1/00</del>)}</li> </ul>
M	B60Q 1/2684	<ul style="list-style-type: none"> <li>• • • {on wipers or windscreen washers <del>{(vehicle wipers B60S 1/04; windscreen washers B60S 1/46)}</del>}</li> </ul>
M	B60Q 1/2688	<ul style="list-style-type: none"> <li>• • • {on exhaust pipes <del>{(exhaust or silencing apparatuses in general F01N)}</del>}</li> </ul>
M	B60Q 1/2696	<ul style="list-style-type: none"> <li>• • {Mounting of devices using LEDs <del>{(fastening of LEDs on printed circuits F21V 19/001)}</del>}</li> </ul>

- C B60Q 1/30
- • for indicating rear of vehicle, e.g. by means of reflecting surfaces
- WARNING**  
 Group B60Q 1/30 is impacted by reclassification into groups B60Q 1/301, B60Q 1/3015, B60Q 1/303 and B60Q 1/304.  
 All groups listed in this Warning should be considered in order to perform a complete search.
- N B60Q 1/301
- • {by means of surfaces, e.g. metal plate, reflecting the light of an external light source}
- WARNING**  
 Groups B60Q 1/301 and B60Q 1/3015 are incomplete pending reclassification of documents from group B60Q 1/30.  
 Groups B60Q 1/30, B60Q 1/301 and B60Q 1/3015 should be considered in order to perform a complete search.
- N B60Q 1/3015
- • • {combined with a lamp}
- U B60Q 1/302
- • {mounted in the vicinity, e.g. in the middle, of a rear window}
- N B60Q 1/303
- • {Rear fog lamps}
- WARNING**  
 Group B60Q 1/303 is incomplete pending reclassification of documents from group B60Q 1/30.  
 Groups B60Q 1/30 and B60Q 1/303 should be considered in order to perform a complete search.
- N B60Q 1/304
- • {Adaptations of signalling devices having a part on the vehicle body and another on the boot door}
- WARNING**  
 Group B60Q 1/304 is incomplete pending reclassification of documents from group B60Q 1/30.  
 Groups B60Q 1/30 and B60Q 1/304 should be considered in order to perform a complete search.
- M B60Q 1/307
- • {mounted on loading platforms ~~(warning signals on loading platforms B60P 1/4464)~~}
- U B60Q 1/32
- • for indicating vehicle sides {, e.g. clearance lights}
- C B60Q 1/323
- • {on or for doors ~~or running boards, e.g. to facilitate acces to the vehicle (illumination of door locks E05B 17/10/illuminated exterior door handles B60Q 1/2669; illuminated door locks E05B 17/10)~~}
- WARNING**  
 Group B60Q 1/323 is impacted by reclassification into groups B60Q 1/324 and B60Q 1/325.  
 Groups B60Q 1/323, B60Q 1/324 and B60Q 1/325 should be considered in order to perform a complete search.
- N B60Q 1/324
- • • {for signalling that a door is open or intended to be opened}
- WARNING**  
 Group B60Q 1/324 is incomplete pending reclassification of documents from group B60Q 1/323.  
 Groups B60Q 1/323 and B60Q 1/324 should be considered in order to perform a complete search.

N	B60Q 1/325	<ul style="list-style-type: none"> <li>• • • {on or for running boards or steps}</li> </ul> <p><u>WARNING</u>  Group <a href="#">B60Q 1/325</a> is incomplete pending reclassification of documents from group <a href="#">B60Q 1/323</a>.  Groups <a href="#">B60Q 1/323</a> and <a href="#">B60Q 1/325</a> should be considered in order to perform a complete search.</p>
U	B60Q 1/34	<ul style="list-style-type: none"> <li>• • for indicating change of drive direction (<a href="#">B60Q 1/22</a> takes precedence)</li> </ul>
C	B60Q 1/38	<ul style="list-style-type: none"> <li>• • • using immovably-mounted light sources, e.g. fixed flashing lamps</li> </ul> <p><u>WARNING</u>  Group <a href="#">B60Q 1/38</a> is impacted by reclassification into group <a href="#">B60Q 1/381</a>.  Groups <a href="#">B60Q 1/38</a> and <a href="#">B60Q 1/381</a> should be considered in order to perform a complete search.</p>
N	B60Q 1/381	<ul style="list-style-type: none"> <li>• • • • {with several light sources activated in sequence, e.g. to create a sweep effect}</li> </ul> <p><u>WARNING</u>  Group <a href="#">B60Q 1/381</a> is incomplete pending reclassification of documents from group <a href="#">B60Q 1/38</a>.  Groups <a href="#">B60Q 1/38</a> and <a href="#">B60Q 1/381</a> should be considered in order to perform a complete search.</p>
U	B60Q 1/40	<ul style="list-style-type: none"> <li>• • • having {mechanical, electric or electronic} automatic return to inoperative position</li> </ul>
U	B60Q 1/42	<ul style="list-style-type: none"> <li>• • • • {having mechanical automatic return to inoperative position} due to steering-wheel position {, e.g. with roller wheel control}</li> </ul>
M	B60Q 1/425	<ul style="list-style-type: none"> <li>• • • • • {using a latching element for resetting a switching element (<del>hand actuated multifunction switches B60Q 1/1461</del>)}</li> </ul>
M	B60Q 1/44	<ul style="list-style-type: none"> <li>• • for indicating braking action {or preparation for braking, {e.g. by detection of the foot approaching the brake pedal}</li> </ul>
M	B60Q 1/441	<ul style="list-style-type: none"> <li>• • • {Electric switches operable by the driver's pedals (<del>electric switches in general H01H</del>)}</li> </ul>
M	B60Q 1/46	<ul style="list-style-type: none"> <li>• • for giving flashing caution signals during drive, other than signalling change of direction, e.g. flashing the headlights {, <del>hazard lights or hazard lights</del>} (<del>flashing lights in general F21S 10/06</del>)</li> </ul>
M	B60Q 1/48	<ul style="list-style-type: none"> <li>• • for parking purposes (<del>warning arrangements in garages E04H 6/42</del>)</li> </ul>
C	B60Q 1/50	<ul style="list-style-type: none"> <li>• • for indicating other intentions or conditions, e.g. request for waiting or overtaking</li> </ul> <p><u>WARNING</u>  Group <a href="#">B60Q 1/50</a> is impacted by reclassification into groups <a href="#">B60Q 1/503</a>, <a href="#">B60Q 1/5035</a>, <a href="#">B60Q 1/5037</a>, <a href="#">B60Q 1/507</a>, <a href="#">B60Q 1/508</a>, <a href="#">B60Q 1/509</a>, <a href="#">B60Q 1/543</a>, <a href="#">B60Q 1/544</a>, <a href="#">B60Q 1/545</a>, <a href="#">B60Q 1/547</a> and <a href="#">B60Q 1/549</a>.  All groups listed in this Warning should be considered in order to perform a complete search.</p>
C	B60Q 1/503	<ul style="list-style-type: none"> <li>• • • {using luminous text <del>displays</del> or symbol displays in or on the vehicle, e.g. static text}</li> </ul> <p><u>WARNING</u>  Group <a href="#">B60Q 1/503</a> is incomplete pending reclassification of documents from group <a href="#">B60Q 1/50</a>.  Group <a href="#">B60Q 1/503</a> is also impacted by reclassification into groups <a href="#">B60Q 1/5035</a> and <a href="#">B60Q 1/5037</a>.</p>



*All groups listed in this Warning should be considered in order to perform a complete search.*

- N B60Q 1/5035
- • • {electronic displays}
- WARNING  
Groups [B60Q 1/5035](#) and [B60Q 1/5037](#) are incomplete pending reclassification of documents from groups [B60Q 1/50](#) and [B60Q 1/503](#). All groups listed in this warning should be considered in order to perform a complete search.
- N B60Q 1/5037
- • • • {the display content changing automatically, e.g. depending on traffic situation}
- M B60Q 1/506
- • • {for signaling specific to silent vehicles, e.g. for warning that a hybrid or electric vehicle is approaching}
- N B60Q 1/507
- • • {specific to autonomous vehicles}
- WARNING  
Group [B60Q 1/507](#) is incomplete pending reclassification of documents from group [B60Q 1/50](#). Groups [B60Q 1/50](#) and [B60Q 1/507](#) should be considered in order to perform a complete search.
- N B60Q 1/508
- • • {specific to vehicles driving in fleets or convoys}
- WARNING  
Group [B60Q 1/508](#) is incomplete pending reclassification of documents from group [B60Q 1/50](#). Groups [B60Q 1/50](#) and [B60Q 1/508](#) should be considered in order to perform a complete search.
- N B60Q 1/509
- • • {specific to unauthorised use, e.g. for indicating stolen vehicles or infringements of traffic rules}
- WARNING  
Group [B60Q 1/509](#) is incomplete pending reclassification of documents from group [B60Q 1/50](#). Groups [B60Q 1/50](#) and [B60Q 1/509](#) should be considered in order to perform a complete search.
- M B60Q 1/52
- • • for indicating emergencies ~~{(braking indicating devices B60Q 1/44, portable emergency signal devices B60Q 7/00)}~~
- C B60Q 1/525
- • • • ~~{automatically indicating risk of collision between vehicles or with pedestrians in traffic or with pedestrians, e.g. after risk assessment using the vehicle sensor data}~~ ~~(using video cameras B62D 1/00; radars designed for anti-collision purposes between land vehicles or between land vehicle and fixed obstacles G01S 13/931; control of position or course in two dimensions for land vehicles G05D 1/021; anti-collision systems for road vehicles G08G 1/16)}~~
- WARNING  
Group [B60Q 1/525](#) is impacted by reclassification into group [B60Q 1/535](#). Groups [B60Q 1/525](#) and [B60Q 1/535](#) should be considered in order to perform a complete search.
- N B60Q 1/535
- • • • {to prevent rear-end collisions, e.g. by indicating safety distance at the rear of the vehicle}
- WARNING  
Group [B60Q 1/535](#) is incomplete pending reclassification of documents from group [B60Q 1/525](#).



Groups [B60Q 1/525](#) and [B60Q 1/535](#) should be considered in order to perform a complete search.

- M B60Q 1/54
- • for indicating speed {outside of the vehicle ~~(automatic vehicle speed controlling fittings including unintended speed signalling devices to the vehicle driver B60K 31/18)~~}
- N B60Q 1/543
- • {for indicating other states or conditions of the vehicle (indicating taxis' state of hire or fare [G07B 13/045](#))}
- WARNING  
Group [B60Q 1/543](#) is incomplete pending reclassification of documents from group [B60Q 1/50](#).  
Groups [B60Q 1/50](#) and [B60Q 1/543](#) should be considered in order to perform a complete search.
- N B60Q 1/544
- • {for indicating other states or conditions of the vehicle occupants, e.g. for indicating disabled occupants}
- WARNING  
Group [B60Q 1/544](#) is incomplete pending reclassification of documents from group [B60Q 1/50](#).  
Groups [B60Q 1/50](#) and [B60Q 1/544](#) should be considered in order to perform a complete search.
- N B60Q 1/545
- • {for indicating other traffic conditions, e.g. fog, heavy traffic}
- WARNING  
Group [B60Q 1/545](#) is incomplete pending reclassification of documents from group [B60Q 1/50](#).  
Groups [B60Q 1/50](#) and [B60Q 1/545](#) should be considered in order to perform a complete search.
- N B60Q 1/547
- • {for issuing requests to other traffic participants; for confirming to other traffic participants they can proceed, e.g. they can overtake}
- WARNING  
Group [B60Q 1/547](#) is incomplete pending reclassification of documents from group [B60Q 1/50](#).  
Groups [B60Q 1/50](#) and [B60Q 1/547](#) should be considered in order to perform a complete search.
- N B60Q 1/549
- • {for expressing greetings, gratitude or emotions}
- WARNING  
Group [B60Q 1/549](#) is incomplete pending reclassification of documents from group [B60Q 1/50](#).  
Groups [B60Q 1/50](#) and [B60Q 1/549](#) should be considered in order to perform a complete search.
- M B60Q 1/56
- • for illuminating registrations or the like {, e.g. for licence plates ~~(license plates B60R 13/10)~~}
- U B60Q 3/00**
- Arrangement of lighting devices for vehicle interiors; Lighting devices specially adapted for vehicle interiors**
- U B60Q 3/20
- for lighting specific fittings of passenger or driving compartments; mounted on specific fittings of passenger or driving compartments (lighting for dashboards [B60Q 3/10](#))
- C B60Q 3/225
- • Small compartments, e.g. glove compartments

WARNING

Group [B60Q 3/225](#) is impacted by reclassification into group [B60Q 3/229](#).

*Groups [B60Q 3/225](#) and [B60Q 3/229](#) should be considered in order to perform a complete search.*

N B60Q 3/229

- • {Cup holders}

WARNING

Group [B60Q 3/229](#) is incomplete pending reclassification of documents from group [B60Q 3/225](#).

Groups [B60Q 3/225](#) and [B60Q 3/229](#) should be considered in order to perform a complete search.

C B60Q 3/70

- characterised by the purpose

WARNING

Group [B60Q 3/70](#) is impacted by reclassification into groups [B60Q 3/731](#) and [B60Q 3/735](#).

Groups [B60Q 3/70](#), [B60Q 3/731](#) and [B60Q 3/735](#) should be considered in order to perform a complete search.

U B60Q 3/72

- • for preventing the driver from being dazzled

N B60Q 3/731

- • {for autonomous vehicle travel}

WARNING

Groups [B60Q 3/731](#) and [B60Q 3/735](#) are incomplete pending reclassification of documents from group [B60Q 3/70](#).

Groups [B60Q 3/70](#), [B60Q 3/731](#) and [B60Q 3/735](#) should be considered in order to perform a complete search.

N B60Q 3/735

- • • {for preventing discomfort, e.g. for preventing motion sickness or for anticipating motion}

M B60Q 5/00

**Arrangements or adaptations of acoustic signal devices** **{Arrangement or adaptation of acoustic signal devices (sound producing devices in general G10K)}**

U B60Q 5/005

- {automatically actuated}

M B60Q 5/006

- • {indicating risk of collision between vehicles or with pedestrians ~~{using video cameras B62D 1/00; radars designed for anti-collision purposes between land vehicles or between land vehicle and fixed obstacles G01S 13/931; control of position or course in two dimensions for land vehicles G05D 1/021; anti-collision systems for road vehicles G08G 1/16}~~}

M B60Q 9/00

**Arrangements or adaptations** **Arrangement or adaptation** of signal devices not provided for in one of the preceding main groups, **{ [B60Q 1/00](#) - [B60Q 7/00](#) }**, e.g. haptic signalling}

M B60Q 11/00

**Arrangements** **Arrangement** of monitoring devices for devices provided for in groups [B60Q 1/00](#) - [B60Q 9/00](#) **{(testing of electric installations on road vehicle G01R 31/00)}**

U B60Q 11/005

- {for lighting devices, e.g. indicating if lamps are burning or not}

M B60Q 11/007

- • {the lighting devices indicating change of drive direction ~~{change of drive direction indicators B60Q 1/34}~~}

C B60Q 2400/00

**Special features or arrangements of exterior signal lamps for vehicles**

WARNING

Group [B60Q 2400/00](#) is impacted by reclassification into groups [B60Q 2400/10](#) and [B60Q 2400/50](#).

Groups [B60Q 2400/00](#), [B60Q 2400/10](#) and [B60Q 2400/50](#) should be considered in order to perform a complete search.

T	B60Q 2400/10	<ul style="list-style-type: none"> <li>• <del>Electroluminescent surfaces, i.e.</del> <i>Electro- or photo- luminescent surfaces, e.g.</i> signalling by way of electroluminescent strips or panels</li> </ul> <p><b>WARNING</b>  Group <u>B60Q 2400/10</u> is incomplete pending reclassification of documents from group <u>B60Q 2400/00</u>.  Groups <u>B60Q 2400/00</u> and <u>B60Q 2400/10</u> should be considered in order to perform a complete search.</p>
T	B60Q 2400/50	<ul style="list-style-type: none"> <li>• Projected <del>signs, i.e. symbol or information is projected onto the road</del> <i>symbol or information, e.g. onto the road or car body</i></li> </ul> <p><b>WARNING</b>  Group <u>B60Q 2400/50</u> is incomplete pending reclassification of documents from group <u>B60Q 2400/00</u>.  Groups <u>B60Q 2400/00</u> and <u>B60Q 2400/50</u> should be considered in order to perform a complete search.</p>
C	B60Q 2500/00	<p><b>Special features or arrangements of vehicle interior lamps</b></p> <p><b>WARNING</b>  Group <u>B60Q 2500/00</u> is impacted by reclassification into group <u>B60Q 2500/30</u>.  Groups <u>B60Q 2500/00</u> and <u>B60Q 2500/30</u> should be considered in order to perform a complete search.</p>
D	B60Q 2500/10	<ul style="list-style-type: none"> <li>• embedded in interior trim, e.g. integrated in headliner layers</li> </ul> <p>&lt;administratively transferred to <a href="#">B60Q 3/54</a> INV&gt;</p>
U	B60Q 2500/20	<ul style="list-style-type: none"> <li>• associated with air conditioning arrangements</li> </ul>
N	B60Q 2500/30	<ul style="list-style-type: none"> <li>• Arrangements for illuminating different zones in the vehicle, e.g. front/rear, different seats</li> </ul> <p><b>WARNING</b>  Group <u>B60Q 2500/30</u> is incomplete pending reclassification of documents from group <u>B60Q 2500/00</u>.  Groups <u>B60Q 2500/00</u> and <u>B60Q 2500/30</u> should be considered in order to perform a complete search.</p>
N	B60Q 2800/00	<p><b>Features related to particular types of vehicles not otherwise provided for</b></p>
N	B60Q 2800/10	<ul style="list-style-type: none"> <li>• Autonomous vehicles</li> </ul>
N	B60Q 2800/20	<ul style="list-style-type: none"> <li>• Utility vehicles, e.g. for agriculture, construction work</li> </ul>
N	B60Q 2800/30	<ul style="list-style-type: none"> <li>• Mass transport vehicles</li> </ul>
C	B60Q 2900/00	<p><b>Features of lamps not covered by other groups in <a href="#">B60Q</a></b></p> <p><b>WARNING</b>  Group <u>B60Q 2900/00</u> is impacted by reclassification into groups <u>B60Q 2900/40</u> and <u>B60Q 2900/50</u>.  Groups <u>B60Q 2900/00</u>, <u>B60Q 2900/40</u> and <u>B60Q 2900/50</u> should be considered in order to perform a complete search.</p>
U	B60Q 2900/30	<ul style="list-style-type: none"> <li>• Lamps commanded by wireless transmissions</li> </ul>
N	B60Q 2900/40	<ul style="list-style-type: none"> <li>• Several lamps activated in sequence, e.g. sweep effect, progressive activation</li> </ul> <p><b>WARNING</b>  Group <u>B60Q 2900/40</u> is incomplete pending reclassification of documents from group <u>B60Q 2900/00</u>.  Groups <u>B60Q 2900/00</u> and <u>B60Q 2900/40</u> should be considered in order to perform a complete search.</p>

N B60Q 2900/50

- Arrangements to reconfigure features of lighting or signalling devices, or to choose from a list of pre-defined settings

WARNING

Group [B60Q 2900/50](#) is incomplete pending reclassification of documents from group [B60Q 2900/00](#).

Groups [B60Q 2900/00](#) and [B60Q 2900/50](#) should be considered in order to perform a complete search.

**Project: RP10402 (F21S)**

U F21S 8/00

**Lighting devices intended for fixed installation ([F21S 9/00](#), [F21S 10/00](#) take precedence; using a string or strip of light sources [F21S 4/00](#))**

F21S 8/003

- {Searchlights, i.e. outdoor lighting device producing powerful beam of parallel rays, e.g. for military or attraction purposes (searchlights mounted on a vehicle [B60Q 1/24](#)[B60Q 1/245](#))}

**Project: RP10424 (B29B)**

D B29B 2911/00

**Indexing scheme related to making preforms for blow-moulding bottles or the like**

<administratively transferred to [B29C 2949/07](#) ADD>

D B29B 2911/14

- Layer configuration, geometry, dimensions or physical properties of preforms for blow-moulding bottles or the like

<administratively transferred to [B29C 2949/07](#) ADD>

D B29B 2911/14006

- • layer configuration

<administratively transferred to [B29C 2949/20](#) ADD>

D B29B 2911/14013

- • • monolayered

<administratively transferred to [B29C 2949/20](#) ADD>

D B29B 2911/1402

- • • • at neck portion

<administratively transferred to [B29C 2949/22](#) ADD>

D B29B 2911/14026

- • • • at flange portion

<administratively transferred to [B29C 2949/24](#) ADD>

D B29B 2911/14033

- • • • at body portion

<administratively transferred to [B29C 2949/26](#) ADD>

D B29B 2911/1404

- • • • at bottom portion

<administratively transferred to [B29C 2949/28](#) ADD>

D B29B 2911/14046

- • • multilayered

<administratively transferred to [B29C 2949/30](#) ADD>

D B29B 2911/14053

- • • • at neck portion

<administratively transferred to [B29C 2949/3008](#) ADD>

D B29B 2911/1406

- • • • partially

<administratively transferred to [B29C 2949/3009](#) ADD>

D B29B 2911/14066

- • • • at flange portion

<administratively transferred to [B29C 2949/3012](#) ADD>

D B29B 2911/14073

- • • • partially

<administratively transferred to [B29C 2949/3014](#) ADD>

D B29B 2911/1408

- • • • at body portion

<administratively transferred to [B29C 2949/3016](#) ADD>

- D B29B 2911/14086 . . . . partially  
<administratively transferred to [B29C 2949/3018](#) ADD>
- D B29B 2911/14093 . . . . at bottom portion  
<administratively transferred to [B29C 2949/302](#) ADD>
- D B29B 2911/141 . . . . partially  
<administratively transferred to [B29C 2949/3022](#) ADD>
- D B29B 2911/14106 . . . . having at least one layer  
<administratively transferred to [B29C 2949/3024](#) ADD>
- D B29B 2911/14113 . . . . having at least two layers  
<administratively transferred to [B29C 2949/3026](#) ADD>
- D B29B 2911/1412 . . . . having at least three layers  
<administratively transferred to [B29C 2949/3028](#) ADD>
- D B29B 2911/14126 . . . . having more than three layers  
<administratively transferred to [B29C 2949/303](#) ADD>
- D B29B 2911/14133 . . . . having at least one layer being injected  
<administratively transferred to [B29C 2949/3032](#) ADD>
- D B29B 2911/1414 . . . . having at least two layers being injected  
<administratively transferred to [B29C 2949/3034](#) ADD>
- D B29B 2911/14146 . . . . having at least three layers being injected  
<administratively transferred to [B29C 2949/3036](#) ADD>
- D B29B 2911/14153 . . . . having more than three layers being injected  
<administratively transferred to [B29C 2949/3038](#) ADD>
- D B29B 2911/1416 . . . . having at least one layer being extruded  
<administratively transferred to [B29C 2949/3041](#) ADD>
- D B29B 2911/14166 . . . . having at least two layers being extruded  
<administratively transferred to [B29C 2949/3042](#) ADD>
- D B29B 2911/14173 . . . . having at least three layers being extruded  
<administratively transferred to [B29C 2949/3044](#) ADD>
- D B29B 2911/1418 . . . . having more than three layers being extruded  
<administratively transferred to [B29C 2949/3046](#) ADD>
- D B29B 2911/14186 . . . . having at least one layer being thermoformed  
<administratively transferred to [B29C 2949/3048](#) ADD>
- D B29B 2911/14193 . . . . having at least two layers being thermoformed  
<administratively transferred to [B29C 2949/3051](#) ADD>
- D B29B 2911/142 . . . . having at least three layers being thermoformed  
<administratively transferred to [B29C 2949/3052](#) ADD>
- D B29B 2911/14206 . . . . having more than three layers being thermoformed  
<administratively transferred to [B29C 2949/3054](#) ADD>
- D B29B 2911/14213 . . . . having at least one layer being compression moulded  
<administratively transferred to [B29C 2949/3056](#) ADD>
- D B29B 2911/1422 . . . . having at least two layers being compression moulded  
<administratively transferred to [B29C 2949/3058](#) ADD>

- D B29B 2911/14226 . . . . . having at least three layers being compression-moulded  
<administratively transferred to [B29C 2949/306](#) ADD>
- D B29B 2911/14233 . . . . . having more than three layers being compression-moulded  
<administratively transferred to [B29C 2949/3062](#) ADD>
- D B29B 2911/1424 . . . . having at least one layer being applied using techniques not covered by B29B 2911/14133 – B29B 2911/14213  
<administratively transferred to [B29C 2949/3064](#) ADD>
- D B29B 2911/14246 . . . . . having at least two layers being applied using said techniques  
<administratively transferred to [B29C 2949/3066](#) ADD>
- D B29B 2911/14253 . . . . . having at least three layers being applied using said techniques  
<administratively transferred to [B29C 2949/3068](#) ADD>
- D B29B 2911/1426 . . . . . having more than three layers being applied using said techniques  
<administratively transferred to [B29C 2949/307](#) ADD>
- D B29B 2911/14266 . . . . . Type of said techniques not covered by B29B 2911/14133 – B29B 2911/14213  
<administratively transferred to [B29C 2949/3064](#) ADD>
- D B29B 2911/14273 . . . . . Spray-coating  
<administratively transferred to [B29C 2949/3078](#) ADD>
- D B29B 2911/1428 . . . . . Dip-coating  
<administratively transferred to [B29C 2949/308](#) ADD>
- D B29B 2911/14286 . . . . . Powder-coating  
<administratively transferred to [B29C 2949/3082](#) ADD>
- D B29B 2911/14293 . . . . . Casting  
<administratively transferred to [B29C 2949/3084](#) ADD>
- D B29B 2911/143 . . . . Interaction between at least two layers  
<administratively transferred to [B29C 2949/3086](#) ADD>
- D B29B 2911/14306 . . . . . by welding  
<administratively transferred to [B29C 2949/309](#) ADD>
- D B29B 2911/14313 . . . . . by using adhesives  
<administratively transferred to [B29C 2949/3092](#) ADD>
- D B29B 2911/1432 . . . Geometry  
<administratively transferred to [B29C 2949/07](#) ADD>
- D B29B 2911/14326 . . . Variable wall thickness  
<administratively transferred to [B29C 2949/072](#) ADD>
- D B29B 2911/14328 . . . . at neck portion  
<administratively transferred to [B29C 2949/0722](#) ADD>
- D B29B 2911/1433 . . . . at flange portion  
<administratively transferred to [B29C 2949/0723](#) ADD>
- D B29B 2911/14331 . . . . at body portion  
<administratively transferred to [B29C 2949/0724](#) ADD>
- D B29B 2911/14332 . . . . at bottom portion  
<administratively transferred to [B29C 2949/0725](#) ADD>



- D B29B 2911/14333 . . . Variable diameter  
<administratively transferred to [B29C 2949/073](#) ADD>
- D B29B 2911/14335 . . . . at neck portion  
<administratively transferred to [B29C 2949/0731](#) ADD>
- D B29B 2911/14336 . . . . at flange portion  
<administratively transferred to [B29C 2949/0732](#) ADD>
- D B29B 2911/14337 . . . . at body portion  
<administratively transferred to [B29C 2949/0733](#) ADD>
- D B29B 2911/14338 . . . . at bottom portion  
<administratively transferred to [B29C 2949/0734](#) ADD>
- D B29B 2911/1434 . . . Ribs or protrusions  
<administratively transferred to [B29C 2949/074](#) ADD>
- D B29B 2911/14341 . . . . at neck portion  
<administratively transferred to [B29C 2949/0744](#) ADD>
- D B29B 2911/14343 . . . . at flange portion  
<administratively transferred to [B29C 2949/0745](#) ADD>
- D B29B 2911/14344 . . . . at body portion  
<administratively transferred to [B29C 2949/0746](#) ADD>
- D B29B 2911/14345 . . . . at bottom portion  
<administratively transferred to [B29C 2949/0747](#) ADD>
- D B29B 2911/14346 . . . Internal separating wall  
<administratively transferred to [B29C 2949/075](#) ADD>
- D B29B 2911/14348 . . . . at neck portion  
<administratively transferred to [B29C 2949/0751](#) ADD>
- D B29B 2911/1435 . . . . at flange portion  
<administratively transferred to [B29C 2949/0752](#) ADD>
- D B29B 2911/14351 . . . . at body portion  
<administratively transferred to [B29C 2949/0753](#) ADD>
- D B29B 2911/14352 . . . . at bottom portion  
<administratively transferred to [B29C 2949/0754](#) ADD>
- D B29B 2911/14353 . . . Special shape  
<administratively transferred to [B29C 2949/076](#) ADD>
- D B29B 2911/1436 . . . . Special overall shape  
<administratively transferred to [B29C 2949/0761](#) ADD>
- D B29B 2911/14366 . . . . . Conical  
<administratively transferred to [B29C 2949/0762](#) ADD>
- D B29B 2911/14373 . . . . . Axially asymmetrical  
<administratively transferred to [B29C 2949/0763](#) ADD>
- D B29B 2911/1438 . . . . . Elliptic or oval cross-section shape  
<administratively transferred to [B29C 2949/0764](#) ADD>
- D B29B 2911/14386 . . . . . Rectangular cross-section shape  
<administratively transferred to [B29C 2949/0765](#) ADD>



- D B29B 2911/14393 . . . . Hexagonal cross-section shape  
<administratively transferred to [B29C 2949/0766](#) ADD>
- D B29B 2911/144 . . . . Shape allows stacking or nesting  
<administratively transferred to [B29C 2949/0767](#) ADD>
- D B29B 2911/14406 . . . . Special shape of specific parts of preform  
<administratively transferred to [B29C 2949/0768](#) ADD>
- D B29B 2911/14413 . . . . Special lip, i.e. very top of preform neck  
<administratively transferred to [B29C 2949/0769](#) ADD>
- D B29B 2911/1442 . . . . Special neck  
<administratively transferred to [B29C 2949/077](#) ADD>
- D B29B 2911/14426 . . . . Wide-mouth  
<administratively transferred to [B29C 2949/0771](#) ADD>
- D B29B 2911/14433 . . . . Closure retaining means  
<administratively transferred to [B29C 2949/0772](#) ADD>
- D B29B 2911/1444 . . . . Threads  
<administratively transferred to [B29C 2949/0773](#) ADD>
- D B29B 2911/14446 . . . . Interrupted threads  
<administratively transferred to [B29C 2949/0774](#) ADD>
- D B29B 2911/14453 . . . . Inner threads  
<administratively transferred to [B29C 2949/0775](#) ADD>
- D B29B 2911/1446 . . . . No threads  
<administratively transferred to [B29C 2949/0776](#) ADD>
- D B29B 2911/14466 . . . . Tamper-evident band retaining ring  
<administratively transferred to [B29C 2949/0777](#) ADD>
- D B29B 2911/14473 . . . . Special flange  
<administratively transferred to [B29C 2949/0778](#) ADD>
- D B29B 2911/1448 . . . . Special body  
<administratively transferred to [B29C 2949/0779](#) ADD>
- D B29B 2911/14486 . . . . Special bottom  
<administratively transferred to [B29C 2949/078](#) ADD>
- D B29B 2911/14493 . . . . Special sprue, i.e. injection mark  
<administratively transferred to [B29C 2949/0781](#) ADD>
- D B29B 2911/145 . . . . Special pinch-off portion  
<administratively transferred to [B29C 2949/0782](#) ADD>
- D B29B 2911/14506 . . . Auxiliary parts or inserts  
<administratively transferred to [B29C 2949/079](#) ADD>
- D B29B 2911/14513 . . . . Handle  
<administratively transferred to [B29C 2949/0791](#) ADD>
- D B29B 2911/1452 . . . . Closure  
<administratively transferred to [B29C 2949/0792](#) ADD>
- D B29B 2911/14526 . . . . Transport means  
<administratively transferred to [B29C 2949/0793](#) ADD>

- D B29B 2911/14533 . . . . Dispensing spout  
<administratively transferred to [B29C 2949/0794](#) ADD>
- D B29B 2911/1454 . . . . Parts to assist orientation of preform, e.g. in mould  
<administratively transferred to [B29C 2949/0795](#) ADD>
- D B29B 2911/14546 . . . . . at neck portion  
<administratively transferred to [B29C 2949/0796](#) ADD>
- D B29B 2911/14553 . . . . . at flange portion  
<administratively transferred to [B29C 2949/0797](#) ADD>
- D B29B 2911/1456 . . . . . at body portion  
<administratively transferred to [B29C 2949/0798](#) ADD>
- D B29B 2911/14566 . . . . . at bottom portion  
<administratively transferred to [B29C 2949/0799](#) ADD>
- D B29B 2911/14573 . . . . Preform, i.e. neck, flange, body and bottom, made of several individual parts  
<administratively transferred to [B29C 2949/08](#) ADD>
- D B29B 2911/1458 . . . . . Finish neck ring  
<administratively transferred to [B29C 2949/0801](#) ADD>
- D B29B 2911/14586 . . . Mentioned dimensions  
<administratively transferred to [B29C 2949/081](#) ADD>
- D B29B 2911/14593 . . . Wall thickness  
<administratively transferred to [B29C 2949/0811](#) ADD>
- D B29B 2911/146 . . . . of the lip, i.e. the very top of the preform neck  
<administratively transferred to [B29C 2949/0812](#) ADD>
- D B29B 2911/14606 . . . . of the neck  
<administratively transferred to [B29C 2949/0813](#) ADD>
- D B29B 2911/14613 . . . . of the threads  
<administratively transferred to [B29C 2949/0814](#) ADD>
- D B29B 2911/1462 . . . . of the tamper-evident band retaining ring  
<administratively transferred to [B29C 2949/0815](#) ADD>
- D B29B 2911/14626 . . . . of the flange  
<administratively transferred to [B29C 2949/0816](#) ADD>
- D B29B 2911/14633 . . . . of the body  
<administratively transferred to [B29C 2949/0817](#) ADD>
- D B29B 2911/1464 . . . . of the bottom  
<administratively transferred to [B29C 2949/0818](#) ADD>
- D B29B 2911/14646 . . . . of a layer  
<administratively transferred to [B29C 2949/0819](#) ADD>
- D B29B 2911/14653 . . . Diameter, D  
<administratively transferred to [B29C 2949/082](#) ADD>
- D B29B 2911/1466 . . . . of the lip, i.e. the very top of the preform neck  
<administratively transferred to [B29C 2949/0821](#) ADD>
- D B29B 2911/14666 . . . . of the neck  
<administratively transferred to [B29C 2949/0822](#) ADD>

- D B29B 2911/14673 . . . . of the threads  
<administratively transferred to [B29C 2949/0823](#) ADD>
- D B29B 2911/1468 . . . . of the tamper-evident band retaining ring  
<administratively transferred to [B29C 2949/0824](#) ADD>
- D B29B 2911/14686 . . . . of the flange  
<administratively transferred to [B29C 2949/0825](#) ADD>
- D B29B 2911/14693 . . . . of the body  
<administratively transferred to [B29C 2949/0826](#) ADD>
- D B29B 2911/147 . . . . of the bottom  
<administratively transferred to [B29C 2949/0827](#) ADD>
- D B29B 2911/14706 . . . . of a layer  
<administratively transferred to [B29C 2949/0828](#) ADD>
- D B29B 2911/14713 . . . Height, length, L  
<administratively transferred to [B29C 2949/0829](#) ADD>
- D B29B 2911/1472 . . . . of the lip, i.e. the very top of the preform neck  
<administratively transferred to [B29C 2949/083](#) ADD>
- D B29B 2911/14726 . . . . of the neck  
<administratively transferred to [B29C 2949/0831](#) ADD>
- D B29B 2911/14733 . . . . of the threads  
<administratively transferred to [B29C 2949/0832](#) ADD>
- D B29B 2911/1474 . . . . of the tamper-evident band retaining ring  
<administratively transferred to [B29C 2949/0833](#) ADD>
- D B29B 2911/14746 . . . . of the flange  
<administratively transferred to [B29C 2949/0834](#) ADD>
- D B29B 2911/14753 . . . . of the body  
<administratively transferred to [B29C 2949/0835](#) ADD>
- D B29B 2911/1476 . . . . of the bottom  
<administratively transferred to [B29C 2949/0836](#) ADD>
- D B29B 2911/14766 . . . . of a layer  
<administratively transferred to [B29C 2949/0837](#) ADD>
- D B29B 2911/14773 . . . Ratio L/D  
<administratively transferred to [B29C 2949/0838](#) ADD>
- D B29B 2911/1478 . . . Angle  
<administratively transferred to [B29C 2949/0839](#) ADD>
- D B29B 2911/14786 . . . . of the lip, i.e. the very top of the preform neck  
<administratively transferred to [B29C 2949/084](#) ADD>
- D B29B 2911/14793 . . . . of the neck  
<administratively transferred to [B29C 2949/0841](#) ADD>
- D B29B 2911/148 . . . . of the threads  
<administratively transferred to [B29C 2949/0842](#) ADD>
- D B29B 2911/14806 . . . . of the tamper-evident band retaining ring  
<administratively transferred to [B29C 2949/0843](#) ADD>

- D B29B 2911/14813 . . . . of the flange  
<administratively transferred to [B29C 2949/0844](#) ADD>
- D B29B 2911/1482 . . . . of the body  
<administratively transferred to [B29C 2949/0845](#) ADD>
- D B29B 2911/14826 . . . . of the bottom  
<administratively transferred to [B29C 2949/0846](#) ADD>
- D B29B 2911/14833 . . . . of a layer  
<administratively transferred to [B29C 2949/0847](#) ADD>
- D B29B 2911/1484 . . . Curvature, e.g. radius  
<administratively transferred to [B29C 2949/0849](#) ADD>
- D B29B 2911/14846 . . . . of the lip, i.e. the very top of the preform neck  
<administratively transferred to [B29C 2949/085](#) ADD>
- D B29B 2911/14853 . . . . of the neck  
<administratively transferred to [B29C 2949/0851](#) ADD>
- D B29B 2911/1486 . . . . of the threads  
<administratively transferred to [B29C 2949/0852](#) ADD>
- D B29B 2911/14866 . . . . of the tamper-evident band retaining ring  
<administratively transferred to [B29C 2949/0853](#) ADD>
- D B29B 2911/14873 . . . . of the flange  
<administratively transferred to [B29C 2949/0854](#) ADD>
- D B29B 2911/1488 . . . . of the body  
<administratively transferred to [B29C 2949/0855](#) ADD>
- D B29B 2911/14886 . . . . of the bottom  
<administratively transferred to [B29C 2949/0856](#) ADD>
- D B29B 2911/14893 . . . . of a layer  
<administratively transferred to [B29C 2949/086](#) ADD>
- D B29B 2911/149 . . . Mentioned values not covered by B29B 2911/14586  
<administratively transferred to [B29C 2949/0861](#) ADD>
- D B29B 2911/14906 . . . Crystallinity  
<administratively transferred to [B29C 2949/0862](#) ADD>
- D B29B 2911/14913 . . . . at the neck portion  
<administratively transferred to [B29C 2949/0863](#) ADD>
- D B29B 2911/1492 . . . . at the flange portion  
<administratively transferred to [B29C 2949/0864](#) ADD>
- D B29B 2911/14926 . . . . at the body portion  
<administratively transferred to [B29C 2949/0865](#) ADD>
- D B29B 2911/14933 . . . . at the bottom portion  
<administratively transferred to [B29C 2949/0866](#) ADD>
- D B29B 2911/1494 . . . Surface roughness  
<administratively transferred to [B29C 2949/0867](#) ADD>
- D B29B 2911/14946 . . . . at the neck portion  
<administratively transferred to [B29C 2949/0868](#) ADD>

- D B29B 2911/14953 . . . . at the flange portion  
<administratively transferred to [B29C 2949/0869](#) ADD>
- D B29B 2911/1496 . . . . at the body portion  
<administratively transferred to [B29C 2949/087](#) ADD>
- D B29B 2911/14966 . . . . at the bottom portion  
<administratively transferred to [B29C 2949/0871](#) ADD>
- D B29B 2911/14973 . . . Optical properties  
<administratively transferred to [B29K 2995/0018](#) ADD>
- D B29B 2911/1498 . . . Weight  
<administratively transferred to [B29C 2949/0872](#) ADD>
- D B29B 2911/14986 . . . Composition  
<administratively transferred to [B29C 49/0005](#)>
- D B29B 2911/14993 . . . . Recycled material  
<administratively transferred to [B29K 2105/26](#) ADD>

## Project: RP10424 (B29C)

- C B29C 49/00 **Blow-moulding, i.e. blowing a preform or parison to a desired shape within a mould; Apparatus therefor** ~~{(extrusion moulding of tubular films B29C 48/10; enlarging tube ends using pressure difference B29C 57/08)}~~  
WARNING  
*Group B29C 49/00 is impacted by reclassification into groups B29C 49/006, B29C 49/0062 and B29C 49/0064. All groups listed in this Warning should be considered in order to perform a complete search.*
- C B29C 49/0005 . {characterised by the ~~choice of~~ material}  
NOTE  
{When classifying in this group, it is desirable to add the indexing codes of subclass [B29K](#) to identify the moulding materials and their properties. Documents concerning the choice of moulding materials having a particular influence on the moulding technique should be classified in this group if of interest}  
WARNING  
*Group B29C 49/0005 is impacted by reclassification into group B29C 49/0006. Groups B29C 49/0005 and B29C 49/0006 should be considered in order to perform a complete search.*
- N B29C 49/0006 . . {for heating or cooling}  
WARNING  
*Group B29C 49/0006 is incomplete pending reclassification of documents from group B29C 49/0005. Groups B29C 49/0005 and B29C 49/0006 should be considered in order to perform a complete search.*
- D B29C 2049/001 . . {The material comprising particles or additives to induce special properties in the preform}  
<administratively transferred to [B29C 49/0005](#)>

- C B29C 49/0015
- {~~for making~~*Making* articles of indefinite length, e.g. corrugated tubes}
- WARNING  
*Group B29C 49/0015 is impacted by reclassification into groups B29C 49/0021, B29C 49/0022, B29C 49/0023, B29C 49/0024, B29C 49/0025, B29C 49/0027, B29C 49/0028, B29C 49/0029 and B29C 49/003.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- C B29C 49/0021
- {using moulds or mould parts movable in a closed path, e.g. mounted on movable endless supports}
- WARNING  
*Group B29C 49/0021 is incomplete pending reclassification of documents from group B29C 49/0015.*  
*Group B29C 49/0021 is also impacted by reclassification into groups B29C 49/0022, B29C 49/0023, B29C 49/0024, B29C 49/0025, B29C 49/0027, B29C 49/0028, B29C 49/0029 and B29C 49/003.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- N B29C 49/0022
- • {characterised by mould return means}
- WARNING  
*Group B29C 49/0022 is incomplete pending reclassification of documents from groups B29C 49/0015 and B29C 49/0021.*  
*Groups B29C 49/0015, B29C 49/0021 and B29C 49/0022 should be considered in order to perform a complete search.*
- N B29C 49/0023
- {using adjustable machine tables, e.g. to align extrusion nozzles with the moulds}
- WARNING  
*Group B29C 49/0023 is incomplete pending reclassification of documents from groups B29C 49/0015 and B29C 49/0021.*  
*Groups B29C 49/0015, B29C 49/0021 and B29C 49/0023 should be considered in order to perform a complete search.*
- N B29C 49/0024
- {using varying mould speed}
- WARNING  
*Group B29C 49/0024 is incomplete pending reclassification of documents from groups B29C 49/0015 and B29C 49/0021.*  
*Groups B29C 49/0015, B29C 49/0021 and B29C 49/0024 should be considered in order to perform a complete search.*
- N B29C 49/0025
- {subsequent mould cavities being different, e.g. for making bells}
- WARNING  
*Group B29C 49/0025 is incomplete pending reclassification of documents from groups B29C 49/0015 and B29C 49/0021.*  
*Groups B29C 49/0015, B29C 49/0021 and B29C 49/0025 should be considered in order to perform a complete search.*
- D B29C 49/0026
- • {using independent mould parts, i.e. the mould parts not being interconnected, e.g. for speeding up the transfer of the moulds to the beginning of the moulding area}
- <administratively transferred to B29C 49/0021>



- N B29C 49/0027
- {involving the change of moulds, e.g. in production processes without interrupting the production processes}
- WARNING  
Group [B29C 49/0027](#) is incomplete pending reclassification of documents from groups [B29C 49/0015](#) and [B29C 49/0021](#).  
Groups [B29C 49/0015](#), [B29C 49/0021](#) and [B29C 49/0027](#) should be considered in order to perform a complete search.
- N B29C 49/0028
- {using variable forming length, e.g. adapted to cooling needs}
- WARNING  
Group [B29C 49/0028](#) is incomplete pending reclassification of documents from groups [B29C 49/0015](#) and [B29C 49/0021](#).  
Groups [B29C 49/0015](#), [B29C 49/0021](#) and [B29C 49/0028](#) should be considered in order to perform a complete search.
- N B29C 49/0029
- {wherein the process is characterised by the pressure used, e.g. using varying pressure depending on sequence of cavity shapes}
- WARNING  
Group [B29C 49/0029](#) is incomplete pending reclassification of documents from groups [B29C 49/0015](#) and [B29C 49/0021](#).  
Groups [B29C 49/0015](#), [B29C 49/0021](#) and [B29C 49/0029](#) should be considered in order to perform a complete search.
- N B29C 49/003
- {wherein the process is characterised by temperature conditioning, e.g. using inside cooling by air}
- WARNING  
Group [B29C 49/003](#) is incomplete pending reclassification of documents from groups [B29C 49/0015](#) and [B29C 49/0021](#).  
Groups [B29C 49/0015](#), [B29C 49/0021](#) and [B29C 49/003](#) should be considered in order to perform a complete search.
- M B29C 49/0031
- {~~for making~~[Making](#) articles having hollow walls}
- D B29C 2049/0036
- {~~by ballooning the parison in an open mould~~
- <administratively transferred to [B29C 49/1602](#)>
- C B29C 49/0042
- {without using a mould ([B29C 49/1602](#) takes precedence)}
- WARNING  
Group [B29C 49/0042](#) is impacted by reclassification into group [B29C 49/1602](#).  
Groups [B29C 49/0042](#) and [B29C 49/1602](#) should be considered in order to perform a complete search.
- D B29C 49/0047
- {Sheet blow-moulding, i.e. using at least two parallel sheets or a folded sheet as a preform}
- <administratively transferred to [B29C 49/0691](#)>
- D B29C 2049/0052
- {using a folded sheet as a preform}
- <administratively transferred to [B29C 49/06912](#)>
- D B29C 2049/0057
- {using two parallel sheets as a preform}
- <administratively transferred to [B29C 49/06914](#)>
- N B29C 49/006
- {Blow-moulding plants, e.g. using several blow-moulding apparatuses cooperating}
- WARNING  
Groups [B29C 49/006](#), [B29C 49/0062](#) and [B29C 49/0064](#) are incomplete pending reclassification of documents from group [B29C 49/00](#).



*All groups listed in this Warning should be considered in order to perform a complete search.*

- N B29C 49/0062
  - {using two or more parallel stations, e.g. two parallel heating or blowing stations}
- D B29C 2049/0063
  - {whereby the folded sheets or the two parallel sheets are separated from each other at least at one place, e.g. to allow inserting of a blowing means}
  - <administratively transferred to [B29C 49/06916](#)>
- N B29C 49/0064
  - • {the number of preform manufacturing stations being different to the number of blowing stations}
- D B29C 2049/0068
  - {Means for avoiding the sheets to stick together before or during the blow moulding operation}
  - <administratively transferred to [B29C 49/06916](#)>
- D B29C 49/0073
  - {characterised by the parison configuration, e.g. nestable (B29C 49/22 takes precedence)}
  - <administratively transferred to [B29C 49/071](#)>
- D B29C 49/0078
  - {Parisons having internal or external ribs}
  - <administratively transferred to [B29C 2949/074](#) ADD>
- D B29C 49/0084
  - • {the internal ribs being connected to the opposite wall, e.g. forming an internal separating wall}
  - <administratively transferred to [B29C 2949/075](#) ADD>
- D B29C 2049/0089
  - {the parison being a tube, e.g. a tube which has to be reheated before blow moulding}
  - <administratively transferred to [B29C 2949/08](#) ADD>
- D B29C 2049/0094
  - {Blow moulding plants, e.g. using at least two blow moulding apparatuses at the same time}
  - <administratively transferred to [B29C 49/006](#)>
- C B29C 49/02
  - Combined blow-moulding and manufacture of the preform or the parison

**WARNING**

Group [B29C 49/02](#) is impacted by reclassification into groups [B29C 49/0208](#), [B29C 49/0665](#), [B29C 49/0685](#), [B29C 49/06905](#), [B29C 49/0691](#), [B29C 49/06912](#), [B29C 49/06914](#), [B29C 49/06916](#) and [B29C 49/071](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 49/0208
  - {joining several separate preforms while blow-moulding, e.g. two cylindrical preforms welded together during blowing}

**WARNING**

Group [B29C 49/0208](#) is incomplete pending reclassification of documents from group [B29C 49/02](#).  
Groups [B29C 49/02](#) and [B29C 49/0208](#) should be considered in order to perform a complete search.
- D B29C 2049/021
  - {the preform or parison being made out of several parts, e.g. by welding or gluing parts together}
  - <administratively transferred to [B29C 2949/08](#) ADD>
- D B29C 49/022
  - {the parison being partly injected and partly extruded}
  - <administratively transferred to [B29C 2949/3032](#) ADD and [B29C 2949/3041](#) ADD>

- D B29C 2049/025
  - • {the preform or parison being made of powder}
  - <administratively transferred to [B29C 49/02](#)>
- D B29C 2049/026
  - • {Coating a preform or parison, e.g. with reinforcing material}
  - <administratively transferred to [B29C 2949/3074](#) ADD>
- D B29C 2049/027
  - • • {on the inside}
  - <administratively transferred to [B29C 2949/3076](#) ADD>
- D B29C 2049/028
  - • {Compression blow-moulding}
  - <administratively transferred to [B29C 49/0685](#)>
- C B29C 49/04
  - • Extrusion blow-moulding

**WARNING**

Group [B29C 49/04](#) is impacted by reclassification into groups [B29C 49/04102](#), [B29C 49/04104](#), [B29C 49/04106](#), [B29C 49/04108](#), [B29C 49/04111](#), [B29C 49/04112](#), [B29C 49/04114](#), [B29C 49/04116](#), [B29C 49/04118](#) and [B29C 49/0412](#).  
All groups listed in this Warning should be considered in order to perform a complete search.

- T B29C 49/041
  - • • {using an accumulator head}
- N B29C 49/04102
  - • • {extruding the material continuously}
  - WARNING**  
Group [B29C 49/04102](#) is incomplete pending reclassification of documents from group [B29C 49/04](#).  
Groups [B29C 49/04](#) and [B29C 49/04102](#) should be considered in order to perform a complete search.
- N B29C 49/04104
  - • • {extruding the material discontinuously}
  - WARNING**  
Group [B29C 49/04104](#) is incomplete pending reclassification of documents from group [B29C 49/04](#).  
Groups [B29C 49/04](#) and [B29C 49/04104](#) should be considered in order to perform a complete search.
- N B29C 49/04106
  - • • {Means for moving the extruder head up and down, e.g. to continue extruding the next parison while blow-moulding the previous parison in the blow-mould}
  - WARNING**  
Group [B29C 49/04106](#) is incomplete pending reclassification of documents from group [B29C 49/04](#).  
Groups [B29C 49/04](#) and [B29C 49/04106](#) should be considered in order to perform a complete search.
- N B29C 49/04108
  - • • {extruding several parisons parallel to each other at the same time}
  - WARNING**  
Group [B29C 49/04108](#) is incomplete pending reclassification of documents from group [B29C 49/04](#).  
Groups [B29C 49/04](#) and [B29C 49/04108](#) should be considered in order to perform a complete search.
- N B29C 49/0411
  - • • {Means for defining the wall or layer thickness}
  - WARNING**  
Groups [B29C 49/04111](#), [B29C 49/04112](#) and [B29C 49/04114](#) are incomplete pending reclassification of documents from group [B29C 49/04](#).

*All groups listed in this Warning should be considered in order to perform a complete search.*

N B29C 49/04112 . . . {for varying the thickness}

N B29C 49/04114 . . . {for keeping constant thickness}

N B29C 49/04116 . . . {characterised by the die}

WARNING

Group [B29C 49/04116](#) is incomplete pending reclassification of documents from group [B29C 49/04](#).

Groups [B29C 49/04](#) and [B29C 49/04116](#) should be considered in order to perform a complete search.

N B29C 49/04118 . . . {Means for supporting the extruded parison}

WARNING

Group [B29C 49/04118](#) is incomplete pending reclassification of documents from group [B29C 49/04](#).

Groups [B29C 49/04](#) and [B29C 49/04118](#) should be considered in order to perform a complete search.

N B29C 49/0412 . . . {Means for cutting the extruded preform}

WARNING

Group [B29C 49/0412](#) is incomplete pending reclassification of documents from group [B29C 49/04](#).

Groups [B29C 49/04](#) and [B29C 49/0412](#) should be considered in order to perform a complete search.

D B29C 2049/042 . . . {disclosing the push-out speed}

<administratively transferred to [B29C 49/041](#)>

D B29C 2049/044 . . . {extruding the material continuously}

<administratively transferred to [B29C 49/04102](#)>

D B29C 2049/045 . . . {with means to move the extruder head up and down, e.g. to continue extruding the next parison while blow moulding the previous parison in the blow mould}

<administratively transferred to [B29C 49/04106](#)>

D B29C 2049/047 . . . {extruding the material discontinuously}

<administratively transferred to [B29C 49/04104](#)>

D B29C 2049/048 . . . {extruding several parisons parallel to each other at the same time}

<administratively transferred to [B29C 49/04108](#)>

T B29C 49/06 . . . Injection blow-moulding ~~{(introducing a fluid into the interior of the injected material which is still in a molten state B29C 45/1704)}~~

M B29C 2049/065 . . . {Means ~~to compensate or avoid the shrinking of the~~ *for compensating or avoiding the shrinking of* preforms, e.g. in the injection mould or outside the injection mould}

D B29C 2049/066 . . . {One injection moulding station supplies several blow moulding stations with preforms}

<administratively transferred to [B29C 49/0064](#)>

N B29C 49/0665 . . . {the injection mould cavity and the blow-mould cavity being displaceable to the geometrically fixed injection core mould}

WARNING

Group [B29C 49/0665](#) is incomplete pending reclassification of documents from group [B29C 49/02](#).

Groups [B29C 49/02](#) and [B29C 49/0665](#) should be considered in order to perform a complete search.

- |   |               |   |
|---|---------------|---|
| D | B29C 2049/067 | <ul style="list-style-type: none"> <li>• • • {Several injection moulding stations supply one blow moulding station with preforms}</li> <li style="padding-left: 20px;">&lt;administratively transferred to <a href="#">B29C 49/0064</a>&gt;</li> </ul>  |
| D | B29C 2049/068 | <ul style="list-style-type: none"> <li>• • • {Moving the injection mould cavity and blow mould cavity to the geometrically fixed injection core mould}</li> <li style="padding-left: 20px;">&lt;administratively transferred to <a href="#">B29C 49/0665</a>&gt;</li> </ul>   |
| N | B29C 49/0685  | <ul style="list-style-type: none"> <li>• • {Compression blow-moulding}</li> </ul> <p><u>WARNING</u><br/>Group <a href="#">B29C 49/0685</a> is incomplete pending reclassification of documents from group <a href="#">B29C 49/02</a>.<br/>Groups <a href="#">B29C 49/02</a> and <a href="#">B29C 49/0685</a> should be considered in order to perform a complete search.</p>  |
| D | B29C 2049/069 | <ul style="list-style-type: none"> <li>• • • {using a porous core}</li> <li style="padding-left: 20px;">&lt;administratively transferred to <a href="#">B29C 49/06</a>&gt;</li> </ul>   |
| N | B29C 49/06905 | <ul style="list-style-type: none"> <li>• • {Using combined techniques for making the preform}</li> </ul> <p><u>WARNING</u><br/>Groups <a href="#">B29C 49/06905</a>, <a href="#">B29C 49/0691</a>, <a href="#">B29C 49/06912</a>, <a href="#">B29C 49/06914</a> and <a href="#">B29C 49/06916</a> are incomplete pending reclassification of documents from group <a href="#">B29C 49/02</a>.<br/>All groups listed in this Warning should be considered in order to perform a complete search.</p> |
| N | B29C 49/0691  | <ul style="list-style-type: none"> <li>• • • {using sheet like material, e.g. sheet blow-moulding from joined sheets}</li> </ul>  |
| N | B29C 49/06912 | <ul style="list-style-type: none"> <li>• • • • {using folded sheets as a preform, e.g. folded into parallel sheets or rolled into cylindrical shape}</li> </ul>   |
| N | B29C 49/06914 | <ul style="list-style-type: none"> <li>• • • • {using parallel sheets as a preform}</li> </ul>  |
| N | B29C 49/06916 | <ul style="list-style-type: none"> <li>• • • • {Means for avoiding parts of the sheets to stick together, e.g. to provide blow opening}</li> </ul>  |
| N | B29C 49/071   | <ul style="list-style-type: none"> <li>• {Preforms or parisons characterised by their configuration, e.g. geometry, dimensions or physical properties}</li> </ul> <p><u>WARNING</u><br/>Group <a href="#">B29C 49/071</a> is incomplete pending reclassification of documents from group <a href="#">B29C 49/02</a>.<br/>Groups <a href="#">B29C 49/02</a> and <a href="#">B29C 49/071</a> should be considered in order to perform a complete search.</p>  |
| C | B29C 49/08    | <ul style="list-style-type: none"> <li>• Biaxial stretching during blow-moulding-<del>{with or without prestretching}</del></li> </ul> <p><u>WARNING</u><br/>Group <a href="#">B29C 49/08</a> is impacted by reclassification into groups <a href="#">B29C 49/086</a>, <a href="#">B29C 49/087</a>, <a href="#">B29C 49/0871</a> and <a href="#">B29C 49/0872</a>.<br/>All groups listed in this Warning should be considered in order to perform a complete search.</p>                            |
| M | B29C 49/085   | <ul style="list-style-type: none"> <li>• • {without <del>prestretching</del>pre-stretching, e.g. simple blowing step}</li> </ul>  |
| N | B29C 49/086   | <ul style="list-style-type: none"> <li>• • {mono-axial stretching, e.g. either length or width}</li> </ul> <p><u>WARNING</u><br/>Group <a href="#">B29C 49/086</a> is incomplete pending reclassification of documents from group <a href="#">B29C 49/08</a>.</p>   |

Groups [B29C 49/08](#) and [B29C 49/086](#) should be considered in order to perform a complete search.

N B29C 49/087

- {Means for providing controlled or limited stretch ratio}

WARNING

Groups [B29C 49/087](#), [B29C 49/0871](#) and [B29C 49/0872](#) are incomplete pending reclassification of documents from group [B29C 49/08](#). All groups listed in this Warning should be considered in order to perform a complete search.

N B29C 49/0871

- • {radial stretch ratio, i.e. hoop or tangential stretch ratio}

N B29C 49/0872

- • {axial stretch ratio}

U B29C 49/10

- • using mechanical means {for prestretching}

C B29C 49/12

- • Stretching rods

WARNING

Group [B29C 49/12](#) is impacted by reclassification into groups [B29C 49/1202](#), [B29C 49/1205](#), [B29C 49/1206](#), [B29C 49/1208](#), [B29C 49/121](#), [B29C 49/1212](#), [B29C 49/1215](#), [B29C 49/1216](#), [B29C 49/1218](#), [B29C 49/122](#), [B29C 49/1222](#), [B29C 49/1224](#), [B29C 49/1226](#), [B29C 49/1229](#), [B29C 49/123](#), [B29C 49/1232](#) and [B29C 49/1602](#).

All groups listed in this Warning should be considered in order to perform a complete search.

N B29C 49/1202

- • • {Means for fixing the stretching rod to the driving means, e.g. clamping means or bayonet connections}

WARNING

Group [B29C 49/1202](#) is incomplete pending reclassification of documents from group [B29C 49/12](#).

Groups [B29C 49/12](#) and [B29C 49/1202](#) should be considered in order to perform a complete search.

D B29C 2049/1204

- • • {Means for fixing the stretching rod to the driving means, e.g. clamping means or bayonet connections}

<administratively transferred to [B29C 49/1202](#)>

N B29C 49/1205

- • • {relative rotation between the preform and the stretch rod}

WARNING

Group [B29C 49/1205](#) is incomplete pending reclassification of documents from group [B29C 49/12](#).

Groups [B29C 49/12](#) and [B29C 49/1205](#) should be considered in order to perform a complete search.

N B29C 49/1206

- • • {using at least two stretching rods for stretching different parts of the preform}

WARNING

Group [B29C 49/1206](#) is incomplete pending reclassification of documents from group [B29C 49/12](#).

Groups [B29C 49/12](#) and [B29C 49/1206](#) should be considered in order to perform a complete search.

- N B29C 49/1208 . . . {using additional means to clamp the preform bottom while stretching the preform}  
WARNING  
 Group [B29C 49/1208](#) is incomplete pending reclassification of documents from group [B29C 49/12](#).  
 Groups [B29C 49/12](#) and [B29C 49/1208](#) should be considered in order to perform a complete search.
- D B29C 2049/1209 . . . {rotating during stretching of the preform}  
 <administratively transferred to [B29C 49/1205](#)>
- N B29C 49/121 . . . {Stretching rod configuration, e.g. geometry; Stretching rod material}  
WARNING  
 Groups [B29C 49/121](#), [B29C 49/1212](#), [B29C 49/1215](#) and [B29C 49/1216](#) are incomplete pending reclassification of documents from group [B29C 49/12](#).  
 All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 49/1212 . . . {the stretching rod comprising at least one opening on the surface, e.g. through which compressed air is blown into the preform to expand the same}
- D B29C 2049/1214 . . . {Using at least two stretching rods for stretching different parts of the preform}  
 <administratively transferred to [B29C 49/1206](#)>
- N B29C 49/1215 . . . {Geometry of the stretching rod, e.g. specific stretching rod end shape}
- N B29C 49/1216 . . . {Material for stretching rods or parts thereof, e.g. heat insulating material}
- N B29C 49/1218 . . . {to stretch heated tubes}  
WARNING  
 Group [B29C 49/1218](#) is incomplete pending reclassification of documents from group [B29C 49/12](#).  
 Groups [B29C 49/12](#) and [B29C 49/1218](#) should be considered in order to perform a complete search.
- D B29C 2049/1219 . . . {Using additional means to clamp the preform bottom while stretching the preform}  
 <administratively transferred to [B29C 49/1208](#)>
- N B29C 49/122 . . . {Drive means therefor}  
WARNING  
 Groups [B29C 49/122](#), [B29C 49/1222](#), [B29C 49/1224](#), [B29C 49/1226](#), [B29C 49/1229](#), [B29C 49/123](#) and [B29C 49/1232](#) are incomplete pending reclassification of documents from group [B29C 49/12](#).  
 All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 49/1222 . . . {Pneumatic}
- D B29C 2049/1223 . . . {Stretching rod configuration, e.g. geometry; Stretching rod material}  
 <administratively transferred to [B29C 49/121](#)>
- N B29C 49/1224 . . . {Hydraulic}
- N B29C 49/1226 . . . {Mechanical}



- D B29C 2049/1228 . . . . {the stretching rod comprises at least one opening on the surface through which compressed air is blown into the preform to expand the same}  
<administratively transferred to [B29C 49/1212](#)>
- N B29C 49/1229 . . . . {being a cam mechanism}
- N B29C 49/123 . . . . {Electric drives, e.g. linear motors}
- N B29C 49/1232 . . . . {Magnetic}
- D B29C 2049/1233 . . . . {the opening being at the end where it touches the preform, e.g. to avoid direct contact between the preform and the stretching rod}  
<administratively transferred to [B29C 49/1212](#)>
- D B29C 2049/1238 . . . . {Geometry of the stretching rod, e.g. specific stretching rod end shape}  
<administratively transferred to [B29C 49/1215](#)>
- D B29C 2049/1242 . . . . {Material for parts or the whole stretching rod, e.g. heat insulating material}  
<administratively transferred to [B29C 49/1216](#)>
- D B29C 2049/1247 . . . . {to stretch heated tubes}  
<administratively transferred to [B29C 49/1218](#)>
- D B29C 2049/1252 . . . . {Drive means therefore}  
<administratively transferred to [B29C 49/122](#)>
- D B29C 2049/1257 . . . . {Pneumatic}  
<administratively transferred to [B29C 49/1222](#)>
- D B29C 2049/1261 . . . . {Hydraulic}  
<administratively transferred to [B29C 49/1224](#)>
- D B29C 2049/1266 . . . . {Mechanical}  
<administratively transferred to [B29C 49/1226](#)>
- D B29C 2049/1271 . . . . {being a cam mechanism}  
<administratively transferred to [B29C 49/1229](#)>
- D B29C 2049/1276 . . . . {adaptable to different sized stretching rods}  
<administratively transferred to [B29C 49/1229](#)>
- D B29C 2049/128 . . . . {being a toggle mechanism}  
<administratively transferred to [B29C 49/1229](#)>
- D B29C 2049/1285 . . . . {being a spindle nut mechanism}  
<administratively transferred to [B29C 49/1229](#)>
- D B29C 2049/129 . . . . {Electric direct drives, e.g. linear motors}  
<administratively transferred to [B29C 49/123](#)>
- D B29C 2049/1295 . . . . {Magnetic}  
<administratively transferred to [B29C 49/1232](#)>
- C B29C 49/16 . . using pressure difference {for ~~prestretching~~*pre-stretching*}, e.g. pre-blowing  
{(B29C 49/649 takes precedence)}

**WARNING**

Group [B29C 49/16](#) is impacted by reclassification into group [B29C 49/1602](#). Groups [B29C 49/16](#) and [B29C 49/1602](#) should be considered in order to perform a complete search.



- N B29C 49/1602
- • • {pre-blowing without using a mould}
- WARNING  
Group [B29C 49/1602](#) is incomplete pending reclassification of documents from groups [B29C 49/0042](#), [B29C 49/12](#) and [B29C 49/16](#). All groups listed in this Warning should be considered in order to perform a complete search.
- D B29C 2049/165
- • • {pre-blowing without using a mould}
- <administratively transferred to [B29C 49/1602](#)>
- C B29C 49/18
- using several blowing steps ([B29C 49/16](#) takes precedence)
- WARNING  
Group [B29C 49/18](#) is impacted by reclassification into group [B29C 49/1802](#). Groups [B29C 49/18](#) and [B29C 49/1802](#) should be considered in order to perform a complete search.
- N B29C 49/1802
- {the first mould cavity being bigger than a second mould cavity}
- WARNING  
Group [B29C 49/1802](#) is incomplete pending reclassification of documents from group [B29C 49/18](#). Groups [B29C 49/18](#) and [B29C 49/1802](#) should be considered in order to perform a complete search.
- D B29C 49/185
- {in different mould cavities}
- <administratively transferred to [B29C 49/18](#)>
- C B29C 49/20
- of articles having inserts or reinforcements {; Handling of inserts or reinforcements}
- WARNING  
Group [B29C 49/20](#) is impacted by reclassification into group [B29C 2049/2071](#). Groups [B29C 49/20](#) and [B29C 2049/2071](#) should be considered in order to perform a complete search.
- D B29C 2049/2004
- • {with a specific location of the inserts or reinforcements in or on the final article}
- <administratively transferred to [B29C 49/20](#)>
- M B29C 2049/2008
- • • {~~Inside~~[inside the article](#)}
- M B29C 2049/2013
- • • • {~~Connecting~~[for connecting](#) opposite walls, e.g. baffles in a fuel tank}
- M B29C 2049/2017
- • • {~~Outside~~[outside the article](#)}
- M B29C 2049/2021
- • {~~Particular inserts~~[Inserts characterised by the material or type](#)}
- M B29C 2049/2069
- • • {~~being injection moulded, e.g.~~[moulded in combination, e.g. injection moulded](#) in the same mould before or after blow-~~moulding~~}
- N B29C 2049/2071
- • • {comprising electronic elements or detection means, e.g. chips, RFIDs or barcodes}
- WARNING  
Group [B29C 2049/2071](#) is incomplete pending reclassification of documents from group [B29C 49/20](#). Groups [B29C 49/20](#) and [B29C 2049/2071](#) should be considered in order to perform a complete search.
- M B29C 2049/2086
- • {Means for verifying [or keeping](#) the position of ~~insert~~[the insert, e.g. sensors, or attachment on mould wall](#)}

- D B29C 2049/2091
- {Means for avoiding cooling of the inserts where the inserts touch the preform or the mould}
  - <administratively transferred to [B29C 49/20](#)>
- M B29C 2049/2095
- {Means for **heating the inserts** *preparing or treating the inserts, e.g. cutting, deforming, heating, cooling or applying adhesives*}
- C B29C 49/22
- using multilayered preforms or parisons
- WARNING**  
*Group B29C 49/22 is impacted by reclassification into group B29C 2949/00. Groups B29C 49/22 and B29C 2949/00 should be considered in order to perform a complete search.*
- D B29C 49/221
- {at least one layer being injected (injection moulding of multilayered parisons B29C 45/1643, B29C 45/1646)}
  - <administratively transferred to [B29C 2949/3032](#) ADD>
- U B29C 2049/222
- {only parts of the preforms or parisons are layered}
- D B29C 2049/224
- • {neck portion}
  - <administratively transferred to [B29C 2949/3008](#) ADD and [B29C 2949/20](#) ADD>
- D B29C 2049/225
- • {body portion}
  - <administratively transferred to [B29C 2949/3016](#) ADD and [B29C 2949/20](#) ADD>
- D B29C 2049/227
- {with particular bonding between the layers}
  - <administratively transferred to [B29C 2949/3088](#) ADD>
- D B29C 2049/228
- {at least one layer has a variable thickness}
  - <administratively transferred to [B29C 2949/072](#) ADD and [B29C 2949/30](#) ADD>
- C B29C 49/24
- Lining or labelling
- WARNING**  
*Group B29C 49/24 is impacted by reclassification into groups B29C 2049/24302, B29C 2049/24304, B29C 2049/24306, B29C 2049/24308, B29C 2049/2442, B29C 49/249 and B29C 49/251. All groups listed in this Warning should be considered in order to perform a complete search.*
- D B29C 2049/2402
- {lining articles}
  - <administratively transferred to [B29C 49/251](#)>
- T B29C 2049/2404
- • {**on their inside surface, e.g. the inside of a bottle or box** *inside the article*}
- D B29C 2049/2406
- • • {the lining being used to line a previously coated mould}
  - <administratively transferred to [B29C 2049/2404](#) ADD>
- T B29C 49/2408
- • {**Inserting labels or films into blow-moulds, e.g. in-mould labellers** *In-mould lining or labelling*}
- D B29C 2049/241
- • {In-mould labelling}
  - <administratively transferred to [B29C 49/2408](#)>
- M B29C 2049/2412
- • {**the label being on the outside surface of the blow moulded article, e.g. bottle with a label on its outside surface** *outside the article*}
- T B29C 2049/2414
- • {**Particular linings** *Linings* or labels, e.g. specific geometry, **multilayered** *multi-layered or material*}; **Pretreatment thereof**}
- D B29C 2049/2416
- • • {Specific shapes or geometries}
  - <administratively transferred to [B29C 2049/2414](#) ADD>

- D B29C 2049/2418 . . . {Double folded labels}  
<administratively transferred to [B29C 2049/2414](#) ADD>
- D B29C 2049/242 . . . {Labels have round edges}  
<administratively transferred to [B29C 2049/2414](#) ADD>
- M B29C 2049/2422 . . . {Cylindrical *or sleeve shaped linings or labels*}
- T B29C 2049/2425 . . . {Perforated, *corrugated or embossed* labels}
- D B29C 2049/2427 . . . {Corrugated or embossed labels}  
<administratively transferred to [B29C 2049/2425](#) ADD>
- U B29C 2049/2429 . . . {Multilayered labels}
- N B29C 2049/24302 . . . {Label materials}
- WARNING  
Groups [B29C 2049/24302](#), [B29C 2049/24304](#) and [B29C 2049/24306](#) are incomplete pending reclassification of documents from group [B29C 49/24](#). All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 2049/24304 . . . {using identical material for the label and the preform}
- N B29C 2049/24306 . . . {using different material for the label and the preform}
- N B29C 2049/24308 . . . {comprising electronic elements or detection means, e.g. chips, RFIDs or barcodes}
- WARNING  
Group [B29C 2049/24308](#) is incomplete pending reclassification of documents from group [B29C 49/24](#). Groups [B29C 49/24](#) and [B29C 2049/24308](#) should be considered in order to perform a complete search.
- M B29C 2049/2431 . . . {~~Pretreatment or preshaping of labels~~ *Means for preparing or treating the label or lining, e.g. cutting, deforming, heating or applying adhesive*}
- M B29C 2049/2433 . . . {~~Applying glue~~ *Heating or applying adhesive*}
- M B29C 2049/2435 . . . {in a specific pattern}
- M B29C 2049/2437 . . . {Cutting}
- M B29C 2049/2439 . . . {by means in the mould cavity}
- T B29C 2049/2441 . . . {~~Preshaping while in the mould cavity~~ *Deforming*}
- N B29C 2049/2442 . . . {while blow-moulding, e.g. the preform expansion deforms the label or lining}
- WARNING  
Group [B29C 2049/2442](#) is incomplete pending reclassification of documents from group [B29C 49/24](#). Groups [B29C 49/24](#) and [B29C 2049/2442](#) should be considered in order to perform a complete search.
- M B29C 2049/2443 . . . {Means for ~~inserting the linings or labels into the mould~~ *feeding the lining or label into the mould, preform or parison, e.g. grippers*}
- M B29C 2049/2458 . . . {Driving ~~means or transporting means related to lining or labelling~~}
- M B29C 2049/246 . . . {Cams}
- M B29C 2049/2462 . . . {Conveyor ~~belt~~ *belts*}
- M B29C 2049/2464 . . . {Means for ~~positioning labels verifying or keeping the position of the lining or label, e.g. sensors, or attachment on mould wall~~ *(moulds with incorporated means for positioning inserts in general B29C 33/12)*}

- D B29C 2049/2477
- {~~Deforming linings or the labels during blow moulding~~}
  - <administratively transferred to [B29C 2049/2442](#) ADD>
- U B29C 2049/2479
- {Label or lining movements}
- U B29C 2049/2487
- • {comprising a rotary movement}
- D B29C 2049/2489
- {Folding the label around the edges of the final blow moulded article, e.g. via mould closing or via additional means}
  - <administratively transferred to [B29C 2049/2441](#) ADD>
- N B29C 49/249
- {explicit labelling}
- WARNING  
 Group [B29C 49/249](#) is incomplete pending reclassification of documents from group [B29C 49/24](#).  
 Groups [B29C 49/24](#) and [B29C 49/249](#) should be considered in order to perform a complete search.
- D B29C 2049/2491
- {~~Label materials~~}
  - <administratively transferred to [B29C 2049/24302](#) ADD>
- D B29C 2049/2493
- • {~~using identical material for the label and the preform~~}
  - <administratively transferred to [B29C 2049/24304](#) ADD>
- D B29C 2049/2495
- • {~~using different material for the label and the preform~~}
  - <administratively transferred to [B29C 2049/24306](#) ADD>
- D B29C 2049/2497
- • {~~Labels comprising data carriers or detection means, e.g. chips, RFIDs, antennas~~}
  - <administratively transferred to [B29C 2049/24308](#) ADD>
- N B29C 49/251
- {explicit lining ([B29C 49/26](#) takes precedence)}
- WARNING  
 Group [B29C 49/251](#) is incomplete pending reclassification of documents from group [B29C 49/24](#).  
 Groups [B29C 49/24](#) and [B29C 49/251](#) should be considered in order to perform a complete search.
- U B29C 49/26
- inner lining of tubes
- C B29C 49/28
- Blow-moulding apparatus
- WARNING  
 Group [B29C 49/28](#) is impacted by reclassification into groups [B29C 49/28002](#), [B29C 49/28004](#), [B29C 49/28006](#), [B29C 49/28008](#) and [B29C 49/28012](#).  
 All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 49/28002
- {designed for reduced size or for experiments, e.g. lower inertia, transportable or experimental apparatus}
- WARNING  
 Group [B29C 49/28002](#) is incomplete pending reclassification of documents from group [B29C 49/28](#).  
 Groups [B29C 49/28](#) and [B29C 49/28002](#) should be considered in order to perform a complete search.
- N B29C 49/28004
- {designed for easy access by operator}
- WARNING  
 Group [B29C 49/28004](#) is incomplete pending reclassification of documents from group [B29C 49/28](#).

Groups [B29C 49/28](#) and [B29C 49/28004](#) should be considered in order to perform a complete search.

N B29C 49/28006

- {having special frame}

WARNING

Group [B29C 49/28006](#) is incomplete pending reclassification of documents from group [B29C 49/28](#).

Groups [B29C 49/28](#) and [B29C 49/28006](#) should be considered in order to perform a complete search.

N B29C 49/28008

- {mounting, exchanging or centering machine parts, e.g. modular parts}

WARNING

Group [B29C 49/28008](#) is incomplete pending reclassification of documents from group [B29C 49/28](#).

Groups [B29C 49/28](#) and [B29C 49/28008](#) should be considered in order to perform a complete search.

N B29C 49/28012

- {using several moulds whereby at least one mould is different in at least one feature, e.g. size or shape ([B29C 49/0025](#) takes precedence)}

WARNING

Group [B29C 49/28012](#) is incomplete pending reclassification of documents from group [B29C 49/28](#).

Groups [B29C 49/28](#) and [B29C 49/28012](#) should be considered in order to perform a complete search.

D B29C 2049/283

- {configured to easily exchange modules, e.g. heating or feeding module}  
<administratively transferred to [B29C 49/28008](#)>

D B29C 2049/286

- {using several moulds whereby at least one mould is different from a plurality of identical moulds in at least one feature, e.g. size or shape}  
<administratively transferred to [B29C 49/28012](#)>

U B29C 49/30

- having movable moulds or mould parts

C B29C 49/42

- Component parts, details or accessories; Auxiliary operations

WARNING

Group [B29C 49/42](#) is impacted by reclassification into groups [B29C 49/42378](#), [B29C 49/4238](#), [B29C 49/42382](#), [B29C 49/42384](#), [B29C 49/42386](#), [B29C 49/42388](#), [B29C 49/4239](#), [B29C 49/42392](#), [B29C 49/42394](#), [B29C 49/42396](#), [B29C 49/42398](#), [B29C 49/424](#), [B29C 49/42402](#), [B29C 49/42403](#), [B29C 49/42405](#), [B29C 49/42407](#), [B29C 49/42408](#), [B29C 49/42409](#), [B29C 49/4241](#), [B29C 49/42412](#), [B29C 49/42413](#), [B29C 49/42414](#), [B29C 49/42416](#), [B29C 49/42418](#), [B29C 49/4242](#), [B29C 49/42421](#), [B29C 49/42422](#), [B29C 49/42424](#), [B29C 49/42426](#), [B29C 49/42428](#), [B29C 49/4244](#), [B29C 49/42442](#), [B29C 49/42444](#), [B29C 49/42446](#), [B29C 49/42448](#), [B29C 49/4245](#), [B29C 49/42452](#), [B29C 49/42454](#), [B29C 49/425](#), [B29C 49/4251](#), [B29C 49/427](#), [B29C 49/428](#), [B29C 49/42802](#), [B29C 49/42806](#), [B29C 49/42808](#), [B29C 49/42809](#), [B29C 49/4281](#), [B29C 49/42811](#), [B29C 49/42815](#), [B29C 49/42817](#), [B29C 49/4282](#), [B29C 49/42822](#), [B29C 49/42824](#), [B29C 49/42826](#), [B29C 49/42828](#), [B29C 49/4283](#), [B29C 49/42832](#), [B29C 49/42834](#), [B29C 49/42836](#), [B29C 49/42845](#), [B29C 49/4285](#), [B29C 49/42855](#), [B29C 49/4286](#), [B29C 49/42865](#), [B29C 49/4287](#), [B29C 2049/4296](#), [B29C 2049/4298](#) and [B29C 2049/431](#).

All groups listed in this Warning should be considered in order to perform a complete search.



- C B29C 49/4205
- {Handling means, e.g. transfer, loading or discharging means (handling of inserts or reinforcements [B29C 49/20](#); ~~handling of labels B29C 49/2408~~; *handling of linings or labels B29C 49/2408*)}
- WARNING**  
 Group [B29C 49/4205](#) is impacted by reclassification into groups [B29C 49/42051](#), [B29C 49/42053](#), [B29C 49/42055](#), [B29C 49/42057](#), [B29C 49/42059](#), [B29C 49/42061](#), [B29C 49/42063](#), [B29C 49/42065](#), [B29C 49/42067](#), [B29C 49/42069](#), [B29C 49/4207](#), [B29C 49/42071](#), [B29C 49/42073](#), [B29C 49/42075](#), [B29C 49/42077](#), [B29C 49/42079](#), [B29C 49/42081](#), [B29C 49/42083](#), [B29C 49/42085](#), [B29C 49/42087](#), [B29C 49/42089](#), [B29C 49/42091](#), [B29C 49/42093](#), [B29C 49/42095](#), [B29C 49/42097](#), [B29C 49/42099](#), [B29C 49/42101](#), [B29C 49/42103](#), [B29C 49/42105](#), [B29C 49/42107](#), [B29C 49/42109](#), [B29C 49/42111](#), [B29C 49/42113](#), [B29C 49/42115](#), [B29C 49/42117](#), [B29C 49/42119](#), [B29C 49/42121](#) and [B29C 49/42155](#).  
 All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 49/42051
- {Means for stripping, aligning or de-stacking}
- WARNING**  
 Groups [B29C 49/42051](#), [B29C 49/42053](#), [B29C 49/42055](#), [B29C 49/42057](#), [B29C 49/42059](#), [B29C 49/42061](#) and [B29C 49/42063](#) are incomplete pending reclassification of documents from group [B29C 49/4205](#).  
 All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 49/42053
- {Stripping preforms from moulds, e.g. from injection moulds or cores}
- N B29C 49/42055
- {De-stacking preforms, e.g. delivered in a stacked configuration}
- N B29C 49/42057
- {Aligning disorderly arranged preforms, e.g. delivered disorderly}
- N B29C 49/42059
- {Aligning of preforms getting stuck, unaligned or stacked during transport}
- N B29C 49/42061
- {Means for correcting, aligning or straighten preforms, e.g. gripper with correcting means}
- N B29C 49/42063
- {in relation to the mould, e.g. preform centring means in the mould}
- N B29C 49/42065
- {Means specially adapted for transporting preforms}
- WARNING**  
 Groups [B29C 49/42065](#) and [B29C 49/42067](#) are incomplete pending reclassification of documents from group [B29C 49/4205](#).  
 Groups [B29C 49/4205](#), [B29C 49/42065](#) and [B29C 49/42067](#) should be considered in order to perform a complete search.
- N B29C 49/42067
- {Extruded preforms, e.g. providing means for avoiding deformation of the soft preform}
- N B29C 49/42069
- {Means explicitly adapted for transporting blown article}
- WARNING**  
 Groups [B29C 49/42069](#) and [B29C 49/4207](#) are incomplete pending reclassification of documents from group [B29C 49/4205](#).  
 Groups [B29C 49/4205](#), [B29C 49/42069](#) and [B29C 49/4207](#) should be considered in order to perform a complete search.
- N B29C 49/4207
- {with stacking means, e.g. stacking the articles for further transport}

- N B29C 49/42071 . . . {Temperature conditioned transport, e.g. insulated or heated transport means}
- WARNING  
Group [B29C 49/42071](#) is incomplete pending reclassification of documents from group [B29C 49/4205](#).  
Groups [B29C 49/4205](#) and [B29C 49/42071](#) should be considered in order to perform a complete search.
- N B29C 49/42073 . . . {Grippers}
- WARNING  
Groups [B29C 49/42073](#), [B29C 49/42075](#), [B29C 49/42077](#), [B29C 49/42079](#), [B29C 49/42081](#), [B29C 49/42083](#), [B29C 49/42085](#), [B29C 49/42087](#), [B29C 49/42089](#) and [B29C 49/42091](#) are incomplete pending reclassification of documents from group [B29C 49/4205](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 49/42075 . . . . {with pivoting clamps}
- N B29C 49/42077 . . . . {with U-shaped holder}
- N B29C 49/42079 . . . . {using vacuum for gripping}
- N B29C 49/42081 . . . . {adjustable for different preform size}
- N B29C 49/42083 . . . . {being inflatable}
- N B29C 49/42085 . . . . {holding inside the neck}
- N B29C 49/42087 . . . . {holding outside the neck}
- N B29C 49/42089 . . . . {holding body portion}
- N B29C 49/42091 . . . . {holding bottom portion or sprue}
- N B29C 49/42093 . . . {Transporting apparatus, e.g. slides, wheels or conveyors}
- WARNING  
Groups [B29C 49/42093](#), [B29C 49/42095](#), [B29C 49/42097](#), [B29C 49/42099](#), [B29C 49/42101](#), [B29C 49/42103](#), [B29C 49/42105](#), [B29C 49/42107](#), [B29C 49/42109](#) and [B29C 49/42111](#) are incomplete pending reclassification of documents from group [B29C 49/4205](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 49/42095 . . . . {Rotating wheels or stars}
- N B29C 49/42097 . . . . {Sliding rails, e.g. inclined}
- N B29C 49/42099 . . . . {Pushing by air}
- D B29C 49/421 . . . {for blown articles}
- <administratively transferred to [B29C 49/42069](#)>
- N B29C 49/42101 . . . . {Conveyors, e.g. flat conveyor or clamping between two bands}
- N B29C 49/42103 . . . . {Vacuum suction pipes}
- N B29C 49/42105 . . . . {for discontinuous or batch transport}
- N B29C 49/42107 . . . . {with accumulator or temporary storage, e.g. while waiting for the blowing apparatus}
- N B29C 49/42109 . . . . {keeping temperature of accumulated preforms or articles, e.g. the accumulator being an oven}
- N B29C 49/42111 . . . . {with changeable transporting paths or lengths}



- N B29C 49/42113 . . . {Means for manipulating the objects' position or orientation}
- WARNING  
Groups [B29C 49/42113](#), [B29C 49/42115](#), [B29C 49/42117](#), [B29C 49/42119](#), [B29C 49/42121](#) and [B29C 49/42155](#) are incomplete pending reclassification of documents from group [B29C 49/4205](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 49/42115 . . . . {Inversion, e.g. turning preform upside down}
- N B29C 49/42117 . . . . {Translation e.g. telescopic movement to pick up a preform}
- N B29C 49/42119 . . . . {Rotation, e.g. rotating a predetermined angle for asymmetric preform or with asymmetric heat profile}
- N B29C 49/42121 . . . . {Changing the center-center distance}
- N B29C 49/42122 . . . . {Adapting to blow-mould cavity center-center distance}
- D B29C 49/4215 . . . {for increasing the space between preforms, e.g. in order to perform the blow moulding step}
- <administratively transferred to [B29C 49/42122](#)>
- N B29C 49/42155 . . . . {Keeping center-center distance constant}
- D B29C 2049/4221 . . . {for transferring at least two preforms to the mould}
- <administratively transferred to [B29C 49/42105](#)>
- D B29C 2049/4226 . . . {for orienting preforms in the mould, e.g. depending on their heat profile}
- <administratively transferred to [B29C 49/42119](#)>
- D B29C 2049/4231 . . . {for aligning disorderly arranged preforms}
- <administratively transferred to [B29C 49/42057](#)>
- C B29C 49/4236 . . {Drive means}
- WARNING  
Group [B29C 49/4236](#) is impacted by reclassification into groups [B29C 49/42362](#), [B29C 49/4237](#), [B29C 49/42372](#), [B29C 49/42374](#) and [B29C 49/42376](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 49/42362 . . . {Electric drive means, e.g. servomotors}
- WARNING  
Group [B29C 49/42362](#) is incomplete pending reclassification of documents from group [B29C 49/4236](#).  
Groups [B29C 49/4236](#) and [B29C 49/42362](#) should be considered in order to perform a complete search.
- N B29C 49/4237 . . . {Pneumatic drive means}
- WARNING  
Group [B29C 49/4237](#) is incomplete pending reclassification of documents from group [B29C 49/4236](#).  
Groups [B29C 49/4236](#) and [B29C 49/4237](#) should be considered in order to perform a complete search.
- N B29C 49/42372 . . . {Hydraulic drive means}
- WARNING  
Group [B29C 49/42372](#) is incomplete pending reclassification of documents from group [B29C 49/4236](#).

Groups [B29C 49/4236](#) and [B29C 49/42372](#) should be considered in order to perform a complete search.

- N B29C 49/42374      • • • {for the extruder, e.g. extruder moving up and down}

WARNING

Group [B29C 49/42374](#) is incomplete pending reclassification of documents from group [B29C 49/4236](#).

Groups [B29C 49/4236](#) and [B29C 49/42374](#) should be considered in order to perform a complete search.

- N B29C 49/42376      • • • {for moulds other than opening, closing and clamping}

WARNING

Group [B29C 49/42376](#) is incomplete pending reclassification of documents from group [B29C 49/4236](#).

Groups [B29C 49/4236](#) and [B29C 49/42376](#) should be considered in order to perform a complete search.

- N B29C 49/42378      • • {Handling malfunction}

WARNING

Groups [B29C 49/42378](#), [B29C 49/4238](#) and [B29C 49/42382](#) are incomplete pending reclassification of documents from group [B29C 49/42](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- N B29C 49/4238      • • • {Ejecting defective preforms or products}

- N B29C 49/42382      • • • {Stopping at least a part of the machine}

- N B29C 49/42384      • • {Safety, e.g. operator safety}

WARNING

Group [B29C 49/42384](#) is incomplete pending reclassification of documents from group [B29C 49/42](#).

Groups [B29C 49/42](#) and [B29C 49/42384](#) should be considered in order to perform a complete search.

- N B29C 49/42386      • • {Improving flash formation, e.g. providing for easily removable flash from extrusion moulded articles}

WARNING

Group [B29C 49/42386](#) is incomplete pending reclassification of documents from group [B29C 49/42](#).

Groups [B29C 49/42](#) and [B29C 49/42386](#) should be considered in order to perform a complete search.

- N B29C 49/42388      • • {Eliminating electric charge}

WARNING

Group [B29C 49/42388](#) is incomplete pending reclassification of documents from group [B29C 49/42](#).

Groups [B29C 49/42](#) and [B29C 49/42388](#) should be considered in order to perform a complete search.

- N B29C 49/4239      • • {Avoiding condense, e.g. on cooled mould surfaces}

WARNING

Group [B29C 49/4239](#) is incomplete pending reclassification of documents from group [B29C 49/42](#).

Groups [B29C 49/42](#) and [B29C 49/4239](#) should be considered in order to perform a complete search.

- N B29C 49/42392
- • {Avoiding marks or scratches, e.g. mould marks}
- WARNING  
 Group [B29C 49/42392](#) is incomplete pending reclassification of documents from group [B29C 49/42](#).  
 Groups [B29C 49/42](#) and [B29C 49/42392](#) should be considered in order to perform a complete search.
- N B29C 49/42394
- • {Providing specific wall thickness}
- WARNING  
 Groups [B29C 49/42394](#) and [B29C 49/42396](#) are incomplete pending reclassification of documents from group [B29C 49/42](#).  
 Groups [B29C 49/42](#), [B29C 49/42394](#) and [B29C 49/42396](#) should be considered in order to perform a complete search.
- N B29C 49/42396
- • • {Avoiding excessive thickness differences, e.g. thinning of corners}
- N B29C 49/42398
- • {Simulation of the blow-moulding process}
- WARNING  
 Groups [B29C 49/42398](#), [B29C 49/424](#) and [B29C 49/42402](#) are incomplete pending reclassification of documents from group [B29C 49/42](#).  
 All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 49/424
- • • {Simulation of the preform conditioning process}
- N B29C 49/42402
- • • {Simulation of the shaping process}
- N B29C 49/42403
- • {Purging or cleaning the blow-moulding apparatus}
- WARNING  
 Groups [B29C 49/42403](#) and [B29C 49/42405](#) are incomplete pending reclassification of documents from group [B29C 49/42](#).  
 Groups [B29C 49/42](#), [B29C 49/42403](#) and [B29C 49/42405](#) should be considered in order to perform a complete search.
- N B29C 49/42405
- • • {Sterilizing}
- N B29C 49/42407
- • {Procedures for start-up or material change}
- WARNING  
 Groups [B29C 49/42407](#), [B29C 49/42408](#), [B29C 49/42409](#) and [B29C 49/4241](#) are incomplete pending reclassification of documents from group [B29C 49/42](#).  
 All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 49/42408
- • • {Temperature conditioning, e.g. pre-heating of the moulds}
- N B29C 49/42409
- • • {Special pressurization during start-up of the machine}
- N B29C 49/4241
- • • {Material change}
- N B29C 49/42412
- • {Marking or printing}
- WARNING  
 Groups [B29C 49/42412](#) and [B29C 49/42413](#) are incomplete pending reclassification of documents from group [B29C 49/42](#).  
 Groups [B29C 49/42](#), [B29C 49/42412](#) and [B29C 49/42413](#) should be considered in order to perform a complete search.
- N B29C 49/42413
- • • {with a pattern for analysing deformation}

- N B29C 49/42414 . . {Treatment of preforms, e.g. cleaning or spraying water for improved heat transfer}
- WARNING  
Groups [B29C 49/42414](#), [B29C 49/42416](#) and [B29C 49/42418](#) are incomplete pending reclassification of documents from group [B29C 49/42](#). All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 49/42416 . . . {Purging or cleaning the preforms}
- N B29C 49/42418 . . . . {for sterilizing}
- T B29C 49/4242 . . {Means for deforming the parison prior to the blowing operation ([B29C 49/08](#) takes precedence)}
- WARNING  
Groups [B29C 49/4242](#), [B29C 49/42421](#), [B29C 49/42422](#), [B29C 49/42424](#), [B29C 49/42426](#), [B29C 49/42428](#), [B29C 49/4244](#), [B29C 49/42442](#), [B29C 49/42444](#), [B29C 49/42446](#), [B29C 49/42448](#), [B29C 49/4245](#), [B29C 49/42452](#), [B29C 49/42454](#), [B29C 49/425](#) and [B29C 49/4251](#) are incomplete pending reclassification of documents from group [B29C 49/42](#). All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 49/42421 . . . {before laying into the mould}
- N B29C 49/42422 . . . . {by the preform transporting means}
- N B29C 49/42424 . . . . {Deforming or closing the preform ends, e.g. pinching and welding}
- N B29C 49/42426 . . . . {by pressure difference deforming parts of the preform}
- N B29C 49/42428 . . . . {in a separate pre-moulding station}
- N B29C 49/4244 . . . {during or after laying preform into the final mould}
- N B29C 49/42442 . . . . {by moving the extruder head}
- N B29C 49/42444 . . . . {by moving the transport means}
- N B29C 49/42446 . . . . {by using a robot arm or similar actuator}
- N B29C 49/42448 . . . . {by moving the mould}
- N B29C 49/4245 . . . . {aided by air floating}
- N B29C 49/42452 . . . . {The mould opening plane being horizontal}
- N B29C 49/42454 . . . . {The mould opening plane being vertical}
- M B29C 49/4247 . . . {~~Spreading~~~~using spreading~~ or extending means}
- N B29C 49/425 . . . . {rods or bars entering the preform}
- N B29C 49/4251 . . . {by foaming}
- M B29C 49/4252 . . {Auxiliary operations prior to the blow ~~moulding operation, e.g. cutting -~~  
~~moulding operation not otherwise provided for~~ ([B29C 49/64](#), [B29C 49/76](#), [B29C 49/78](#) take precedence)}
- D B29C 2049/4257 . . . {Means for heating the mould cavity surface from the side of the cavity, e.g. putting an external heating member between the mould halves}  
<administratively transferred to [B29C 2049/4854](#) ADD>
- D B29C 2049/4263 . . . . {using flames}  
<administratively transferred to [B29C 2049/4854](#) ADD>

- T B29C 49/4268
- • {Auxiliary operations during the blow-moulding operation (~~B29C 49/64~~, ~~B29C 49/76~~, ~~B29C 49/78~~ take precedence)}
- WARNING  
Group [B29C 49/4268](#) is incomplete pending reclassification of documents from groups [B29C 49/64](#), [B29C 49/76](#) and [B29C 49/78](#). All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 49/427
- • {Auxiliary deformation, i.e. not caused by pre-stretching or blowing not otherwise provided for}
- WARNING  
Group [B29C 49/427](#) is incomplete pending reclassification of documents from group [B29C 49/42](#). Groups [B29C 49/42](#) and [B29C 49/427](#) should be considered in order to perform a complete search.
- T B29C 49/4273
- • {Auxiliary operations after the blow-moulding operation -moulding operation not otherwise provided for} (~~B29C 49/64~~, ~~B29C 49/70~~, ~~B29C 49/72~~, ~~B29C 49/76~~, ~~B29C 49/78~~ take precedence)}
- WARNING  
Group [B29C 49/4273](#) is incomplete pending reclassification of documents from groups [B29C 49/64](#), [B29C 49/70](#), [B29C 49/76](#) and [B29C 49/78](#). All groups listed in this Warning should be considered in order to perform a complete search.
- M B29C 49/4278
- • {Cutting, ~~rearranging and joining the cut parts~~}
- N B29C 49/428
- • {Joining}
- WARNING  
Groups [B29C 49/428](#), [B29C 49/42802](#) and [B29C 49/42806](#) are incomplete pending reclassification of documents from group [B29C 49/42](#). All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 49/42802
- • • {a closure or a sealing foil to the article or pinching the opening}
- N B29C 49/42806
- • • {auxiliary parts to the article, e.g. handle ([B29C 49/42802](#) takes precedence)}
- N B29C 49/42808
- • • {Filling the article}
- WARNING  
Groups [B29C 49/42808](#), [B29C 49/42809](#), [B29C 49/4281](#) and [B29C 49/42811](#) are incomplete pending reclassification of documents from group [B29C 49/42](#). All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 49/42809
- • • {while in the mould, i.e. with other material than the blowing fluid}
- N B29C 49/4281
- • • {outside the mould}
- N B29C 49/42811
- • • {Introducing an auxiliary material not being the content, e.g. foamable material in a hollow wall section}
- N B29C 49/42815
- • • {Emptying the article, e.g. emptying hydraulic blowing fluid}
- WARNING  
Group [B29C 49/42815](#) is incomplete pending reclassification of documents from group [B29C 49/42](#).

Groups [B29C 49/42](#) and [B29C 49/42815](#) should be considered in order to perform a complete search.

N B29C 49/42817 . . . {Drying the article}

WARNING

Group [B29C 49/42817](#) is incomplete pending reclassification of documents from group [B29C 49/42](#).

Groups [B29C 49/42](#) and [B29C 49/42817](#) should be considered in order to perform a complete search.

N B29C 49/4282 . . . {Purging or cleaning the article}

WARNING

Groups [B29C 49/4282](#) and [B29C 49/42822](#) are incomplete pending reclassification of documents from group [B29C 49/42](#).

Groups [B29C 49/42](#), [B29C 49/4282](#) and [B29C 49/42822](#) should be considered in order to perform a complete search.

N B29C 49/42822 . . . {Sterilizing the article}

N B29C 49/42824 . . . {Cooling the article outside the mould}

WARNING

Group [B29C 49/42824](#) is incomplete pending reclassification of documents from group [B29C 49/42](#).

Groups [B29C 49/42](#) and [B29C 49/42824](#) should be considered in order to perform a complete search.

N B29C 49/42826 . . . {Separating burr or other part from the article, e.g. using mechanical means}

WARNING

Group [B29C 49/42826](#) is incomplete pending reclassification of documents from group [B29C 49/42](#).

Groups [B29C 49/42](#) and [B29C 49/42826](#) should be considered in order to perform a complete search.

N B29C 49/42828 . . . {Coating or painting the article}

WARNING

Group [B29C 49/42828](#) is incomplete pending reclassification of documents from group [B29C 49/42](#).

Groups [B29C 49/42](#) and [B29C 49/42828](#) should be considered in order to perform a complete search.

N B29C 49/4283 . . . {Deforming the finished article}

WARNING

Groups [B29C 49/4283](#), [B29C 49/42832](#), [B29C 49/42834](#) and [B29C 49/42836](#) are incomplete pending reclassification of documents from group [B29C 49/42](#).

All groups listed in this Warning should be considered in order to perform a complete search.

N B29C 49/42832 . . . {Moving or inverting sections, e.g. inverting bottom as vacuum panel}

N B29C 49/42834 . . . {Foaming, expanding or stretching the article}

N B29C 49/42836 . . . {Collapsing or folding the article, e.g. to save space for transport}



- C B29C 49/4284
- {Means for recycling or reusing auxiliaries or materials, e.g. blowing fluids or energy}
- WARNING**  
 Group [B29C 49/4284](#) is impacted by reclassification into groups [B29C 49/42845](#) - [B29C 49/4287](#).  
 Groups [B29C 49/4284](#) and [B29C 49/42845](#) - [B29C 49/4287](#) should be considered in order to perform a complete search.
- N B29C 49/42845
- {Recycling or reusing of fluid, e.g. pressure}
- WARNING**  
 Groups [B29C 49/42845](#), [B29C 49/4285](#) and [B29C 49/42855](#) are incomplete pending reclassification of documents from groups [B29C 49/42](#) and [B29C 49/4284](#).  
 All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 49/4285
- {Reactive gases}
- N B29C 49/42855
- {Blowing fluids, e.g. reducing fluid consumption}
- N B29C 49/4286
- {Recycling or reusing of heat energy}
- WARNING**  
 Group [B29C 49/4286](#) is incomplete pending reclassification of documents from groups [B29C 49/42](#) and [B29C 49/4284](#).  
 Groups [B29C 49/42](#), [B29C 49/4284](#) and [B29C 49/4286](#) should be considered in order to perform a complete search.
- N B29C 49/42865
- {Recycling or reusing of electric energy}
- WARNING**  
 Group [B29C 49/42865](#) is incomplete pending reclassification of documents from groups [B29C 49/42](#) and [B29C 49/4284](#).  
 Groups [B29C 49/42](#), [B29C 49/4284](#) and [B29C 49/42865](#) should be considered in order to perform a complete search.
- N B29C 49/4287
- {for use outside the blow-moulding apparatus, e.g. generating power or as pressurized plant air}
- WARNING**  
 Group [B29C 49/4287](#) is incomplete pending reclassification of documents from groups [B29C 49/42](#) and [B29C 49/4284](#).  
 Groups [B29C 49/42](#), [B29C 49/4284](#) and [B29C 49/4287](#) should be considered in order to perform a complete search.
- M B29C 2049/4294
- {Sealing means, ~~i.e. for avoiding blowing air to escape~~}
- N B29C 2049/4296
- {for avoiding blowing fluid from leaking, e.g. between the blowing means and the preform neck}
- WARNING**  
 Group [B29C 2049/4296](#) is incomplete pending reclassification of documents from group [B29C 49/42](#).  
 Groups [B29C 49/42](#) and [B29C 2049/4296](#) should be considered in order to perform a complete search.
- N B29C 2049/4298
- {for sealing clean or sterile room or volume}
- WARNING**  
 Group [B29C 2049/4298](#) is incomplete pending reclassification of documents from group [B29C 49/42](#).



Groups [B29C 49/42](#) and [B29C 2049/4298](#) should be considered in order to perform a complete search.

- N B29C 2049/431 . . . {for sealing moulds, e.g. for vacuum air floating}

WARNING

Group [B29C 2049/431](#) is incomplete pending reclassification of documents from group [B29C 49/42](#).

Groups [B29C 49/42](#) and [B29C 2049/431](#) should be considered in order to perform a complete search.

- U B29C 49/44 . . for applying pressure through the walls of an inflated bag

- C B29C 49/46 . . characterised by using a particular environment or blow fluids other than air

WARNING

Group [B29C 49/46](#) is impacted by reclassification into groups [B29C 2049/4698](#) and [B29C 2049/4699](#).

Groups [B29C 49/46](#), [B29C 2049/4698](#) and [B29C 2049/4699](#) should be considered in order to perform a complete search.

- M B29C 2049/4673 . . . {~~Particular environments~~ *Environments*}

- M B29C 2049/4679 . . . . {~~being sterile~~ *Sterile* gas to surround or flush parts of the blow-~~moulding~~ apparatus, e.g. blowing means, preforms or parisons}

- D B29C 2049/4682 . . . . {surrounding or flushing preforms or parisons, e.g. flushing the inside of extruded parisons}

<administratively transferred to [B29C 49/42414](#)>

- D B29C 2049/4685 . . . . {after blow moulding}

<administratively transferred to [B29C 49/4273](#)>

- D B29C 2049/4688 . . . . {using reactive gas}

<administratively transferred to [B29C 49/4273](#)>

- D B29C 2049/4691 . . . . {using steam during blow moulding, e.g. to expand foamable beads}

<administratively transferred to [B29C 49/42834](#)>

- D B29C 2049/4694 . . . . {purging or cleaning the blow moulding apparatus or parts of it, e.g. cleaning blow moulds (cleaning moulds in general B29C 33/72)}

<administratively transferred to [B29C 49/42403](#)>

- U B29C 2049/4697 . . . . {Clean room}

- N B29C 2049/4698 . . . . {Pressure difference, e.g. over pressure in room}

WARNING

Group [B29C 2049/4698](#) is incomplete pending reclassification of documents from group [B29C 49/46](#).

Groups [B29C 49/46](#) and [B29C 2049/4698](#) should be considered in order to perform a complete search.

- N B29C 2049/4699 . . . . {Air conditioned room}

WARNING

Group [B29C 2049/4699](#) is incomplete pending reclassification of documents from group [B29C 49/46](#).

Groups [B29C 49/46](#) and [B29C 2049/4699](#) should be considered in order to perform a complete search.

C	B29C 49/48	<ul style="list-style-type: none"> <li>• • Moulds</li> </ul> <p><b>WARNING</b>  <i>Group B29C 49/48 is impacted by reclassification into groups B29C 49/48185, B29C 49/4819, B29C 2049/48615, B29C 2049/4862, B29C 2049/4863, B29C 2049/4874, B29C 2049/4881, B29C 2049/48825 and B29C 2049/4883.</i>  <i>All groups listed in this Warning should be considered in order to perform a complete search.</i></p>
U	B29C 49/4802	<ul style="list-style-type: none"> <li>• • • {with means for locally compressing part(s) of the parison in the main blowing cavity}</li> </ul>
D	B29C 2049/4812	<ul style="list-style-type: none"> <li>• • • {<del>and welding opposite wall parts of the parisons or preforms to each other</del>}</li> <li>&lt;administratively transferred to <a href="#">B29C 49/4812</a>&gt;</li> </ul>
N	B29C 49/4812	<ul style="list-style-type: none"> <li>• • • {<del>and welding opposite wall parts of the parisons or preforms to each other</del>}</li> </ul>
M	B29C 49/4815	<ul style="list-style-type: none"> <li>• • • • {by means of movable mould parts}</li> </ul>
M	B29C 49/4817	<ul style="list-style-type: none"> <li>• • • • {with means for closing off parison ends}</li> </ul>
N	B29C 49/48185	<ul style="list-style-type: none"> <li>• • • {with more than one separate mould cavity}</li> </ul> <p><b>WARNING</b>  <i>Groups B29C 49/48185 and B29C 49/4819 are incomplete pending reclassification of documents from group B29C 49/48.</i>  <i>Groups B29C 49/48, B29C 49/48185 and B29C 49/4819 should be considered in order to perform a complete search.</i></p>
N	B29C 49/4819	<ul style="list-style-type: none"> <li>• • • • {having different sizes or shapes of the mould cavities}</li> </ul>
U	B29C 49/4823	<ul style="list-style-type: none"> <li>• • • {with incorporated heating or cooling means}</li> </ul>
T	B29C 2049/4825	<ul style="list-style-type: none"> <li>• • • • {for cooling moulds or mould parts (<a href="#">B29C 2049/5889</a> takes precedence)}</li> </ul>
D	B29C 2049/4828	<ul style="list-style-type: none"> <li>• • • • • {for cooling mould parts}</li> <li>&lt;administratively transferred to <a href="#">B29C 2049/4825</a> ADD&gt;</li> </ul>
T	B29C 2049/4838	<ul style="list-style-type: none"> <li>• • • • {for heating moulds or mould parts}</li> </ul>
D	B29C 2049/4841	<ul style="list-style-type: none"> <li>• • • • • {for heating mould parts}</li> <li>&lt;administratively transferred to <a href="#">B29C 2049/4838</a> ADD&gt;</li> </ul>
D	B29C 2049/4843	<ul style="list-style-type: none"> <li>• • • • • • {for heating the bottom, e.g. heating the bottom part independently}</li> <li>&lt;administratively transferred to <a href="#">B29C 2049/4848</a> ADD&gt;</li> </ul>
U	B29C 2049/4846	<ul style="list-style-type: none"> <li>• • • • • {in different areas of the mould at different temperatures, e.g. neck, shoulder or bottom}</li> </ul>
T	B29C 2049/4848	<ul style="list-style-type: none"> <li>• • • • • • {Bottom}</li> </ul>
M	B29C 2049/4853	<ul style="list-style-type: none"> <li>• • • • {<del>having additional</del><i>with</i> means for improving heat transfer between the mould cavity and the <del>parisons or preforms</del><i>preform</i>}(in general <a href="#">B29C 33/30</a>)}</li> </ul>
N	B29C 2049/4854	<ul style="list-style-type: none"> <li>• • • • {Heating or cooling from the inside of the cavity, e.g. using flames or other means}</li> </ul>
M	B29C 2049/4856	<ul style="list-style-type: none"> <li>• • • {Mounting, exchanging or centering moulds or parts thereof (<a href="#">B29C 2049/5893</a> takes precedence;<del>in general B29C 33/30</del>)}</li> </ul>
U	B29C 2049/4858	<ul style="list-style-type: none"> <li>• • • • {Exchanging mould parts, e.g. for changing the mould size or geometry for making different products in the same mould}</li> </ul>
U	B29C 2049/4861	<ul style="list-style-type: none"> <li>• • • • • {Neck portions of bottle producing moulds}</li> </ul>

- N B29C 2049/48615 . . . {Aligning the mould assembly position e.g. adapting center to the extruded parison}  
WARNING  
 Group [B29C 2049/48615](#) is incomplete pending reclassification of documents from group [B29C 49/48](#).  
 Groups [B29C 49/48](#) and [B29C 2049/48615](#) should be considered in order to perform a complete search.
- N B29C 2049/4862 . . . {Aligning the mould part position e.g. left half to right half}  
WARNING  
 Group [B29C 2049/4862](#) is incomplete pending reclassification of documents from group [B29C 49/48](#).  
 Groups [B29C 49/48](#) and [B29C 2049/4862](#) should be considered in order to perform a complete search.
- N B29C 2049/4863 . . . {Mould identification, e.g. chip on mould with ID and process data}  
WARNING  
 Group [B29C 2049/4863](#) is incomplete pending reclassification of documents from group [B29C 49/48](#).  
 Groups [B29C 49/48](#) and [B29C 2049/4863](#) should be considered in order to perform a complete search.
- U B29C 2049/4864 . . . {Fixed by a special construction to the mould half carriers, e.g. using insulating material between the mould and the mould half carrier}
- U B29C 2049/4866 . . . {center the moulds with the mould half carriers}
- D B29C 2049/4869 . . . {containing more than one mould cavity}  
 <administratively transferred to [B29C 49/48185](#)>
- D B29C 2049/4871 . . . {having different sizes or shapes mould cavities, e.g. for producing different sized bottles with the same mould}  
 <administratively transferred to [B29C 49/4819](#)>
- N B29C 49/487105 . . . {characterised by the manufacturing process}
- T B29C 2049/4874 . . . {Moulds made of at least two different materials, e.g. a hard material and a soft material, materials having different thermal conductivities characterised by the material, e.g. having different thermal conductivities or hardness}  
WARNING  
 Group [B29C 2049/4874](#) is incomplete pending reclassification of documents from group [B29C 49/48](#).  
 Groups [B29C 49/48](#) and [B29C 2049/4874](#) should be considered in order to perform a complete search.
- M B29C 2049/4879 . . . {defined by special characterised by mould configurations}
- N B29C 2049/4881 . . . {having a mandrel or core e.g. two mould halves with a core in-between}  
WARNING  
 Group [B29C 2049/4881](#) is incomplete pending reclassification of documents from group [B29C 49/48](#).  
 Groups [B29C 49/48](#) and [B29C 2049/4881](#) should be considered in order to perform a complete search.
- C B29C 2049/4882 . . . {Having a special mould Mould cavity geometry}  
WARNING  
 Group [B29C 2049/4882](#) is impacted by reclassification into groups [B29C 2049/48825](#) and [B29C 2049/4883](#).

Groups [B29C 2049/4882](#), [B29C 2049/48825](#) and [B29C 2049/4883](#) should be considered in order to perform a complete search.

- N B29C 2049/48825 . . . . {Asymmetric moulds, i.e. the parison is not in the center of the mould}  
WARNING  
Group [B29C 2049/48825](#) is incomplete pending reclassification of documents from groups [B29C 49/48](#) and [B29C 2049/4882](#).  
Groups [B29C 49/48](#), [B29C 2049/4882](#) and [B29C 2049/48825](#) should be considered in order to perform a complete search.
- N B29C 2049/4883 . . . . {having cavity parts avoiding preform contact, e.g. partial free blow}  
WARNING  
Group [B29C 2049/4883](#) is incomplete pending reclassification of documents from groups [B29C 49/48](#) and [B29C 2049/4882](#).  
Groups [B29C 49/48](#), [B29C 2049/4882](#) and [B29C 2049/4883](#) should be considered in order to perform a complete search.
- D B29C 2049/4897 . . . {characterised by the manufacturing process (in general B29C 33/38)}  
<administratively transferred to [B29C 49/487105](#)>
- C B29C 49/56 . . . Opening, closing or clamping means  
WARNING  
Group [B29C 49/56](#) is impacted by reclassification into groups [B29C 49/5601](#), [B29C 49/5602](#), [B29C 49/5603](#), [B29C 49/5604](#), [B29C 49/5605](#), [B29C 49/5606](#), [B29C 49/5607](#), [B29C 49/5608](#), [B29C 49/561](#), [B29C 49/5611](#), [B29C 49/5612](#), [B29C 49/5613](#), [B29C 49/5614](#), [B29C 2049/5631](#), [B29C 2049/5632](#), [B29C 2049/5633](#), [B29C 2049/5634](#), [B29C 2049/5635](#), [B29C 2049/5636](#), [B29C 2049/5661](#), [B29C 2049/5662](#), [B29C 2049/5663](#), [B29C 2049/5664](#), [B29C 2049/5665](#) and [B29C 2049/5666](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 49/5601 . . . {Mechanically operated, i.e. closing or opening of the mould parts is done by mechanic means}  
WARNING  
Groups [B29C 49/5601](#), [B29C 49/5602](#), [B29C 49/5603](#) and [B29C 49/5604](#) are incomplete pending reclassification of documents from group [B29C 49/56](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 49/5602 . . . . {using cams}
- N B29C 49/5603 . . . . {using toggle mechanism}
- N B29C 49/5604 . . . . {using spindle nut mechanism}
- N B29C 49/5605 . . . {Hydraulically operated, i.e. closing or opening of the mould parts is done by hydraulic means}  
WARNING  
Group [B29C 49/5605](#) is incomplete pending reclassification of documents from group [B29C 49/56](#).  
Groups [B29C 49/56](#) and [B29C 49/5605](#) should be considered in order to perform a complete search.

- N B29C 49/5606
- • • {Pneumatically operated, i.e. closing or opening of the mould parts is done by hydraulic means}
- WARNING  
Group [B29C 49/5606](#) is incomplete pending reclassification of documents from group [B29C 49/56](#).  
Groups [B29C 49/56](#) and [B29C 49/5606](#) should be considered in order to perform a complete search.
- N B29C 49/5607
- • • {Electrically operated, e.g. the closing or opening is done with an electrical motor direct drive}
- WARNING  
Group [B29C 49/5607](#) is incomplete pending reclassification of documents from group [B29C 49/56](#).  
Groups [B29C 49/56](#) and [B29C 49/5607](#) should be considered in order to perform a complete search.
- N B29C 49/5608
- • • {Asymmetric movement of mould parts, e.g. by moving only one mould part}
- WARNING  
Group [B29C 49/5608](#) is incomplete pending reclassification of documents from group [B29C 49/56](#).  
Groups [B29C 49/56](#) and [B29C 49/5608](#) should be considered in order to perform a complete search.
- N B29C 49/561
- • • {Characterised by speed, e.g. variable opening closing speed}
- WARNING  
Group [B29C 49/561](#) is incomplete pending reclassification of documents from group [B29C 49/56](#).  
Groups [B29C 49/56](#) and [B29C 49/561](#) should be considered in order to perform a complete search.
- N B29C 49/5611
- • • {Tilting movement, e.g. changing angle of the mould parts towards the vertical direction}
- WARNING  
Group [B29C 49/5611](#) is incomplete pending reclassification of documents from group [B29C 49/56](#).  
Groups [B29C 49/56](#) and [B29C 49/5611](#) should be considered in order to perform a complete search.
- N B29C 49/5612
- • • {characterised by bottom part movement}
- WARNING  
Group [B29C 49/5612](#) is incomplete pending reclassification of documents from group [B29C 49/56](#).  
Groups [B29C 49/56](#) and [B29C 49/5612](#) should be considered in order to perform a complete search.
- N B29C 49/5613
- • • {characterised by connected mould part movement, e.g. bottom part movement is linked to mould half movement}
- WARNING  
Group [B29C 49/5613](#) is incomplete pending reclassification of documents from group [B29C 49/56](#).  
Groups [B29C 49/56](#) and [B29C 49/5613](#) should be considered in order to perform a complete search.

- N B29C 49/5614 . . . {Safety means, e.g. during ejection or locking failure}  
WARNING  
 Group [B29C 49/5614](#) is incomplete pending reclassification of documents from group [B29C 49/56](#).  
 Groups [B29C 49/56](#) and [B29C 49/5614](#) should be considered in order to perform a complete search.
- U B29C 2049/563 . . . {Clamping means}
- N B29C 2049/5631 . . . {Hydraulic}  
WARNING  
 Group [B29C 2049/5631](#) is incomplete pending reclassification of documents from group [B29C 49/56](#).  
 Groups [B29C 49/56](#) and [B29C 2049/5631](#) should be considered in order to perform a complete search.
- N B29C 2049/5632 . . . {Magnetic}  
WARNING  
 Group [B29C 2049/5632](#) is incomplete pending reclassification of documents from group [B29C 49/56](#).  
 Groups [B29C 49/56](#) and [B29C 2049/5632](#) should be considered in order to perform a complete search.
- N B29C 2049/5633 . . . {Pneumatic}  
WARNING  
 Group [B29C 2049/5633](#) is incomplete pending reclassification of documents from group [B29C 49/56](#).  
 Groups [B29C 49/56](#) and [B29C 2049/5633](#) should be considered in order to perform a complete search.
- N B29C 2049/5634 . . . {Electric, e.g. electric motor}  
WARNING  
 Group [B29C 2049/5634](#) is incomplete pending reclassification of documents from group [B29C 49/56](#).  
 Groups [B29C 49/56](#) and [B29C 2049/5634](#) should be considered in order to perform a complete search.
- N B29C 2049/5635 . . . {Avoiding mould deformation}  
WARNING  
 Group [B29C 2049/5635](#) is incomplete pending reclassification of documents from group [B29C 49/56](#).  
 Groups [B29C 49/56](#) and [B29C 2049/5635](#) should be considered in order to perform a complete search.
- N B29C 2049/5636 . . . {using closing means as clamping means}  
WARNING  
 Group [B29C 2049/5636](#) is incomplete pending reclassification of documents from group [B29C 49/56](#).  
 Groups [B29C 49/56](#) and [B29C 2049/5636](#) should be considered in order to perform a complete search.
- U B29C 2049/566 . . . {Locking means}



- N B29C 2049/5661 . . . . {Mechanical}
- WARNING  
Groups [B29C 2049/5661](#), [B29C 2049/5662](#), [B29C 2049/5663](#) and [B29C 2049/5664](#) are incomplete pending reclassification of documents from group [B29C 49/56](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 2049/5662 . . . . {Latch}
- N B29C 2049/5663 . . . . {Rotating locking pin}
- N B29C 2049/5664 . . . . {Translating locking pin}
- N B29C 2049/5665 . . . . {Magnetic}
- WARNING  
Group [B29C 2049/5665](#) is incomplete pending reclassification of documents from group [B29C 49/56](#).  
Groups [B29C 49/56](#) and [B29C 2049/5665](#) should be considered in order to perform a complete search.
- N B29C 2049/5666 . . . . {Pneumatic}
- WARNING  
Group [B29C 2049/5666](#) is incomplete pending reclassification of documents from group [B29C 49/56](#).  
Groups [B29C 49/56](#) and [B29C 2049/5666](#) should be considered in order to perform a complete search.
- T B29C 49/58 . . Blowing means ~~{(B29C 45/1734 takes precedence)}~~
- D B29C 2049/5803 . . . {Constructional features}
- <administratively transferred to [B29C 49/58](#)>
- M B29C 2049/5806 . . . {Means for fixing the blowing means with the mould}
- M B29C 2049/581 . . . . {Mechanical, e.g. fingers or toothed wheels}
- M B29C 2049/5813 . . . . {Hydraulic}
- M B29C 2049/5817 . . . . {Pneumatic}
- M B29C 2049/582 . . . . {Magnetic, e.g. permanent magnets}
- M B29C 2049/5824 . . . . {Electromagnetic means, e.g. electromagnets}
- M B29C 2049/5827 . . . {Blowing means not touching the preform}
- M B29C 2049/5831 . . . {Diaphragms or bellows protecting the blowing means against contamination}
- M B29C 2049/5834 . . . {Lost blowing means}
- M B29C 2049/5837 . . . {Plural independent blowing means}
- M B29C 2049/5841 . . . {Plural independent blowing paths}
- M B29C 2049/5844 . . . {Compacting means, e.g. to compact the neck portion of the blown article with the blowing means}
- M B29C 2049/5848 . . . {Cutting means, e.g. to cut parts of the preform or parison with the blowing means}
- M B29C 2049/5851 . . . {Means to avoid clogging of the blowing paths}
- M B29C 2049/5855 . . . {~~allowing injecting additional cooling~~ *for injecting additional* medium during the blowing operation, e.g. ~~water droplets~~ *cooling medium*}
- M B29C 2049/5858 . . . {~~Connecting means, e.g. to allow connection of fluid supply lines to the blowing means~~ *Distributing blowing fluid to the moulds, e.g. rotative distributor or special connection*}



- U B29C 2049/5862 . . . {Drive means therefore}
- C B29C 2049/5893 . . . {Mounting, exchanging or centering blowing means}

WARNING

Group [B29C 2049/5893](#) is impacted by reclassification into group [B29C 2049/5898](#).

Groups [B29C 2049/5893](#) and [B29C 2049/5898](#) should be considered in order to perform a complete search.

- U B29C 2049/5896 . . . {Centering means therefore}
- N B29C 2049/5898 . . . {Regulation of the blowing means clamp force}

WARNING

Group [B29C 2049/5898](#) is incomplete pending reclassification of documents from group [B29C 2049/5893](#).

Groups [B29C 2049/5893](#) and [B29C 2049/5898](#) should be considered in order to perform a complete search.

- C B29C 49/60 . . . Blow-needles

WARNING

Group [B29C 49/60](#) is impacted by reclassification into groups [B29C 2049/6091](#) and [B29C 2049/6092](#).

Groups [B29C 49/60](#), [B29C 2049/6091](#) and [B29C 2049/6092](#) should be considered in order to perform a complete search.

- D B29C 2049/6009 . . . {Constructional features}  
<administratively transferred to [B29C 49/60](#)>
- M B29C 2049/6018 . . . {~~related to~~ *Constructional features of* the air outlet}
- M B29C 2049/6027 . . . {~~Having~~ *having* several air outlets; e.g. for directing the blowing fluid in different directions}
- M B29C 2049/6036 . . . {the air outlet being located distant from the end of the needle}
- M B29C 2049/6045 . . . {~~The~~ *the* air outlet being ~~open~~ *openable* and closable}
- M B29C 2049/609 . . . {~~being at least two~~ *Two or more blow-needles*}
- N B29C 2049/6091 . . . {Avoiding needle marks, e.g. insertion in sprue}

WARNING

Group [B29C 2049/6091](#) is incomplete pending reclassification of documents from group [B29C 49/60](#).

Groups [B29C 49/60](#) and [B29C 2049/6091](#) should be considered in order to perform a complete search.

- N B29C 2049/6092 . . . {Blow needle sterilization}

WARNING

Group [B29C 2049/6092](#) is incomplete pending reclassification of documents from group [B29C 49/60](#).

Groups [B29C 49/60](#) and [B29C 2049/6092](#) should be considered in order to perform a complete search.

- C B29C 49/62 . . Venting means

WARNING

Group [B29C 49/62](#) is impacted by reclassification into groups [B29C 2049/6271](#) and [B29C 2049/6272](#).

Groups [B29C 49/62](#), [B29C 2049/6271](#) and [B29C 2049/6272](#) should be considered in order to perform a complete search.

- T B29C 2049/622 . . . {~~Air gaps between closed mould halves~~for venting air between preform and cavity, e.g. using venting holes, gaps or patterned moulds}
- D B29C 2049/625 . . . {by using spacing means between the mould halves}  
<administratively transferred to [B29C 2049/622](#) ADD>
- M B29C 2049/627 . . . {~~Vacuum~~using vacuum means}
- N B29C 2049/6271 . . . {for venting blowing medium, e.g. using damper or silencer}
- WARNING**  
Groups [B29C 2049/6271](#) and [B29C 2049/6272](#) are incomplete pending reclassification of documents from group [B29C 49/62](#).  
Groups [B29C 49/62](#), [B29C 2049/6271](#) and [B29C 2049/6272](#) should be considered in order to perform a complete search.
- N B29C 2049/6272 . . . {using vacuum means}
- C B29C 49/64 . . Heating or cooling preforms, parisons or blown articles
- WARNING**  
Group [B29C 49/64](#) is impacted by reclassification into groups [B29C 49/4268](#), [B29C 49/4273](#), [B29C 49/6419](#), [B29C 49/64195](#), [B29C 49/642](#), [B29C 49/6427](#), [B29C 49/643](#), [B29C 49/6435](#), [B29C 49/645](#), [B29C 49/6452](#), [B29C 49/6458](#), [B29C 49/6462](#), [B29C 49/6464](#), [B29C 49/6465](#), [B29C 49/6466](#), [B29C 49/6467](#) and [B29C 49/648](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- U B29C 49/6409 . . . {Thermal conditioning of preforms ([B29C 49/68](#) takes precedence)}
- M B29C 49/6418 . . . {~~by reheating cold preforms in a single stage~~ Heating of preforms}(B29C 49/6436 takes precedence)}
- N B29C 49/6419 . . . {from the inside}
- WARNING**  
Group [B29C 49/6419](#) is incomplete pending reclassification of documents from group [B29C 49/64](#).  
Groups [B29C 49/64](#) and [B29C 49/6419](#) should be considered in order to perform a complete search.
- N B29C 49/64195 . . . {Heated by the mould}
- WARNING**  
Group [B29C 49/64195](#) is incomplete pending reclassification of documents from group [B29C 49/64](#).  
Groups [B29C 49/64](#) and [B29C 49/64195](#) should be considered in order to perform a complete search.
- N B29C 49/642 . . . {and shrinking of the preform}
- WARNING**  
Group [B29C 49/642](#) is incomplete pending reclassification of documents from group [B29C 49/64](#).  
Groups [B29C 49/64](#) and [B29C 49/642](#) should be considered in order to perform a complete search.
- T B29C 49/6427 . . . {~~by cooling hot or molten preforms in a single stage~~Cooling of preforms}(B29C 49/6436 takes precedence)}
- WARNING**  
Groups [B29C 49/6427](#), [B29C 49/643](#) and [B29C 49/6435](#) are incomplete pending reclassification of documents from group [B29C 49/64](#).

*All groups listed in this Warning should be considered in order to perform a complete search.*

- N B29C 49/643 . . . . {from the inside}
- N B29C 49/6435 . . . . {from the outside}
- M B29C 49/6436 . . . . {producing a characterised by temperature differential}
- U B29C 49/6445 . . . . {through the preform length}
- N B29C 49/645 . . . . {by cooling the neck}

WARNING

Group [B29C 49/645](#) is incomplete pending reclassification of documents from group [B29C 49/64](#).  
Groups [B29C 49/64](#) and [B29C 49/645](#) should be considered in order to perform a complete search.

- N B29C 49/6452 . . . . {by heating the neck}

WARNING

Group [B29C 49/6452](#) is incomplete pending reclassification of documents from group [B29C 49/64](#).  
Groups [B29C 49/64](#) and [B29C 49/6452](#) should be considered in order to perform a complete search.

- M B29C 49/6454 . . . . {along through the preform thickness}
- N B29C 49/6458 . . . . {tangentially, i.e. along circumference}

WARNING

Group [B29C 49/6458](#) is incomplete pending reclassification of documents from group [B29C 49/64](#).  
Groups [B29C 49/64](#) and [B29C 49/6458](#) should be considered in order to perform a complete search.

- N B29C 49/6462 . . . . {by masking}

WARNING

Group [B29C 49/6462](#) is incomplete pending reclassification of documents from group [B29C 49/64](#).  
Groups [B29C 49/64](#) and [B29C 49/6462](#) should be considered in order to perform a complete search.

- M B29C 49/6463 . . . . {Mandrels or by contact heating or cooling, e.g. mandrels or cores specially adapted for heating or cooling preforms}
- N B29C 49/6464 . . . . {Heating}

WARNING

Group [B29C 49/6464](#) is incomplete pending reclassification of documents from group [B29C 49/64](#).  
Groups [B29C 49/64](#) and [B29C 49/6464](#) should be considered in order to perform a complete search.

- N B29C 49/6465 . . . . {Cooling}

WARNING

Group [B29C 49/6465](#) is incomplete pending reclassification of documents from group [B29C 49/64](#).  
Groups [B29C 49/64](#) and [B29C 49/6465](#) should be considered in order to perform a complete search.

- N B29C 49/6466 . . . . {on the inside}
- WARNING  
Group [B29C 49/6466](#) is incomplete pending reclassification of documents from group [B29C 49/64](#).  
Groups [B29C 49/64](#) and [B29C 49/6466](#) should be considered in order to perform a complete search.
- N B29C 49/6467 . . . . {on the outside}
- WARNING  
Group [B29C 49/6467](#) is incomplete pending reclassification of documents from group [B29C 49/64](#).  
Groups [B29C 49/64](#) and [B29C 49/6467](#) should be considered in order to perform a complete search.
- T B29C 49/6472 . . . {in several stages ~~(B29C 49/6409 takes precedence)~~}
- N B29C 49/648 . . . . {of preforms or parisons}
- WARNING  
Group [B29C 49/648](#) is incomplete pending reclassification of documents from group [B29C 49/64](#).  
Groups [B29C 49/64](#) and [B29C 49/648](#) should be considered in order to perform a complete search.
- D B29C 49/6481 . . . . {using several mould cavities for each article}
- <administratively transferred to [B29C 49/18](#) and [B29C 49/6472](#)>
- D B29C 49/649 . . . . {at least one stage being a heating stage used for shrinking of a preform prior to a subsequent blowing stage}
- <administratively transferred to [B29C 49/6472](#) and [B29C 49/642](#)>
- C B29C 49/66 . . . Cooling by refrigerant introduced into the blown article
- WARNING  
Group [B29C 49/66](#) is impacted by reclassification into groups [B29C 49/6604](#), [B29C 49/6605](#), [B29C 49/66055](#), [B29C 2049/6606](#) and [B29C 2049/671](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 49/6604 . . . {Thermal conditioning of the blown article ([B29C 49/66](#) takes precedence)}
- WARNING  
Groups [B29C 49/6604](#), [B29C 49/6605](#), [B29C 49/66055](#), [B29C 2049/6606](#) and [B29C 2049/671](#) are incomplete pending reclassification of documents from group [B29C 49/66](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 49/6605 . . . . {Heating the article, e.g. for hot fill}
- N B29C 49/66055 . . . . {using special pressurizing during the heating, e.g. in order to control the shrinking}
- N B29C 2049/6606 . . . . {Cooling the article}
- T B29C 2049/6607 . . . . {Flushing blown articles}
- M B29C 2049/6615 . . . . {and exhausting through the blowing means}
- M B29C 2049/6623 . . . . {and exhausting through an opening in the blown article}
- D B29C 2049/663 . . . . {against ambient pressure}
- <administratively transferred to [B29C 2049/6607](#) ADD>

- D B29C 2049/6638 . . . . {against a pressure higher than ambient pressure}  
<administratively transferred to [B29C 2049/6607](#) ADD>
- M B29C 2049/6646 . . . . {while keeping the final blowing pressure in the article}
- M B29C 2049/6653 . . . . {the ~~refrigerant~~ **medium** being other than cooled air}
- M B29C 2049/6661 . . . . {~~the refrigerant being water~~ **Water**}
- M B29C 2049/6669 . . . . {~~the refrigerant being gas~~ **Gas** with water droplets}
- M B29C 2049/6676 . . . . {the ~~refrigerant~~ **medium** being oriented towards special areas of the blown article}
- M B29C 2049/6684 . . . . {Neck area}
- M B29C 2049/6692 . . . . {Bottom area}
- N B29C 2049/671 . . . . {Conditioning the blown article outside the mould, e.g. while transporting it out of the mould}
- C B29C 49/68 . . . Ovens specially adapted for heating preforms or parisons
- WARNING**  
Group [B29C 49/68](#) is impacted by reclassification into groups [B29C 49/681](#), [B29C 49/682](#), [B29C 49/6825](#), [B29C 49/683](#), [B29C 49/6835](#), [B29C 49/684](#), [B29C 49/6845](#), [B29C 49/685](#) and [B29C 49/6855](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 49/681 . . . . {using a conditioning receptacle, e.g. a cavity, e.g. having heated or cooled regions}
- WARNING**  
Group [B29C 49/681](#) is incomplete pending reclassification of documents from group [B29C 49/68](#).  
Groups [B29C 49/68](#) and [B29C 49/681](#) should be considered in order to perform a complete search.
- N B29C 49/682 . . . . {characterised by the path, e.g. sinusoidal path}
- WARNING**  
Group [B29C 49/682](#) is incomplete pending reclassification of documents from group [B29C 49/68](#).  
Groups [B29C 49/68](#) and [B29C 49/682](#) should be considered in order to perform a complete search.
- N B29C 49/6825 . . . . {Mounting exchanging or centering ovens or parts thereof}
- WARNING**  
Group [B29C 49/6825](#) is incomplete pending reclassification of documents from group [B29C 49/68](#).  
Groups [B29C 49/68](#) and [B29C 49/6825](#) should be considered in order to perform a complete search.
- N B29C 49/683 . . . . {Adjustable or modular conditioning means, e.g. position and number of heating elements}
- WARNING**  
Group [B29C 49/683](#) is incomplete pending reclassification of documents from group [B29C 49/68](#).  
Groups [B29C 49/68](#) and [B29C 49/683](#) should be considered in order to perform a complete search.

- N B29C 49/6835 . . . {using reflectors}  
WARNING  
 Group [B29C 49/6835](#) is incomplete pending reclassification of documents from group [B29C 49/68](#).  
 Groups [B29C 49/68](#) and [B29C 49/6835](#) should be considered in order to perform a complete search.
- N B29C 49/684 . . . {using masking}  
WARNING  
 Group [B29C 49/684](#) is incomplete pending reclassification of documents from group [B29C 49/68](#).  
 Groups [B29C 49/68](#) and [B29C 49/684](#) should be considered in order to perform a complete search.
- N B29C 49/6845 . . . {using ventilation, e.g. a fan}  
WARNING  
 Group [B29C 49/6845](#) is incomplete pending reclassification of documents from group [B29C 49/68](#).  
 Groups [B29C 49/68](#) and [B29C 49/6845](#) should be considered in order to perform a complete search.
- N B29C 49/685 . . . {Rotating the preform in relation to heating means}  
WARNING  
 Group [B29C 49/685](#) is incomplete pending reclassification of documents from group [B29C 49/68](#).  
 Groups [B29C 49/68](#) and [B29C 49/685](#) should be considered in order to perform a complete search.
- N B29C 49/6855 . . . {Cooling of heating means, e.g. avoiding overheating}  
WARNING  
 Group [B29C 49/6855](#) is incomplete pending reclassification of documents from group [B29C 49/68](#).  
 Groups [B29C 49/68](#) and [B29C 49/6855](#) should be considered in order to perform a complete search.
- C B29C 49/70 . . Removing or ejecting blown articles from the mould  
WARNING  
 Group [B29C 49/70](#) is impacted by reclassification into groups [B29C 49/4273](#) and [B29C 2049/709](#).  
 Groups [B29C 49/70](#), [B29C 49/4273](#) and [B29C 2049/709](#) should be considered in order to perform a complete search.
- T B29C 2049/701 . . . {Ejecting means}
- D B29C 2049/704 . . . {Pins}  
 <administratively transferred to [B29C 2049/701](#) ADD>
- D B29C 2049/705 . . . {Driving means therefore}  
 <administratively transferred to [B29C 2049/701](#) ADD>
- M B29C 2049/707 . . . ~~Hydraulical~~ [Hydraulic driving means](#)
- M B29C 2049/708 . . . ~~Pneumatical~~ [Pneumatic driving means](#)



- N B29C 2049/709
- • • {Retaining means, e.g. means for retaining the article before it is removed or ejected}
- WARNING  
Group [B29C 2049/709](#) is incomplete pending reclassification of documents from group [B29C 49/70](#).  
Groups [B29C 49/70](#) and [B29C 2049/709](#) should be considered in order to perform a complete search.
- C B29C 49/76
- • Neck calibration
- WARNING  
Group [B29C 49/76](#) is impacted by reclassification into groups [B29C 49/4268](#), [B29C 49/4273](#) and [B29C 49/761](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 49/761
- • • {Forming threads, e.g. shaping neck thread between blowing means and mould}
- WARNING  
Group [B29C 49/761](#) is incomplete pending reclassification of documents from group [B29C 49/76](#).  
Groups [B29C 49/76](#) and [B29C 49/761](#) should be considered in order to perform a complete search.
- C B29C 49/78
- • Measuring, controlling or regulating
- WARNING  
Group [B29C 49/78](#) is impacted by reclassification into groups [B29C 49/4268](#), [B29C 49/4273](#), [B29C 2049/7831](#), [B29C 2049/7832](#), [B29C 2049/7833](#), [B29C 2049/7834](#), [B29C 2049/7835](#), [B29C 2049/7861](#), [B29C 2049/7862](#), [B29C 2049/7863](#), [B29C 2049/7864](#), [B29C 2049/78645](#), [B29C 2049/7865](#), [B29C 2049/7866](#), [B29C 2049/7867](#), [B29C 2049/78675](#), [B29C 2049/7868](#), [B29C 2049/787](#), [B29C 2049/78705](#), [B29C 2049/7871](#), [B29C 2049/78715](#), [B29C 2049/7873](#), [B29C 2049/7874](#), [B29C 2049/78745](#), [B29C 2049/7875](#), [B29C 2049/78755](#), [B29C 2049/7876](#), [B29C 2049/78765](#), [B29C 2049/7878](#), [B29C 2049/7879](#), [B29C 2049/788](#), [B29C 2049/78805](#), [B29C 2049/7881](#), [B29C 2049/78815](#) and [B29C 2049/7882](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- M B29C 49/783
- • • {~~the~~ blowing pressure}
- N B29C 2049/7831
- • • • {characterised by pressure values or ranges}
- WARNING  
Group [B29C 2049/7831](#) is incomplete pending reclassification of documents from group [B29C 49/78](#).  
Groups [B29C 49/78](#) and [B29C 2049/7831](#) should be considered in order to perform a complete search.
- N B29C 2049/7832
- • • • {Blowing with two or more pressure levels}
- WARNING  
Groups [B29C 2049/7832](#) and [B29C 2049/7833](#) are incomplete pending reclassification of documents from group [B29C 49/78](#).  
Groups [B29C 49/78](#), [B29C 2049/7832](#) and [B29C 2049/7833](#) should be considered in order to perform a complete search.
- N B29C 2049/7833
- • • • • {Blowing with three or more pressure levels}



- N B29C 2049/7834 . . . . {Pressure increase speed, e.g. dependent on stretch or position}  
WARNING  
 Group [B29C 2049/7834](#) is incomplete pending reclassification of documents from group [B29C 49/78](#).  
 Groups [B29C 49/78](#) and [B29C 2049/7834](#) should be considered in order to perform a complete search.
- N B29C 2049/7835 . . . . {Pressure reduction speed}  
WARNING  
 Group [B29C 2049/7835](#) is incomplete pending reclassification of documents from group [B29C 49/78](#).  
 Groups [B29C 49/78](#) and [B29C 2049/7835](#) should be considered in order to perform a complete search.
- M B29C 49/786 . . . {~~the temperature~~Temperature}  
 N B29C 2049/7861 . . . . {of the preform}  
WARNING  
 Groups [B29C 2049/7861](#), [B29C 2049/7862](#) and [B29C 2049/7863](#) are incomplete pending reclassification of documents from group [B29C 49/78](#).  
 All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 2049/7862 . . . . . {characterised by temperature values or ranges}  
 N B29C 2049/7863 . . . . . {Cold blow-moulding, e.g. below Tg}  
 N B29C 2049/7864 . . . . {of the mould}  
WARNING  
 Groups [B29C 2049/7864](#) and [B29C 2049/78645](#) are incomplete pending reclassification of documents from group [B29C 49/78](#).  
 Groups [B29C 49/78](#), [B29C 2049/7864](#) and [B29C 2049/78645](#) should be considered in order to perform a complete search.
- N B29C 2049/78645 . . . . . {characterised by temperature values or ranges}  
 N B29C 2049/7865 . . . . {of the stretching means, e.g. stretch rod}  
WARNING  
 Group [B29C 2049/7865](#) is incomplete pending reclassification of documents from group [B29C 49/78](#).  
 Groups [B29C 49/78](#) and [B29C 2049/7865](#) should be considered in order to perform a complete search.
- N B29C 2049/7866 . . . . {of the blowing medium}  
WARNING  
 Group [B29C 2049/7866](#) is incomplete pending reclassification of documents from group [B29C 49/78](#).  
 Groups [B29C 49/78](#) and [B29C 2049/7866](#) should be considered in order to perform a complete search.
- N B29C 2049/7867 . . . . {of the heating or cooling means}  
WARNING  
 Groups [B29C 2049/7867](#) and [B29C 2049/78675](#) are incomplete pending reclassification of documents from group [B29C 49/78](#).  
 Groups [B29C 49/78](#), [B29C 2049/7867](#) and [B29C 2049/78675](#) should be considered in order to perform a complete search.
- N B29C 2049/78675 . . . . . {of the heating means}

- N B29C 2049/7868 . . . {of the articles}  
WARNING  
 Group [B29C 2049/7868](#) is incomplete pending reclassification of documents from group [B29C 49/78](#).  
 Groups [B29C 49/78](#) and [B29C 2049/7868](#) should be considered in order to perform a complete search.
- N B29C 2049/787 . . . {Thickness}  
WARNING  
 Groups [B29C 2049/787](#), [B29C 2049/78705](#), [B29C 2049/7871](#) and [B29C 2049/78715](#) are incomplete pending reclassification of documents from group [B29C 49/78](#).  
 All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 2049/78705 . . . {of a layer, e.g. intermediate layer}
- N B29C 2049/7871 . . . {of the extruded preform thickness}
- N B29C 2049/78715 . . . {of the blown article thickness}
- N B29C 2049/7873 . . . {Extrusion speed; Extruded preform position or length; Extrusion fall speed}  
WARNING  
 Group [B29C 2049/7873](#) is incomplete pending reclassification of documents from group [B29C 49/78](#).  
 Groups [B29C 49/78](#) and [B29C 2049/7873](#) should be considered in order to perform a complete search.
- N B29C 2049/7874 . . . {Preform or article shape, weight, defect or presence}  
WARNING  
 Groups [B29C 2049/7874](#), [B29C 2049/78745](#), [B29C 2049/7875](#), [B29C 2049/78755](#), [B29C 2049/7876](#) and [B29C 2049/78765](#) are incomplete pending reclassification of documents from group [B29C 49/78](#).  
 All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 2049/78745 . . . {Weight or density}
- N B29C 2049/7875 . . . {Size or shape}
- N B29C 2049/78755 . . . {Optical properties}
- N B29C 2049/7876 . . . {Defects}
- N B29C 2049/78765 . . . {Presence, e.g. of the preform in the mould}
- N B29C 2049/7878 . . . {Preform or article handling, e.g. flow from station to station}  
WARNING  
 Group [B29C 2049/7878](#) is incomplete pending reclassification of documents from group [B29C 49/78](#).  
 Groups [B29C 49/78](#) and [B29C 2049/7878](#) should be considered in order to perform a complete search.
- N B29C 2049/7879 . . . {Stretching, e.g. stretch rod}  
WARNING  
 Group [B29C 2049/7879](#) is incomplete pending reclassification of documents from group [B29C 49/78](#).  
 Groups [B29C 49/78](#) and [B29C 2049/7879](#) should be considered in order to perform a complete search.

- N B29C 2049/788 . . . {Controller type or interface}
- WARNING  
Groups [B29C 2049/788](#), [B29C 2049/78805](#), [B29C 2049/7881](#), [B29C 2049/78815](#) and [B29C 2049/7882](#) are incomplete pending reclassification of documents from group [B29C 49/78](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 2049/78805 . . . . {Computer or PLC control}
- N B29C 2049/7881 . . . . {Mechanical control}
- N B29C 2049/78815 . . . . {using wireless transmission}
- N B29C 2049/7882 . . . . {Control interface, e.g. display}
- C B29C 49/80 . . . Testing, e.g. for leaks
- WARNING  
Group [B29C 49/80](#) is impacted by reclassification into group [B29C 2049/801](#).  
Groups [B29C 49/80](#) and [B29C 2049/801](#) should be considered in order to perform a complete search.
- N B29C 2049/801 . . . . {Taking preform or article samples, e.g. by cutting out pieces for analysis}
- WARNING  
Group [B29C 2049/801](#) is incomplete pending reclassification of documents from group [B29C 49/80](#).  
Groups [B29C 49/80](#) and [B29C 2049/801](#) should be considered in order to perform a complete search.
- U B29C 51/00 **Shaping by thermoforming {, i.e. shaping sheets or sheet like preforms after heating}, e.g. shaping sheets in matched moulds or by deep-drawing; Apparatus therefor {(blow moulding of tubular preforms [B29C 49/00](#), deforming of tubular or hollow preforms [B29C 67/0014](#))}**
- U B29C 51/10 . Forming by pressure difference, e.g. vacuum
- B29C 51/105 . . {Twin sheet thermoforming, i.e. deforming two parallel opposing sheets or foils at the same time by using one common mould cavity and without welding them together during thermoforming ([B29C 51/267](#), ~~[B29C 49/0047](#)~~ [B29C 49/0691](#) take precedence)}
- U B29C 51/26 . Component parts, details or accessories; Auxiliary operations
- U B29C 51/266 . . {Auxiliary operations after the thermoforming operation ([B29C 51/42](#), [B29C 51/44](#), [B29C 51/46](#) take precedence)}
- B29C 51/267 . . . {Two sheets being thermoformed in separate mould parts and joined together while still in the mould (~~[B29C 49/0047](#)~~ [B29C 49/0691](#) takes precedence)}
- C B29C 2949/00 **Blow moulding, i.e. blowing a preform or parison to a desired shape within a mould** Indexing scheme relating to blow-moulding
- WARNING  
Group [B29C 2949/00](#) is incomplete pending reclassification of documents from group [B29C 49/22](#).  
Group [B29C 2949/00](#) is also impacted by reclassification into groups [B29C 2949/07](#), [B29C 2949/071](#), [B29C 2949/0715](#), [B29C 2949/072](#), [B29C 2949/0721](#), [B29C 2949/0722](#), [B29C 2949/0723](#), [B29C 2949/0724](#), [B29C 2949/0725](#), [B29C 2949/073](#), [B29C 2949/0731](#), [B29C 2949/0732](#), [B29C 2949/0733](#), [B29C 2949/0734](#), [B29C 2949/074](#), [B29C 2949/0741](#), [B29C 2949/0742](#), [B29C 2949/0744](#), [B29C 2949/0745](#), [B29C 2949/0746](#), [B29C 2949/0747](#), [B29C 2949/075](#), [B29C 2949/0751](#), [B29C 2949/0752](#),

B29C 2949/0753, B29C 2949/0754, B29C 2949/076, B29C 2949/0761, B29C 2949/0762, B29C 2949/0763, B29C 2949/0764, B29C 2949/0765, B29C 2949/0766, B29C 2949/0767, B29C 2949/0768, B29C 2949/0769, B29C 2949/077, B29C 2949/0771, B29C 2949/0772, B29C 2949/0773, B29C 2949/0774, B29C 2949/0775, B29C 2949/0776, B29C 2949/0777, B29C 2949/0778, B29C 2949/0779, B29C 2949/078, B29C 2949/0781, B29C 2949/0782, B29C 2949/079, B29C 2949/0791, B29C 2949/0792, B29C 2949/0793, B29C 2949/0794, B29C 2949/0795, B29C 2949/0796, B29C 2949/0797, B29C 2949/0798, B29C 2949/0799, B29C 2949/08, B29C 2949/0801, B29C 2949/081, B29C 2949/0811, B29C 2949/0812, B29C 2949/0813, B29C 2949/0814, B29C 2949/0815, B29C 2949/0816, B29C 2949/0817, B29C 2949/0818, B29C 2949/0819, B29C 2949/082, B29C 2949/0821, B29C 2949/0822, B29C 2949/0823, B29C 2949/0824, B29C 2949/0825, B29C 2949/0826, B29C 2949/0827, B29C 2949/0828, B29C 2949/0829, B29C 2949/083, B29C 2949/0831, B29C 2949/0832, B29C 2949/0833, B29C 2949/0834, B29C 2949/0835, B29C 2949/0836, B29C 2949/0837, B29C 2949/0838, B29C 2949/0839, B29C 2949/084, B29C 2949/0841, B29C 2949/0842, B29C 2949/0843, B29C 2949/0844, B29C 2949/0845, B29C 2949/0846, B29C 2949/0847, B29C 2949/0849, B29C 2949/085, B29C 2949/0851, B29C 2949/0852, B29C 2949/0853, B29C 2949/0854, B29C 2949/0855, B29C 2949/0856, B29C 2949/086, B29C 2949/0861, B29C 2949/0862, B29C 2949/0863, B29C 2949/0864, B29C 2949/0865, B29C 2949/0866, B29C 2949/0867, B29C 2949/0868, B29C 2949/0869, B29C 2949/087, B29C 2949/0871, B29C 2949/0872, B29C 2949/20, B29C 2949/22, B29C 2949/24, B29C 2949/26, B29C 2949/28, B29C 2949/30, B29C 2949/3004, B29C 2949/3006, B29C 2949/3008, B29C 2949/3009, B29C 2949/3012, B29C 2949/3014, B29C 2949/3016, B29C 2949/3018, B29C 2949/302, B29C 2949/3022, B29C 2949/3024, B29C 2949/3026, B29C 2949/3028, B29C 2949/303, B29C 2949/3032, B29C 2949/3034, B29C 2949/3036, B29C 2949/3038, B29C 2949/3041, B29C 2949/3042, B29C 2949/3044, B29C 2949/3046, B29C 2949/3048, B29C 2949/3051, B29C 2949/3052, B29C 2949/3054, B29C 2949/3056, B29C 2949/3058, B29C 2949/306, B29C 2949/3062, B29C 2949/3064, B29C 2949/3066, B29C 2949/3068, B29C 2949/307, B29C 2949/3074, B29C 2949/3076, B29C 2949/3078, B29C 2949/308, B29C 2949/3082, B29C 2949/3084, B29C 2949/3086, B29C 2949/3088, B29C 2949/309, B29C 2949/3092 and B29C 2949/3094.

*All groups listed in this Warning should be considered in order to perform a complete search.*

N B29C 2949/07

• *Preforms or parisons characterised by their configuration*

**WARNING**

Groups B29C 2949/07, B29C 2949/071, B29C 2949/0715, B29C 2949/072, B29C 2949/0721, B29C 2949/0722, B29C 2949/0723, B29C 2949/0724, B29C 2949/0725, B29C 2949/073, B29C 2949/0731, B29C 2949/0732, B29C 2949/0733, B29C 2949/0734, B29C 2949/074, B29C 2949/0741, B29C 2949/0742, B29C 2949/0744, B29C 2949/0745, B29C 2949/0746, B29C 2949/0747, B29C 2949/075, B29C 2949/0751, B29C 2949/0752, B29C 2949/0753, B29C 2949/0754, B29C 2949/076, B29C 2949/0761, B29C 2949/0762, B29C 2949/0763, B29C 2949/0764, B29C 2949/0765, B29C 2949/0766, B29C 2949/0767, B29C 2949/0768, B29C 2949/0769, B29C 2949/077, B29C 2949/0771, B29C 2949/0772, B29C 2949/0773, B29C 2949/0774, B29C 2949/0775, B29C 2949/0776, B29C 2949/0777, B29C 2949/0778, B29C 2949/0779, B29C 2949/078, B29C 2949/0781, B29C 2949/0782, B29C 2949/079, B29C 2949/0791, B29C 2949/0792, B29C 2949/0793, B29C 2949/0794, B29C 2949/0795, B29C 2949/0796, B29C 2949/0797, B29C 2949/0798, B29C 2949/0799, B29C 2949/08, B29C 2949/0801, B29C 2949/081, B29C 2949/0811, B29C 2949/0812, B29C 2949/0813, B29C 2949/0814, B29C 2949/0815, B29C 2949/0816,

[B29C 2949/0817](#), [B29C 2949/0818](#), [B29C 2949/0819](#), [B29C 2949/082](#),  
[B29C 2949/0821](#), [B29C 2949/0822](#), [B29C 2949/0823](#), [B29C 2949/0824](#),  
[B29C 2949/0825](#), [B29C 2949/0826](#), [B29C 2949/0827](#), [B29C 2949/0828](#),  
[B29C 2949/0829](#), [B29C 2949/083](#), [B29C 2949/0831](#), [B29C 2949/0832](#),  
[B29C 2949/0833](#), [B29C 2949/0834](#), [B29C 2949/0835](#), [B29C 2949/0836](#),  
[B29C 2949/0837](#), [B29C 2949/0838](#), [B29C 2949/0839](#), [B29C 2949/084](#),  
[B29C 2949/0841](#), [B29C 2949/0842](#), [B29C 2949/0843](#), [B29C 2949/0844](#),  
[B29C 2949/0845](#), [B29C 2949/0846](#), [B29C 2949/0847](#), [B29C 2949/0849](#),  
[B29C 2949/085](#), [B29C 2949/0851](#), [B29C 2949/0852](#), [B29C 2949/0853](#),  
[B29C 2949/0854](#), [B29C 2949/0855](#), [B29C 2949/0856](#), [B29C 2949/086](#),  
[B29C 2949/0861](#), [B29C 2949/0862](#), [B29C 2949/0863](#), [B29C 2949/0864](#),  
[B29C 2949/0865](#), [B29C 2949/0866](#), [B29C 2949/0867](#), [B29C 2949/0868](#),  
[B29C 2949/0869](#), [B29C 2949/087](#), [B29C 2949/0871](#) and [B29C 2949/0872](#) are  
incomplete pending reclassification of documents from group [B29C 2949/00](#).  
All groups listed in this Warning should be considered in order to perform a  
complete search.

- |   |                |  |
|---|----------------|--|
| N | B29C 2949/071  | • • the preform being a tube, i.e. with both ends open |
| N | B29C 2949/0715 | • • the preform having one end closed                  |
| N | B29C 2949/072  | • • having variable wall thickness                     |
| N | B29C 2949/0721 | • • • Tangentially varying thickness                   |
| N | B29C 2949/0722 | • • • at neck portion                                  |
| N | B29C 2949/0723 | • • • at flange portion                                |
| N | B29C 2949/0724 | • • • at body portion                                  |
| N | B29C 2949/0725 | • • • at bottom portion                                |
| N | B29C 2949/073  | • • having variable diameter                           |
| N | B29C 2949/0731 | • • • at neck portion                                  |
| N | B29C 2949/0732 | • • • at flange portion                                |
| N | B29C 2949/0733 | • • • at body portion                                  |
| N | B29C 2949/0734 | • • • at bottom portion                                |
| N | B29C 2949/074  | • • having ribs or protrusions                         |
| N | B29C 2949/0741 | • • • longitudinal, e.g. from top to bottom            |
| N | B29C 2949/0742 | • • • Circumferential                                  |
| N | B29C 2949/0744 | • • • at neck portion                                  |
| N | B29C 2949/0745 | • • • at flange portion                                |
| N | B29C 2949/0746 | • • • at body portion                                  |
| N | B29C 2949/0747 | • • • at bottom portion                                |
| N | B29C 2949/075  | • • having at least one internal separating wall       |
| N | B29C 2949/0751 | • • • at neck portion                                  |
| N | B29C 2949/0752 | • • • at flange portion                                |
| N | B29C 2949/0753 | • • • at body portion                                  |
| N | B29C 2949/0754 | • • • at bottom portion                                |
| N | B29C 2949/076  | • • characterised by the shape                         |
| N | B29C 2949/0761 | • • • characterised by overall the shape               |
| N | B29C 2949/0762 | • • • • Conical  |
| N | B29C 2949/0763 | • • • • Axially asymmetrical                           |
| N | B29C 2949/0764 | • • • • Elliptic or oval cross-section shape           |
| N | B29C 2949/0765 | • • • • Rectangular cross-section shape                |
| N | B29C 2949/0766 | • • • • Hexagonal cross-section shape                  |

- N B29C 2949/0767 . . . . the shape allowing stacking or nesting
- N B29C 2949/0768 . . . characterised by the shape of specific parts of preform
- N B29C 2949/0769 . . . . characterised by the lip, i.e. very top of preform neck
- N B29C 2949/077 . . . . characterised by the neck
- N B29C 2949/0771 . . . . . Wide-mouth
- N B29C 2949/0772 . . . . . Closure retaining means
- N B29C 2949/0773 . . . . . Threads
- N B29C 2949/0774 . . . . . Interrupted threads
- N B29C 2949/0775 . . . . . Inner threads
- N B29C 2949/0776 . . . . . not containing threads
- N B29C 2949/0777 . . . . . Tamper-evident band retaining ring
- N B29C 2949/0778 . . . . characterised by the flange
- N B29C 2949/0779 . . . . characterised by the body
- N B29C 2949/078 . . . . characterised by the bottom
- N B29C 2949/0781 . . . . . characterised by the sprue, i.e. injection mark
- N B29C 2949/0782 . . . . . characterised by the pinch-off portion
- N B29C 2949/079 . . Auxiliary parts or inserts
- N B29C 2949/0791 . . . Handle
- N B29C 2949/0792 . . . Closure
- N B29C 2949/0793 . . . Transport means
- N B29C 2949/0794 . . . Dispensing spout
- N B29C 2949/0795 . . . Parts to assist orientation of preform, e.g. in mould
- N B29C 2949/0796 . . . . at neck portion
- N B29C 2949/0797 . . . . at flange portion
- N B29C 2949/0798 . . . . at body portion
- N B29C 2949/0799 . . . . at bottom portion
- N B29C 2949/08 . . . Preforms made of several individual parts, e.g. by welding or gluing parts together
- N B29C 2949/0801 . . . . Finish neck ring
- N B29C 2949/081 . . Specified dimensions, e.g. values or ranges
- N B29C 2949/0811 . . . Wall thickness
- N B29C 2949/0812 . . . . of the lip, i.e. the very top of the preform neck
- N B29C 2949/0813 . . . . of the neck
- N B29C 2949/0814 . . . . of the threads
- N B29C 2949/0815 . . . . of the tamper-evident band retaining ring
- N B29C 2949/0816 . . . . of the flange
- N B29C 2949/0817 . . . . of the body
- N B29C 2949/0818 . . . . of the bottom
- N B29C 2949/0819 . . . . of a layer
- N B29C 2949/082 . . . Diameter
- N B29C 2949/0821 . . . . of the lip, i.e. the very top of the preform neck
- N B29C 2949/0822 . . . . of the neck
- N B29C 2949/0823 . . . . of the threads
- N B29C 2949/0824 . . . . of the tamper-evident band retaining ring

N	B29C 2949/0825	. . . . of the flange
N	B29C 2949/0826	. . . . of the body
N	B29C 2949/0827	. . . . of the bottom
N	B29C 2949/0828	. . . . of a layer
N	B29C 2949/0829	. . . Height, length
N	B29C 2949/083	. . . . of the lip, i.e. the very top of the preform neck
N	B29C 2949/0831	. . . . of the neck
N	B29C 2949/0832	. . . . of the threads
N	B29C 2949/0833	. . . . of the tamper-evident band retaining ring
N	B29C 2949/0834	. . . . of the flange
N	B29C 2949/0835	. . . . of the body
N	B29C 2949/0836	. . . . of the bottom
N	B29C 2949/0837	. . . . of a layer
N	B29C 2949/0838	. . . Ratio between length and diameter
N	B29C 2949/0839	. . . Angle
N	B29C 2949/084	. . . . of the lip, i.e. the very top of the preform neck
N	B29C 2949/0841	. . . . of the neck
N	B29C 2949/0842	. . . . of the threads
N	B29C 2949/0843	. . . . of the tamper-evident band retaining ring
N	B29C 2949/0844	. . . . of the flange
N	B29C 2949/0845	. . . . of the body
N	B29C 2949/0846	. . . . of the bottom
N	B29C 2949/0847	. . . . of a layer
N	B29C 2949/0849	. . . Curvature, e.g. radius
N	B29C 2949/085	. . . . of the lip, i.e. the very top of the preform neck
N	B29C 2949/0851	. . . . of the neck
N	B29C 2949/0852	. . . . of the threads
N	B29C 2949/0853	. . . . of the tamper-evident band retaining ring
N	B29C 2949/0854	. . . . of the flange
N	B29C 2949/0855	. . . . of the body
N	B29C 2949/0856	. . . . of the bottom
N	B29C 2949/086	. . . . of a layer
N	B29C 2949/0861	. . Other specified values, e.g. values or ranges
N	B29C 2949/0862	. . . Crystallinity
N	B29C 2949/0863	. . . . at the neck portion
N	B29C 2949/0864	. . . . at the flange portion
N	B29C 2949/0865	. . . . at the body portion
N	B29C 2949/0866	. . . . at the bottom portion
N	B29C 2949/0867	. . . Surface roughness
N	B29C 2949/0868	. . . . at the neck portion
N	B29C 2949/0869	. . . . at the flange portion
N	B29C 2949/087	. . . . at the body portion
N	B29C 2949/0871	. . . . at the bottom portion
N	B29C 2949/0872	. . . Weight



- N B29C 2949/20
- *Preforms or parisons whereby a specific part is made of only one component, e.g. only one layer*
- WARNING  
Groups [B29C 2949/20](#), [B29C 2949/22](#), [B29C 2949/24](#), [B29C 2949/26](#) and [B29C 2949/28](#) are incomplete pending reclassification of documents from group [B29C 2949/00](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 2949/22
- • *at neck portion*
- N B29C 2949/24
- • *at flange portion*
- N B29C 2949/26
- • *at body portion*
- N B29C 2949/28
- • *at bottom portion*
- N B29C 2949/30
- *Preforms or parisons made of several components*
- WARNING  
Groups [B29C 2949/30](#), [B29C 2949/3004](#), [B29C 2949/3006](#), [B29C 2949/3008](#), [B29C 2949/3009](#), [B29C 2949/3012](#), [B29C 2949/3014](#), [B29C 2949/3016](#), [B29C 2949/3018](#), [B29C 2949/302](#), [B29C 2949/3022](#), [B29C 2949/3024](#), [B29C 2949/3026](#), [B29C 2949/3028](#), [B29C 2949/303](#), [B29C 2949/3032](#), [B29C 2949/3034](#), [B29C 2949/3036](#), [B29C 2949/3038](#), [B29C 2949/3041](#), [B29C 2949/3042](#), [B29C 2949/3044](#), [B29C 2949/3046](#), [B29C 2949/3048](#), [B29C 2949/3051](#), [B29C 2949/3052](#), [B29C 2949/3054](#), [B29C 2949/3056](#), [B29C 2949/3058](#), [B29C 2949/306](#), [B29C 2949/3062](#), [B29C 2949/3064](#), [B29C 2949/3066](#), [B29C 2949/3068](#), [B29C 2949/307](#), [B29C 2949/3074](#), [B29C 2949/3076](#), [B29C 2949/3078](#), [B29C 2949/308](#), [B29C 2949/3082](#), [B29C 2949/3084](#), [B29C 2949/3086](#), [B29C 2949/3088](#), [B29C 2949/309](#), [B29C 2949/3092](#) and [B29C 2949/3094](#) are incomplete pending reclassification of documents from group [B29C 2949/00](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- N B29C 2949/3004
- • *having longitudinally different components within one layer, e.g. tubes with longitudinal stratified layering*
- N B29C 2949/3006
- • *having tangentially different components within one layer, e.g. longitudinal stripes*
- N B29C 2949/3008
- • *at neck portion*
- N B29C 2949/3009
- • • *partially*
- N B29C 2949/3012
- • *at flange portion*
- N B29C 2949/3014
- • • *partially*
- N B29C 2949/3016
- • *at body portion*
- N B29C 2949/3018
- • • *partially*
- N B29C 2949/302
- • *at bottom portion*
- N B29C 2949/3022
- • • *partially*
- N B29C 2949/3024
- • *characterised by the number of components or by the manufacturing technique*
- N B29C 2949/3026
- • • *having two or more components*
- N B29C 2949/3028
- • • • *having three or more components*
- N B29C 2949/303
- • • • • *having more than three components*
- N B29C 2949/3032
- • *having components being injected*
- N B29C 2949/3034
- • • *having two or more components being injected*
- N B29C 2949/3036
- • • • *having three or more components being injected*

- N B29C 2949/3038 . . . . having more than three components being injected
- N B29C 2949/3041 . . having components being extruded
- N B29C 2949/3042 . . . having two or more components being extruded
- N B29C 2949/3044 . . . . having three or more components being extruded
- N B29C 2949/3046 . . . . . having more than three components being extruded
- N B29C 2949/3048 . . having components being thermoformed
- N B29C 2949/3051 . . . having two or more components being thermoformed
- N B29C 2949/3052 . . . . having three or more components being thermoformed
- N B29C 2949/3054 . . . . . having more than three components being thermoformed
- N B29C 2949/3056 . . having components being compression moulded
- N B29C 2949/3058 . . . having two or more components being compression moulded
- N B29C 2949/306 . . . . having three or more components being compression moulded
- N B29C 2949/3062 . . . . . having more than three components being compression moulded
- N B29C 2949/3064 . . having at least one components being applied using techniques not covered by [B29C 2949/3032](#) - [B29C 2949/3062](#)
- N B29C 2949/3066 . . . having two or more components being applied using said techniques
- N B29C 2949/3068 . . . . having three or more components being applied using said techniques
- N B29C 2949/307 . . . . . having more than three components being applied using said techniques
- N B29C 2949/3074 . . . said at least one component obtained by coating
- N B29C 2949/3076 . . . . on the inside
- N B29C 2949/3078 . . . . by spray coating
- N B29C 2949/308 . . . . by dip coating
- N B29C 2949/3082 . . . . by powder coating
- N B29C 2949/3084 . . . said at least one component obtained by casting
- N B29C 2949/3086 . . Interaction between two or more components, e.g. type of or lack of bonding
- N B29C 2949/3088 . . . Bonding
- N B29C 2949/309 . . . . by welding
- N B29C 2949/3092 . . . . by using adhesives
- N B29C 2949/3094 . . . preform having at least partially loose components, e.g. at least partially loose layers
- D B29C 2949/78 . Measuring, controlling or regulating  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78008 . . Measuring  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78016 . . . Measured parameter  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78025 . . . . Pressure  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78033 . . . . Energy, power, electric current or voltage  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78042 . . . . Time, e.g. start, termination, duration or interruption  
<administratively transferred to [B29C 49/78](#)>

- D B29C 2949/7805 . . . . Position, e.g. start, end or actual position  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78058 . . . . Velocity  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78067 . . . . Dimension  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78075 . . . . . Diameter  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78084 . . . . . Length  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78092 . . . . . Thickness  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/781 . . . . . of individual layers of multilayered objects  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78109 . . . . Volume or quantity  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78117 . . . . Dimensional change, e.g. distortion or shrinkage  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78126 . . . . Weight  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78134 . . . . Density, e.g. per unit length or area  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78142 . . . . Viscosity  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78151 . . . . Temperature  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78159 . . . . Electrical properties  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78168 . . . . Optical properties  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78176 . . . . . Colour, e.g. transparency  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78184 . . . . Mechanical properties  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78193 . . . . Magnetic properties  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78201 . . . . Surface properties  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/7821 . . . . Errors or malfunctioning  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78218 . . . . Presence or absence, e.g. of preforms or parisons  
<administratively transferred to [B29C 49/78](#)>

- D B29C 2949/78226 . . . Location or phase of measurement  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78235 . . . Injection phase or unit  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78243 . . . Extrusion phase or unit  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78252 . . . Die; Nozzle zone  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/7826 . . . Handling phase or unit, e.g. feeding device  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78268 . . . of blow moulded articles  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78277 . . . of inserts  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78285 . . . of labels  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78294 . . . Blow moulding phase  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78302 . . . Closure, opening or clamping phase or unit  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/7831 . . . during opening phase  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78319 . . . during clamping phase  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78327 . . . Ejection phase or unit  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78336 . . . Mould  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78344 . . . cavity  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78352 . . . non-cavity-forming parts  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78361 . . . core of the injection blow moulding machine, e.g. core transporting preform to blow moulding machine  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78369 . . . Stretching phase or unit  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78378 . . . Blowing means, pressurized phase  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78386 . . . Preform or parison  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78394 . . . Moulded articles  
<administratively transferred to [B29C 49/78](#)>

- D B29C 2949/78403 . . . . Inserts  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78411 . . . . Fluids  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/7842 . . . . introduced into the preform, parison or blown article  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78428 . . . . . for temperature control  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78436 . . . . . Temperature control fluids, i.e. to regulate the temperature in the blow mould  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78445 . . . . Driving means, e.g. motor or drive fluids  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78453 . . . . Auxiliary phases or units  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78462 . . . . . Pre-treatment phase or devices  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/7847 . . . . . Post-treatment phases or devices  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78478 . . . . Start-up, shut-down phase; Emergency shut down  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78487 . . . Measurement means  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78495 . . . . Electrical, e.g. thermocouples  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78504 . . . . Optical, e.g. laser  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78512 . . . . . Cameras  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78521 . . Controlling or regulating  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78529 . . . Controlled parameter  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78537 . . . . Pressure  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78546 . . . . Energy, power, electric current or voltage  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78554 . . . . Time, e.g. start, termination, duration or interruption  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78563 . . . . Position, e.g. start, end or actual position  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78571 . . . . Velocity  
<administratively transferred to [B29C 49/78](#)>

- D B29C 2949/78579 . . . . Dimension  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78588 . . . . Diameter  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78596 . . . . Length  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78605 . . . . Thickness  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78613 . . . . of individual layers of multilayered objects  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78621 . . . . Volume or quantity  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/7863 . . . . Dimensional change, e.g. distortion or shrinkage  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78638 . . . . Weight  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78647 . . . . Density, e.g. per unit length or area  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78655 . . . . Viscosity  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78663 . . . . Temperature  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78672 . . . . Electrical properties  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/7868 . . . . Optical properties  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78689 . . . . Colour, e.g. transparency  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78697 . . . . Mechanical properties  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78705 . . . . Magnetic properties  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78714 . . . . Surface properties  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78722 . . . . Errors or malfunctioning  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78731 . . . . Presence or absence, e.g. of preforms or parisons  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78739 . . . . Location or phase of control  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78747 . . . . Injection phase or unit  
<administratively transferred to [B29C 49/78](#)>

- D B29C 2949/78756 . . . . Extrusion phase or unit  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78764 . . . . Die; Nozzle zone  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78773 . . . . Handling phase or unit, e.g. feeding device  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78781 . . . . of blow moulded articles  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78789 . . . . of inserts  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78798 . . . . of labels  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78806 . . . . Blow moulding phase  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78815 . . . . Closure, opening or clamping phase or unit  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78823 . . . . during opening phase  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78831 . . . . during clamping phase  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/7884 . . . . Ejection phase or unit  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78848 . . . . Mould  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78857 . . . . cavity  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78865 . . . . non-cavity-forming parts  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78873 . . . . core of the injection blow moulding machine, e.g. core transporting preform to blow moulding machine  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78882 . . . . Stretching phase or unit  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/7889 . . . . Blowing means, pressurized phase  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78899 . . . . Preform or parison  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78907 . . . . Moulded articles  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78915 . . . . Inserts  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78924 . . . . Fluids  
<administratively transferred to [B29C 49/78](#)>



- D B29C 2949/78932 . . . . introduced into the preform, parison or blown article  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78941 . . . . . for temperature control  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78949 . . . . . Temperature control fluids, i.e. to regulate the temperature in the blow mould  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78957 . . . . Driving means, e.g. motor or drive fluids  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78966 . . . . Auxiliary phases or units  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78974 . . . . . Pre-treatment phases or devices  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78983 . . . . . Post-treatment phases or devices  
<administratively transferred to [B29C 49/78](#)>
- D B29C 2949/78991 . . . . Start-up, shut-down phase; Emergency shut down  
<administratively transferred to [B29C 49/78](#)>

**Project: RP10460 (G06F)**

- U G06F 9/00 Arrangements for program control, e.g. control units (program control for peripheral devices [G06F 13/10](#))**
- U G06F 9/06 . using stored programs, i.e. using an internal store of processing equipment to receive or retain programs
- U G06F 9/44 . . Arrangements for executing specific programs
- U G06F 9/451 . . . Execution arrangements for user interfaces
- G06F 9/452 . . . . {Remote windowing, e.g. X-Window System, desktop virtualisation  
([protocols for telewriting H04L 67/38](#)[protocols for virtual reality H04L 67/131](#))}
- U G06F 11/00 Error detection; Error correction; Monitoring (error detection, correction or monitoring in information storage based on relative movement between record carrier and transducer [G11B 20/18](#); monitoring, i.e. supervising the progress of recording or reproducing [G11B 27/36](#); in static stores [G11C 29/00](#))**
- NOTE  
In this group the indexing codes of [G06F 1/00](#) - [G06F 15/00](#) are added
- U G06F 11/07 . Responding to the occurrence of a fault, e.g. fault tolerance
- U G06F 11/0703 . . {Error or fault processing not based on redundancy, i.e. by taking additional measures to deal with the error or fault not making use of redundancy in operation, in hardware, or in data representation}
- U G06F 11/0706 . . . {the processing taking place on a specific hardware platform or in a specific software environment}

- G06F 11/0727
  - • • {in a storage system, e.g. in a DASD or network based storage system (~~circuits for error detection or correction within digital recording or reproducing units G11B 20/18~~; drivers for digital recording or reproducing units [G06F 3/06](#); ~~storage area networks H04L 29/08549~~; *circuits for error detection or correction within digital recording or reproducing units G11B 20/18*; *for distributed storage of data in networks, e.g. transport arrangements for network file system [NFS], storage area networks [SAN] or network attached storage [NAS], H04L 67/1097*)}
- G06F 11/0793
  - • • {Remedial or corrective actions (~~by retry G06F 11/1402~~; recovery from an exception in an instruction pipeline [G06F 9/3861](#); ~~in a network context H04L 29/14~~; *by retry G06F 11/1402*; *for recovering from a failure of a protocol instance or entity H04L 69/40*)}
- U G06F 11/30
  - Monitoring
- U G06F 11/3003
  - {Monitoring arrangements specially adapted to the computing system or computing system component being monitored}
- G06F 11/3034
  - • • {where the computing system component is a storage system, e.g. DASD based or network based (~~digital recording or reproducing G11B 20/18~~; digital input from or digital output to record carriers [G06F 3/06](#); ~~arrangements and networking functions for distributed storage of data in a network H04L 29/08549~~; *digital recording or reproducing G11B 20/18*; *for distributed storage of data in networks, e.g. transport arrangements for network file system [NFS], storage area networks [SAN] or network attached storage [NAS], H04L 67/1097*)}
- U G06F 11/34
  - • Recording or statistical evaluation of computer activity, e.g. of down time, of input/output operation {; Recording or statistical evaluation of user activity, e.g. usability assessment}
- G06F 11/3438
  - • • {monitoring of user actions (~~checking the network activity of the user for network-specific applications H04L 67/22~~*tracking the activity of the user H04L 67/535*)}
- U G06F 15/00
 

**Digital computers in general (details [G06F 1/00](#) – [G06F 13/00](#)); Data processing equipment in general**
- U G06F 15/16
  - Combinations of two or more digital computers each having at least an arithmetic unit, a program unit and a register, e.g. for a simultaneous processing of several programs {(coordinating program control therefor [G06F 9/52](#); in regulating and control system [G05B](#))}
- U G06F 15/163
  - • Interprocessor communication
- U G06F 15/173
  - • • using an interconnection network, e.g. matrix, shuffle, pyramid, star, snowflake
- G06F 15/1735
  - • • {Network adapters, e.g. SCI, Myrinet (protocol engines ~~H04L 29/06081~~*H04L 69/12*)}

## Project: RP10460 (G06K)

- U G06K 7/00
 

**Methods or arrangements for sensing record carriers, {e.g. for reading patterns} ([G06K 9/00](#) takes precedence; methods or arrangements for marking the record carrier in digital fashion [G06K 1/00](#))**
- U G06K 7/10
  - by electromagnetic radiation, e.g. optical sensing; by corpuscular radiation
- U G06K 7/10009
  - • {sensing by radiation using wavelengths larger than 0.1 mm, e.g. radio-waves or microwaves}

### NOTE

This group covers electromagnetic interrogation as radiated by the antenna of an interrogation device while interrogating a plurality of wireless electronic

memory record carriers, e.g. non-contact smart cards, RFID tags or labels, or transponders

G06K 7/10297

- • {arrangements for handling protocols designed for non-contact record carriers such as RFIDs NFCs, e.g. ISO/IEC 14443 and 18092 (~~protocols for data communication in general, see H04L 29/06~~*cryptographic protocols H04L 9/00; network security protocols H04L 63/00; real-time communication protocols in data switching networks H04L 65/00; network protocols for data switching network services H04L 67/00*)}

## Project: RP10460 (G06Q)

U G06Q 10/00

Administration; Management

G06Q 10/10

- Office automation, e.g. computer aided management of electronic mail or groupware (~~electronic mail protocols H04L 29/06~~; ~~arrangements for user-to-user messaging in packet-switching networks, e.g. e-mail or instant messages, H04L 41/00~~*user-to-user messaging in packet switching networks, transmitted according to store-and-forward or real-time protocols, e.g. e-mail, H04L 51/00*); Time management, e.g. calendars, reminders, meetings or time accounting (~~organizing, planning, scheduling or allocating time G06Q 10/06~~)

G06Q 10/107

- {Computer aided management of electronic mail (~~electronic mail protocols H04L 29/06~~; ~~arrangements for user-to-user messaging in packet-switching networks, e.g. e-mail or instant messages, H04L 41/00~~*H04L 51/00; network security protocols H04L 63/00; real-time communication protocols in data switching networks H04L 65/00; network protocols for data switching network services H04L 67/00*)}

## Project: RP10460 (G09B)

G09B 9/00

Simulators for teaching or training purposes (for the use of weapons ~~F41~~; computing aspects ~~G06~~; ~~{protocols for networked simulations H04L 29/06034}~~; *{protocols for games, networked simulations or virtual reality H04L 67/131}*)

## Project: RP10460 (H04L)

M H04L

TRANSMISSION OF DIGITAL INFORMATION, e.g. TELEGRAPHIC COMMUNICATION (~~{coding or ciphering apparatus for cryptographic or other purposes involving the need for secrecy G09C}~~; arrangements common to telegraphic and telephonic communication ~~H04M~~)

### NOTE

1. This subclass covers transmission of signals having been supplied in digital form and includes data transmission, telegraphic communication ~~and, or~~ methods or arrangements for monitoring.

*2. In this subclass, it is desirable to add the indexing codes of group H04L 2101/00.*

### WARNINGS

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

H04L 9/18	covered by	H04L 9/065
H04L 9/20	covered by	H04L 9/0656
H04L 9/22	covered by	H04L 9/0662
H04L 9/24	covered by	H04L 9/0662
H04L 9/26	covered by	H04L 9/0668
H04L 9/28	covered by	H04L 9/002, H04L 9/008, H04L 9/06, H04L 9/08, H04L 9/30, H04L 9/32

H04L 12/20	covered by	<del>H04L 29/00</del> <a href="#">H04L 69/00</a>
H04L 25/04	covered by	<a href="#">H04L 25/03</a>
H04L 25/17	covered by	<a href="#">H04L 25/02</a> - <a href="#">H04L 25/0298</a>
H04L 25/18	covered by	<a href="#">H04L 25/027</a>
H04L 25/28	covered by	<a href="#">H04L 25/0268</a>
H04L 25/30	covered by	<a href="#">H04L 25/061</a>
H04L 25/32	covered by	<a href="#">H04L 25/49</a>
H04L 25/34	covered by	<a href="#">H04L 25/4917</a>
H04L 25/48	covered by	<a href="#">H04L 25/49</a>
H04L 25/52	covered by	<a href="#">H04L 25/20</a>
H04L 25/54	covered by	<a href="#">H04L 25/20</a>
H04L 25/56	covered by	<a href="#">H04L 25/202</a>
H04L 25/58	covered by	<a href="#">H04L 25/20</a>
H04L 25/60	covered by	<a href="#">H04L 25/207</a>
H04L 25/62	covered by	<a href="#">H04L 25/205</a>
H04L 25/64	covered by	<a href="#">H04L 25/245</a>
H04L 25/66	covered by	<a href="#">H04L 25/247</a>

2. In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

## M H04L 9/00

**{Cryptographic mechanisms or cryptographic} arrangements for secret or secure ~~communication~~ [communications](#) ~~(network architectures or network communication protocols for network security H04L 63/00 or for wireless network security H04W 12/00; security arrangements for protecting computers or computer systems against unauthorized activity G06F 21/00)~~; [Network security protocols](#)**

### NOTES

#### 1. This group covers:

1.1 Cryptographic mechanisms including cryptographic protocols and cryptographic algorithms, whereby a cryptographic protocol is a distributed cryptographic algorithm defined by a sequence of steps precisely specifying the actions required of two or more entities to achieve specific security objectives (e.g. cryptographic protocol for key agreement), and whereby a cryptographic algorithm is specifying the steps followed by a single entity to achieve specific security objectives (e.g. cryptographic algorithm for symmetric key encryption).

1.2 [H04L 9/00](#) focuses on cryptographic mechanisms such as encryption schemes, digital signatures, hash functions, random number generation, key management, said cryptographic mechanisms providing information security such as privacy or confidentiality, data integrity, message authentication, entity authentication, authorization, validation, certification, time-stamping, anonymity, revocation, non-repudiation.

1.3 [H04L 9/00](#) covers also countermeasures against attacks on cryptographic mechanisms.

#### 2. This group does not cover:

2.1 Networking architectures or network communication protocols for securing the traffic flowing through data packet networks and providing secure exchanges among applications communicating through data packet networks, which are covered by [H04L 63/00](#). Attention is drawn to the Note 1. after group [H04L 63/00](#)

2.2 Security arrangements for protecting computers or computer systems against unauthorised activity, which are covered by [G06F 21/00](#)

3. In subgroups [H04L 9/001](#) - [H04L 9/38](#), the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the last appropriate place.

- U H04L 9/38
  - Encryption being effected by mechanical apparatus, e.g. rotating cams, switches, keytape punchers
- Q H04L 9/40
  - Network security protocols

NOTE

{When allocating [H04L 9/40](#) to patent documents, attention should be made to check whether other subgroups from [H04L 63/00](#) need to be allocated also for a complete classification.}

WARNING

Group [H04L 9/40](#) is impacted by reclassification into groups [H04L 61/09](#), [H04L 63/00](#), [H04L 65/60](#), [H04L 65/61](#), [H04L 65/611](#), [H04L 65/612](#), [H04L 65/613](#), [H04L 65/65](#), [H04L 65/70](#), [H04L 65/75](#), [H04L 65/752](#), [H04L 65/756](#), [H04L 67/01](#), [H04L 67/1001](#), [H04L 67/10015](#), [H04L 67/131](#), [H04L 67/133](#), [H04L 67/1396](#) and [H04L 67/50](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- N H04L 9/50
  - {using hash chains, e.g. blockchains or hash trees}
- U H04L 12/00
  - **Data switching networks (interconnection of, or transfer of information or other signals between, memories, input/output devices or central processing units [G06F 13/00](#))**
- U H04L 12/02
  - Details
- U H04L 12/16
  - • Arrangements for providing special services to substations
- U H04L 12/18
  - • • for broadcast or conference {, e.g. multicast}
- H04L 12/1813
  - • • {for computer conferences, e.g. chat rooms (*instant messaging [H04L 51/04](#)*; protocols for multimedia communication ~~[H04L 29/06027](#)~~~~[H04L 65/1101](#)~~; signaling and real-time protocols for multimedia conference ~~[H04L 29/06414](#)~~; instant messaging ~~[H04L 51/04](#)~~; *arrangements for multi-party communication [H04L 65/403](#)*; telephonic conference arrangements [H04M 3/56](#); television conference systems [H04N 7/15](#))}
- H04L 12/1845
  - • • {broadcast or multicast in a specific location, e.g. geocast (protocols for adapting network applications to user terminal location ~~[H04L 29/08657](#)~~~~[H04L 67/52](#)~~; services specially adapted for wireless communication networks making use of the location of users or terminals [H04W 4/02](#))}
- U H04L 12/28
  - characterised by path configuration, e.g. LAN [Local Area Networks] or WAN [Wide Area Networks] (wireless communication networks [H04W](#) {; arrangements for dividing the transmission path [H04W 40/00](#))}
- U H04L 12/2803
  - • {Home automation networks}
- H04L 12/2807
  - • • {Exchanging configuration information on appliance services in a home automation network (~~address allocation [H04L 29/12207](#)~~; arrangements for maintenance or administration involving network analysis for automatically determining the actual topology of a network [H04L 41/12](#); hardware or software tools for network management using graphical user interfaces [H04L 41/22](#); *address allocation [H04L 61/50](#)*)}

- H04L 12/2809
  - • • {indicating that an appliance service is present in a home automation network (~~arrangements for service discovery H04L 29/08648~~; monitoring functionality [H04L 43/0817](#); *discovery or management thereof, e.g. service location protocol [SLP] or web services, H04L 67/51*)}
- H04L 12/281
  - • • {indicating a format for calling an appliance service function in a home automation network (~~protocols for network applications involving the use of web-based technology H04L 29/08099~~*for remote control or remote monitoring of applications H04L 67/025*)}
- U H04L 12/2816
  - • • {Controlling appliance services of a home automation network by calling their functionalities (arrangements in telecontrol or telemetry systems for selectively calling a substation from a main station; in which substation desired apparatus is selected for applying a control signal thereto or for obtaining measured values therefrom [H04Q 9/00](#))}
- H04L 12/2818
  - • • {from a device located outside both the home and the home network (access arrangements [H04L 12/2856](#); ~~protocols for network applications involving the use of web-based technology for remote control or remote monitoring H04L 29/08099~~; telephonic communication systems adapted for combination with remote control systems [H04M 11/007](#); *for remote control or remote monitoring of applications H04L 67/025*; arrangements for transmitting signals characterised by the use of a wireless electrical link [G08C 17/00](#); *telephonic communication systems adapted for combination with remote control systems H04M 11/007*)}
- H04L 12/2821
  - • • {Avoiding conflicts related to the use of home appliances (~~arrangements for network security H04L 29/06551~~*cryptographic protocols H04L 9/00; protocols for network security H04L 63/00*)}
- U H04L 12/2823
  - • • {Reporting information sensed by appliance or service execution status of appliance services in a home automation network (device-related reporting [H04L 43/065](#); arrangements in telecontrol or telemetry systems for selectively calling a substation from a main station, in which substation desired apparatus is selected for applying a control signal thereto or for obtaining measured values therefrom [H04Q 9/00](#))}
- H04L 12/2825
  - • • {Reporting to a device located outside the home and the home network (access arrangements [H04L 12/2856](#); ~~protocols for network applications involving the use of web-based technology for remote control or remote monitoring H04L 29/08099~~; *for remote control or remote monitoring of applications H04L 67/025*; telephonic communication systems adapted for combination with telemetering systems [H04M 11/002](#))}
- U H04L 12/283
  - • • {Processing of data at an internetworking point of a home automation network}
- H04L 12/2836
  - • • {Protocol conversion between an external network and a home network (*controlling appliance services of a home automation network from a device located outside the home and the home network H04L 12/2818*; protocol conversion ~~H04L 29/06068~~[H04L 69/08](#); adaptation of digital video signals for transport over a specific home network [H04N 7/24](#); ~~controlling appliance services of a home automation network from a device located outside the home and the home network H04L 12/2818~~)}
- U H04L 12/2854
  - • {Wide area networks, e.g. public data networks}
- U H04L 12/2856
  - • • {Access arrangements, e.g. Internet access (asynchronous transfer mode networks [H04L 12/5601](#); broadband local area networks [H04L 12/2801](#); optical access or distribution networks [H04Q 11/0067](#); access to open networks [H04L 12/5691](#); digital subscriber line end-user equipment and bit-level processing of data on a PSTN-based network [H04M 11/00](#); home network gateways [H04L 12/2834](#); wireless access networks [H04W](#))}

## NOTES

1. This group covers:



- access to a public data network, such as an IP network, for subscribers, i.e. customers of a network service provider, over a wired network.
- communication of generic types of data between end-user equipments, located typically at the subscriber premises, and an access server, which acts as interface between the access network and the public data network.

2. This group does not cover:

- wireless access networks, which are covered by [H04W](#)
- optical distribution networks, which are covered by [H04Q 11/0067](#)
- bit-level, or PHY layer, processing of data between digital subscriber line equipments, which is covered by [H04M 11/06](#)
- design of DSL, digital subscriber line, modems, which is covered by [H04M 11/06](#)
- exchange of data related to functionalities of home network appliances between a home network and an external network, which is covered by [H04L 12/2803](#)
- management of WDM parameters in optical multiplex systems, which is covered by [H04J 14/02](#)
- circuit-switched access networks, which are covered by [H04M 7/1205](#)
- access arrangements for providing telephone service in networks other than PSTN/ISDN, which are covered by [H04M 7/0066](#)

3. In this group the following terms or expressions are used with the meaning indicated:

- ATM means Asynchronous Transfer Mode
- LAN means Local Area Network
- BRAS means Broadband Remote Access Server
- DSLAM means Digital Subscriber Line Access Multiplexer
- MSAN means MultiService Access Node
- DSL means Digital Subscriber Line
- IP means Internet Protocol
- WDM means Wavelength Division Multiplexing
- SDH means Synchronous Digital Hierarchy
- OTN means Optical Transport Network
- PSTN means Public Switched Telephone Network
- ISDN means Integrated Services Digital Network
- TDM means Time-Division Multiplexing
- TDMA means Time Division Multiple Access

- |                 |  |
|-----------------|--|
| H04L 12/2863    | • • • {Arrangements for combining access network resources elements, e.g. channel bonding (modem pooling <a href="#">H04L 25/14</a> ; <del>multichannel protocols</del> <a href="#">H04L 29/06088</a> ; routing of packets <a href="#">H04L 45/00</a> ; <del>multichannel or multilink protocols</del> <a href="#">H04L 69/14</a> )} |
| U H04L 12/40    | • • Bus networks   |
| U H04L 12/40052 | • • • {High-speed IEEE 1394 serial bus (bus transfer protocol on a daisy chain bus using an embedded synchronisation <a href="#">G06F 13/426</a> )}  |
| H04L 12/40104   | • • • • {Security; Encryption; Content protection ( <del>arrangements for network security</del> <a href="#">H04L 29/06551</a> <del>cryptographic protocols</del> <a href="#">H04L 9/00</a> ; <del>protocols for network security</del> <a href="#">H04L 63/00</a> )}  |
| U H04L 12/46    | • • Interconnection of networks  |



- M H04L 12/4641
- • {Virtual LANs, VLANs, e.g. virtual private networks [VPN] (LAN interconnection over a bridge based backbone [H04L 12/462](#); encapsulation techniques [H04L 12/4633](#); ~~virtual private networks for security~~ [H04L 29/06612](#); routing of packets [H04L 45/00](#); packet switches [H04L 49/00](#); *virtual private networks for security* [H04L 63/0272](#))}
- NOTES**
1. {This group covers:
    - a group of hosts with a common set of requirements that communicate as if they were attached to the same broadcast domain, regardless of their physical location.
  - }
  2. {This group does not cover:
    - group multicasting, which is covered by group [H04L 12/18](#)
    - configuration of switches supporting VLANs, which is covered by group [H04L 41/08](#)
    - multiprotocol label switching [MPLS], which is covered by group [H04L 45/00](#)
    - spanning tree protocols [STP], which are covered by group [H04L 12/462](#)
    - arrangements for network security, which are covered by group [H04L 29/06612](#) [H04L 63/0272](#)
    - encapsulation techniques, which are covered by group [H04L 12/4633](#)
    - access arrangements, which are covered by group [H04L 12/2856](#)
  - }
  3. {In this group the following terms or expressions are used with the meaning indicated:
    - B-Tag means Backbone VLAN Tag
    - C-Tag means Customer VLAN Tag
    - GARP means Generic Attribute Registration Protocol
    - GVRP means GARP VLAN Registration Protocol
    - I-SID means Service Instance Identifier
    - MVRP means Multiple VLAN Registration Protocol
    - PBB means Provider Backbone Bridges
    - S-Tag means Service VLAN Tag
    - VLAN means Virtual Local Area Network
    - VPN means Virtual Private Network
    - VTP means VLAN Trunking Protocol
  - }
- M H04L 12/54
- Store-and-forward switching systems (packet switching systems [H04L 12/56](#) [H04L 45/00](#), [H04L 47/00](#))
- D H04L 29/00**
- Arrangements, apparatus, circuits or systems, not covered by a single one of groups H04L 1/00 – H04L 27/00**
- <administratively transferred to [H04L 69/00](#)>**
- D H04L 29/02
- Communication control {(in satellite networks [H04B 7/185](#))}; Communication processing ([H04L 29/12](#), [H04L 29/14](#) take precedence)
- <administratively transferred to [H04L 65/00](#)>**
- D H04L 29/04
- • for plural communication lines
- <administratively transferred to [H04L 69/14](#)>**
- D H04L 29/06
- • characterised by a protocol
- <administratively transferred to [H04L 9/40](#)>**
- D H04L 29/06006
- • {Protocol performance}
- <administratively transferred to [H04L 69/02](#)>**

- |   |               |  |
|---|---------------|--|
| D | H04L 29/06013 | <ul style="list-style-type: none"> <li>• • {Protocol definition or specification (protocol conformance testing H04L 1/244)}</li> </ul> <p>&lt;administratively transferred to <a href="#">H04L 69/03</a>&gt;</p>   |
| D | H04L 29/0602  | <ul style="list-style-type: none"> <li>• • {Protocols characterised by their application (H04L 29/08081 takes precedence)}</li> </ul> <p>&lt;administratively transferred to <a href="#">H04L 67/00</a>&gt;</p>  |
| D | H04L 29/06027 | <ul style="list-style-type: none"> <li>• • • {Protocols for multimedia communication}</li> </ul> <p><u>WARNING</u><br/>This group is no longer used for the classification of new documents as from April 21, 2008. The backlog of this group is being continuously reclassified to subgroups of H04L 29/06176</p> <p>&lt;administratively transferred to <a href="#">H04L 65/1101</a>&gt;</p>   |
| D | H04L 29/06034 | <ul style="list-style-type: none"> <li>• • • {Protocols for telewriting; Protocols for networked simulations, virtual reality or games}</li> </ul> <p>&lt;administratively transferred to <a href="#">H04L 67/131</a>&gt;</p>  |
| D | H04L 29/0604  | <ul style="list-style-type: none"> <li>• • • {Protocols for data compression (compression in general H03M 7/30)}</li> </ul> <p>&lt;administratively transferred to <a href="#">H04L 69/04</a>&gt;</p>  |
| D | H04L 29/06047 | <ul style="list-style-type: none"> <li>• • • {Protocols for client-server architecture}</li> </ul> <p>&lt;administratively transferred to <a href="#">H04L 67/00</a>&gt;</p>   |
| D | H04L 29/06054 | <ul style="list-style-type: none"> <li>• • • • {Access to distributed or replicated servers, e.g. using brokers}</li> </ul> <p>&lt;administratively transferred to <a href="#">H04L 67/10015</a>&gt;</p>   |
| D | H04L 29/06061 | <ul style="list-style-type: none"> <li>• • {Notations for structuring of protocol data, e.g. Abstract Syntax Notation One (ASN 1)}</li> </ul> <p>&lt;administratively transferred to <a href="#">H04L 69/06</a>&gt;</p>  |
| D | H04L 29/06068 | <ul style="list-style-type: none"> <li>• • {Protocols for interworking or protocol conversion}</li> </ul> <p>&lt;administratively transferred to <a href="#">H04L 69/08</a>&gt;</p>  |
| D | H04L 29/06074 | <ul style="list-style-type: none"> <li>• • {Streamlined, light-weight or high-speed protocols, e.g. express transfer protocol [XTP], byte stream}</li> </ul> <p>&lt;administratively transferred to <a href="#">H04L 69/10</a>&gt;</p>   |
| D | H04L 29/06081 | <ul style="list-style-type: none"> <li>• • {Protocol engines, e.g. VLSIs, transputer}</li> </ul> <p>&lt;administratively transferred to <a href="#">H04L 69/12</a>&gt;</p>   |
| D | H04L 29/06088 | <ul style="list-style-type: none"> <li>• • {Multichannel or multilink protocols}</li> </ul> <p>&lt;administratively transferred to <a href="#">H04L 69/14</a>&gt;</p>  |
| D | H04L 29/06095 | <ul style="list-style-type: none"> <li>• • {Special adaptations or provisions of the transmission control protocol/ internet protocol [TCP/IP] or the user datagram protocol [UDP] (flow control in data switching networks in general H04L 47/10; adapting video-multiplex streams to a specific network H04N 21/2381; network layer protocol adaptations for supporting mobility, e.g. mobile IP H04W 80/04)}</li> </ul> <p>&lt;administratively transferred to <a href="#">H04L 69/16</a>&gt;</p> |
| D | H04L 29/06102 | <ul style="list-style-type: none"> <li>• • • {Implementation details of TCP/IP or UDP/IP stack architecture; specification of modified or new header fields (protocols engines in general H04L 29/06081; OSI stack based layering aspects H04L 29/08009; protocol header analysis in general H04L 29/0653)}</li> </ul> <p>&lt;administratively transferred to <a href="#">H04L 69/161</a>&gt;</p>  |
| D | H04L 29/06108 | <ul style="list-style-type: none"> <li>• • • • {involving adaptations of sockets based mechanisms (secure socket layer H04L 29/06965)}</li> </ul> <p>&lt;administratively transferred to <a href="#">H04L 69/162</a>&gt;</p>   |

- D H04L 29/06115 . . . {Adaptation of TCP data-exchange control procedures (generic OSI layer 4 protocols, e.g. SCTP H04L 29/08045; TCP or UDP flow control procedures H04L 47/19; error control procedures in general H04L 1/18)}  
<administratively transferred to [H04L 69/163](#)>
- D H04L 29/06122 . . . {Adaptation or special uses of UDP protocol}  
<administratively transferred to [H04L 69/164](#)>
- D H04L 29/06129 . . . {involving combined use or selection criteria between TCP and UDP protocols (multi-protocol arrangements in general H04L 29/06163; multilink protocols in general H04L 29/06088)}  
<administratively transferred to [H04L 69/165](#)>
- D H04L 29/06136 . . . {IP fragmentation or TCP segmentation aspects (evaluation of maximum transfer unit H04L 47/36; assembly or disassembly of packets in wireless networks H04W 28/065)}  
<administratively transferred to [H04L 69/166](#)>
- D H04L 29/06142 . . . {Transitional provisions between IPv4 and IPv6 (address translation between IPv4 and IPv6 H04L 29/12358; involvement of different protocol versions in wireless network layer protocols, e.g. MIPv4 and MIPv6, H04W 80/045)}  
<administratively transferred to [H04L 69/167](#)>
- D H04L 29/06149 . . . {Special adaptations of TCP, UDP or IP to match specific link layer protocols, e.g. ATM, SONET or PPP (IP over ATM H04Q 11/0478; special adaptation of TCP protocol for wireless media H04W 80/06)}  
<administratively transferred to [H04L 69/168](#)>
- D H04L 29/06156 . . . {Special adaptations of TCP, UDP or IP for interworking of IP based networks with other networks (protocols for interworking in general H04L 29/06068)}  
<administratively transferred to [H04L 69/169](#)>
- D H04L 29/06163 . . . {Multi-protocol handler, e.g. single device capable of handling multiple protocols}  
<administratively transferred to [H04L 69/18](#)>
- D H04L 29/0617 . . . {Protocols for remote procedure call}  
<administratively transferred to [H04L 67/133](#)>
- D H04L 29/06176 . . . {Arrangements for real-time multimedia communications (data switching systems for broadcast or conference H04L 12/18; network applications in general H04L 29/08081; message switching systems H04L 51/00; systems providing special services to telephonic subscribers H04M 3/42; interconnection arrangements between switching centres for working between exchanges having different types of switching equipment where the types of switching equipment comprise PSTN/ISDN equipment and equipment of networks other than PSTN/ISDN H04M 7/1205; television systems H04N 7/00)}

#### NOTES

##### 1. [N: This group covers:

- only communications which fulfil the following two conditions:
  1. they are based on packet data;
  2. there is real-time or pseudo-real-time temporal association between source and destination, or source and network, or destination and network;
- provided that the above two conditions are met, this group covers arrangements relating to
  1. the transmission of the multimedia data itself;

2. the user-to-user, user-to-network, inter-network or intra-network signalling supporting:
  - a. the establishment of a session for the subsequent transmission of the multimedia data, or
  - b. the maintenance of the session or
  - c. the application services available to the user during the session (unless explicitly excluded in certain cases).

2. This group does not cover:

- non-real-time multimedia file transfer, which is covered by group H04L 29/08117.
- multimedia store or forward messaging as in e-mail, MMS or the like, which are covered by group H04L 51/00
- analogue multimedia streaming, as in analogue television systems, which is covered by groups H04N 7/00 or H04N 5/00
- bit streaming, i.e. not packet-based, such as in ISDN, which is covered by group H04Q 11/04
- instant messaging, which is covered by group H04L 51/04
- any other multimodal data communications which do not meet the conditions of being packet-based and real-time or pseudo-real-time.

3. In this group the following terms or expressions are used with the meaning indicated:

- H.323 means International Telecommunication Union Recommendation no. 323, series H, entitled "Packet-based multimedia communications systems"
- IP means Internet Protocol
- IMS means IP Multimedia Subsystem
- ISDN means Integrated Services Digital Network
- MGC means Media Gateway Control/Controller
- MGCP means Media Gateway Control Protocol
- MMS means Multimedia Messaging Service
- PBX means Private Branch Exchange
- PSTN means Public Switched Telephone Network
- QoS means Quality of Service
- RTP means Real Time Protocol
- RTCP means Real Time Control Protocol
- SIP means Session Initiation Protocol
- SPAM means unsolicited electronic mail
- SPIT means SPAM Prevention in IP Telephony

WARNING

Group H04L 29/06176 or subgroups are not complete pending reorganisation. See also H04L 29/06027

<administratively transferred to [H04L 65/00](#)>

- |   |               |  |
|---|---------------|--|
| D | H04L 29/06183 | . . . {Signalling, control or architecture (data network management H04L 41/00; data network testing or monitoring H04L 43/00; selecting or control in telephonic networks H04Q 3/00)} |
|---|---------------|--|

<administratively transferred to [H04L 65/1101](#)>

- |   |              |   |
|---|--------------|---|
| D | H04L 29/0619 | . . . . {Signalling or session protocols} |
|---|--------------|---|

<administratively transferred to [H04L 65/1101](#)>

- |   |               |   |
|---|---------------|---|
| D | H04L 29/06197 | . . . . . {SIP [Session Initiation Protocol]} |
|---|---------------|---|

<administratively transferred to [H04L 65/1104](#)>

- |   |               |                   |
|---|---------------|-------------------|
| D | H04L 29/06204 | . . . . . {H.323} |
|---|---------------|-------------------|

<administratively transferred to [H04L 65/1106](#)>

D	H04L 29/0621	. . . . . {Network architectures, gateways, control or user entities}
		<administratively transferred to <a href="#">H04L 65/1013</a> >
D	H04L 29/06217	. . . . . {IMS [IP multimedia subsystem] (wireless communication networks H04W)}
		<administratively transferred to <a href="#">H04L 65/1016</a> >
D	H04L 29/06224	. . . . . {Gateways (protocols for interworking or protocol conversion H04L 29/06068; interconnection between PSTN/ISDN networks and networks other than PSTN/ISDN H04M 7/1205; arrangements for connecting between networks having differing types of switching systems H04L 12/66)}
		<administratively transferred to <a href="#">H04L 65/102</a> >
D	H04L 29/06231	. . . . . {Media gateways}
		<administratively transferred to <a href="#">H04L 65/1023</a> >
D	H04L 29/06238	. . . . . {at the edge}
		<administratively transferred to <a href="#">H04L 65/1026</a> >
D	H04L 29/06244	. . . . . {in the network}
		<administratively transferred to <a href="#">H04L 65/103</a> >
D	H04L 29/06251	. . . . . {Signalling gateways}
		<administratively transferred to <a href="#">H04L 65/1033</a> >
D	H04L 29/06258	. . . . . {at the edge}
		<administratively transferred to <a href="#">H04L 65/1036</a> >
D	H04L 29/06265	. . . . . {in the network}
		<administratively transferred to <a href="#">H04L 65/104</a> >
D	H04L 29/06272	. . . . . {MGC [media gateway control], MGCP or Megaco (decomposed PSTN/ISDN-IP gateways H04M 7/1255)}
		<administratively transferred to <a href="#">H04L 65/1043</a> >
D	H04L 29/06278	. . . . . {Call controllers; Call servers}
		<administratively transferred to <a href="#">H04L 65/1046</a> >
D	H04L 29/06285	. . . . . {Proxies, e.g. SIP proxies}
		<administratively transferred to <a href="#">H04L 65/1045</a> >
D	H04L 29/06292	. . . . . {Arrangements providing PBX functionality, e.g. IP PBX (circuit switched PBXs H04M 3/42314; PBX networks H04M 7/009)}
		<administratively transferred to <a href="#">H04L 65/1053</a> >
D	H04L 29/06299	. . . . . {for multi-site}
		<administratively transferred to <a href="#">H04L 65/1056</a> >
D	H04L 29/06306	. . . . . {End-user terminal functionality (substation equipment for use by subscribers H04M 1/00; terminal profiles H04L 29/08927; terminal emulation H04L 29/08126; adaptation for terminals with limited resources or for terminal portability H04L 29/08108)}
		<administratively transferred to <a href="#">H04L 65/1059</a> >
D	H04L 29/06312	. . . . . {Application servers (systems providing special services to telephonic subscribers H04M 3/42)}
		<administratively transferred to <a href="#">H04L 65/1063</a> >
D	H04L 29/06319	. . . . . {Session control}
		<administratively transferred to <a href="#">H04L 65/1066</a> >

- D H04L 29/06326 . . . . . {Setup (connection or session management in network applications H04L 29/08576; arrangements for peer-to-peer networking in network applications H04L 29/08306; negotiation of communication capabilities H04L 29/06537)}  
<administratively transferred to [H04L 65/1069](#)>
- D H04L 29/06333 . . . . . {Registration (arrangements for addressing or naming in data networks H04L 29/12009)}  
<administratively transferred to [H04L 65/1073](#)>
- D H04L 29/0634 . . . . . {Screening (arrangements for screening incoming telephone calls H04M 3/436; arrangements for network security H04L 29/06551)}  
<administratively transferred to [H04L 65/1076](#)>
- D H04L 29/06346 . . . . . {of unsolicited session attempts, e.g. SPIT [SPAM prevention in IP telephony] (message switching systems H04L 51/00)}  
<administratively transferred to [H04L 65/1079](#)>
- D H04L 29/06353 . . . . . {In-session procedures}  
<administratively transferred to [H04L 65/1083](#)>
- D H04L 29/0636 . . . . . {session scope modification}  
<administratively transferred to [H04L 65/1086](#)>
- D H04L 29/06367 . . . . . {by adding or removing media}  
<administratively transferred to [H04L 65/1089](#)>
- D H04L 29/06374 . . . . . {by adding or removing participants}  
<administratively transferred to [H04L 65/1093](#)>
- D H04L 29/0638 . . . . . {Features, e.g. call-forwarding or call hold (systems providing special services to telephonic subscribers H04M 3/42)}  
<administratively transferred to [H04L 65/1096](#)>
- D H04L 29/06387 . . . . {Services or applications (systems providing special services to telephonic subscribers H04M 3/42; contact center services H04M 3/51; information services comprising voice H04M 3/487)}  
<administratively transferred to [H04L 65/40](#)>
- D H04L 29/06394 . . . . {Services involving a main real time session and one or more additional parallel sessions (multichannel or multilink protocols H04L 29/06088; services and arrangements where telephone services are combined with data services H04M 7/0024)}  
<administratively transferred to [H04L 65/401](#)>
- D H04L 29/06401 . . . . . {where at least one of the additional parallel sessions is real time or time sensitive, e.g. white board sharing, collaboration, spawning of a subconference (telewriting, virtual reality or network gaming H04L 29/06034)}  
<administratively transferred to [H04L 65/4015](#)>
- D H04L 29/06408 . . . . . {where none of the additional parallel sessions is real time or time sensitive, e.g. downloading a file in a parallel FTP session; initiating an email, combinational services (web-based applications H04L 29/0809; file transfer H04L 29/08117; message switching systems H04L 51/00; instant messaging H04L 51/04)}  
<administratively transferred to [H04L 65/4025](#)>



- D H04L 29/06414 . . . . {Arrangements for multiparty communication, e.g. conference (television conferencing systems H04N 7/15; telephonic conference systems H04M 3/56; data switching systems for broadcast or conference H04L 12/18)}  
<administratively transferred to [H04L 65/403](#)>
- D H04L 29/06421 . . . . {with central floor control}  
<administratively transferred to [H04L 65/4038](#)>
- D H04L 29/06428 . . . . {with distributed floor control}  
<administratively transferred to [H04L 65/4046](#)>
- D H04L 29/06435 . . . . {without floor control}  
<administratively transferred to [H04L 65/4053](#)>
- D H04L 29/06442 . . . . {"Push-to-X" services (Push-to-Talk services in wireless networks H04W 4/025)}  
<administratively transferred to [H04L 65/4061](#)>
- D H04L 29/06448 . . . . {Services related to one way streaming}  
<administratively transferred to [H04L 65/61](#)>
- D H04L 29/06455 . . . . {Multicast or broadcast (data switching systems for broadcast or conference H04L 12/18; television systems in general H04N 5/00; H04N 7/00; arrangements for broadcast or distribution combined with broadcast H04H 20/00; arrangements for broadcast applications with a direct linkage of broadcast information H04H 60/00; arrangements for push based network services H04L 29/08693)}  
<administratively transferred to [H04L 65/611](#)>
- D H04L 29/06462 . . . . {Content on demand (television systems using two way working H04N 7/173)}  
<administratively transferred to [H04L 65/612](#)>
- D H04L 29/06469 . . . . {Control of source by destination, e.g. user controlling streaming rate of server (television systems using two way working H04N 7/173)}  
<administratively transferred to [H04L 65/613](#)>
- D H04L 29/06476 . . . . {Media handling, encoding, streaming or conversion}  
<administratively transferred to [H04L 65/60](#)>
- D H04L 29/06482 . . . . {Media manipulation, adaptation or conversion (transmission of television signals using pulse code modulation H04N 7/24; adaptation for terminals or networks with limited resources or for terminal portability H04L 29/08108; data reduction or adaptation H04L 29/08792; network application being adapted for the location of the user terminal H04L 29/08657)}  
<administratively transferred to [H04L 65/75](#)>
- D H04L 29/06489 . . . . {at the source}  
<administratively transferred to [H04L 65/762](#)>
- D H04L 29/06496 . . . . {at the destination}  
<administratively transferred to [H04L 65/764](#)>
- D H04L 29/06503 . . . . {intermediate}  
<administratively transferred to [H04L 65/765](#)>
- D H04L 29/0651 . . . . {Stream encoding details (transmission of television signals using pulse code modulation H04N 7/24; protocols for data compression H04L 29/0604; header parsing or analysis H04L 29/0653)}  
<administratively transferred to [H04L 65/70](#)>



- D H04L 29/06517 . . . . {Streaming protocols, e.g. RTP, RTCP}  
<administratively transferred to [H04L 65/65](#)>
- D H04L 29/06523 . . . . {Quality of Service (QoS) aspects (arrangements for scheduling or organising the servicing of requests whereby quality of service or priority requirements are taken into account H04L 29/08954; adaptation for terminals and/or networks with limited resources or for terminal portability H04L 29/08108; data reduction and/or adaptation H04L 29/08792; network application is adapted for the location of the user terminal H04L 29/08657)}  
<administratively transferred to [H04L 65/80](#)>
- D H04L 29/0653 . . . {Header parsing and analysis}  
<administratively transferred to [H04L 69/22](#)>
- D H04L 29/06537 . . . {Negotiation of communication capabilities}  
<administratively transferred to [H04L 69/24](#)>
- D H04L 29/06544 . . . {Special purpose or proprietary protocols or architectures (H04L 29/08558 takes precedence)}  
<administratively transferred to [H04L 69/26](#)>
- D H04L 29/06551 . . . {Arrangements for network security (security arrangements for protecting computers or computer systems against unauthorised activity G06F 21/00; arrangements for secret or secure communication H04L 9/00; security arrangements specially adapted for wireless communication networks H04W 12/00)}  
<administratively transferred to [H04L 63/00](#)>
- D H04L 29/06557 . . . . {Separating internal and external traffic, e.g. firewalls}  
<administratively transferred to [H04L 63/02](#)>
- D H04L 29/06564 . . . . {Architectural arrangements, e.g. perimeter networks, demilitarized zones}  
<administratively transferred to [H04L 63/0209](#)>
- D H04L 29/06571 . . . . . {Distributed architectures}  
<administratively transferred to [H04L 63/0218](#)>
- D H04L 29/06578 . . . . . {Filtering policies}  
<administratively transferred to [H04L 63/0227](#)>
- D H04L 29/06585 . . . . . {Filtering by address, protocol, port number or service, e.g. IP-address, URL}  
<administratively transferred to [H04L 63/0236](#)>
- D H04L 29/06591 . . . . . {Filtering by information in the payload}  
<administratively transferred to [H04L 63/0245](#)>
- D H04L 29/06598 . . . . . {Stateful filtering}  
<administratively transferred to [H04L 63/0254](#)>
- D H04L 29/06605 . . . . . {Rule management}  
<administratively transferred to [H04L 63/0263](#)>
- D H04L 29/06612 . . . . . {Virtual private networks}  
<administratively transferred to [H04L 63/0272](#)>
- D H04L 29/06619 . . . . . {Proxies}  
<administratively transferred to [H04L 63/0281](#)>

- D H04L 29/06625 . . . . {Firewall traversal, e.g. tunnelling, creating pinholes}  
<administratively transferred to [H04L 63/029](#)>
- D H04L 29/06632 . . . . {Protecting information from access by third parties}  
<administratively transferred to [H04L 63/04](#)>
- D H04L 29/06639 . . . . {Protecting a party's identity, e.g. anonymous}  
<administratively transferred to [H04L 63/0407](#)>
- D H04L 29/06646 . . . . . {during transmission, i.e. identity only known to the other party or parties involved in the communication}  
<administratively transferred to [H04L 63/0414](#)>
- D H04L 29/06653 . . . . . {Anonymous communication, i.e. identity not known to any party at all}  
<administratively transferred to [H04L 63/0421](#)>
- D H04L 29/06659 . . . . . {Protecting the content, e.g. encryption}  
<administratively transferred to [H04L 63/0428](#)>
- D H04L 29/06666 . . . . . {using symmetric encryption, i.e. same key used for encryption and decryption}  
<administratively transferred to [H04L 63/0435](#)>
- D H04L 29/06673 . . . . . {using asymmetric encryption, i.e. different keys for encryption and decryption}  
<administratively transferred to [H04L 63/0442](#)>
- D H04L 29/0668 . . . . . {using hybrid encryption, i.e. combination of symmetric and asymmetric encryption}  
<administratively transferred to [H04L 63/045](#)>
- D H04L 29/06687 . . . . . {using dynamic encryption, e.g. stream encryption}  
<administratively transferred to [H04L 63/0457](#)>
- D H04L 29/06693 . . . . . {Re-encryption}  
<administratively transferred to [H04L 63/0464](#)>
- D H04L 29/067 . . . . . {Hardware and software architectures for enhanced packet encryption processing}  
<administratively transferred to [H04L 63/0485](#)>
- D H04L 29/06707 . . . . {Key management}  
<administratively transferred to [H04L 63/06](#)>
- D H04L 29/06714 . . . . . {Key exchange, e.g. in peer-to-peer networks}  
<administratively transferred to [H04L 63/061](#)>
- D H04L 29/06721 . . . . . {Key distribution, e.g. centrally by trusted party}  
<administratively transferred to [H04L 63/062](#)>
- D H04L 29/06727 . . . . . {Hierarchical key distribution, e.g. by multi-tier trusted parties}  
<administratively transferred to [H04L 63/064](#)>
- D H04L 29/06734 . . . . . {for group communications}  
<administratively transferred to [H04L 63/065](#)>
- D H04L 29/06741 . . . . . {One-time keys}  
<administratively transferred to [H04L 63/067](#)>
- D H04L 29/06748 . . . . . {Time-dependent keys, e.g. periodically changing keys}  
<administratively transferred to [H04L 63/068](#)>

D	H04L 29/06755	. . . . {Authentication mechanisms}	<administratively transferred to <a href="#">H04L 63/08</a> >
D	H04L 29/06761	. . . . {Tickets, e.g. Kerberos}	<administratively transferred to <a href="#">H04L 63/0807</a> >
D	H04L 29/06768	. . . . {Single-sign-on}	<administratively transferred to <a href="#">H04L 63/0815</a> >
D	H04L 29/06775	. . . . {Certificates}	<administratively transferred to <a href="#">H04L 63/0823</a> >
D	H04L 29/06782	. . . . {Passwords}	<administratively transferred to <a href="#">H04L 63/083</a> >
D	H04L 29/06789	. . . . {One-time-passwords}	<administratively transferred to <a href="#">H04L 63/0838</a> >
D	H04L 29/06795	. . . . {Time-dependent passwords, e.g. periodically changing passwords}	<administratively transferred to <a href="#">H04L 63/0846</a> >
D	H04L 29/06802	. . . . {using an additional device, e.g. smartcard, SIM}	<administratively transferred to <a href="#">H04L 63/0853</a> >
D	H04L 29/06809	. . . . {using biometrical features, e.g. fingerprint, retina-scan}	<administratively transferred to <a href="#">H04L 63/0861</a> >
D	H04L 29/06816	. . . . {Mutual authentication}	<administratively transferred to <a href="#">H04L 63/0869</a> >
D	H04L 29/06823	. . . . {Access control}	<administratively transferred to <a href="#">H04L 63/10</a> >
D	H04L 29/06829	. . . . {Access control lists [ACL]}	<administratively transferred to <a href="#">H04L 63/101</a> >
D	H04L 29/06836	. . . . {User profiles}	<administratively transferred to <a href="#">H04L 63/102</a> >
D	H04L 29/06843	. . . . {Grouping of users}	<administratively transferred to <a href="#">H04L 63/104</a> >
D	H04L 29/0685	. . . . {Multiple levels of security}	<administratively transferred to <a href="#">H04L 63/105</a> >
D	H04L 29/06857	. . . . {Verifying the information received}	<administratively transferred to <a href="#">H04L 63/12</a> >
D	H04L 29/06863	. . . . {Checking the content, e.g. message integrity}	<administratively transferred to <a href="#">H04L 63/123</a> >
D	H04L 29/0687	. . . . {Checking the source, e.g. non-repudiation}	<administratively transferred to <a href="#">H04L 63/126</a> >
D	H04L 29/06877	. . . . {Detection of malicious traffic; protection against malicious traffic}	<administratively transferred to <a href="#">H04L 63/14</a> >
D	H04L 29/06884	. . . . {Monitoring network traffic}	<administratively transferred to <a href="#">H04L 63/1408</a> >
D	H04L 29/06891	. . . . {Event detection}	<administratively transferred to <a href="#">H04L 63/1416</a> >

D	H04L 29/06897	. . . . . {Traffic logging} <administratively transferred to <a href="#">H04L 63/1425</a> >
D	H04L 29/06904	. . . . . {Vulnerability analysis} <administratively transferred to <a href="#">H04L 63/1433</a> >
D	H04L 29/06911	. . . . . {Countermeasures against attacks} <administratively transferred to <a href="#">H04L 63/1441</a> >
D	H04L 29/06918	. . . . . {Viruses; Trojans; Worms} <administratively transferred to <a href="#">H04L 63/145</a> >
D	H04L 29/06925	. . . . . {Denial of Service} <administratively transferred to <a href="#">H04L 63/1458</a> >
D	H04L 29/06931	. . . . . {Session hijacking, e.g. TCP sequence number attacks} <administratively transferred to <a href="#">H04L 63/1466</a> >
D	H04L 29/06938	. . . . . {Session spying, e.g. eavesdropping} <administratively transferred to <a href="#">H04L 63/1475</a> >
D	H04L 29/06945	. . . . {Security features implemented at a particular protocol layer} <administratively transferred to <a href="#">H04L 63/16</a> >
D	H04L 29/06952	. . . . . {at the data link layer, e.g. SILS, EAP} <administratively transferred to <a href="#">H04L 63/162</a> >
D	H04L 29/06959	. . . . . {at the network layer, e.g. IPSec AH, ESP} <administratively transferred to <a href="#">H04L 63/164</a> >
D	H04L 29/06965	. . . . . {at the transport layer, e.g. SSL, TLS} <administratively transferred to <a href="#">H04L 63/166</a> >
D	H04L 29/06972	. . . . . {above the transport layer, e.g. https, JAVA} <administratively transferred to <a href="#">H04L 63/168</a> >
D	H04L 29/06979	. . . . {using a different network or path for securing the traffic} <administratively transferred to <a href="#">H04L 63/18</a> >
D	H04L 29/06986	. . . . {Security management; Security policies in general (filtering policies H04L 29/06578)} <administratively transferred to <a href="#">H04L 63/20</a> >
D	H04L 29/06993	. . . {Timer mechanisms used in protocols} <administratively transferred to <a href="#">H04L 69/28</a> >
D	H04L 29/08	. . . Transmission control procedure, e.g. data link level control procedure <administratively transferred to <a href="#">H04L 65/40</a> >
D	H04L 29/08009	. . . . {Open systems interconnection [OSI] architecture, e.g. layering, entities, standards; Interface between layers; Software aspects} <administratively transferred to <a href="#">H04L 69/32</a> >
D	H04L 29/08018	. . . . . {Physical layer, i.e. layer one} <administratively transferred to <a href="#">H04L 69/323</a> >
D	H04L 29/08027	. . . . . {Data link layer, i.e. layer two, e.g. HDLC} <administratively transferred to <a href="#">H04L 69/324</a> >
D	H04L 29/08036	. . . . . {Network layer, i.e. layer three, e.g. X.25} <administratively transferred to <a href="#">H04L 69/325</a> >

- D H04L 29/08045 . . . . {Transport layer, i.e. layer four}  
<administratively transferred to [H04L 69/326](#)>
- D H04L 29/08054 . . . . {Session layer, i.e. layer five}  
<administratively transferred to [H04L 69/327](#)>
- D H04L 29/08063 . . . . {Presentation layer, i.e. layer six}  
<administratively transferred to [H04L 69/328](#)>
- D H04L 29/08072 . . . . {Application layer, i.e. layer seven (not used)}  
WARNING  
from 01.01.2006 onwards, documents relating to the application layer, and in particular to protocols for network applications are classified in H04L 29/08081 and subgroups. All documents previously classified in H04L 29/08072 are reclassified in these groups  
<administratively transferred to [H04L 69/329](#)>
- D H04L 29/08081 . . . . {Protocols for network applications (protocols for multimedia communication H04L 29/06027; protocols for telewriting H04L 29/06034; message switching systems H04L 51/00)}  
<administratively transferred to [H04L 67/00](#)>
- D H04L 29/0809 . . . . {involving the use of web-based technology, e.g. Hyper-Text Transfer Protocol [HTTP], (information retrieval from the Internet G06F 16/95)}  
<administratively transferred to [H04L 67/02](#)>
- D H04L 29/08099 . . . . {for remote control or remote monitoring (network management using Internet technology H04L 41/0246; network monitoring H04L 43/00)}  
<administratively transferred to [H04L 67/025](#)>
- D H04L 29/08108 . . . . {adapted for terminals or networks with limited resources and for terminal portability, e.g. Wireless Application Protocol [WAP] (services or facilities specially adapted for wireless communication networks H04W 4/00)}  
<administratively transferred to [H04L 67/04](#)>
- D H04L 29/08117 . . . . {adapted for file transfer, e.g. File Transfer Protocol [FTP]}  
<administratively transferred to [H04L 67/06](#)>
- D H04L 29/08126 . . . . {adapted for terminal emulation, e.g. telnet (protocols for telewriting or protocols for networked simulations, virtual reality or games H04L 29/06034)}  
<administratively transferred to [H04L 67/08](#)>
- D H04L 29/08135 . . . . {in which application tasks are distributed across nodes in the network (multiprogramming arrangements G06F 9/46)}  
<administratively transferred to [H04L 67/10](#)>
- D H04L 29/08144 . . . . {Network arrangements or communication protocol arrangements for accessing one among a plurality of replicated servers, e.g. load balancing (rebalancing the processing load in a distributed system G06F 9/5083; arrangements for peer-to-peer networking H04L 29/08306; wireless network traffic load balancing H04W 28/08; network load balancing, traffic engineering H04L 47/125; video servers using load balancing strategies H04N 21/23103)}  
NOTE  
In this group and its subgroups, the term "servers" includes non-dedicated servers, such as peer nodes in a peer-to-peer architecture  
<administratively transferred to [H04L 67/1001](#)>

D	H04L 29/08153	. . . . . {Server selection in load balancing (allocation of processing resources to service a request in a distributed system G06F 9/5027)}
		<administratively transferred to <a href="#">H04L 67/1004</a> >
D	H04L 29/08162	. . . . . {with static server selection, e.g. the same server being selected for a specific client (allocation of processing resources considering data affinity G06F 9/5033)}
		<administratively transferred to <a href="#">H04L 67/1006</a> >
D	H04L 29/08171	. . . . . {based on parameters of servers, e.g. available memory or workload (allocation of processing resources considering the load G06F 9/505)}
		<administratively transferred to <a href="#">H04L 67/1008</a> >
D	H04L 29/0818	. . . . . {based on network conditions}
		<administratively transferred to <a href="#">H04L 67/101</a> >
D	H04L 29/08189	. . . . . {based on compliance of requirements or conditions with available server resources}
		<administratively transferred to <a href="#">H04L 67/1012</a> >
D	H04L 29/08198	. . . . . {based on the content of a request}
		<administratively transferred to <a href="#">H04L 67/1014</a> >
D	H04L 29/08207	. . . . . {based on round robin mechanisms}
		<administratively transferred to <a href="#">H04L 67/1017</a> >
D	H04L 29/08216	. . . . . {based on random server selection}
		<administratively transferred to <a href="#">H04L 67/1019</a> >
D	H04L 29/08225	. . . . . {based on locations of client and servers}
		<administratively transferred to <a href="#">H04L 67/1021</a> >
D	H04L 29/08234	. . . . . {based on other criteria, e.g., hash applied to IP address, specific algorithms or cost}
		<administratively transferred to <a href="#">H04L 67/1023</a> >
D	H04L 29/08243	. . . . . {Dynamic adaptation of server selection criteria for load balancing}
		<administratively transferred to <a href="#">H04L 67/1025</a> >
D	H04L 29/08252	. . . . . {Persistence of sessions during load balancing}
		<administratively transferred to <a href="#">H04L 67/1027</a> >
D	H04L 29/08261	. . . . . {Collection and organization of data related to the state of servers by a load balancer}
		<administratively transferred to <a href="#">H04L 67/1029</a> >
D	H04L 29/0827	. . . . . {Controlling of the operation of servers by a load balancer, e.g. adding or removing servers that serve requests}
		<administratively transferred to <a href="#">H04L 67/1031</a> >
D	H04L 29/08279	. . . . . {Reaction to server failures by a load balancer}
		<administratively transferred to <a href="#">H04L 67/1034</a> >
D	H04L 29/08288	. . . . . {Load balancing of requests to servers for services different from user content provisioning, e.g. load balancing to DNS servers or firewalls (internet service provider selection H04L 12/5691)}
		<administratively transferred to <a href="#">H04L 67/1036</a> >

- D H04L 29/08297 . . . . . {Load balancing arrangements to avoid a single path through a load balancer}  
<administratively transferred to [H04L 67/1038](#)>
- D H04L 29/08306 . . . . . {Arrangements for peer-to-peer networking [P2P]; functionalities, architectural details or applications of P2P networks (provisions for file transfer, upload, download H04L 29/08117; provisions for accessing replicated servers H04L 29/08144; security provisions H04L 29/06551; addressing provisions H04L 29/12009; scheduling provisions H04L 29/08945; presence management provisions H04L 29/08684; multimedia provisions H04L 29/06176; information retrieval provisions, file indexing, file systems G06F 16/00; wireless interfaces between terminal devices H04W 92/18; small scale hierarchical wireless network topologies H04W 84/10; peer-to-peer connection between video clients H04N 21/632; peer-to-peer connection between video game machines A63F 13/34)}  
<administratively transferred to [H04L 67/104](#)>
- D H04L 29/08315 . . . . . {involving topology management mechanisms}  
<administratively transferred to [H04L 67/1042](#)>
- D H04L 29/08324 . . . . . {Group management mechanisms}  
<administratively transferred to [H04L 67/1044](#)>
- D H04L 29/08333 . . . . . {Joining mechanisms}  
<administratively transferred to [H04L 67/1046](#)>
- D H04L 29/08342 . . . . . {Departure and maintenance mechanisms (counter-measures to a fault H04L 29/14)}  
<administratively transferred to [H04L 67/1048](#)>
- D H04L 29/08351 . . . . . {Group master selection mechanisms}  
<administratively transferred to [H04L 67/1051](#)>
- D H04L 29/0836 . . . . . {with pre-configuration of logical or physical connections with a determined number of other peers}  
<administratively transferred to [H04L 67/1053](#)>
- D H04L 29/08369 . . . . . {involving connection limits (involving dynamic management of active down/uploading connections H04L 29/08495)}  
<administratively transferred to [H04L 67/1055](#)>
- D H04L 29/08378 . . . . . {involving pre-assessment of levels of reputation of peers}  
<administratively transferred to [H04L 67/1057](#)>
- D H04L 29/08387 . . . . . {Inter-group management mechanisms, e.g. splitting, merging or interconnection of groups}  
<administratively transferred to [H04L 67/1059](#)>
- D H04L 29/08396 . . . . . {involving resource based peer discovery mechanisms (access to replicated servers H04L 29/08144; arrangements for service discovery H04L 29/08648; topology discovery for routing H04L 45/02)}  
<administratively transferred to [H04L 67/1061](#)>
- D H04L 29/08405 . . . . . {Discovery through centralizing entities}  
<administratively transferred to [H04L 67/1063](#)>
- D H04L 29/08414 . . . . . {Discovery involving distributed pre-established resource-based relationships among peers, e.g. based on DHTs (pre-configuration of logical or physical connections H04L 29/0836)}  
<administratively transferred to [H04L 67/1065](#)>



- D H04L 29/08423 . . . . . {Discovery involving direct consultation/announcement among potential requesting and potential source peers}  
<administratively transferred to [H04L 67/1068](#)>
- D H04L 29/08432 . . . . . {with limitation/expansion of the discovery scope}  
<administratively transferred to [H04L 67/107](#)>
- D H04L 29/08441 . . . . . {Discovery involving ranked list compilation of candidate peers}  
<administratively transferred to [H04L 67/1072](#)>
- D H04L 29/0845 . . . . . {involving resource distribution mechanisms}  
<administratively transferred to [H04L 67/1074](#)>
- D H04L 29/08459 . . . . . {Resource dissemination mechanisms and resource keeping policies for optimal resource availability in the overlay network}  
<administratively transferred to [H04L 67/1076](#)>
- D H04L 29/08468 . . . . . {Resource delivery mechanisms}  
<administratively transferred to [H04L 67/1078](#)>
- D H04L 29/08477 . . . . . {characterized by resources being split in blocks or fragments}  
<administratively transferred to [H04L 67/108](#)>
- D H04L 29/08486 . . . . . {involving incentive schemes}  
<administratively transferred to [H04L 67/1082](#)>
- D H04L 29/08495 . . . . . {involving dynamic management of active down/uploading connections}  
<administratively transferred to [H04L 67/1085](#)>
- D H04L 29/08504 . . . . . {involving cross-functional aspects}  
<administratively transferred to [H04L 67/1087](#)>
- D H04L 29/08513 . . . . . {Hierarchical topologies}  
<administratively transferred to [H04L 67/1089](#)>
- D H04L 29/08522 . . . . . {Interfacing with client/server systems and between P2P systems}  
<administratively transferred to [H04L 67/1091](#)>
- D H04L 29/08531 . . . . . {Some peer nodes performing special functions}  
<administratively transferred to [H04L 67/1093](#)>
- D H04L 29/0854 . . . . . {Arrangements for replication or mirroring of data, e.g. data synchronisation between network nodes and/or user terminals}  
<administratively transferred to [H04L 67/1095](#)>
- D H04L 29/08549 . . . . . {Arrangements and networking functions for distributed storage of data in a network, e.g. Storage Area Networks [SAN], Network Attached Storage [NAS]}  
<administratively transferred to [H04L 67/1097](#)>
- D H04L 29/08558 . . . . . {adapted for proprietary or special purpose networking environments, e.g. medical networks, sensor networks, networks in a car (home automation networks H04L 12/2803; total factory control characterised by the network communication G05B 19/4185; games involving transmission A63F 13/30)}  
<administratively transferred to [H04L 67/12](#)>
- D H04L 29/08567 . . . . . {involving the management of devices over a network (device management using web-based technology H04L 29/08099; network management H04L 41/00)}  
<administratively transferred to [H04L 67/125](#)>

- D H04L 29/08576 . . . . {Arrangements for session management (real-time session management for multimedia connections H04L 29/06176; negotiation of communication capabilities H04L 29/06537; packet switching or routing H04L 12/56; connection management in wireless networks, e.g. connection set-up, manipulation or release H04W 76/00; session management for telephonic communication and services H04M 7/00; intertask communications in multiprogramming arrangements G06F 9/54)}
- NOTE  
This group covers session signaling at higher OSI layers to support networked applications.
- <administratively transferred to [H04L 67/14](#)>
- D H04L 29/08585 . . . . {provided for setup of an application session}
- <administratively transferred to [H04L 67/141](#)>
- D H04L 29/08594 . . . . {provided for managing session state for stateless protocols, e.g. HTTP; Signalling a session state; State transitions; Keeping state mechanisms}
- <administratively transferred to [H04L 67/142](#)>
- D H04L 29/08603 . . . . {provided for session termination, e.g., event controlled end of session}
- <administratively transferred to [H04L 67/143](#)>
- D H04L 29/08612 . . . . {provided for avoiding end of session (e.g. keep-alive, heartbeats, resumption message, wake-up for inactive or interrupted session)}
- <administratively transferred to [H04L 67/145](#)>
- D H04L 29/08621 . . . . {markers provided for unambiguous identification of a particular session, e.g. session identifier, session cookie or URL-encoding (verifying the identity or authority of a user or a system, ID-based authentication H04L 9/32; ID-based key exchange H04L 9/08)}
- <administratively transferred to [H04L 67/146](#)>
- D H04L 29/0863 . . . . {provided for signalling methods or particular messages providing extensions to IETF, ITU, ETSI or 3GPP protocols, e.g. additional proprietary messages, standard messages enhanced by additional header fields or standard messages being used for purposes other than originally intended}
- <administratively transferred to [H04L 67/147](#)>
- D H04L 29/08639 . . . . {provided for migration or transfer of sessions}
- <administratively transferred to [H04L 67/148](#)>
- D H04L 29/08648 . . . . {Arrangements for service discovery, e.g. Service Location Protocol [SLP] (address allocation to terminals or nodes connected to a network H04L 29/12009)}
- <administratively transferred to [H04L 67/51](#)>
- D H04L 29/08657 . . . . {in which the network application is adapted for the location of the user terminal (services specially adapted for wireless communication networks making use of the location of users or terminals H04W 4/02)}
- <administratively transferred to [H04L 67/52](#)>
- D H04L 29/08666 . . . . {involving third party service providers (e-commerce G06Q 30/00)}
- <administratively transferred to [H04L 67/53](#)>

- D H04L 29/08675 . . . . {Arrangements for tracking the activity of the application user (monitoring arrangements in general H04L 43/00; e-commerce G06Q 30/00)}  
<administratively transferred to [H04L 67/535](#)>
- D H04L 29/08684 . . . . {Arrangements for presence management (instant messaging H04L 51/04)}  
<administratively transferred to [H04L 67/54](#)>
- D H04L 29/08693 . . . . {Arrangements for push-based network services (broadcast and multicast push services H04L 12/1859)}  
<administratively transferred to [H04L 67/55](#)>
- D H04L 29/08702 . . . . {involving intermediate processing or storage in the network, e.g. proxy (billing provisions H04L 12/14; multimedia network architectures; gateways and control entities H04L 29/0621; multimedia handling; encoding and conversion H04L 29/06476; security provisions H04L 29/06551; addressing provisions H04L 29/12009; network management provisions H04L 41/00; monitoring provisions H04L 43/00)}  
WARNING  
The subgroups H04L 29/08711, H04L 29/08738 - H04L 29/08783, and H04L 29/08801 - H04L 29/08855 are not complete pending reorganisation. See also H04L 29/0872, H04L 29/08729 and H04L 29/08792 )  
<administratively transferred to [H04L 67/56](#)>
- D H04L 29/08711 . . . . {Arrangements for adding application control or application functional data, e.g. adding metadata}  
<administratively transferred to [H04L 67/561](#)>
- D H04L 29/0872 . . . . {Arrangements for brokering (protocols for client-server architecture H04L 29/06047; negotiation of communication capabilities H04L 29/06537; e-commerce G06Q 30/00)}  
WARNING  
This group is no longer used for the classification of new documents as from December 1, 2009. The backlog of this group is being continuously reclassified to the subgroups H04L 29/08711 - H04L 29/08909  
<administratively transferred to [H04L 67/562](#)>
- D H04L 29/08729 . . . . {Arrangements for intermediate storage, e.g. caching (browsing optimisation of access to content G06F 16/9574)}  
WARNING  
This group is no longer used for the classification of new documents as from December 1, 2009. The backlog of this group is being continuously reclassified to the subgroups H04L 29/08711 - H04L 29/08909  
<administratively transferred to [H04L 67/568](#)>
- D H04L 29/08738 . . . . {Arrangements for data redirection (access network selection H04L 12/5691; load balancing H04L 29/08144; context based routing H04L 29/08972; addressing aspects H04L 29/12009; routing path selection H04L 45/00)}  
<administratively transferred to [H04L 67/563](#)>

- D H04L 29/08747 . . . . . {Arrangements for evaluation of intercepted application data aiming at enhancement of application control}  
<administratively transferred to [H04L 67/564](#)>
- D H04L 29/08756 . . . . . {Arrangements for conversion or adaptation of application content or format (H04L 29/08783 takes precedence; protocol conversion H04L 29/06068)}  
<administratively transferred to [H04L 67/565](#)>
- D H04L 29/08765 . . . . . {Arrangements for grouping or aggregating service requests, e.g. for unified processing of service requests}  
<administratively transferred to [H04L 67/566](#)>
- D H04L 29/08774 . . . . . {Arrangements for integrating service provisioning from a plurality of service providers}  
<administratively transferred to [H04L 67/567](#)>
- D H04L 29/08783 . . . . . {Arrangements for reducing the amount or size of exchanged application data (protocols for header compression H04L 29/0604; optimizing visualization of content G06F 16/9577; digital video compression H04N 19/00)}  
<administratively transferred to [H04L 67/5651](#)>
- D H04L 29/08792 . . . . . {Arrangements for data reduction and/or adaptation (protocols for data compression H04L 29/0604; optimising the visualization of content G06F 16/9577; digital video signal compression H04N 19/00)}  
**WARNING**  
This group is no longer used for the classification of new documents as from December 1, 2009. The backlog of this group is being continuously reclassified to the subgroups H04L 29/08711–H04L 29/08909  
<administratively transferred to [H04L 67/565](#) and [H04L 67/5651](#)>
- D H04L 29/08801 . . . . . {Arrangements for storing temporarily data at an intermediate stage, e.g. caching (browsing optimization of access to content by caching G06F 16/9574)}  
<administratively transferred to [H04L 67/568](#)>
- D H04L 29/0881 . . . . . {involving pre-fetching or pre-delivering data}  
<administratively transferred to [H04L 67/5681](#)>
- D H04L 29/08819 . . . . . {involving policies or rules for updating, deleting or replacing the stored data}  
<administratively transferred to [H04L 67/5682](#)>
- D H04L 29/08828 . . . . . {involving storage of data provided by user terminals, i.e. reverse caching}  
<administratively transferred to [H04L 67/5683](#)>
- D H04L 29/08837 . . . . . {Arrangements for providing operational support to end devices when they are unavailable, e.g. being off-line; off-loading of end devices (counter-measures to a fault H04L 29/14)}  
<administratively transferred to [H04L 67/59](#)>
- D H04L 29/08846 . . . . . {Arrangements to globally emulate or virtualize the functionalities of an end device (H04L 29/08837 takes precedence)}  
<administratively transferred to [H04L 67/59](#)>
- D H04L 29/08855 . . . . . {Architectural aspects}  
<administratively transferred to [H04L 67/2866](#)>

D	H04L 29/08864	. . . . . {Implementation details of a single intermediate entity} <administratively transferred to <a href="#">H04L 67/2871</a> >
D	H04L 29/08873	. . . . . {Pairs of interprocessing entities at each side of the network, e.g. split proxies} <administratively transferred to <a href="#">H04L 67/2876</a> >
D	H04L 29/08882	. . . . . {Distributed intermediate devices, i.e. intermediate device interaction with other intermediate devices on the same level} <administratively transferred to <a href="#">H04L 67/288</a> >
D	H04L 29/08891	. . . . . {Hierarchically arranged intermediate devices, e.g. hierarchical caching} <administratively transferred to <a href="#">H04L 67/2885</a> >
D	H04L 29/089	. . . . . {where the intermediate processing is functionally located closer to the data consumer application, e.g. in same machine, in same home or in same subnetwork} <administratively transferred to <a href="#">H04L 67/289</a> >
D	H04L 29/08909	. . . . . {where the intermediate processing is functionally located closer to the data provider application, e.g. reverse proxies; in same machine, in same cluster or subnetwork} <administratively transferred to <a href="#">H04L 67/2895</a> >
D	H04L 29/08918	. . . . . {involving profiles} <administratively transferred to <a href="#">H04L 67/30</a> >
D	H04L 29/08927	. . . . . {Terminal profiles} <administratively transferred to <a href="#">H04L 67/303</a> >
D	H04L 29/08936	. . . . . {User profiles} <administratively transferred to <a href="#">H04L 67/306</a> >
D	H04L 29/08945	. . . . . {Arrangements for scheduling and organising the servicing of requests, e.g. requests for data transmissions involving the analysis and optimisation of the requires network resources (broadcast or conference with schedule organisation H04L 12/1881)} <administratively transferred to <a href="#">H04L 67/60</a> >
D	H04L 29/08954	. . . . . {whereby quality of service and priority requirements are taken into account} <administratively transferred to <a href="#">H04L 67/61</a> >
D	H04L 29/08963	. . . . . {whereby a time schedule is established for servicing the requests} <administratively transferred to <a href="#">H04L 67/62</a> >
D	H04L 29/08972	. . . . . {whereby the routing of a service request to a node providing the service depends on the content and context of the request, e.g. profile, connectivity status} <administratively transferred to <a href="#">H04L 67/63</a> >
D	H04L 29/08981	. . . . . {involving the movement of software and/or configuration parameters, e.g. applets, (programme loading or initiating G06F 9/445)} <administratively transferred to <a href="#">H04L 67/34</a> >
D	H04L 29/0899	. . . . . {involving the display to the application user of network conditions affecting the network application (terminal emulation H04L 29/08126; graphical user interfaces for network management H04L 41/22)} <administratively transferred to <a href="#">H04L 67/75</a> >

- D H04L 29/10
- characterised by an interface, e.g. the interface between the data link level and the physical level
- <administratively transferred to [H04L 69/32](#)>
- D H04L 29/12
- characterised by the data terminal
- <administratively transferred to [H04L 61/00](#)>
- D H04L 29/12009
- {Arrangements for addressing and naming in data networks}
- NOTES
1. H04L 61/00 covers aspects of data networks, excluding pure telephone solutions ( H04M 7/00 ) or addressing within a device, e.g. process, memory etc. ( G06F 13/42 or G06F 12/00 ).
  2. Aspects relating to switching and routing are classified in H04L 12/56.
  3. Main aspects covered by this groups are:
    - address resolution;
    - directories and name-to-address resolution;
    - allocation of addresses;
    - conversion of addresses;
    - logical names and non-standard use of addresses
- WARNING
- This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/00
- <administratively transferred to [H04L 61/00](#)>
- D H04L 29/12018
- • {Mapping of addresses of different types; address resolution}
- WARNING
- This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/10
- <administratively transferred to [H04L 61/10](#)>
- D H04L 29/12028
- • • {across network layers, e.g. resolution of network layer into physical layer addresses, Address Resolution Protocol [ARP]}
- WARNING
- This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/103
- <administratively transferred to [H04L 61/103](#)>
- D H04L 29/12037
- • • {across networks, e.g. mapping telephone numbers to data network addresses}
- WARNING
- This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/106
- <administratively transferred to [H04L 61/106](#)>
- D H04L 29/12047
- • {Directories; name-to-address mapping (telephone directories in user terminals H04M 1/27)}
- WARNING
- This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/15
- <administratively transferred to [H04L 61/45](#)>

- D H04L 29/12056 . . . {involving standard directories and standard directory access protocols}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/1505  
 <administratively transferred to [H04L 61/4505](#)>
- D H04L 29/12066 . . . {using Domain Name System [DNS]}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/1511  
 <administratively transferred to [H04L 61/4511](#)>
- D H04L 29/12075 . . . {using Open Systems Interconnection Directories, i.e. X.500}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/1517  
 <administratively transferred to [H04L 61/4517](#)>
- D H04L 29/12084 . . . {using Lightweight Directory Access Protocol [LDAP]}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/1523  
 <administratively transferred to [H04L 61/4523](#)>
- D H04L 29/12094 . . . {using Voice over IP [VoIP] directories, e.g. Session Initiation Protocol [SIP] registrar or H.323 gatekeeper}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/1529  
 <administratively transferred to [H04L 61/4535](#)>
- D H04L 29/12103 . . . {using an address exchange platform which sets up a session between two nodes, e.g. Rendezvous server (H04L 29/12094 takes precedence for address exchange for Voice over IP)}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/1535  
 <administratively transferred to [H04L 61/4535](#)>
- D H04L 29/12113 . . . {for service discovery (network applications for service discovery H04L 29/08648)}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/1541  
 <administratively transferred to [H04L 61/4541](#)>



- D H04L 29/12122 . . . {for personal communications, i.e. using a personal identifier}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/1547  
 <administratively transferred to [H04L 61/4547](#)>
- D H04L 29/12132 . . . {Mechanisms for table lookup, also between directories; Directory data structures; Synchronization of directories (information retrieval in file systems G06F 16/10; information retrieval in structured data stores G06F 16/20)}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/1552  
 <administratively transferred to [H04L 61/4552](#)>
- D H04L 29/12141 . . . {Object oriented directories, e.g. CORBA name server}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/1558  
 <administratively transferred to [H04L 61/4553](#)>
- D H04L 29/1215 . . . {Directories for electronic mail or instant messaging (message switching systems per se H04L 51/00)}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/1564  
 <administratively transferred to [H04L 61/4555](#)>
- D H04L 29/1216 . . . {Directories for hybrid networks, e.g. including also telephone numbers}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/157  
 <administratively transferred to [H04L 61/4557](#)>
- D H04L 29/12169 . . . {Metadirectories, i.e. all encompassing global directory which interfaces to various underlying directories}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/1576  
 <administratively transferred to [H04L 61/4552](#)>
- D H04L 29/12179 . . . {containing identifiers of data entities on a computer, e.g. file names}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/1582  
 <administratively transferred to [H04L 61/457](#)>

- D H04L 29/12188 . . . {containing mobile subscriber information, e.g. Home Subscriber Server [HSS]}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/1588
- <administratively transferred to [H04L 61/4588](#)>
- D H04L 29/12198 . . . {Address books, i.e. directories containing contact information about correspondents, e.g. on a user device (directories providing the best way to reach a correspondent H04L 29/12122)}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/1594
- <administratively transferred to [H04L 61/4594](#)>
- D H04L 29/12207 . . . {Address allocation}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/20
- <administratively transferred to [H04L 61/50](#)>
- D H04L 29/12216 . . . {Internet Protocol [IP] addresses}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/2007
- <administratively transferred to [H04L 61/5007](#)>
- D H04L 29/12226 . . . {using the Dynamic Host Configuration Protocol [DHCP] or variants}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/2015
- <administratively transferred to [H04L 61/5014](#)>
- D H04L 29/12235 . . . {using the Bootstrap Protocol [BOOTP] or variants}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/2023
- <administratively transferred to [H04L 61/5014](#)>
- D H04L 29/12245 . . . {using an authentication, authorization and accounting [AAA] protocol, e.g. remote authentication dial-in user service [RADIUS] or diameter (authentication mechanisms H04L 29/06755)}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/203
- <administratively transferred to [H04L 61/503](#)>

- D H04L 29/12254 . . . {for local use, e.g. on Local Area Networks [LAN] or on Universal Serial Bus [USB] networks (bus addresses inside a computer G06F 13/42)}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/2038
- <administratively transferred to [H04L 61/5038](#)>
- D H04L 29/12264 . . . {involving the solving of address allocation conflicts; involving testing of addresses}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/2046
- <administratively transferred to [H04L 61/5046](#)>
- D H04L 29/12273 . . . {involving timing and renewal aspects}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/2053
- <administratively transferred to [H04L 61/5053](#)>
- D H04L 29/12283 . . . {involving aspects of pools of addresses, e.g. assignment of different pools of addresses to different Dynamic Host Configuration Protocol [DHCP] servers}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/2061
- <administratively transferred to [H04L 61/5061](#)>
- D H04L 29/12292 . . . {for group-, multicast- and broadcast-communication}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/2069
- <administratively transferred to [H04L 61/5069](#)>
- D H04L 29/12301 . . . {involving update or notification mechanisms, e.g. update of a Domain Name Server with Dynamic Host Configuration Protocol [DHCP] assigned addresses}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/2076
- <administratively transferred to [H04L 61/5076](#)>

- D H04L 29/12311 . . . {involving portability aspects (mobility data transfer in wireless communication networks H04W 8/26; mobile IP, network layer protocols in wireless communication networks H04W 80/04)}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/2084
- <administratively transferred to [H04L 61/5084](#)>
- D H04L 29/1232 . . . {by self assignment, e.g. pick address randomly and test if already in use}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/2092
- <administratively transferred to [H04L 61/5092](#)>
- D H04L 29/1233 . . . {Mapping of addresses of the same type; Address translation}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/25
- <administratively transferred to [H04L 61/25](#)>
- D H04L 29/12339 . . . {Internet Protocol [IP] address translation}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/2503
- <administratively transferred to [H04L 61/2503](#)>
- D H04L 29/12349 . . . {Translating between special types of IP addresses}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/2507
- <administratively transferred to [H04L 61/2503](#)>
- D H04L 29/12358 . . . {between different IP versions}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/251
- <administratively transferred to [H04L 61/251](#)>
- D H04L 29/12367 . . . {between local and global IP addresses}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/2514
- <administratively transferred to [H04L 61/2514](#)>

- D H04L 29/12377 . . . . . {involving port numbers}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/2517  
 <administratively transferred to [H04L 61/2517](#)>
- D H04L 29/12386 . . . . . {Special translation architecture, different from a single Network  
 Address Translation [NAT] server}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/2521  
 <administratively transferred to [H04L 61/2521](#)>
- D H04L 29/12396 . . . . . {Translation at a client}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/2525  
 <administratively transferred to [H04L 61/2525](#)>
- D H04L 29/12405 . . . . . {Translation at a proxy}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/2528  
 <administratively transferred to [H04L 61/2528](#)>
- D H04L 29/12415 . . . . . {Clique of NAT servers}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/2532  
 <administratively transferred to [H04L 61/2532](#)>
- D H04L 29/12424 . . . . . {Multiple local networks, e.g. resolving potential IP address conflicts}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/2535  
 <administratively transferred to [H04L 61/2535](#)>
- D H04L 29/12433 . . . . . {for hiding addresses or keeping them anonymous}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/2539  
 <administratively transferred to [H04L 61/2539](#)>

- D H04L 29/12443 . . . . {involving dual-stack hosts}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/2542  
 <administratively transferred to [H04L 61/2542](#)>
- D H04L 29/12452 . . . . {Mechanisms for avoiding unnecessary translation}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/2546  
 <administratively transferred to [H04L 61/2546](#)>
- D H04L 29/12462 . . . . {Map-table maintenance and indexing}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/255  
 <administratively transferred to [H04L 61/255](#)>
- D H04L 29/12471 . . . . . {Binding renewal aspects; Keep-alive messages}  
 <administratively transferred to [H04L 61/2553](#)>
- D H04L 29/12481 . . . . {Translation policies and rules}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/2557  
 <administratively transferred to [H04L 61/2557](#)>
- D H04L 29/1249 . . . . {NAT-Traversal}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/256  
 <administratively transferred to [H04L 61/256](#)>
- D H04L 29/125 . . . . . {for a higher-layer protocol, e.g. for SIP}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/2564  
 <administratively transferred to [H04L 61/2564](#)>
- D H04L 29/12509 . . . . . {for reachability, e.g. inquiring the address of a correspondent behind a NAT server}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/2567  
 <administratively transferred to [H04L 61/2567](#)>

- D H04L 29/12518 . . . . . {for identification, e.g. for authentication, for billing}  
WARNING  
This subgroup is no longer used for classification as from 01.05.2012.  
The backlog of this subgroup is being continuously reclassified to  
H04L 61/2571  
<administratively transferred to [H04L 61/2571](#)>
- D H04L 29/12528 . . . . . {using address mapping retrieval, e.g. Simple Traversal of UDP  
through NATs [STUN]}  
WARNING  
This subgroup is no longer used for classification as from 01.05.2012.  
The backlog of this subgroup is being continuously reclassified to  
H04L 61/2575  
<administratively transferred to [H04L 61/2575](#)>
- D H04L 29/12537 . . . . . {transparent to the NAT server}  
WARNING  
This subgroup is no longer used for classification as from 01.05.2012.  
The backlog of this subgroup is being continuously reclassified to  
H04L 61/2578  
<administratively transferred to [H04L 61/2578](#)>
- D H04L 29/12547 . . . . . {through control of the NAT server, e.g. using Universal Plug and Play  
(UPnP)}  
WARNING  
This subgroup is no longer used for classification as from 01.05.2012.  
The backlog of this subgroup is being continuously reclassified to  
H04L 61/2582  
<administratively transferred to [H04L 61/2582](#)>
- D H04L 29/12556 . . . . . {through Application Level Gateway [ALG]}  
WARNING  
This subgroup is no longer used for classification as from 01.05.2012.  
The backlog of this subgroup is being continuously reclassified to  
H04L 61/2585  
<administratively transferred to [H04L 61/2585](#)>
- D H04L 29/12566 . . . . . {over a relay server, e.g. traversal using relay NAT [TURN]}  
WARNING  
This subgroup is no longer used for classification as from 01.05.2012.  
The backlog of this subgroup is being continuously reclassified to  
H04L 61/2589  
<administratively transferred to [H04L 61/2589](#)>
- D H04L 29/12575 . . . . . {involving tunneling or encapsulation (protecting information from  
access by third parties H04L 29/06632)}  
WARNING  
This subgroup is no longer used for classification as from 01.05.2012.  
The backlog of this subgroup is being continuously reclassified to  
H04L 61/2592  
<administratively transferred to [H04L 61/2592](#)>



- D H04L 29/12584 . . . {Non-IP address translation}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/2596
- <administratively transferred to [H04L 61/2596](#)>
- D H04L 29/12594 . . . {Arrangements for managing names, e.g. use of aliases or nicknames (retrieval from the Internet by using information identifiers, e.g. URLs G06F 16/955; name-to-address mapping H04L 29/12047)}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/30
- <administratively transferred to [H04L 61/30](#)>
- D H04L 29/12603 . . . {Mechanisms for avoiding name conflicts}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/3005
- <administratively transferred to [H04L 61/3005](#)>
- D H04L 29/12613 . . . {Name conversion}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/301
- <administratively transferred to [H04L 61/301](#)>
- D H04L 29/12622 . . . {Name registration, generation or assignment}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/3015
- <administratively transferred to [H04L 61/3015](#)>
- D H04L 29/12632 . . . {Administrative registration, e.g. for domain names at internet corporation for assigned names and numbers [ICANN] (data processing for administration G06Q 10/00)}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/302
- <administratively transferred to [H04L 61/302](#)>
- D H04L 29/12641 . . . {Domain name generation or assignment}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/3025
- <administratively transferred to [H04L 61/3025](#)>

- D H04L 29/1265 . . . . {Name structure}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/303  
 <administratively transferred to [H04L 2101/30](#) ADD>
- D H04L 29/1266 . . . . {containing non-Latin characters, e.g. Chinese domain names}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/3035  
 <administratively transferred to [H04L 2101/32](#) ADD>
- D H04L 29/12669 . . . . {containing protocol addresses or telephone numbers (address type  
 involved H04L 29/1283)}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/304  
 <administratively transferred to [H04L 2101/33](#) ADD>
- D H04L 29/12679 . . . . {containing wildcard characters}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/3045  
 <administratively transferred to [H04L 2101/345](#) ADD>
- D H04L 29/12688 . . . . {containing special prefixes}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/305  
 <administratively transferred to [H04L 2101/35](#) ADD>
- D H04L 29/12698 . . . . {containing special suffixes}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/3055  
 <administratively transferred to [H04L 2101/355](#) ADD>
- D H04L 29/12707 . . . . {Name types}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/306  
 <administratively transferred to [H04L 2101/30](#) ADD>

- D H04L 29/12716 . . . . {Application layer names, e.g. buddy name, unstructured name chosen by a user or home appliance name}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012.  
The backlog of this subgroup is being continuously reclassified to H04L 61/3065
- <administratively transferred to [H04L 2101/365](#) ADD>
- D H04L 29/12726 . . . . {E-mail addresses (message switching systems H04L 51/00)}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012.  
The backlog of this subgroup is being continuously reclassified to H04L 61/307
- <administratively transferred to [H04L 2101/37](#) ADD>
- D H04L 29/12735 . . . . {Access point names [APN], i.e. name of a gateway GPRS support node [GGSN] connecting a mobile user to a packet data network [PDN]}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012.  
The backlog of this subgroup is being continuously reclassified to H04L 61/3075
- <administratively transferred to [H04L 2101/375](#) ADD>
- D H04L 29/12745 . . . . {Telephone URI}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012.  
The backlog of this subgroup is being continuously reclassified to H04L 61/308
- <administratively transferred to [H04L 2101/38](#) ADD>
- D H04L 29/12754 . . . . {Session initiation protocol [SIP] URI}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012.  
The backlog of this subgroup is being continuously reclassified to H04L 61/3085
- <administratively transferred to [H04L 2101/385](#) ADD>
- D H04L 29/12764 . . . . {Globally routable user-agent URI [GRUU] for SIP}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012.  
The backlog of this subgroup is being continuously reclassified to H04L 61/309
- <administratively transferred to [H04L 2101/39](#) ADD>
- D H04L 29/12773 . . . . {IP multimedia private identity [IMPI] or IP multimedia public identity [IMPU]}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012.  
The backlog of this subgroup is being continuously reclassified to H04L 61/3095
- <administratively transferred to [H04L 2101/395](#) ADD>

- D H04L 29/12783      • • • {involving non-standard use of addresses for implementing network functionalities, e.g. coding subscription information within the address; functional addressing, i.e. assigning an address to a function}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/35
- <administratively transferred to [H04L 61/35](#)>
- D H04L 29/12792      • • • {Details}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/60
- <administratively transferred to [H04L 2101/60](#) ADD>
- D H04L 29/12801      • • • • {about the structures and formats of addresses}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/6004
- <administratively transferred to [H04L 2101/604](#) ADD>
- D H04L 29/12811      • • • • {Caching of addresses}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/6009
- <administratively transferred to [H04L 61/58](#)>
- D H04L 29/1282      • • • • {Proxying of addresses}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/6013
- <administratively transferred to [H04L 61/59](#)>
- D H04L 29/1283      • • • • {about address types}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/6018
- <administratively transferred to [H04L 2101/618](#) ADD>
- D H04L 29/12839      • • • • • {Layer 2 addresses, e.g. Medium Access Control [MAC] addresses}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/6022
- <administratively transferred to [H04L 2101/622](#) ADD>

- D H04L 29/12849 . . . . {Control Area Network [CAN] identifiers (vehicle networks B60R 16/0315)}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012.  
The backlog of this subgroup is being continuously reclassified to H04L 61/6027
- <administratively transferred to [H04L 2101/627](#) ADD>
- D H04L 29/12858 . . . . {Small Computer System Interface [SCSI] addresses}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012.  
The backlog of this subgroup is being continuously reclassified to H04L 61/6031
- <administratively transferred to [H04L 2101/631](#) ADD>
- D H04L 29/12867 . . . . {IEEE1394 (FireWire) identification numbers}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012.  
The backlog of this subgroup is being continuously reclassified to H04L 61/6036
- <administratively transferred to [H04L 2101/636](#) ADD>
- D H04L 29/12877 . . . . {Asynchronous Transfer Mode [ATM] addresses}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012.  
The backlog of this subgroup is being continuously reclassified to H04L 61/604
- <administratively transferred to [H04L 2101/64](#) ADD>
- D H04L 29/12886 . . . . {Fibre channel identifiers}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012.  
The backlog of this subgroup is being continuously reclassified to H04L 61/6045
- <administratively transferred to [H04L 2101/645](#) ADD>
- D H04L 29/12896 . . . . {Telephone numbers}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012.  
The backlog of this subgroup is being continuously reclassified to H04L 61/605
- <administratively transferred to [H04L 2101/65](#) ADD>
- D H04L 29/12905 . . . . {International Mobile Subscriber Identity [IMSI] numbers}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012.  
The backlog of this subgroup is being continuously reclassified to H04L 61/6054
- <administratively transferred to [H04L 2101/654](#) ADD>

- D H04L 29/12915 . . . . {Internet Protocol version 6 (IPv6) addresses}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/6059  
 <administratively transferred to [H04L 2101/659](#) ADD>
- D H04L 29/12924 . . . . {Transport layer addresses, e.g. aspects of Transmission Control Protocol [TCP] or User Datagram Protocol [UDP] ports}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/6063  
 <administratively transferred to [H04L 2101/663](#) ADD>
- D H04L 29/12933 . . . . {IP addresses subnets}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/6068  
 <administratively transferred to [H04L 2101/668](#) ADD>
- D H04L 29/12943 . . . . {Short addresses}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/6072  
 <administratively transferred to [H04L 2101/672](#) ADD>
- D H04L 29/12952 . . . . {Multiple interfaces, e.g. multihomed nodes}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/6077  
 <administratively transferred to [H04L 2101/677](#) ADD>
- D H04L 29/12962 . . . . {involving addresses for wireless personal area networks and wireless sensor networks, e.g. Zigbee addresses}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/6081  
 <administratively transferred to [H04L 2101/681](#) ADD>
- D H04L 29/12971 . . . . {involving dual-stack hosts, e.g. in IPv4/IPv6 networks}  
WARNING  
 This subgroup is no longer used for classification as from 01.05.2012.  
 The backlog of this subgroup is being continuously reclassified to  
 H04L 61/6086  
 <administratively transferred to [H04L 2101/686](#) ADD>

- D H04L 29/12981
- • • {involving geographic information, e.g. room number}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/609
- <administratively transferred to [H04L 2101/69](#) ADD>
- D H04L 29/1299
- • • {involving masks or ranges of addresses}
- WARNING  
This subgroup is no longer used for classification as from 01.05.2012. The backlog of this subgroup is being continuously reclassified to H04L 61/6095
- <administratively transferred to [H04L 2101/695](#) ADD>
- D H04L 29/14
- Counter-measures to a fault
- <administratively transferred to [H04L 69/40](#)>
- C H04L 41/00
- {Arrangements for maintenance or administration or management of packet switching networks}, administration or management of data switching networks, e.g. of packet switching networks**
- WARNING  
*Group H04L 41/00 is impacted by reclassification into groups H04L 41/34, H04L 41/342, H04L 41/344 and H04L 41/40. All groups listed in this Warning should be considered in order to perform a complete search.*
- M H04L 41/02
- ~~{involving integration or standardization}~~ *Standardisation; Integration*
- D H04L 41/0206
- {using standardized network management architectures, e.g. telecommunication management network [TMN] or unified network management architecture [UNMA]}
- <administratively transferred to [H04L 41/052](#)>
- M H04L 41/0213
- ~~{using standardized}~~ *Standardised* network management protocols, e.g. simple network management protocol [SNMP] ~~or common management interface protocol [CMIP]}~~
- M H04L 41/022
- ~~{Multivendor or multistandard integration}~~ *Multivendor or multi-standard integration*
- M H04L 41/0226
- ~~{Mapping or translation of multiple network management protocols}~~ *Mapping or translating multiple network management protocols*
- M H04L 41/0233
- ~~{using object oriented techniques}~~ *Object-oriented techniques, for representation of network management data*, e.g. common object request broker architecture [CORBA] ~~for representation of network management data}~~
- M H04L 41/024
- {using relational databases for representation of network management data, e.g. managing via structured query language [SQL]} ~~(information retrieval in structured data stores G06F 16/20)}~~



- M H04L 41/0246
- ~~{exchanging~~*Exchanging* or transporting network management information using Internet, e.g. aspects relating to embedding network management web servers in network elements, web-service for network management purposes, aspects related to Internet applications or services or web-based protocols, simple object access protocol [SOAP] ~~the Internet~~(web-based network application protocols H04L 67/02; web-based network application protocols for remote control of end-devices or monitoring of remote application data H04L 67/025; proprietary application protocols for remote control of end-devices in special networking environments H04L 67/125; retrieval from the Internet G06F 16/95)); *Embedding network management web servers in network elements; Web-services-based protocols*
- M H04L 41/0253
- ~~{involving a browser~~*using browsers* or web-pages for accessing management information ~~(graphical user interface for network management H04L 41/22)}~~
- M H04L 41/026
- ~~{involving~~*using* e-messaging for transporting management information, e.g. email, instant messaging or chat}
- M H04L 41/0266
- ~~{involving management internet~~*using* meta-data, objects or commands, ~~e.g. by using mark-up language} for formatting management information, e.g. using eXtensible markup language [XML]~~
- M H04L 41/0273
- ~~{involving the use of~~*using* web services for network management, e.g. SOAP} *simple object access protocol [SOAP]*
- M H04L 41/028
- ~~{for~~ ~~synchronization~~*synchronisation* between service call and response}
- M H04L 41/0286
- ~~{for search or classification or discovery of web services providing management functionalities (network applications and protocols for service discovery H04L 67/16)}~~
- M H04L 41/0293
- ~~{for accessing web services by means of a binding identification of the management service or element (aspects of naming and addressing in general H04L 61/00)}~~
- C H04L 41/04
- ~~{Architectural aspects of network management arrangements}~~*Network management architectures or arrangements*
- WARNING**  
Group H04L 41/04 is impacted by reclassification into groups H04L 41/045, H04L 41/052, H04L 41/34, H04L 41/342 and H04L 41/344. All groups listed in this Warning should be considered in order to perform a complete search.
- M H04L 41/042
- ~~{Arrangements involving multiple distributed management centers cooperatively managing the network}~~*comprising distributed management centres cooperatively managing the network*
- M H04L 41/044
- ~~{Arrangements involving a hierarchical management structure}~~*comprising hierarchical management structures*
- N H04L 41/045
- *comprising client-server management architectures*
- WARNING**  
Group H04L 41/045 is incomplete pending reclassification of documents from group H04L 41/04. Groups H04L 41/04 and H04L 41/045 should be considered in order to perform a complete search.
- M H04L 41/046
- ~~{Aspects of network management agents}~~*comprising network management agents or mobile agents therefor*
- U H04L 41/048
- ~~{mobile agents}~~

N	H04L 41/052	<ul style="list-style-type: none"> <li>• using standardised network management architectures, e.g. telecommunication management network [TMN] or unified network management architecture [UNMA]</li> </ul> <p><u>WARNING</u> Group <a href="#">H04L 41/052</a> is incomplete pending reclassification of documents from group <a href="#">H04L 41/04</a>. Groups <a href="#">H04L 41/04</a> and <a href="#">H04L 41/052</a> should be considered in order to perform a complete search.</p>
M	H04L 41/06	<ul style="list-style-type: none"> <li>• <del>{involving management of faults or events or alarms}</del> <i>Management of faults, events, alarms or notifications</i></li> </ul>
M	H04L 41/0604	<ul style="list-style-type: none"> <li>• <del>{Alarm or event filtering, e.g. for reduction of information}</del> <i>using filtering, e.g. reduction of information by using priority, element types, position or time</i></li> </ul>
M	H04L 41/0631	<ul style="list-style-type: none"> <li>• <del>{Alarm or event or notifications correlation}</del> <i>using root cause analysis; -Root cause analysis}</i> <i>using analysis of correlation between notifications, alarms or events based on decision criteria, e.g. hierarchy, tree or time analysis</i></li> </ul>
M	H04L 41/0654	<ul style="list-style-type: none"> <li>• <del>{Network}</del> <i>using network</i> fault recovery (<del>backup route selection H04L 45/22; route fault recovery H04L 45/28; techniques for recovering from a failure of a protocol instance or entity H04L 69/40</del> <i>ring fault isolation or reconfiguration in loop networks without recovery actions by a network management system H04L 12/437</i>)</li> </ul>
M	H04L 41/0659	<ul style="list-style-type: none"> <li>• <del>{by isolating the faulty entity}</del> <i>by isolating or reconfiguring faulty entities</i></li> </ul>
M	H04L 41/0663	<ul style="list-style-type: none"> <li>• <del>{involving offline failover planning}</del> <i>Performing the actions predefined by failover planning, e.g. switching to standby network elements</i></li> </ul>
M	H04L 41/0668	<ul style="list-style-type: none"> <li>• <del>{selecting new candidate element}</del> <i>by dynamic selection of recovery network elements, e.g. replacement by the most appropriate element after failure</i></li> </ul>
M	H04L 41/0677	<ul style="list-style-type: none"> <li>• <del>{localization of fault position}</del> <i>Localisation of faults</i></li> </ul>
M	H04L 41/0681	<ul style="list-style-type: none"> <li>• <del>{involving configuration of triggering conditions}</del> <i>Configuration of triggering conditions</i></li> </ul>
M	H04L 41/0686	<ul style="list-style-type: none"> <li>• <del>{involving notification enrichment}</del> <i>Additional information in the notification, e.g. enhancement of specific meta-data</i></li> </ul>
M	H04L 41/069	<ul style="list-style-type: none"> <li>• <del>{involving storage or log of alarms or notifications or post-processing thereof}</del> <i>using logs of notifications; Post-processing of notifications</i></li> </ul>
M	H04L 41/0695	<ul style="list-style-type: none"> <li>• <del>{involving fault of the network management or monitoring system}</del> <i>the faulty arrangement being the maintenance, administration or management system</i></li> </ul>
C	H04L 41/08	<ul style="list-style-type: none"> <li>• <del>{Configuration management of network}</del> <i>networks</i> or network elements (<del>proprietary application protocols for remote control of end-devices in special networking environments H04L 67/125; automatic configuration specially adapted for wireless networks H04W 24/02</del> <i>address allocation H04L 61/50</i>)</li> </ul> <p><u>WARNING</u> Group <a href="#">H04L 41/08</a> is impacted by reclassification into group <a href="#">H04L 41/0895</a>. Groups <a href="#">H04L 41/08</a> and <a href="#">H04L 41/0895</a> should be considered in order to perform a complete search.</p>
M	H04L 41/0803	<ul style="list-style-type: none"> <li>• <del>{Configuration setting of network or network elements}</del> <i>Configuration setting</i> (<del>communication protocols supporting networked applications involving the movement of software or networked applications configuration parameters H04L 67/34</del>)</li> </ul>
M	H04L 41/0806	<ul style="list-style-type: none"> <li>• <del>{for initial configuration or provisioning}</del> <i>for initial configuration or provisioning, e.g. plug-and-play</i></li> </ul>
M	H04L 41/0813	<ul style="list-style-type: none"> <li>• <del>{Changing of configuration}</del> <i>characterised by the conditions triggering a change of settings</i></li> </ul>

- M H04L 41/0816 . . . ~~{due to the condition being an~~ adaptation, e.g. in response to network events}
- M H04L 41/082 . . . ~~{due to updating or upgrading of network functionality, e.g. firmware the condition being updates or upgrades of network functionality (topology update or discovery for routing purposes H04L 45/02)}~~
- M H04L 41/0823 . . . ~~{Configuration optimization}~~ characterised by the purposes of a change of settings, e.g. optimising configuration for enhancing reliability (for optimising operational conditions of wireless networks H04W 24/02)
- M H04L 41/0826 . . . ~~{for network cost reduction}~~ for reduction of network costs (H04L 41/0833 takes precedence)
- M H04L 41/083 . . . ~~{for network speed increase}~~ for increasing network speed
- M H04L 41/0833 . . . ~~{to reduce network energy consumption}~~ for reduction of network energy consumption
- M H04L 41/084 . . . ~~{Configuration by copying}~~ Configuration by using pre-existing information, e.g. using templates or copying from other elements
- M H04L 41/085 . . . ~~{Keeping track of network configuration}~~ Retrieval of network configuration; Tracking network configuration history
- M H04L 41/0853 . . . ~~{by actively collecting or retrieving configuration information}~~ configuration information or by backing up configuration information
- M H04L 41/0856 . . . ~~{by archiving or backing up}~~ backing up or archiving configuration information
- M H04L 41/0859 . . . ~~{by keeping history of different configuration generations or versions}~~ by rolling back to previous configuration versions
- M H04L 41/0863 . . . ~~{by rolling back to previous configuration versions}~~
- M H04L 41/0866 . . . ~~{Checking configuration}~~ Checking the configuration
- M H04L 41/0869 . . . ~~{by validating}~~ Validating the configuration within one network element}
- M H04L 41/0873 . . . ~~{by checking configuration conflicts with other network elements}~~ Checking configuration conflicts between network elements
- C H04L 41/0893 . . . ~~{Assignment of logical groupings groups to network elements; Policy-based network management or configuration}~~

**WARNING**

Group H04L 41/0893 is impacted by reclassification into group H04L 41/0894.

Groups H04L 41/0893 and H04L 41/0894 should be considered in order to perform a complete search.

- N H04L 41/0894 . . . Policy-based network configuration management  
**WARNING**  
Group H04L 41/0894 is incomplete pending reclassification of documents from group H04L 41/0893.  
Groups H04L 41/0893 and H04L 41/0894 should be considered in order to perform a complete search.
- N H04L 41/0895 . . . Configuration of virtualised networks or elements, e.g. virtualised network function or OpenFlow elements  
**WARNING**  
Group H04L 41/0895 is incomplete pending reclassification of documents from group H04L 41/08.  
Groups H04L 41/08 and H04L 41/0895 should be considered in order to perform a complete search.

- C H04L 41/0896
- ~~{Bandwidth or capacity management, i.e. automatically increasing or decreasing capacities, e.g. bandwidth-on-demand (reallocation of resources, renegotiation of resources, e.g. in-call H04L 47/76 flow or congestion control using dynamic resource allocation, e.g. in-call renegotiation, H04L 47/76)}~~
- WARNING  
Group [H04L 41/0896](#) is impacted by reclassification into group [H04L 41/0897](#).  
Groups [H04L 41/0896](#) and [H04L 41/0897](#) should be considered in order to perform a complete search.
- N H04L 41/0897
- • by horizontal or vertical scaling of resources, or by migrating entities, e.g. virtual resources or entities
- WARNING  
Group [H04L 41/0897](#) is incomplete pending reclassification of documents from group [H04L 41/0896](#).  
Groups [H04L 41/0896](#) and [H04L 41/0897](#) should be considered in order to perform a complete search.
- C H04L 41/12
- ~~{network topology discovery or management~~ *Discovery or management of network topologies* ~~(topology discovery for routing H04L 45/02)}~~
- WARNING  
Group [H04L 41/12](#) is impacted by reclassification into groups [H04L 41/122](#), [H04L 41/34](#), [H04L 41/342](#), [H04L 41/344](#) and [H04L 41/40](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- N H04L 41/122
- • of virtualised topologies, e.g. software-defined networks [SDN] or network function virtualisation [NFV]
- WARNING  
Group [H04L 41/122](#) is incomplete pending reclassification of documents from group [H04L 41/12](#).  
Groups [H04L 41/12](#) and [H04L 41/122](#) should be considered in order to perform a complete search.
- C H04L 41/14
- ~~{involving network analysis or design, e.g. simulation, network model or planning~~ *Network analysis or design* ~~(network monitoring H04L 43/00)}~~
- WARNING  
Group [H04L 41/14](#) is impacted by reclassification into group [H04L 41/149](#).  
Groups [H04L 41/14](#) and [H04L 41/149](#) should be considered in order to perform a complete search.
- M H04L 41/142
- • ~~{using statistical or mathematical methods}~~
- C H04L 41/147
- • ~~{for prediction of network behaviour}~~ *for predicting network behaviour*
- WARNING  
Group [H04L 41/147](#) is impacted by reclassification into group [H04L 41/149](#).  
Groups [H04L 41/147](#) and [H04L 41/149](#) should be considered in order to perform a complete search.
- N H04L 41/149
- • for prediction of maintenance
- WARNING  
Group [H04L 41/149](#) is incomplete pending reclassification of documents from groups [H04L 41/14](#) and [H04L 41/147](#).  
Groups [H04L 41/14](#), [H04L 41/147](#) and [H04L 41/149](#) should be considered in order to perform a complete search.

- |  |              |   |
|--|--------------|---|
| M  | H04L 41/16   | • <del>{Network management using artificial intelligence}</del> <i>using machine learning or artificial intelligence</i>  |
| M  | H04L 41/18   | • <del>{Arrangements involving CNM [Customer Network Management]}</del> <i>Delegation of network management function, e.g. customer network management [CNM]</i>  |
| M  | H04L 41/22   | • <del>{using GUI [Graphical User Interface]}</del> <i>comprising specially adapted graphical user interfaces [GUI]</i>   |
| M  | H04L 41/28   | • <del>{Security in network management, e.g. restricting network management access}</del> <i>Restricting access to network management systems or functions, e.g. using authorisation function to access network configuration</i> (network architectures or network communication protocols for network security H04L 63/00; cryptographic mechanisms or cryptographic arrangements for secret or secure communication H04L 9/00; network architectures or network communication protocols for wireless network security H04W 12/00; security arrangements for protecting computers or computer systems against unauthorised activity G06F 21/00) |
| U  | H04L 41/30   | • {Decision processes by autonomous network management units using voting and bidding}  |
| U  | H04L 41/32   | • {Specific management aspects for broadband networks}  |
| N  | H04L 41/34   | • <i>Signalling channels for network management communication</i>   |
| <p><u>WARNING</u><br/> Groups <a href="#">H04L 41/34</a>, <a href="#">H04L 41/342</a> and <a href="#">H04L 41/344</a> are incomplete pending reclassification of documents from groups <a href="#">H04L 41/00</a>, <a href="#">H04L 41/04</a> and <a href="#">H04L 41/12</a>.<br/> All groups listed in this Warning should be considered in order to perform a complete search.</p> |              |   |
| N  | H04L 41/342  | • • <i>between virtual entities, e.g. orchestrators, SDN or NFV entities</i>  |
| N  | H04L 41/344  | • • <i>Out-of-band transfers</i>  |
| N  | H04L 41/40   | • <i>using virtualisation of network functions or resources, e.g. SDN or NFV entities</i>   |
| <p><u>WARNING</u><br/> Group <a href="#">H04L 41/40</a> is incomplete pending reclassification of documents from groups <a href="#">H04L 41/00</a> and <a href="#">H04L 41/12</a>.<br/> Groups <a href="#">H04L 41/00</a>, <a href="#">H04L 41/12</a> and <a href="#">H04L 41/40</a> should be considered in order to perform a complete search.</p>                                 |              |   |
| M  | H04L 41/50   | • <del>{Network service management, i.e. ensuring proper service fulfillment according to an agreement or contract between two parties, e.g. between an IT-provider and a customer}</del> <i>e.g. ensuring proper service fulfillment according to agreements</i>   |
| M  | H04L 41/5003 | • • <i>Managing SLA; {Managing service level agreement [SLA] or interaction between SLA and quality of service [QoS]}</i> <i>Interaction between SLA and QoS</i>  |
| M  | H04L 41/5006 | • • • <del>{Defining}</del> <i>Creating</i> or negotiating SLA contracts, guarantees or penalties <del>(SLA negotiation in wireless networks H04W 28/24)}</del>   |
| M  | H04L 41/5009 | • • • <del>{Determining service level performance, e.g. measuring SLA quality parameters, determining contract or guarantee violations,}</del> <i>Determining service level performance parameters or violations of service level contracts, e.g. violations of agreed</i> response time or mean time between failure <del>failures [MTBF]-(monitoring performance metrics on a simple network level H04L 43/08)}</del>   |
| U  | H04L 41/5012 | • • • • {determining service availability, e.g. which services are available at a certain point in time}  |
| U  | H04L 41/5016 | • • • • {based on statistics of service availability, e.g. in percentage or over a given time}  |



M	H04L 41/5019	<ul style="list-style-type: none"> <li>• • <del>{Ensuring SLA</del> <i>Ensuring fulfilment of SLA</i> (flow or congestion control at network level H04L 47/10)}</li> </ul>
M	H04L 41/5022	<ul style="list-style-type: none"> <li>• • • <del>{</del> (by giving priorities, e.g. assigning classes of service)</li> </ul>
M	H04L 41/5025	<ul style="list-style-type: none"> <li>• • • <del>{</del> (by proactively reacting to service quality change, e.g. <del>degradation or upgrade, by reconfiguration</del> <i>by reconfiguration after service quality degradation or upgrade</i> (mere recovery after a network faults H04L 41/0654)}</li> </ul>
M	H04L 41/5029	<ul style="list-style-type: none"> <li>• • {Service quality level-based billing, e.g. dependent on measured service level customer is charged more or less (<del>general charging or billing for transport of data packets</del> H04L 12/14)}</li> </ul>
D	H04L 41/5035	<ul style="list-style-type: none"> <li>• • {<del>Measuring contribution of individual network components to actual service level</del> (alarm or event correlation H04L 41/0631)}</li> <li>&lt;administratively transferred to <a href="#">H04L 43/091</a>&gt;</li> </ul>
D	H04L 41/5038	<ul style="list-style-type: none"> <li>• • {Testing of service level quality, e.g. simulating service usage}</li> <li>&lt;administratively transferred to <a href="#">H04L 43/55</a>&gt;</li> </ul>
M	H04L 41/5041	<ul style="list-style-type: none"> <li>• • <del>{Service implementation}</del> <i>characterised by the time relationship between creation and deployment of a service</i></li> </ul>
M	H04L 41/5051	<ul style="list-style-type: none"> <li>• • • <del>{Service on demand, i.e. services are defined and provided in real time as requested by the user}</del> <i>e.g. definition and deployment of services in real time</i></li> </ul>
M	H04L 41/5054	<ul style="list-style-type: none"> <li>• • • <del>{Automatic provisioning of the service}</del> <i>Automatic deployment of services</i> triggered by the service manager, e.g. <del>concrete</del> service implementation by automatic configuration of network components (<del>for initializing configuration, i.e. provisioning of network or devices</del> H04L 41/0806)}</li> </ul>
M	H04L 41/5058	<ul style="list-style-type: none"> <li>• • {Service discovery by the service manager (<del>automatically determining the actual topology of a network</del> H04L 41/12; topology discovery for routing H04L 45/02; arrangements for service discovery, e.g. service location protocol H04L 67/16)}</li> </ul>
M	H04L 41/5061	<ul style="list-style-type: none"> <li>• • <del>{Customer care}</del> <i>characterised by the interaction between service providers and their network customers, e.g. customer relationship management</i></li> </ul>
M	H04L 41/5064	<ul style="list-style-type: none"> <li>• • • {Customer relationship management (<del>arrangements involving customer network management, i.e. giving the customer access to network management functions</del> H04L 41/18)}</li> </ul>
M	H04L 41/5067	<ul style="list-style-type: none"> <li>• • • <del>{Customer-centric quality of service [QoS] measurement}</del> <i>Customer-centric QoS measurements</i></li> </ul>
M	H04L 41/507	<ul style="list-style-type: none"> <li>• • • <del>{Filtering out customers affected by service problems}</del></li> </ul>
M	H04L 41/5074	<ul style="list-style-type: none"> <li>• • • <del>{Handling of trouble tickets}</del> <i>Handling of user complaints or trouble tickets</i></li> </ul>
U	H04L 41/508	<ul style="list-style-type: none"> <li>• • {based on type of value added network service under agreement}</li> </ul>
M	H04L 41/5083	<ul style="list-style-type: none"> <li>• • • {wherein the managed service relates to web hosting (<del>web-based network application protocols</del> H04L 67/02; web site content organization and management G06F 16/958; video-hosting H04N 21/2743)}</li> </ul>
M	H04L 41/5087	<ul style="list-style-type: none"> <li>• • • {wherein the managed service relates to voice services (<del>protocols for real-time multimedia communications</del> H04L 65/00; management of telephonic communication services H04M 3/22; management of VoIP services <a href="#">H04M 7/0081</a>)}</li> </ul>
M	H04L 41/509	<ul style="list-style-type: none"> <li>• • • {wherein the managed service relates to media content delivery, e.g. audio-<del>video</del> / TV, <i>video or TV</i>} (<del>protocols for real-time multimedia communications</del> H04L 65/00; interactive television or VoD H04N 21/00)}</li> </ul>
M	H04L 41/5093	<ul style="list-style-type: none"> <li>• • • {wherein the managed service relates to messaging or chat services (<del>conducting a computer conference</del> H04L 12/1822; messaging, such as e-mail in packet-switching networks H04L 51/00; instant messaging H04L 51/04)}</li> </ul>

M	H04L 41/5096	<ul style="list-style-type: none"> <li>• • • {wherein the managed service relates to distributed or central networked applications <del>(management of file systems G06F 16/10; management of structured data stores G06F 16/20)</del>}</li> </ul>
M	H04L 43/00	<b>{Arrangements for monitoring or testing <del>packet data</del> switching networks (networking arrangements or communications protocols for supporting networked applications for tracking the activity of the application user H04L 67/22; monitoring of computing systems G06F 11/30; monitoring of computer activity G06F 11/34)}</b>
M	H04L 43/02	<ul style="list-style-type: none"> <li>• {involving a reduction of monitoring data} <i>Capturing of monitoring data</i></li> </ul>
M	H04L 43/022	<ul style="list-style-type: none"> <li>• • {using sampling of monitoring data, i.e. storing only a selection of packets} <i>by sampling</i></li> </ul>
M	H04L 43/024	<ul style="list-style-type: none"> <li>• • • {using adaptive sampling} <i>by adaptive sampling</i></li> </ul>
M	H04L 43/026	<ul style="list-style-type: none"> <li>• • {using flow generation} <i>using flow identification</i></li> </ul>
M	H04L 43/028	<ul style="list-style-type: none"> <li>• • {using <i>by</i> filtering} <del>(alarm or event filtering H04L 41/0604)</del></li> </ul>
M	H04L 43/04	<ul style="list-style-type: none"> <li>• {Processing of captured monitoring data} <i>Processing captured monitoring data, e.g. for logfile generation</i></li> </ul>
M	H04L 43/045	<ul style="list-style-type: none"> <li>• • {for graphical visualization} <i>for graphical visualisation</i> of monitoring data (graphical user interfaces H04L 41/22; display of network or application conditions affecting the network application to the application user H04L 67/36; visual indication of the functioning of a computing machine G06F 11/32)}</li> </ul>
M	H04L 43/06	<ul style="list-style-type: none"> <li>• {Report generation} <i>Generation of reports</i></li> </ul>
M	H04L 43/062	<ul style="list-style-type: none"> <li>• • {for traffic related reporting} <i>related to network traffic</i></li> </ul>
M	H04L 43/065	<ul style="list-style-type: none"> <li>• • {for device related reporting} <i>related to network devices</i> (reporting of sensed information of home appliances H04L 12/2803)}</li> </ul>
M	H04L 43/067	<ul style="list-style-type: none"> <li>• • {for time frame related reporting} <i>using time frame reporting</i></li> </ul>
C	H04L 43/08	<ul style="list-style-type: none"> <li>• {Monitoring based on specific metrics} <i>Monitoring or testing based on specific metrics, e.g. QoS, energy consumption or environmental parameters</i></li> </ul> <p><b>WARNING</b>  Group <u>H04L 43/08</u> is impacted by reclassification into group <u>H04L 43/20</u>. Groups <u>H04L 43/08</u> and <u>H04L 43/20</u> should be considered in order to perform a complete search.</p>
M	H04L 43/0805	<ul style="list-style-type: none"> <li>• • {Availability} <i>by checking availability</i></li> </ul>
M	H04L 43/0811	<ul style="list-style-type: none"> <li>• • • {Connectivity} <i>by checking connectivity</i></li> </ul>
M	H04L 43/0817	<ul style="list-style-type: none"> <li>• • • {functioning} <i>by checking functioning</i> (networked applications tracking the activity of users H04L 67/22; monitoring appliance functionality of home appliances H04L 12/2803)}</li> </ul>
M	H04L 43/0823	<ul style="list-style-type: none"> <li>• • {Errors} <i>Errors, e.g. transmission errors</i> (management of events, faults or alarms in networks or network elements H04L 41/06)}</li> </ul>
M	H04L 43/0829	<ul style="list-style-type: none"> <li>• • • {Packet loss}</li> </ul>
M	H04L 43/0852	<ul style="list-style-type: none"> <li>• • {Delays} <i>Delays</i></li> </ul>
M	H04L 43/0864	<ul style="list-style-type: none"> <li>• • • {Round trip delays}</li> </ul>
M	H04L 43/087	<ul style="list-style-type: none"> <li>• • • {Jitter} <i>Jitter</i></li> </ul>
M	H04L 43/0876	<ul style="list-style-type: none"> <li>• • {Network utilization} <i>Network utilisation, e.g. volume of load or congestion level</i></li> </ul>
M	H04L 43/0882	<ul style="list-style-type: none"> <li>• • • {Utilization} <i>Utilisation</i> of link capacity}</li> </ul>
M	H04L 43/0888	<ul style="list-style-type: none"> <li>• • • {Throughput} <i>Throughput</i></li> </ul>
M	H04L 43/0894	<ul style="list-style-type: none"> <li>• • • {Packet rate}</li> </ul>



N	H04L 43/091	<ul style="list-style-type: none"> <li>• <del>Measuring contribution of individual network components to actual service level</del></li> </ul>
M	H04L 43/10	<ul style="list-style-type: none"> <li>• <del>{using active</del>Active monitoring, e.g. heartbeat<del> protocols, polling, ping, trace-route}, ping or trace-route</del></li> </ul>
M	H04L 43/103	<ul style="list-style-type: none"> <li>• <del>{with adaptive polling, i.e. dynamically adapting the polling rate}</del></li> </ul>
M	H04L 43/106	<ul style="list-style-type: none"> <li>• <del>{by adding timestamps to packets}</del>using time related information in packets, e.g. by adding timestamps</li> </ul>
M	H04L 43/12	<ul style="list-style-type: none"> <li>• <del>{using dedicated network monitoring probes}</del>Network monitoring probes</li> </ul>
M	H04L 43/16	<ul style="list-style-type: none"> <li>• <del>{using threshold monitoring}</del>Threshold monitoring</li> </ul>
M	H04L 43/18	<ul style="list-style-type: none"> <li>• <del>{using protocol analyzers}</del>Protocol analysers</li> </ul>
N	H04L 43/20	<ul style="list-style-type: none"> <li>• the monitoring system or the monitored elements being virtualised, abstracted or software-defined entities, e.g. SDN or NFV</li> </ul> <p><u>WARNING</u> Group <a href="#">H04L 43/20</a> is incomplete pending reclassification of documents from group <a href="#">H04L 43/08</a>. Groups <a href="#">H04L 43/08</a> and <a href="#">H04L 43/20</a> should be considered in order to perform a complete search.</p>
M	H04L 43/50	<ul style="list-style-type: none"> <li>• <del>{Testing arrangements}</del></li> </ul>
N	H04L 43/55	<ul style="list-style-type: none"> <li>• Testing of service level quality, e.g. simulating service usage</li> </ul>
C	H04L 45/00	<p><del>{Routing or path finding of packets in data switching networks (specially adapted for wireless routing H04W 40/00 routing or path finding in wireless networks H04W 40/00)}</del></p> <p><u>WARNING</u> Group <a href="#">H04L 45/00</a> is impacted by reclassification into groups <a href="#">H04L 45/17</a>, <a href="#">H04L 45/243</a>, <a href="#">H04L 45/247</a>, <a href="#">H04L 45/645</a>, <a href="#">H04L 45/655</a>, <a href="#">H04L 45/76</a>, <a href="#">H04L 45/80</a>, <a href="#">H04L 45/85</a> and <a href="#">H04L 45/851</a>. All groups listed in this Warning should be considered in order to perform a complete search.</p>
C	H04L 45/02	<ul style="list-style-type: none"> <li>• <del>{Topology update or discovery (topology discovery for network management H04L 41/12; LAN interconnection over a backbone network H04L 12/4604; node-based peer discovery mechanisms in peer-to-peer networks H04L 67/1061)}</del></li> </ul> <p><u>WARNING</u> Group <a href="#">H04L 45/02</a> is impacted by reclassification into groups <a href="#">H04L 45/03</a>, <a href="#">H04L 45/033</a>, <a href="#">H04L 45/036</a>, <a href="#">H04L 45/037</a> and <a href="#">H04L 45/0377</a>. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	H04L 45/021	<ul style="list-style-type: none"> <li>• <del>{Routing table update consistency, e.g. epoch number}</del>Ensuring consistency of routing table updates, e.g. by using epoch numbers</li> </ul>
M	H04L 45/023	<ul style="list-style-type: none"> <li>• <del>{Delayed use of routing table update}</del>updates</li> </ul>
M	H04L 45/028	<ul style="list-style-type: none"> <li>• <del>{Dynamic adaptation of the update interval}</del>intervals, e.g. event-triggered updateupdates</li> </ul>
N	H04L 45/03	<ul style="list-style-type: none"> <li>• by updating link state protocols</li> </ul> <p><u>WARNING</u> Group <a href="#">H04L 45/03</a> is incomplete pending reclassification of documents from group <a href="#">H04L 45/02</a>. Groups <a href="#">H04L 45/02</a> and <a href="#">H04L 45/03</a> should be considered in order to perform a complete search.</p>

- N H04L 45/033
- • by updating distance vector protocols
- WARNING  
Group [H04L 45/033](#) is incomplete pending reclassification of documents from group [H04L 45/02](#).  
Groups [H04L 45/02](#) and [H04L 45/033](#) should be considered in order to perform a complete search.
- N H04L 45/036
- • Updating the topology between route computation elements, e.g. between OpenFlow controllers
- WARNING  
Groups [H04L 45/036](#), [H04L 45/037](#) and [H04L 45/0377](#) are incomplete pending reclassification of documents from group [H04L 45/02](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- N H04L 45/037
- • • Routes obligatorily traversing service-related nodes
- N H04L 45/0377
- • • • for service chaining
- M H04L 45/04
- {Interdomain routing, e.g. hierarchical routing}
- M H04L 45/06
- {Deflection routing, e.g. hot-potato routing}
- M H04L 45/08
- {Learning-based routing, e.g. **neural networks using neural networks or artificial intelligence**}
- M H04L 45/10
- {Routing in connection-oriented networks, e.g. X.25; **or** ATM}
- M H04L 45/12
- {Shortest path evaluation}
- M H04L 45/121
- • {**Minimizing delay**} **by minimising delays**
- M H04L 45/122
- • {**Minimizing distance, e.g. number of hops**} **by minimising distances, e.g. by selecting a route with minimum of number of hops**
- M H04L 45/125
- • {based on throughput or bandwidth}
- M H04L 45/126
- • {**minimizing** **minimising** geographical or physical path length}
- M H04L 45/128
- • {for finding disjoint paths}
- M H04L 45/16
- {Multipoint routing (**arrangements for multicast or broadcast in data networks H04L 12/18**)}
- N H04L 45/17
- Shortcut routing, e.g. using next hop resolution protocol [NHRP]
- WARNING  
Group [H04L 45/17](#) is incomplete pending reclassification of documents from group [H04L 45/00](#).  
Groups [H04L 45/00](#) and [H04L 45/17](#) should be considered in order to perform a complete search.
- M H04L 45/18
- {**Loop free**} **Loop-free operations**
- C H04L 45/22
- {Alternate routing}
- WARNING  
Group [H04L 45/22](#) is impacted by reclassification into group [H04L 45/247](#).  
Groups [H04L 45/22](#) and [H04L 45/247](#) should be considered in order to perform a complete search.
- M H04L 45/24
- {**Multipath**} **Multipath**
- N H04L 45/243
- • using M+N parallel active paths
- WARNING  
Group [H04L 45/243](#) is incomplete pending reclassification of documents from group [H04L 45/00](#).

Groups [H04L 45/00](#) and [H04L 45/243](#) should be considered in order to perform a complete search.

- |   |             |   |
|---|-------------|---|
| U | H04L 45/245 | • {Link aggregation, e.g. trunking}   |
| N | H04L 45/247 | • using M:N active or standby paths   |
|   |             | <u>WARNING</u><br>Group <a href="#">H04L 45/247</a> is incomplete pending reclassification of documents from groups <a href="#">H04L 45/00</a> and <a href="#">H04L 45/22</a> .<br>Groups <a href="#">H04L 45/00</a> , <a href="#">H04L 45/22</a> and <a href="#">H04L 45/247</a> should be considered in order to perform a complete search. |
| M | H04L 45/28  | • {Route using route fault recovery- <del>(network fault recovery H04L 41/0654)</del> }   |
| M | H04L 45/30  | • { <del>Special provisions for routing multiclass traffic</del> } Routing of multiclass traffic  |
| M | H04L 45/302 | • {Route determination based on requested QoS}  |
| M | H04L 45/304 | • {Route determination for <del>signaling</del> signalling traffic}   |
| M | H04L 45/306 | • {Route determination based on the nature of the carried application<br>(communications protocols whereby the routing of a service request to a node providing the service depends on the content or context of the request, e.g. profile, connectivity status H04L 67/327)}   |
| U | H04L 45/308 | • {Route determination based on user's profile, e.g. premium users}   |
| M | H04L 45/42  | • { <del>Centralized routing</del> } Centralised routing  |
| M | H04L 45/44  | • {Distributed routing}   |
| C | H04L 45/48  | • {Routing tree calculation}  |
|   |             | <u>WARNING</u><br>Group <a href="#">H04L 45/48</a> is impacted by reclassification into groups <a href="#">H04L 45/484</a> and <a href="#">H04L 45/488</a> .<br>Groups <a href="#">H04L 45/48</a> , <a href="#">H04L 45/484</a> and <a href="#">H04L 45/488</a> should be considered in order to perform a complete search.                   |
| N | H04L 45/484 | • using multiple routing trees  |
|   |             | <u>WARNING</u><br>Group <a href="#">H04L 45/484</a> is incomplete pending reclassification of documents from group <a href="#">H04L 45/48</a> .<br>Groups <a href="#">H04L 45/48</a> and <a href="#">H04L 45/484</a> should be considered in order to perform a complete search.  |
| N | H04L 45/488 | • using root node determination   |
|   |             | <u>WARNING</u><br>Group <a href="#">H04L 45/488</a> is incomplete pending reclassification of documents from group <a href="#">H04L 45/48</a> .<br>Groups <a href="#">H04L 45/48</a> and <a href="#">H04L 45/488</a> should be considered in order to perform a complete search.  |
| M | H04L 45/50  | • {using label swapping, e.g. multi-protocol label switch [MPLS]}   |
| M | H04L 45/52  | • {Multiprotocol routers}   |
| U | H04L 45/56  | • {Routing software}  |
| M | H04L 45/563 | • {Software download or update- <del>(software deployment in general G06F 8/60)</del> }   |
| M | H04L 45/58  | • {Association of routers}  |
| M | H04L 45/586 | • { <del>Virtual routers</del> } of virtual routers   |
| M | H04L 45/60  | • { <del>Router architecture</del> } Router architectures   |
| M | H04L 45/64  | • {using an overlay routing layer <del>(Peer-to-Peer networks H04L 67/104)</del> }  |

- N H04L 45/645
- Splitting route computation layer and forwarding layer, e.g. routing according to path computational element [PCE] or based on OpenFlow functionality
- WARNING  
Groups [H04L 45/645](#) and [H04L 45/655](#) are incomplete pending reclassification of documents from group [H04L 45/00](#).  
Groups [H04L 45/00](#), [H04L 45/645](#) and [H04L 45/655](#) should be considered in order to perform a complete search.
- N H04L 45/655
- • Interaction between route computation entities and forwarding entities, e.g. for route determination or for flow table update
- M H04L 45/70
- {Routing based on monitoring results ~~{techniques for monitoring network metrics H04L 43/08}~~}
- M H04L 45/74
- {Address processing for routing}
- M H04L 45/741
- • {Routing in networks with a plurality of addressing schemes, e.g. [with both IPv4 and IPv6](#)}
- M H04L 45/742
- • {Route cache ~~and its operation~~; [Operation thereof](#)}
- C H04L 45/745
- • ~~{Address table lookup or address filtering}~~ [Address table lookup; Address filtering](#)
- WARNING  
Group [H04L 45/745](#) is impacted by reclassification into groups [H04L 45/7452](#) and [H04L 45/7459](#).  
Groups [H04L 45/745](#), [H04L 45/7452](#) and [H04L 45/7459](#) should be considered in order to perform a complete search.
- N H04L 45/7452
- • • Multiple parallel or consecutive lookup operations (lookup operation involving Bloom filters [H04L 45/7459](#))
- WARNING  
Group [H04L 45/7452](#) is incomplete pending reclassification of documents from group [H04L 45/745](#).  
Groups [H04L 45/745](#) and [H04L 45/7452](#) should be considered in order to perform a complete search.
- M H04L 45/7453
- • • {using hashing}
- D H04L 45/7457
- • • {using content-addressable memories [CAM]}
- <administratively transferred to [H04L 45/74591](#)>
- N H04L 45/7459
- • • • using Bloom filters
- WARNING  
Group [H04L 45/7459](#) is incomplete pending reclassification of documents from group [H04L 45/745](#).  
Groups [H04L 45/745](#) and [H04L 45/7459](#) should be considered in order to perform a complete search.
- N H04L 45/74591
- • • {using content-addressable memories [CAM]}
- M H04L 45/748
- • • ~~{Longest matching prefix}~~ [using longest matching prefix](#)
- N H04L 45/76
- Routing in software-defined topologies, e.g. routing between virtual machines
- WARNING  
Group [H04L 45/76](#) is incomplete pending reclassification of documents from group [H04L 45/00](#).  
Groups [H04L 45/00](#) and [H04L 45/76](#) should be considered in order to perform a complete search.

- N H04L 45/80
- Ingress point selection by the source endpoint, e.g. selection of ISP or POP
- WARNING  
Groups [H04L 45/80](#), [H04L 45/85](#) and [H04L 45/851](#) are incomplete pending reclassification of documents from group [H04L 45/00](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- N H04L 45/85
- • Selection among different networks
- N H04L 45/851
- • • Dynamic network selection or re-selection, e.g. after degradation of quality
- M H04L 47/00
- ~~{Traffic regulation in packet~~**Traffic control in data** switching networks (arrangements for detecting or correcting errors in the information received [H04L 1/00](#))}
- NOTE  
This group covers:
1. Flow control or congestion control
  2. Queue scheduling
  3. Admission control or resource allocation
- C H04L 47/10
- ~~{Flow control or congestion control}~~**Flow control; Congestion control**
- WARNING  
Group [H04L 47/10](#) is impacted by reclassification into groups [H04L 47/43](#) and [H04L 47/431](#).  
Groups [H04L 47/10](#), [H04L 47/43](#) and [H04L 47/431](#) should be considered in order to perform a complete search.
- M H04L 47/11
- • ~~{Congestion identification}~~**Identifying congestion**
- C H04L 47/12
- • ~~{Congestion avoidance or recovery}~~**Avoiding congestion; Recovering from congestion**
- WARNING  
Group [H04L 47/12](#) is impacted by reclassification into group [H04L 47/129](#).  
Groups [H04L 47/12](#) and [H04L 47/129](#) should be considered in order to perform a complete search.
- M H04L 47/122
- • • ~~{Diverting traffic away from congested spots}~~**by diverting traffic away from congested entities**
- M H04L 47/125
- • • ~~{Load balancing}~~**by balancing the load**, e.g. traffic engineering (~~load balancing among servers~~ [H04L 67/1002](#))}
- M H04L 47/127
- • • ~~{Congestion prediction}~~**by using congestion prediction**
- N H04L 47/129
- • • at the destination endpoint, e.g. reservation of terminal resources or buffer space
- WARNING  
Group [H04L 47/129](#) is incomplete pending reclassification of documents from group [H04L 47/12](#).  
Groups [H04L 47/12](#) and [H04L 47/129](#) should be considered in order to perform a complete search.
- D H04L 47/14
- • ~~{in wireless networks}~~  
<administratively transferred to [H04W 8/04](#)>
- M H04L 47/17
- • ~~{Hop by hop}~~**Interaction among intermediate nodes, e.g. hop by hop**
- M H04L 47/19
- • ~~{at layers above the network layer}~~ (**general aspects of TCP** [H04L 69/16](#); network arrangements for networked applications for scheduling or organising the servicing of application requests [H04L 67/32](#) [H04L 67/60](#))}

M	H04L 47/193	<ul style="list-style-type: none"> <li>• • • <del>{at</del>at the transport layer, e.g. TCP related}</li> </ul>
M	H04L 47/20	<ul style="list-style-type: none"> <li>• • <del>{Policing}</del>Traffic policing</li> </ul>
M	H04L 47/21	<ul style="list-style-type: none"> <li>• • <del>{using leaky bucket}</del>-bucket</li> </ul>
M	H04L 47/215	<ul style="list-style-type: none"> <li>• • • <del>{Token bucket}</del>using token-bucket</li> </ul>
M	H04L 47/22	<ul style="list-style-type: none"> <li>• • <del>{Traffic shaping}</del></li> </ul>
M	H04L 47/24	<ul style="list-style-type: none"> <li>• • <del>{depending on the type of traffic, e.g. priority or quality of service [QoS]}</del> Traffic characterised by specific attributes, e.g. priority or QoS(network arrangements for networked applications for scheduling or organising the servicing of application requests whereby quality of service or priority requirements are taken into account H04L 67/322)}</li> </ul>
M	H04L 47/2408	<ul style="list-style-type: none"> <li>• • • <del>{Different services, e.g. type of service [ToS]}</del>for supporting different services, e.g. a differentiated services [DiffServ] type of service</li> </ul>
M	H04L 47/2416	<ul style="list-style-type: none"> <li>• • • <del>{Real Real-time traffic (arrangements for real-time multimedia communications H04L 65/00)}</del></li> </ul>
M	H04L 47/2425	<ul style="list-style-type: none"> <li>• • • <del>{Service for supporting services}</del> specification, e.g. SLA <del>(general aspects of SLA management H04L 41/50)}</del></li> </ul>
M	H04L 47/2441	<ul style="list-style-type: none"> <li>• • • <del>{Flow classification}</del>relying on flow classification, e.g. using integrated services [IntServ]</li> </ul>
M	H04L 47/2466	<ul style="list-style-type: none"> <li>• • • <del>{Modification of handling priority for control packets, e.g. for ACK or signaling packets}</del>using signalling traffic</li> </ul>
M	H04L 47/2475	<ul style="list-style-type: none"> <li>• • • <del>{Application aware}</del>for supporting traffic characterised by the type of applications</li> </ul>
M	H04L 47/2483	<ul style="list-style-type: none"> <li>• • • <del>{Flow identification}</del>involving identification of individual flows</li> </ul>
M	H04L 47/2491	<ul style="list-style-type: none"> <li>• • • <del>{Mapping QoS requirements between different networks}</del>Mapping quality of service [QoS] requirements between different networks</li> </ul>
M	H04L 47/25	<ul style="list-style-type: none"> <li>• • <del>{Rate modification upon detection by the source of changing network conditions}</del>with rate being modified by the source upon detecting a change of network conditions</li> </ul>
C	H04L 47/26	<ul style="list-style-type: none"> <li>• • <del>{Explicit using explicit}</del> feedback to the source, e.g. choke <del>packet}</del>packets</li> </ul> <p><b>WARNING</b> Group H04L 47/26 is impacted by reclassification into groups H04L 47/265 and H04L 47/267. Groups H04L 47/26, H04L 47/265 and H04L 47/267 should be considered in order to perform a complete search.</p>
M	H04L 47/263	<ul style="list-style-type: none"> <li>• • • <del>{Source rate modification after feedback}</del>Rate modification at the source after receiving feedback</li> </ul>
N	H04L 47/265	<ul style="list-style-type: none"> <li>• • • sent by intermediate network nodes</li> </ul> <p><b>WARNING</b> Group H04L 47/265 is incomplete pending reclassification of documents from group H04L 47/26. Groups H04L 47/26 and H04L 47/265 should be considered in order to perform a complete search.</p>
M	H04L 47/266	<ul style="list-style-type: none"> <li>• • • <del>{Stopping or restarting the source, e.g. X-on or X-off}</del></li> </ul>
N	H04L 47/267	<ul style="list-style-type: none"> <li>• • • sent by the destination endpoint (network streaming of media packets with control of the source by the destination H04L 65/613)</li> </ul> <p><b>WARNING</b> Group H04L 47/267 is incomplete pending reclassification of documents from group H04L 47/26.</p>



Groups [H04L 47/26](#) and [H04L 47/267](#) should be considered in order to perform a complete search.

- M H04L 47/27
  - ~~{Window-size-evaluation-or-update}~~ *Evaluation or update of window size*, e.g. using information derived from ~~ACK-packets~~ *acknowledged [ACK] packets*
- M H04L 47/28
  - ~~{using-time-considerations}~~ *in relation to timing considerations*
- M H04L 47/283
  - • ~~{Network-and-process-delay, e.g.}~~ *in response to processing delays, e.g. caused by* jitter or round trip time [RTT]}
- M H04L 47/29
  - ~~{Using}~~ *using* a combination of thresholds}
- M H04L 47/30
  - ~~{using}~~ *in combination with* information about buffer occupancy at either end or *at* transit nodes}
- M H04L 47/31
  - ~~{Tagging}~~ *by tagging* of packets, e.g. *using* discard eligibility [DE] ~~bit~~ *bits*
- M H04L 47/32
  - ~~{Packet-discarding-or-delaying}~~ *by discarding or delaying data units, e.g. packets or frames*
- M H04L 47/326
  - • ~~{With}~~ *with* random discard, e.g. random early discard [RED]}
- M H04L 47/33
  - ~~{Forward-notification}~~ *using forward notification*
- M H04L 47/34
  - ~~{Sequence}~~ *ensuring sequence* integrity, e.g. *using* sequence numbers}
- M H04L 47/35
  - ~~{Embedded}~~ *by embedding* flow control information in regular packets, e.g. ~~Piggybacking~~ *piggybacking*
- M H04L 47/36
  - ~~{Evaluation-of-the}~~ *by determining* packet size, e.g. maximum transfer unit [MTU]}
- M H04L 47/38
  - ~~{Adapting}~~ *by adapting* coding or compression rate}
- M H04L 47/40
  - ~~{Using-splitted-connections, e.g. IP-spoofing}~~ *using split connections*
- M H04L 47/41
  - ~~{Actions}~~ *by acting* on aggregated flows or links}
- N H04L 47/43
  - Assembling or disassembling of packets, e.g. segmentation and reassembly [SAR]

#### WARNING

Groups [H04L 47/43](#) and [H04L 47/431](#) are incomplete pending reclassification of documents from group [H04L 47/10](#).

Groups [H04L 47/10](#), [H04L 47/43](#) and [H04L 47/431](#) should be considered in order to perform a complete search.

- N H04L 47/431
  - • *using padding or de-padding*
- M H04L 47/50
  - ~~{Queue scheduling}~~
- M H04L 47/52
  - ~~{Bandwidth-attribution-to-queues}~~ *by attributing bandwidth to queues*
- M H04L 47/525
  - • ~~{Redistribution-of-residual-bandwidth}~~ *by redistribution of residual bandwidth*
- M H04L 47/56
  - ~~{Delay-aware-scheduling}~~ *implementing delay-aware scheduling*
- M H04L 47/60
  - ~~{Hierarchical-scheduling}~~ *implementing hierarchical scheduling*
- M H04L 47/62
  - ~~{General-aspects}~~ *characterised by scheduling criteria*
- U H04L 47/622
  - • {Queue service order}
- M H04L 47/6225
  - • • {~~fixed~~ *Fixed* service order, e.g. Round Robin}
- M H04L 47/623
  - • • {~~weighted-service-order~~ *Weighted service order*} (~~H04L-47/52;~~ ~~H04L-47/54;~~ ~~H04L-47/56 take precedence~~)}
- M H04L 47/6235
  - • • {~~variable~~ *Variable* service order}
- M H04L 47/625
  - • {~~Other-criteria-for-service-slot-or-service-order~~ *for service slots or service orders*}
- M H04L 47/6275
  - • • {~~priority~~ *based on priority*}
- M H04L 47/628
  - • • {~~based on~~ packet size, e.g. shortest packet first}



M	H04L 47/629	<ul style="list-style-type: none"> <li>• • <del>{Fair}</del>Ensuring fair share of resources, e.g. <del>WFQ</del>weighted fair queuing [WFQ]</li> </ul>
M	H04L 47/6295	<ul style="list-style-type: none"> <li>• • • <del>{Multiple-queues-per-individual-QoS}</del>using multiple queues, one for each individual QoS, connection, flow or priority</li> </ul>
C	H04L 47/70	<ul style="list-style-type: none"> <li>• <del>{Admission-control-or-resource-allocation}</del>Admission control<del>(medium access in wavelength-division-multiplex systems H04J 14/0227)}</del>; Resource allocation</li> </ul> <p><b>WARNING</b> Group H04L 47/70 is impacted by reclassification into group H04L 47/83. Groups H04L 47/70 and H04L 47/83 should be considered in order to perform a complete search.</p>
M	H04L 47/72	<ul style="list-style-type: none"> <li>• • <del>{Reservation-actions}</del>using reservation actions during connection setup</li> </ul>
M	H04L 47/722	<ul style="list-style-type: none"> <li>• • • <del>{at the end terminals, e.g. buffer space}</del>at the destination endpoint, e.g. reservation of terminal resources or buffer space</li> </ul>
M	H04L 47/724	<ul style="list-style-type: none"> <li>• • • <del>{involving}</del>at intermediate nodes, e.g. <del>RSVP</del>resource reservation protocol [RSVP]</li> </ul>
M	H04L 47/726	<ul style="list-style-type: none"> <li>• • • <del>{over a plurality of alternate paths, e.g. for load balancing}</del>Reserving resources in multiple paths to be used simultaneously (by balancing the load H04L 47/125)</li> </ul>
M	H04L 47/74	<ul style="list-style-type: none"> <li>• • <del>{Reactions-to-resource-unavailability}</del>measures in reaction to resource unavailability</li> </ul>
M	H04L 47/76	<ul style="list-style-type: none"> <li>• • <del>{Reallocation-of-resources, renegotiation-of-resources}</del>using dynamic resource allocation, e.g. in-call; renegotiation requested by the user or requested by the network in response to changing network conditions</li> </ul>
M	H04L 47/762	<ul style="list-style-type: none"> <li>• • • <del>{triggered by the network}</del></li> </ul>
M	H04L 47/765	<ul style="list-style-type: none"> <li>• • • <del>{triggered by the end-points}</del></li> </ul>
M	H04L 47/78	<ul style="list-style-type: none"> <li>• • <del>{Resource-allocation-architecture}</del>Architectures of resource allocation</li> </ul>
M	H04L 47/781	<ul style="list-style-type: none"> <li>• • • <del>{Centralized-allocation-of-resource}</del>Centralised allocation of resources</li> </ul>
M	H04L 47/782	<ul style="list-style-type: none"> <li>• • • {Hierarchical allocation of resourceresources, e.g. involving a hierarchy of local and centralizedcentralised entities}</li> </ul>
M	H04L 47/783	<ul style="list-style-type: none"> <li>• • • <del>{Distributed allocation of resources, e.g. bandwidth brokers}</del></li> </ul>
M	H04L 47/785	<ul style="list-style-type: none"> <li>• • • • <del>{Involving-several}</del>among multiple network domains, e.g. multilateral agreements</li> </ul>
M	H04L 47/80	<ul style="list-style-type: none"> <li>• • <del>{Actions-related-to-the-nature-of-the-flow-or-the-user}</del>Actions related to the user profile or the type of traffic</li> </ul>
U	H04L 47/82	<ul style="list-style-type: none"> <li>• {Miscellaneous aspects}</li> </ul>
U	H04L 47/829	<ul style="list-style-type: none"> <li>• • • {Topology based}</li> </ul>
N	H04L 47/83	<ul style="list-style-type: none"> <li>• • based on usage prediction</li> </ul> <p><b>WARNING</b> Group H04L 47/83 is incomplete pending reclassification of documents from group H04L 47/70. Groups H04L 47/70 and H04L 47/83 should be considered in order to perform a complete search.</p>
M	H04L 49/00	<del>{Packet switching elements (selecting arrangements for multiplex arrangements using optical switching H04Q 11/0001)}</del>
C	H04L 49/10	<ul style="list-style-type: none"> <li>• <del>{Switching-fabric-construction}</del>characterised by the switching fabric construction</li> </ul> <p><b>WARNING</b> Group H04L 49/10 is impacted by reclassification into groups H04L 49/111, H04L 49/112, H04L 49/113, H04L 49/115, H04L 49/116 and H04L 49/118.</p>

*All groups listed in this Warning should be considered in order to perform a complete search.*

- |   |              |  |
|---|--------------|--|
| M | H04L 49/101  | • <del>{Crossbar or matrix}</del> using crossbar or matrix   |
| M | H04L 49/102  | • <del>{using shared medium, e.g. bus or ring}</del>   |
| M | H04L 49/103  | • <del>{using shared central buffer, shared memory, e.g. time switching}</del> using a shared central buffer; using a shared memory  |
| M | H04L 49/104  | • <del>{ATM switching fabrics}</del> Asynchronous transfer mode [ATM] switching fabrics  |
| M | H04L 49/109  | • <del>{integrated}</del> Integrated on microchip, e.g. switch-on-chip   |
| N | H04L 49/111  | • Switch interfaces, e.g. port details<br><br><u>WARNING</u><br>Group <a href="#">H04L 49/111</a> is incomplete pending reclassification of documents from group <a href="#">H04L 49/10</a> .<br>Groups <a href="#">H04L 49/10</a> and <a href="#">H04L 49/111</a> should be considered in order to perform a complete search.   |
| N | H04L 49/112  | • Switch control, e.g. arbitration<br><br><u>WARNING</u><br>Group <a href="#">H04L 49/112</a> is incomplete pending reclassification of documents from group <a href="#">H04L 49/10</a> .<br>Groups <a href="#">H04L 49/10</a> and <a href="#">H04L 49/112</a> should be considered in order to perform a complete search.   |
| N | H04L 49/113  | • Arrangements for redundant switching, e.g. using parallel planes<br><br><u>WARNING</u><br>Groups <a href="#">H04L 49/113</a> , <a href="#">H04L 49/115</a> , <a href="#">H04L 49/116</a> and <a href="#">H04L 49/118</a> are incomplete pending reclassification of documents from group <a href="#">H04L 49/10</a> .<br>All groups listed in this Warning should be considered in order to perform a complete search. |
| N | H04L 49/115  | • • Transferring a complete packet or cell through each plane  |
| N | H04L 49/116  | • • Transferring a part of the packet through each plane, e.g. by bit-slicing  |
| N | H04L 49/118  | • • Address processing within a device, e.g. using internal ID or tags for routing within a switch   |
| M | H04L 49/15   | • <del>{Interconnection of switching modules}</del>  |
| M | H04L 49/1515 | • <del>{Non-blocking multistage, e.g. Clos}</del>  |
| M | H04L 49/153  | • • <del>{ATM switching fabrics having parallel switch planes}</del>   |
| M | H04L 49/1538 | • • • <del>{Cell slicing}</del>  |
| M | H04L 49/1546 | • • <del>{Pipelined operation}</del> using pipelined operation   |
| M | H04L 49/20   | • <del>{Support for services or operations}</del>  |
| M | H04L 49/201  | • <del>{Multicast or broadcast}</del> Multicast operation; Broadcast operation   |
| M | H04L 49/25   | • <del>{Routing or path finding through in}</del> a switch fabric  |
| M | H04L 49/253  | • <del>{Connections establishment or release between ports}</del> using establishment or release of connections between ports  |
| M | H04L 49/254  | • • <del>{Centralized}</del> Centralised controller, i.e. arbitration or scheduling  |
| M | H04L 49/35   | • <del>{Application specific switches}</del> Switches specially adapted for specific applications  |
| M | H04L 49/351  | • <del>{LAN switches, e.g. ethernet switches}</del> for local area network [LAN], e.g. Ethernet switches   |
| M | H04L 49/354  | • <del>{Support for virtual LAN, VLAN tagging or multiple registration, e.g. according to IEEE 802.1q}</del> for supporting virtual local area networks [VLAN]   |

- M H04L 49/355      • • {Application aware switches, e.g. *for* HTTP}
- M H04L 49/356      • • {~~Storage area network switches~~}*for storage area networks*
- M H04L 49/40      • {~~Physical~~*Constructional*} details, e.g. power supply, mechanical construction or backplane}
- M H04L 49/45      • {~~Provisions for supporting expansion~~}*Arrangements for providing or supporting expansion*
- M H04L 49/50      • {~~Overload detection~~*Overload detection or protection within a single switching element*; ~~Overload protection~~}
- M H04L 49/505      • • {~~Corrective Measures, e.g. backpressure~~}*Corrective measures*
- M H04L 49/506      • • • {~~Backpressure~~}*Backpressure*
- M H04L 49/55      • {~~Error prevention, detection or correction~~}*Prevention, detection or correction of errors*
- M H04L 49/552      • • {~~Error prevention, e.g. sequence integrity of packets-redundant connections through the switch fabric~~}*by ensuring the integrity of packets received through redundant connections*
- M H04L 49/60      • {~~Hybrid or multiprotocol packet, ATM or frame switches~~}*Software-defined switches*
- M H04L 49/65      • {~~Fast packet switch re-configuration~~}*Re-configuration of fast packet switches*
- C H04L 49/90      • {~~Queuing arrangements~~}*Buffering arrangements*

**WARNING**

Group H04L 49/90 is impacted by reclassification into group H04L 49/9023. Groups H04L 49/90 and H04L 49/9023 should be considered in order to perform a complete search.

- M H04L 49/9005      • • {~~Dynamic buffer space allocation~~}*using dynamic buffer space allocation*
- M H04L 49/901      • • {~~Storage~~*using storage*} descriptor, e.g. read or write pointers}
- M H04L 49/9015      • • • {~~for supporting a linked list~~}
- U H04L 49/9021      • • {Plurality of buffers per packet}
- N H04L 49/9023      • • for implementing a jitter-buffer

**WARNING**

Group [H04L 49/9023](#) is incomplete pending reclassification of documents from group [H04L 49/90](#). Groups [H04L 49/90](#) and [H04L 49/9023](#) should be considered in order to perform a complete search.

- M H04L 49/9047      • • {~~Buffer pool~~}*including multiple buffers, e.g. buffer pools*
- M H04L 49/9057      • • {~~Arrangements for supporting packet reassembly or resequencing~~}
- U H04L 49/9084      • • {Reactions to storage capacity overflow}
- U H04L 49/9089      • • • {replacing packets in a storage arrangement, e.g. pushout}
- M H04L 49/9094      • • • {~~Arrangements for simultaneous transmit and receive, e.g. simultaneous reading/writing from/to the storage element~~}

- C H04L 51/00      {~~Arrangements for user~~*User-to-user messaging in packet-switching networks, e.g. e-mail or instant messages*}*transmitted according to store-and-forward or real-time protocols, e.g. e-mail*

**WARNING**

Group [H04L 51/00](#) is impacted by reclassification into groups [H04L 51/07](#) and [H04L 51/21](#). Groups [H04L 51/00](#), [H04L 51/07](#) and [H04L 51/21](#) should be considered in order to perform a complete search.

- |   |             |  |
|---|-------------|--|
| M | H04L 51/02  | <ul style="list-style-type: none"> <li>• <del>{with</del><i>using</i> automatic reactions or user delegation, e.g. automatic replies or chatbot}<del>}-generated messages</del></li> </ul>   |
| M | H04L 51/04  | <ul style="list-style-type: none"> <li>• <del>{Real-time or near real-time messaging, e.g. instant messaging [IM]-{network arrangements or protocols for real-time communications H04L 65/00}}</del></li> </ul>  |
| M | H04L 51/043 | <ul style="list-style-type: none"> <li>• <del>{use or manipulation of presence information in messaging</del><i>using or handling presence information</i><del>(presence management H04L 67/24)}</del></li> </ul>  |
| M | H04L 51/046 | <ul style="list-style-type: none"> <li>• <del>{interacting with other applications or services}</del><i>Interoperability with other network applications or services</i></li> </ul>  |
| M | H04L 51/06  | <ul style="list-style-type: none"> <li>• <del>{Message adaptation based on network or terminal capabilities</del><i>Message adaptation to terminal or network requirements</i><del>(networked arrangements for intermediate processing of conversion or adaptation of application content or format H04L 67/2823)}</del></li> </ul>  |
| M | H04L 51/063 | <ul style="list-style-type: none"> <li>• <del>{with adaptation of content}</del><i>Content adaptation, e.g. replacement of unsuitable content</i></li> </ul>   |
| M | H04L 51/066 | <ul style="list-style-type: none"> <li>• <del>{with adaptation of format}</del><i>Format adaptation, e.g. format conversion or compression</i></li> </ul>  |
| N | H04L 51/07  | <ul style="list-style-type: none"> <li>• characterised by the inclusion of specific contents</li> </ul> <p><u>WARNING</u></p> <p>Group <a href="#">H04L 51/07</a> is incomplete pending reclassification of documents from group <a href="#">H04L 51/00</a>.</p> <p>Groups <a href="#">H04L 51/00</a> and <a href="#">H04L 51/07</a> should be considered in order to perform a complete search.</p>   |
| M | H04L 51/08  | <ul style="list-style-type: none"> <li>• <del>{Messages including annexed</del><i>Annexed</i> information, e.g. attachments}</li> </ul>  |
| M | H04L 51/10  | <ul style="list-style-type: none"> <li>• <del>{Messages including multimedia</del><i>Multimedia</i> information<del>-(network arrangements or protocols for real-time communication H04L 65/00; voice messaging in telephonic communication using automatic or semi-automatic exchanges with non-audio components H04M 3/5307)}</del></li> </ul>   |
| D | H04L 51/12  | <ul style="list-style-type: none"> <li>• {with filtering and selective blocking capabilities}</li> </ul> <p>&lt;administratively transferred to <a href="#">H04L 51/212</a>&gt;</p>  |
| D | H04L 51/14  | <ul style="list-style-type: none"> <li>• {with selective forwarding}</li> </ul> <p>&lt;administratively transferred to <a href="#">H04L 51/214</a>&gt;</p>   |
| D | H04L 51/16  | <ul style="list-style-type: none"> <li>• {including conversation history, e.g. threads}</li> </ul> <p>&lt;administratively transferred to <a href="#">H04L 51/216</a>&gt;</p>  |
| M | H04L 51/18  | <ul style="list-style-type: none"> <li>• <del>{Messages including commands or codes to be executed either at an intermediate node or at the recipient to perform message-related actions</del><i>Commands or executable codes</i><del>(computer aided management of electronic mail G06Q 10/10; networked applications for remote control or remote monitoring of the application H04L 67/025; networked applications involving the movement of software or configuration parameters H04L 67/34)}</del></li> </ul> |
| D | H04L 51/20  | <ul style="list-style-type: none"> <li>• {Messaging using geographical location information (protocols for adapting network applications to user terminal location H04L 67/18; services specially adapted for wireless communication networks making use of the location of users or terminals H04W 4/02)}</li> </ul> <p>&lt;administratively transferred to <a href="#">H04L 51/222</a>&gt;</p>   |
| N | H04L 51/21  | <ul style="list-style-type: none"> <li>• Monitoring or handling of messages</li> </ul> <p><u>WARNING</u></p> <p>Group <a href="#">H04L 51/21</a> is incomplete pending reclassification of documents from group <a href="#">H04L 51/00</a>.</p> <p>Groups <a href="#">H04L 51/00</a> and <a href="#">H04L 51/21</a> should be considered in order to perform a complete search.</p>  |

N	H04L 51/212	• • using filtering or selective blocking
N	H04L 51/214	• • using selective forwarding
N	H04L 51/216	• • Handling conversation history, e.g. grouping of messages in sessions or threads
D	H04L 51/22	• {Mailbox-related details (computer aided management of electronic mail G06Q 10/10)} <administratively transferred to <a href="#">H04L 51/42</a> >
N	H04L 51/222	• • using geographical location information, e.g. messages transmitted or received in proximity of a certain spot or area
N	H04L 51/224	• • providing notification on incoming messages, e.g. pushed notifications of received messages
N	H04L 51/226	• • Delivery according to priorities
N	H04L 51/23	• • Reliability checks, e.g. acknowledgments or fault reporting
N	H04L 51/234	• • for tracking messages
D	H04L 51/24	• {with notification on incoming messages} <administratively transferred to <a href="#">H04L 51/224</a> >
D	H04L 51/26	• {Prioritized messaging (networked applications for intermediate processing whereby quality of service or priority requirements are taken into account H04L 67/322)} <administratively transferred to <a href="#">H04L 51/226</a> >
D	H04L 51/28	• {Details regarding addressing issues (arrangements and protocols for addressing and naming H04L 61/00)} <administratively transferred to <a href="#">H04L 51/48</a> >
D	H04L 51/30	• {with reliability check, e.g. acknowledgments or fault reporting} <administratively transferred to <a href="#">H04L 51/23</a> >
D	H04L 51/32	• {Messaging within social networks} <administratively transferred to <a href="#">H04L 51/52</a> >
D	H04L 51/34	• {with provisions for tracking the progress of a message} <administratively transferred to <a href="#">H04L 51/234</a> >
D	H04L 51/36	• {Unified messaging, e.g. interactions between instant messaging, e-mail or other types of messages such as converged IP messaging [CPM]} <administratively transferred to <a href="#">H04L 51/56</a> >
D	H04L 51/38	• {in combination with wireless systems (mobile application service signalling using messaging, e.g. SMS, H04W 4/12)} <administratively transferred to <a href="#">H04L 51/58</a> >
N	H04L 51/42	• Mailbox-related aspects, e.g. synchronisation of mailboxes
N	H04L 51/48	• Message addressing, e.g. address format or anonymous messages, aliases
N	H04L 51/52	• for supporting social networking services
N	H04L 51/56	• Unified messaging, e.g. interactions between e-mail, instant messaging or converged IP messaging [CPM]
N	H04L 51/58	• Message adaptation for wireless communication
M	H04L 61/00	<b>{Network arrangements or network protocols for addressing or naming} Network arrangements, protocols or services for addressing or naming</b>

**NOTE**

This group does not cover:



- aspects relating to switching or routing which are covered by groups [H04L 45/00](#) or [H04L 49/00](#);
- aspects relating to configuration management of data networks or network elements in general, which are covered by group [H04L 41/08](#)
- aspects of addressing in telephony which are covered by group [H04M 7/00](#);
- aspects of addressing within devices, e.g. process or memory, which are covered by groups [G06F 13/42](#) or [G06F 12/00](#).

N H04L 61/09

- Mapping addresses

WARNING

Group [H04L 61/09](#) is incomplete pending reclassification of documents from group [H04L 9/40](#).

Groups [H04L 9/40](#) and [H04L 61/09](#) should be considered in order to perform a complete search.

M H04L 61/10

- ~~{Mapping of addresses of~~ different types; ~~Address resolution}~~

M H04L 61/103

- ~~{~~ across network layers, e.g. resolution of network layer into physical layer addresses or address resolution protocol [ARP]

M H04L 61/106

- ~~{~~ across networks, e.g. mapping telephone numbers to data network addresses

D H04L 61/15

- ~~{Directories; Name-to-address-mapping (telephone directories in user terminals H04M 1/27)}~~

<administratively transferred to [H04L 61/45](#)>

D H04L 61/1505

- ~~{involving standard directories or standard directory access protocols}~~

<administratively transferred to [H04L 61/4505](#)>

D H04L 61/1511

- ~~{using domain-name system [DNS]}~~

<administratively transferred to [H04L 61/4511](#)>

D H04L 61/1517

- ~~{using open systems interconnection [OSI] directories, i.e. X.500}~~

<administratively transferred to [H04L 61/4517](#)>

D H04L 61/1523

- ~~{using lightweight directory access protocol [LDAP]}~~

<administratively transferred to [H04L 61/4523](#)>

D H04L 61/1529

- ~~{using voice over internet protocol [VoIP] directories, e.g. session initiation protocol [SIP] registrar or H.323 gatekeeper (real-time signaling or sessions protocols H04L 65/1003)}~~

<administratively transferred to [H04L 61/4535](#)>

D H04L 61/1535

- ~~{using an address exchange platform which sets up a session between two nodes, e.g. "rendezvous" server (address exchange for voice over internet protocol [VoIP] H04L 61/1529)}~~

<administratively transferred to [H04L 61/4535](#)>

D H04L 61/1541

- ~~{for service discovery (network applications for service discovery H04L 67/16; discovery of network devices in wireless communication networks H04W 8/005)}~~

<administratively transferred to [H04L 61/4541](#)>

D H04L 61/1547

- ~~{for personal communications, i.e. using a personal identifier}~~

<administratively transferred to [H04L 61/4547](#)>

D H04L 61/1552

- ~~{Mechanisms for table lookup, e.g. between directories; Directory data structures; Synchronization of directories (information retrieval in file systems G06F 16/10; information retrieval in structured data stores G06F 16/20)}~~

<administratively transferred to [H04L 61/4552](#)>

- |                |  |
|----------------|--|
| D H04L 61/1558 | <ul style="list-style-type: none"> <li>• {Object oriented directories, e.g. common object request broker architecture [CORBA] name server}</li> <li>&lt;administratively transferred to <a href="#">H04L 61/4553</a>&gt;</li> </ul>  |
| D H04L 61/1564 | <ul style="list-style-type: none"> <li>• {Directories for electronic mail or instant messaging (arrangements for user-to-user messaging in packet-switching networks H04L 51/00)}</li> <li>&lt;administratively transferred to <a href="#">H04L 61/4555</a>&gt;</li> </ul>   |
| D H04L 61/157  | <ul style="list-style-type: none"> <li>• {Directories for hybrid networks, e.g. including telephone numbers}</li> <li>&lt;administratively transferred to <a href="#">H04L 61/4557</a>&gt;</li> </ul>  |
| D H04L 61/1576 | <ul style="list-style-type: none"> <li>• {Metadirectories, i.e. all encompassing global directory which interfaces to various underlying directories}</li> <li>&lt;administratively transferred to <a href="#">H04L 61/4552</a>&gt;</li> </ul>   |
| D H04L 61/1582 | <ul style="list-style-type: none"> <li>• {containing identifiers of data entities on a computer, e.g. file names}</li> <li>&lt;administratively transferred to <a href="#">H04L 61/457</a>&gt;</li> </ul>  |
| D H04L 61/1588 | <ul style="list-style-type: none"> <li>• {containing mobile subscriber information, e.g. home subscriber server [HSS]}</li> <li>&lt;administratively transferred to <a href="#">H04L 61/4588</a>&gt;</li> </ul>  |
| D H04L 61/1594 | <ul style="list-style-type: none"> <li>• {Address books, i.e. directories containing contact information about correspondents, e.g. on a user device (directories providing the best way to reach a correspondent H04L 61/1547)}</li> <li>&lt;administratively transferred to <a href="#">H04L 61/4594</a>&gt;</li> </ul>  |
| D H04L 61/20   | <ul style="list-style-type: none"> <li>• {Address allocation (configuration management of network or network elements H04L 41/08)}</li> <li>&lt;administratively transferred to <a href="#">H04L 61/50</a>&gt;</li> </ul>  |
| D H04L 61/2007 | <ul style="list-style-type: none"> <li>• {internet protocol [IP] addresses}</li> <li>&lt;administratively transferred to <a href="#">H04L 61/5007</a>&gt;</li> </ul>   |
| D H04L 61/2015 | <ul style="list-style-type: none"> <li>• • {using the dynamic host configuration protocol [DHCP] or variants}</li> <li>&lt;administratively transferred to <a href="#">H04L 61/5014</a>&gt;</li> </ul>   |
| D H04L 61/2023 | <ul style="list-style-type: none"> <li>• • {using the bootstrap protocol [BOOTP] or variants}</li> <li>&lt;administratively transferred to <a href="#">H04L 61/5014</a>&gt;</li> </ul>   |
| D H04L 61/203  | <ul style="list-style-type: none"> <li>• • {using an authentication, authorization and accounting [AAA] protocol, e.g. remote authentication dial-in user service [RADIUS] or diameter (supporting authentication of entities communicating through a packet data network H04L 63/08; cryptographic mechanisms or cryptographic arrangements for entity authentication H04L 9/32)}</li> <li>&lt;administratively transferred to <a href="#">H04L 61/503</a>&gt;</li> </ul> |
| D H04L 61/2038 | <ul style="list-style-type: none"> <li>• {for local use, e.g. on local area networks [LAN] or on universal serial bus [USB] networks (bus addresses inside a computer G06F 13/42)}</li> <li>&lt;administratively transferred to <a href="#">H04L 61/5038</a>&gt;</li> </ul>  |
| D H04L 61/2046 | <ul style="list-style-type: none"> <li>• {involving the solving of address allocation conflicts or involving testing of addresses}</li> <li>&lt;administratively transferred to <a href="#">H04L 61/5046</a>&gt;</li> </ul>  |
| D H04L 61/2053 | <ul style="list-style-type: none"> <li>• {involving timing or renewal aspects}</li> <li>&lt;administratively transferred to <a href="#">H04L 61/5053</a>&gt;</li> </ul>  |
| D H04L 61/2061 | <ul style="list-style-type: none"> <li>• {involving aspects of pools of addresses, e.g. assignment of different pools of addresses to different dynamic host configuration protocol [DHCP] servers}</li> <li>&lt;administratively transferred to <a href="#">H04L 61/5061</a>&gt;</li> </ul>   |



- D H04L 61/2069
  - {for group-, multicast- and broadcast-communication (broadcast or conference H04L 12/18)}
  - <administratively transferred to [H04L 61/5069](#)>
- D H04L 61/2076
  - {involving update or notification mechanisms, e.g. update of a domain name server with dynamic host configuration protocol [DHCP] assigned addresses}
  - <administratively transferred to [H04L 61/5076](#)>
- D H04L 61/2084
  - {involving portability aspects (network addressing or numbering for mobility support H04W 8/26; wireless network layer protocols, e.g. mobile IP H04W 80/04)}
  - <administratively transferred to [H04L 61/5084](#)>
- D H04L 61/2092
  - {by self assignment, e.g. pick address randomly and test if already in use}
  - <administratively transferred to [H04L 61/5092](#)>
- M H04L 61/25
  - ~~{mapping of addresses of~~ the same type; ~~address translation~~
- M H04L 61/2503
  - • ~~{~~ [Translation of](#) Internet protocol [IP] ~~address translation~~ [addresses](#)
- D H04L 61/2507
  - • • {translating between special types of IP addresses}
  - <administratively transferred to [H04L 61/2503](#)>
- M H04L 61/251
  - • • • {between different IP versions}
- M H04L 61/2514
  - • • • {between local and global IP addresses}
- M H04L 61/2517
  - • • • {involving port numbers} [using port numbers](#)
- M H04L 61/2521
  - • • • ~~{Special translation architecture, i.e. being different from a single network address translation [NAT] server}~~ [Translation architectures other than single NAT servers](#)
- M H04L 61/2525
  - • • • • ~~{~~ Translation at a client
- M H04L 61/2528
  - • • • • ~~{~~ Translation at a proxy
- M H04L 61/2532
  - • • • • ~~{~~ Clique of NAT servers
- M H04L 61/2535
  - • • • • ~~{~~ Multiple local networks, e.g. resolving potential IP address conflicts
- M H04L 61/2539
  - • • • ~~{for hiding addresses or keeping them anonymous}~~ [Hiding addresses; Keeping addresses anonymous](#)
- M H04L 61/2542
  - • • • ~~{~~ involving dual-stack hosts
- M H04L 61/2546
  - • • • ~~{Mechanisms~~ [Arrangements](#) for avoiding unnecessary translation
- M H04L 61/255
  - • • • ~~{Map-table maintenance and indexing}~~ [Maintenance or indexing of mapping tables](#)
- M H04L 61/2553
  - • • • • ~~{Binding renewal aspects}~~ [Binding renewal aspects, e.g. using keep-alive messages; Keep-alive messages](#)
- M H04L 61/2557
  - • • • ~~{Translation policies and rules}~~ [Translation policies or rules](#)
- M H04L 61/256
  - • • • ~~{Network address translation [NAT] traversal}~~ [NAT traversal](#)
- M H04L 61/2564
  - • • • • {for a higher-layer protocol, e.g. for session initiation protocol [SIP]} ~~(SIP for real-time communications H04L 65/1006)}~~
- M H04L 61/2567
  - • • • • {for reachability, e.g. inquiring the address of a correspondent behind a NAT server}
- M H04L 61/2571
  - • • • • {for identification, e.g. for authentication or billing (charging arrangements [H04L 12/14](#))}
- M H04L 61/2575
  - • • • • {using address mapping retrieval, e.g. simple traversal of user datagram protocol through [session traversal utilities for NAT](#) [STUN]}
- M H04L 61/2578
  - • • • • ~~{transparent to the NAT server}~~ [without involvement of the NAT server](#)
- M H04L 61/2582
  - • • • • {through control of the NAT server, e.g. using universal plug and play [UPnP]}

- M H04L 61/2585 . . . . {through application level gateway [ALG]}
- M H04L 61/2589 . . . . {over a relay server, e.g. traversal using relay NAT [TURN]} *for network address translation [TURN]*
- M H04L 61/2592 . . . . {involving tunneling *using tunnelling* or encapsulation ~~(providing a confidential data exchange among entities communicating through data packet networks H04L 63/04)}~~
- M H04L 61/2596 . . . . {Non - internet protocol [IP] address translation} *Translation of addresses of the same type other than IP, e.g. translation from MAC to MAC addresses*
- M H04L 61/30 . {Arrangements for managing *Managing network* names, e.g. use of aliases or nicknames ~~(retrieval from the Internet by using information identifiers, e.g. uniform resource locators [URLs] G06F 16/955; name-to-address mapping H04L 61/15 H04L 61/45)}~~
- M H04L 61/301 . . {Name conversion}
- M H04L 61/3015 . . {Name registration, generation or assignment}
- M H04L 61/302 . . . {Administrative registration, e.g. for domain names at internet corporation for assigned names and numbers [ICANN] ~~(data processing specially adapted for administration or management G06Q 10/00)}~~
- D H04L 61/303 . . {Name structure}  
<administratively transferred to [H04L 2101/30](#) ADD>
- D H04L 61/3035 . . . {containing non-Latin characters, e.g. Chinese domain names}  
<administratively transferred to [H04L 2101/32](#) ADD>
- D H04L 61/304 . . . {containing protocol addresses or telephone numbers ~~(address type involved H04L 61/6018)}~~  
<administratively transferred to [H04L 2101/33](#) ADD>
- D H04L 61/3045 . . . {containing wildcard characters}  
<administratively transferred to [H04L 2101/345](#) ADD>
- D H04L 61/305 . . . {containing special prefixes}  
<administratively transferred to [H04L 2101/35](#) ADD>
- D H04L 61/3055 . . . {containing special suffixes}  
<administratively transferred to [H04L 2101/355](#) ADD>
- D H04L 61/306 . . {Name types}  
<administratively transferred to [H04L 2101/30](#) ADD>
- D H04L 61/3065 . . . {Application layer names, e.g. buddy name, unstructured name chosen by a user or home appliance name}  
<administratively transferred to [H04L 2101/365](#) ADD>
- D H04L 61/307 . . . {E-mail addresses ~~(arrangements for user-to-user messaging in packet-switching networks H04L 51/00)}~~  
<administratively transferred to [H04L 2101/37](#) ADD>
- D H04L 61/3075 . . . {Access point names [APN], i.e. name of a gateway general packet radio service support node [GGSN] connecting a mobile user to a packet data network [PDN]}  
<administratively transferred to [H04L 2101/375](#) ADD>
- D H04L 61/308 . . . {Telephone uniform resource identifier [URI]}  
<administratively transferred to [H04L 2101/38](#) ADD>
- D H04L 61/3085 . . . {Session initiation protocol [SIP] uniform resource identifier [URI]}  
<administratively transferred to [H04L 2101/385](#) ADD>

- D H04L 61/309
  - • • {Globally routable user-agent [GRUU] uniform resource identifier [URI] for the session initiation protocol [SIP]}
  - <administratively transferred to [H04L 2101/39](#) ADD>
- D H04L 61/3095
  - • • {Internet protocol multimedia private identity [IMPI] or internet protocol multimedia public identity [IMPU]}
  - <administratively transferred to [H04L 2101/395](#) ADD>
- U H04L 61/35
  - {involving non-standard use of addresses for implementing network functionalities, e.g. coding subscription information within the address or functional addressing, i.e. assigning an address to a function}
- N H04L 61/45
  - Network directories; Name-to-address mapping
- N H04L 61/4505
  - • using standardised directories; using standardised directory access protocols
- N H04L 61/4511
  - • • using domain name system [DNS]
- N H04L 61/4517
  - • • using open systems interconnection [OSI] directories, e.g. X.500
- N H04L 61/4523
  - • • using lightweight directory access protocol [LDAP]
- N H04L 61/4535
  - • using an address exchange platform which sets up a session between two nodes, e.g. rendezvous servers, session initiation protocols [SIP] registrars or H.323 gatekeepers
- N H04L 61/4541
  - Directories for service discovery
- N H04L 61/4547
  - • {for personal communications, i.e. using a personal identifier}
- N H04L 61/4552
  - • Lookup mechanisms between a plurality of directories; Synchronisation of directories, e.g. metadirectories
- N H04L 61/4553
  - • {Object oriented directories, e.g. common object request broker architecture [CORBA] name server}
- N H04L 61/4555
  - • {Directories for electronic mail or instant messaging}
- N H04L 61/4557
  - • Directories for hybrid networks, e.g. including telephone numbers
- N H04L 61/457
  - • {containing identifiers of data entities on a computer, e.g. file names}
- N H04L 61/4588
  - • containing mobile subscriber information, e.g. home subscriber server [HSS]
- N H04L 61/4594
  - • Address books, i.e. directories containing contact information about correspondents (telephone directories in user terminals [H04M 1/27453](#))
- N H04L 61/50
  - Address allocation
- N H04L 61/5007
  - • Internet protocol [IP] addresses
- N H04L 61/5014
  - • • using dynamic host configuration protocol [DHCP] or bootstrap protocol [BOOTP]
- N H04L 61/503
  - • • using an authentication, authorisation and accounting [AAA] protocol, e.g. remote authentication dial-in user service [RADIUS] or Diameter
- N H04L 61/5038
  - • for local use, e.g. in LAN or USB networks, or in a controller area network [CAN]
- N H04L 61/5046
  - • Resolving address allocation conflicts; Testing of addresses (testing when self-assigning an address [H04L 61/5092](#))
- N H04L 61/5053
  - • Lease time; Renewal aspects
- N H04L 61/5061
  - • Pools of addresses
- N H04L 61/5069
  - • for group communication, multicast communication or broadcast communication
- N H04L 61/5076
  - • Update or notification mechanisms, e.g. DynDNS
- N H04L 61/5084
  - • Providing for device mobility (network addressing or numbering for mobility support in wireless networks [H04W 8/26](#); mobile IP [H04W 80/04](#))
- N H04L 61/5092
  - • by self-assignment, e.g. picking addresses at random and testing if they are already in use

N	H04L 61/58	• Caching of addresses or names
N	H04L 61/59	• using proxies for addressing
D	H04L 61/60	• {Details} <administratively transferred to <a href="#">H04L 2101/60</a> ADD>
D	H04L 61/6004	• • {Structures or formats of addresses} <administratively transferred to <a href="#">H04L 2101/604</a> ADD>
D	H04L 61/6009	• • {Caching of addresses (caching data temporarily at an intermediate stage in general H04L 67/2842)} <administratively transferred to <a href="#">H04L 61/58</a> >
D	H04L 61/6013	• • {Proxying of addresses} <administratively transferred to <a href="#">H04L 61/59</a> >
D	H04L 61/6018	• • {Address types} <administratively transferred to <a href="#">H04L 2101/618</a> ADD>
D	H04L 61/6022	• • • {Layer 2 addresses, e.g. medium access control [MAC] addresses} <administratively transferred to <a href="#">H04L 2101/622</a> ADD>
D	H04L 61/6027	• • • {Control area network [CAN] identifiers (electric circuits specially adapted for vehicles for transmission of signals between vehicle parts and subsystems B60R 16/023)} <administratively transferred to <a href="#">H04L 2101/627</a> ADD>
D	H04L 61/6031	• • • {Small computer system interface [SCSI] addresses} <administratively transferred to <a href="#">H04L 2101/631</a> ADD>
D	H04L 61/6036	• • • {IEEE1394 identification numbers} <administratively transferred to <a href="#">H04L 2101/636</a> ADD>
D	H04L 61/604	• • • {Asynchronous transfer mode [ATM] addresses} <administratively transferred to <a href="#">H04L 2101/64</a> ADD>
D	H04L 61/6045	• • • {Fibre channel identifiers} <administratively transferred to <a href="#">H04L 2101/645</a> ADD>
D	H04L 61/605	• • • {Telephone numbers} <administratively transferred to <a href="#">H04L 2101/65</a> ADD>
D	H04L 61/6054	• • • {International mobile subscriber identity [IMSI] numbers} <administratively transferred to <a href="#">H04L 2101/654</a> ADD>
D	H04L 61/6059	• • • {Internet protocol version 6 [IPv6] addresses} <administratively transferred to <a href="#">H04L 2101/659</a> ADD>
D	H04L 61/6063	• • • {Transport layer addresses, e.g. aspects of transmission control protocol [TCP] or user datagram protocol [UDP] ports (TCP/IP or UDP protocol aspects or techniques H04L 69/16)} <administratively transferred to <a href="#">H04L 2101/663</a> ADD>
D	H04L 61/6068	• • {Internet protocol [IP] addresses subnets} <administratively transferred to <a href="#">H04L 2101/668</a> ADD>
D	H04L 61/6072	• • {Short addresses} <administratively transferred to <a href="#">H04L 2101/672</a> ADD>
D	H04L 61/6077	• • {Multiple interfaces, e.g. multihomed nodes} <administratively transferred to <a href="#">H04L 2101/677</a> ADD>

- D H04L 61/6081
- {involving addresses for wireless personal area networks and wireless sensor networks, e.g. Zigbee addresses (network addressing or numbering for mobility support H04W 8/26)}
- <administratively transferred to [H04L 2101/681](#) ADD>
- D H04L 61/6086
- {involving dual-stack hosts, e.g. in internet protocol version 4 [IPv4]/ internet protocol version 6 [IPv6] networks (implementation details of transmission control protocol [TCP]/internet protocol [IP] or user datagram protocol [UDP]/ internet protocol [IP] stack architecture H04L 69/161)}
- <administratively transferred to [H04L 2101/686](#) ADD>
- D H04L 61/609
- {involving geographic information, e.g. room number}
- <administratively transferred to [H04L 2101/69](#) ADD>
- D H04L 61/6095
- {involving masks or ranges of addresses}
- <administratively transferred to [H04L 2101/695](#) ADD>

**M H04L 63/00** {Network architectures or network communication protocols for network security (cryptographic mechanisms or cryptographic arrangements for secret or secure communication [H04L 9/00](#); network architectures or network communication protocols for wireless network security [H04W 12/00](#); security arrangements for protecting computers or computer systems against unauthorised activity [G06F 21/00](#))}

**WARNING**

*Group [H04L 63/00](#) is incomplete pending reclassification of documents from group [H04L 9/40](#).*

*Groups [H04L 9/40](#) and [H04L 63/00](#) should be considered in order to perform a complete search.*

- U H04L 63/02
- {for separating internal from external traffic, e.g. firewalls}
- H04L 63/0227
- {Filtering policies (mail message filtering [H04L 51/12](#) [H04L 51/212](#))}

**M H04L 65/00** ~~{Network arrangements or protocols for real-time communications~~**Network arrangements, protocols or services for supporting real-time applications in data packet communication** (computer conference [H04L 12/1813](#); real time or near real time messaging in message switching systems, e.g. instant messaging [H04L 51/04](#); network applications in general [H04L 67/00](#); systems providing special services to telephonic subscribers [H04M 3/42](#); interconnection arrangements between switching centres for working between exchanges having different types of switching equipment where the types of switching equipment comprise PSTN/ISDN equipment and equipment of networks other than PSTN/ISDN [H04M 7/1205](#); television systems [H04N 7/00](#); **real-time or near real-time messaging, e.g. instant messaging [IM] [H04L 51/04](#)**; selective video distribution [H04N 21/00](#))}

**NOTES**

1. {This group covers:

- only communications which fulfill the following two conditions:
  - i. they are based on packet data;
  - ii. there is real-time or pseudo-real-time temporal association between source and destination, or source and network, or destination and network;
- provided that the above two conditions are met, this group covers arrangements relating to
  - a. the transmission of the multimedia data itself,
  - b. the user-to-user, user-to-network, inter-network or intra-network signalling supporting:
    - b1. the establishment of a session for the subsequent transmission of the multimedia data, or

- b2. the maintenance of the session or
- b3. the application services available to the user during the session (unless explicitly excluded in certain cases).

}

2. {This group does not cover:

- non-real-time multimedia file transfer, which is covered by group [H04L 67/06](#);
- multimedia store or forward messaging as in e-mail, MMS or the like, which is covered by group [H04L 51/00](#);
- analogue video streaming, as in analogue television systems, which is covered by group [H04N 7/00](#);
- selective distribution of MPEG elementary or transport streams, containing video and/or additional data, which is covered by group [H04N 21/00](#);
- bit streaming, i.e. not packet-based, such as in ISDN, which is covered by group [H04Q 11/0428](#);
- instant messaging, which is covered by group [H04L 51/04](#);
- any other multimodal data communications which do not meet the conditions of being packet-based and real-time or pseudo-real-time;
- flow control in packet switching networks, which is covered by group [H04L 47/10](#).

}

3. {In this group the following terms or expressions are used with the meaning indicated:

- H.323 means International Telecommunication Union Recommendation no. 323, series H, entitled "Packet-based multimedia communications systems"
- IP means Internet Protocol
- IMS means IP Multimedia Subsystem
- ISDN means Integrated Services Digital Network
- MGC means Media Gateway Control/Controller
- MGCP means Media Gateway Control Protocol
- MMS means Multimedia Messaging Service
- PBX means Private Branch Exchange
- PSTN means Public Switched Telephone Network
- QoS means Quality of Service
- RTP means Real Time Protocol
- RTCP means Real Time Control Protocol
- RTSP means Real Time Streaming Protocol.
- SIP means Session Initiation Protocol
- SPAM means unsolicited electronic mail
- SPIT means SPAM Prevention in IP Telephony

}

M	H04L 65/10	<ul style="list-style-type: none"> <li>• <del>{Signalling, control or architecture</del> <b>Architectures or entities</b> (data-network management <a href="#">H04L 41/00</a>; data-network testing or monitoring <a href="#">H04L 43/00</a>; admission-control or resource-reservation in packet-switching networks <a href="#">H04L 47/70</a>; control-signalling related to video-distribution <a href="#">H04N 21/63</a>; selecting or control in telephonic networks <a href="#">H04Q 3/00</a>)}</li> </ul>
D	H04L 65/1003	<ul style="list-style-type: none"> <li>• • {Signalling or session protocols}</li> <li>&lt;administratively transferred to <a href="#">H04L 65/1101</a>&gt;</li> </ul>
D	H04L 65/1006	<ul style="list-style-type: none"> <li>• • • {SIP}</li> <li>&lt;administratively transferred to <a href="#">H04L 65/1104</a>&gt;</li> </ul>
D	H04L 65/1009	<ul style="list-style-type: none"> <li>• • • {H.323}</li> <li>&lt;administratively transferred to <a href="#">H04L 65/1106</a>&gt;</li> </ul>
M	H04L 65/1016	<ul style="list-style-type: none"> <li>• • • <del>{IMS</del> <b>IP multimedia subsystem [IMS]</b> (wireless communication networks <a href="#">H04W</a>)}</li> </ul>



M	H04L 65/102	<ul style="list-style-type: none"> <li>• • <del>{</del>Gateways (arrangements for connecting between networks having differing types of switching systems, e.g. gateways, <a href="#">H04L 12/66</a>)<del>}</del></li> </ul>
M	H04L 65/1023	<ul style="list-style-type: none"> <li>• • • <del>{</del>Media gateways<del>}</del></li> </ul>
M	H04L 65/1026	<ul style="list-style-type: none"> <li>• • • • <del>{</del>at the edge<del>}</del></li> </ul>
M	H04L 65/103	<ul style="list-style-type: none"> <li>• • • • <del>{</del>in the network<del>}</del></li> </ul>
M	H04L 65/1033	<ul style="list-style-type: none"> <li>• • • <del>{</del>Signalling gateways<del>}</del></li> </ul>
M	H04L 65/1036	<ul style="list-style-type: none"> <li>• • • • <del>{</del>at the edge<del>}</del></li> </ul>
M	H04L 65/104	<ul style="list-style-type: none"> <li>• • • • <del>{</del>in the network<del>}</del></li> </ul>
M	H04L 65/1043	<ul style="list-style-type: none"> <li>• • • <del>{MGC, MGCP or Megaco</del> Gateway controllers, e.g. media gateway control protocol [MGCP] controllers<del>(decomposed PSTN/ISDN-IP gateways H04M 7/1255)}</del></li> </ul>
N	H04L 65/1045	<ul style="list-style-type: none"> <li>• • Proxies, e.g. for session initiation protocol [SIP]</li> </ul>
M	H04L 65/1046	<ul style="list-style-type: none"> <li>• • <del>{</del>Call controllers; <del>Call servers</del><del>}</del></li> </ul>
D	H04L 65/105	<ul style="list-style-type: none"> <li>• • • <del>{</del>Proxies, e.g. SIP proxies<del>}</del></li> </ul> <p>&lt;administratively transferred to <a href="#">H04L 65/1045</a>&gt;</p>
C	H04L 65/1053	<ul style="list-style-type: none"> <li>• • <del>{</del>Arrangements providing PBX functionality, e.g. IP-PBX/IP private branch exchange [PBX] functionality entities or arrangements (circuit switched PBXs <a href="#">H04M 3/42314</a><a href="#">H04M 3/00</a>; PBX networks <a href="#">H04M 7/009</a>)<del>}</del></li> </ul> <p><u>WARNING</u> Group <a href="#">H04L 65/1053</a> is impacted by reclassification into group <a href="#">H04L 65/1055</a>. Groups <a href="#">H04L 65/1053</a> and <a href="#">H04L 65/1055</a> should be considered in order to perform a complete search.</p>
N	H04L 65/1055	<ul style="list-style-type: none"> <li>• • • Single-site</li> </ul> <p><u>WARNING</u> Group <a href="#">H04L 65/1055</a> is incomplete pending reclassification of documents from group <a href="#">H04L 65/1053</a>. Groups <a href="#">H04L 65/1053</a> and <a href="#">H04L 65/1055</a> should be considered in order to perform a complete search.</p>
M	H04L 65/1056	<ul style="list-style-type: none"> <li>• • • <del>{for multi-site}</del>Multi-site</li> </ul>
M	H04L 65/1059	<ul style="list-style-type: none"> <li>• • <del>{</del>End-user terminal functionality<del>End-user terminal functionalities specially adapted for real-time communication</del>(substation equipment for use by subscribers <a href="#">H04M 1/00</a>; terminal profiles <a href="#">H04L 67/303</a>; terminal emulation <a href="#">H04L 67/08</a>; adaptation for terminals with limited resources or for terminal portability <a href="#">H04L 67/04</a>; management of video-client characteristics <a href="#">H04N 21/258</a>, <a href="#">H04N 21/4516</a>)<del>}</del></li> </ul>
M	H04L 65/1063	<ul style="list-style-type: none"> <li>• • <del>{</del>Application servers<del>Application servers providing network services</del> (systems providing special services to telephonic subscribers <a href="#">H04M 3/42</a>)<del>}</del></li> </ul>
M	H04L 65/1066	<ul style="list-style-type: none"> <li>• • <del>{</del>Session control<del>Session management</del>(conducting a computer conference; e.g. admission, detection, selection or grouping of participants; correlating users to one or more conference session or prioritising transmission; <a href="#">H04L 12/1822</a>; admission control/resource reservation in packet switching networks <a href="#">H04L 47/70</a>)<del>}</del></li> </ul>

- M H04L 65/1069
- • ~~{Setup-Session establishment or de-establishment}~~(computer conference organisation arrangements, e.g. handling schedules, setting up parameters needed by nodes to attend a conference, booking network resources or notifying involved parties H04L 12/1818; admission control or resource reservation in packet switching networks H04L 47/70; arrangements for peer-to-peer networking in network applications H04L 67/104; session management in network applications H04L 67/14; negotiation of communication capabilities H04L 69/24)}
- M H04L 65/1073
- • ~~{Registration-Registration or de-registration}~~(arrangements for addressing or naming in data networks H04L 61/00)}
- M H04L 65/1076
- • ~~{Screening-Screening of IP real time communications, e.g. spam over Internet telephony [SPIT]}~~(arrangements for screening incoming telephone calls H04M 3/436; arrangements for network security H04L 63/00)}
- M H04L 65/1079
- • • ~~{of unsolicited session attempts, e.g. SPIT-}~~(message switching systems, e.g. electronic mail systems, with filtering and selective blocking capabilities H04L 51/12)}
- C H04L 65/1083
- • ~~{In-session procedures-}~~(computer conferences, network arrangements for conference optimisation or adaptation H04L 12/1827; reactions to resource unavailability in packet switching networks H04L 47/74; reallocation or renegotiation of resources in packet switching networks H04L 47/76)}
- WARNING**  
Group [H04L 65/1083](#) is impacted by reclassification into groups [H04L 65/1094](#) and [H04L 65/1095](#).  
Groups [H04L 65/1083](#), [H04L 65/1094](#) and [H04L 65/1095](#) should be considered in order to perform a complete search.
- M H04L 65/1086
- • • ~~{}~~(session scope modification)
- M H04L 65/1089
- • • ~~{by adding or removing media}~~by adding media; by removing media
- M H04L 65/1093
- • • ~~{by adding or removing participants}~~by adding participants; by removing participants
- N H04L 65/1094
- • • Inter-user-equipment sessions transfer or sharing
- WARNING**  
Group [H04L 65/1094](#) is incomplete pending reclassification of documents from group [H04L 65/1083](#).  
Groups [H04L 65/1083](#) and [H04L 65/1094](#) should be considered in order to perform a complete search.
- N H04L 65/1095
- • • Inter-network session transfer or sharing
- WARNING**  
Group [H04L 65/1095](#) is incomplete pending reclassification of documents from group [H04L 65/1083](#).  
Groups [H04L 65/1083](#) and [H04L 65/1095](#) should be considered in order to perform a complete search.
- M H04L 65/1096
- • ~~{Features}~~Supplementary features, e.g. call forwarding or call holdholding (systems providing special services to telephonic or facilities to telephony subscribers [H04M 3/42](#))}
- Q H04L 65/1101
- • Session protocols
- WARNING**  
Group [H04L 65/1101](#) is impacted by reclassification into group [H04L 65/1108](#).  
Groups [H04L 65/1101](#) and [H04L 65/1108](#) should be considered in order to perform a complete search.

- N H04L 65/1104      • • • Session initiation protocol [SIP]
- N H04L 65/1106      • • • Call signalling protocols; H.323 and related
- N H04L 65/1108      • • • Web based protocols, e.g. webRTC
- WARNING  
Group [H04L 65/1108](#) is incomplete pending reclassification of documents from group [H04L 65/1101](#).  
Groups [H04L 65/1101](#) and [H04L 65/1108](#) should be considered in order to perform a complete search.
- C H04L 65/40      • {~~Services~~[Support for services](#) or applications (~~network service management for ensuring proper service fulfilment H04L 41/50; information services comprising voice H04M 3/487; systems providing special services to telephonic subscribers H04M 3/42; contact center services H04M 3/51~~)}
- WARNING  
Group [H04L 65/40](#) is impacted by reclassification into groups [H04L 65/401](#), [H04L 65/4015](#), [H04L 65/402](#), [H04L 65/403](#), [H04L 65/4038](#), [H04L 65/4046](#), [H04L 65/4053](#) and [H04L 65/4061](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- D H04L 65/4007      • • {~~Services involving a main real-time session and one or more additional parallel sessions (real time messaging, e.g. instant messaging, interacting with other applications or services H04L 51/046; multichannel or multilink protocols H04L 69/14; services and arrangements where telephone services are combined with data services H04M 7/0024)~~}
- <administratively transferred to [H04L 65/401](#)>
- N H04L 65/401      • • wherein the services involve a main real-time session and one or more additional parallel real-time or time sensitive sessions, e.g. white board sharing or spawning of a subconference
- WARNING  
Groups [H04L 65/401](#) and [H04L 65/4015](#) are incomplete pending reclassification of documents from group [H04L 65/40](#).  
Groups [H04L 65/40](#), [H04L 65/401](#) and [H04L 65/4015](#) should be considered in order to perform a complete search.
- M H04L 65/4015      • • • {where at least one of the additional parallel sessions is real time or time sensitive, e.g. white board sharing, collaboration or spawning of a subconference (~~telewriting, virtual reality or network gaming H04L 67/38~~)}
- N H04L 65/402      • • wherein the services involve a main real-time session and one or more additional parallel non-real time sessions, e.g. downloading a file in a parallel FTP session, initiating an email or combinational services
- WARNING  
Group [H04L 65/402](#) is incomplete pending reclassification of documents from group [H04L 65/40](#).  
Groups [H04L 65/40](#) and [H04L 65/402](#) should be considered in order to perform a complete search.
- D H04L 65/4023      • • • {~~where none of the additional parallel sessions is real time or time sensitive, e.g. downloading a file in a parallel FTP session, initiating an email or combinational services (message switching systems H04L 51/00; instant messaging H04L 51/04; file transfer H04L 67/06; web-based applications H04L 67/02)~~}
- <administratively transferred to [H04L 65/4025](#)>

- N H04L 65/4025
- • {where none of the additional parallel sessions is real time or time sensitive, e.g. downloading a file in a parallel FTP session, initiating an email or combinational services}
- M H04L 65/403
- • {~~Arrangements for multiparty communication, e.g. conference~~*Arrangements for multi-party communication, e.g. for conferences* (television conferencing systems H04N 7/15; telephonic conference systems H04M 3/56; data switching systems for ~~computer~~ conference H04L 12/1813H04L 12/18; *arrangements for connecting several subscribers to a common circuit, i.e. affording conference facilities H04M 3/56; television conferencing systems H04N 7/15*)}
- WARNING**  
Groups H04L 65/403, H04L 65/4038, H04L 65/4046 and H04L 65/4053 are incomplete pending reclassification of documents from group H04L 65/40. All groups listed in this Warning should be considered in order to perform a complete search.
- M H04L 65/4038
- • {~~with central~~*with* floor control (~~data switching systems for conducting a computer conference, e.g. admission, detection, selection or grouping of participants H04L 12/1822~~)}
- M H04L 65/4053
- • {without floor control}
- M H04L 65/4061
- • {"~~Push-to-X~~" services *Push-to services, e.g. push-to-talk or push-to-video* (push-to-talk services in wireless networks H04W 4/10; connection management, e.g. connection set-up, manipulation or release for push-to-talk or push-on-call services in wireless communication networks H04W 76/45)}
- WARNING**  
Group H04L 65/4061 is incomplete pending reclassification of documents from group H04L 65/40. Groups H04L 65/40 and H04L 65/4061 should be considered in order to perform a complete search.
- D H04L 65/4069
- • {Services related to one-way streaming}
- <administratively transferred to [H04L 65/61](#)>
- D H04L 65/4076
- • {Multicast or broadcast (data switching systems for broadcast or conference H04L 12/18; analog television systems in general H04N 7/00; creating video channels for a dedicated end-user group H04N 21/2668; arrangements for broadcast or distribution combined with broadcast H04H 20/00; arrangements for broadcast applications with a direct linkage of broadcast information H04H 60/00; arrangements for push-based network services H04L 67/26)}
- <administratively transferred to [H04L 65/611](#)>
- D H04L 65/4084
- • {Content on demand (analog television systems using two-way working H04N 7/173; end-user applications for requesting content, additional data or services H04N 21/472)}
- <administratively transferred to [H04L 65/612](#)>
- D H04L 65/4092
- • {Control of source by destination, e.g. user controlling streaming rate of server (explicit feedback from the destination to the source to modify data rate for flow control or congestion control in packet switching networks, e.g. choke packet H04L 47/26; end-to-end flow control in packet switching networks H04L 47/18; analog television systems using two-way working H04N 7/173; control signals to video servers issued by video clients H04N 21/6377)}
- <administratively transferred to [H04L 65/613](#)>

- M H04L 65/60
- ~~{Media handling, encoding, streaming or conversion}~~ *Network streaming of media packets*
- WARNING**  
*Groups H04L 65/60, H04L 65/61, H04L 65/611, H04L 65/612, H04L 65/613, H04L 65/65 and H04L 65/70 are incomplete pending reclassification of documents from group H04L 9/40. All groups listed in this Warning should be considered in order to perform a complete search.*
- D H04L 65/601
- • {Media manipulation, adaptation or conversion (computer conferences; network arrangements for conference optimisation or adaptation H04L 12/1827; flow control or congestion control in packet switching networks H04L 47/10; message switching systems, e.g. electronic mail systems, with message adaptation based on network or terminal capabilities H04L 51/06; adaptation for terminals or networks with limited resources or for terminal portability H04L 67/04; network application being adapted for the location of the user terminal H04L 67/18; involving intermediate processing or storage in the network H04L 67/28; transmission of television signals using pulse code modulation H04N 7/24)}
- <administratively transferred to [H04L 65/75](#)>
- D H04L 65/602
- • • {at the source (reformatting of video signals in video distribution servers H04N 21/2343; reformatting of additional data in video distribution servers H04N 21/2355)}
- <administratively transferred to [H04L 65/762](#)>
- D H04L 65/604
- • • {at the destination (reformatting of video signals in video clients H04N 21/4402; reformatting of additional data in video clients H04N 21/4355)}
- <administratively transferred to [H04L 65/764](#)>
- D H04L 65/605
- • • {intermediate}
- <administratively transferred to [H04L 65/765](#)>
- D H04L 65/607
- • {Stream encoding details (interfacing the downstream path of a video distribution network H04N 21/238, H04N 21/438; controlling the complexity of a video stream H04N 21/2662, H04N 21/4621, H04N 21/64792; protocols for data compression H04L 69/04; header parsing or analysis H04L 69/22)}
- <administratively transferred to [H04L 65/70](#)>
- D H04L 65/608
- • {Streaming protocols, e.g. RTP or RTCP}
- <administratively transferred to [H04L 65/65](#)>
- N H04L 65/61
- • for supporting one-way streaming services, e.g. Internet radio
- N H04L 65/611
- • • for multicast or broadcast (systems for broadcast or conference [H04L 12/18](#); arrangements for broadcast or distribution combined with broadcast [H04H 20/00](#); arrangements for broadcast applications with a direct linkage to broadcast information or to broadcast space-time [H04H 60/00](#); selective distribution of broadcast services, e.g. multimedia broadcast multicast service [MBMS], [H04W 4/06](#))
- N H04L 65/612
- • • for unicast
- N H04L 65/613
- • • for the control of the source by the destination (control signals issued by the client directed to the server or network components specially adapted for selective content distribution [H04N 21/637](#))
- N H04L 65/65
- • Network streaming protocols, e.g. real-time transport protocol [RTP] or real-time control protocol [RTCP]
- N H04L 65/70
- • Media network packetisation

- Q H04L 65/75
- • Media network packet handling
- WARNING  
 Group [H04L 65/75](#) is incomplete pending reclassification of documents from group [H04L 9/40](#).  
 Group [H04L 65/75](#) is also impacted by reclassification into groups [H04L 65/752](#) and [H04L 65/756](#).  
 All groups listed in this Warning should be considered in order to perform a complete search.
- N H04L 65/752
- • • adapting media to network capabilities
- WARNING  
 Group [H04L 65/752](#) is incomplete pending reclassification of documents from groups [H04L 9/40](#) and [H04L 65/75](#).  
 Groups [H04L 9/40](#), [H04L 65/75](#) and [H04L 65/752](#) should be considered in order to perform a complete search.
- N H04L 65/756
- • • adapting media to device capabilities
- WARNING  
 Group [H04L 65/756](#) is incomplete pending reclassification of documents from groups [H04L 9/40](#) and [H04L 65/75](#).  
 Groups [H04L 9/40](#), [H04L 65/75](#) and [H04L 65/756](#) should be considered in order to perform a complete search.
- N H04L 65/762
- • • {at the source (reformatting of additional data in video distribution servers [H04N 21/2355](#))}
- N H04L 65/764
- • • {at the destination (reformatting of additional data in video clients [H04N 21/4355](#))}
- N H04L 65/765
- • • {intermediate}
- M H04L 65/80
- {QoS aspects *Responding to QoS* (monitoring of the downstream path of a video distribution network [H04N 21/2402](#), [H04N 21/44209](#); network service management, ensuring proper service fulfillment according to an agreement or contract between two parties, e.g. between an IT-provider and a customer [H04L 41/50](#); monitoring arrangements, testing arrangements, with monitoring of QoS metrics [H04L 43/08](#); traffic-type related flow control in packet switching networks, e.g. priorities or QoS [H04L 47/24](#); admission control/resource reservation in packet switching networks based on QoS or priority awareness [H04L 47/805](#); adaptation for terminals or networks with limited resources, or for terminal portability [H04L 67/04](#); network application adapted for the location of the user terminal [H04L 67/18](#); reducing the amount or size of exchanged application data [H04L 67/2828](#); arrangements for scheduling or organising the servicing of requests whereby quality of service or priority requirements are taken into account [H04L 67/322](#))}



**M H04L 67/00**

~~{Network-specific arrangements or communication protocols supporting networked~~**Network arrangements or protocols for supporting network services or applications** (~~message switching systems H04L 51/00; network management protocols H04L 41/00; routing or path finding of packets in data switching networks H04L 45/00; protocols for real-time multimedia communication H04L 65/00; information retrieval G06F 16/00; services or facilities specially adapted for wireless communication networks H04W 4/00; network structures or processes for video distribution between server and client or between remote clients H04N 21/00; exchange systems providing special services or facilities to subscribers involving telephonic communications H04M 3/42; distributed information systems G06F 9/00; G06F 17/00; lower layer network functionalities which support application layer provisions H04L 12/00~~**user-to-user messaging H04L 51/00; network arrangements, protocols or services for supporting real-time applications in data packet communications networks H04L 65/00**)}

**NOTES****1. This group covers:**

1. Networking arrangements or communication protocols to support networked applications which occur at the abstract network layers 5 to 7 of the OSI layer model. The higher layers constitute the interface between the network and the computer applications that use the network to communicate.
2. Network-specific aspects of client-server applications as well as of networking arrangements supporting networked/distributed applications, e.g. data transport, scheduling. This group also covers specific networked application layer protocols, e.g. FTP, WAP, HTTP.

**2. This group does not cover:**

1. Distributed applications which are network-agnostic, i.e. distributed information systems for which the network functions are transparent. These field are covered, e.g. by [G06F 9/00](#), [G06F 17/00](#). Data switching network provisions in general and the lower layer network functionalities which support application layer provisions are covered by [H04L 12/00](#)

**Q H04L 67/01****• Protocols****WARNING**

Group [H04L 67/01](#) is incomplete pending reclassification of documents from group [H04L 9/40](#).

Group [H04L 67/01](#) is also impacted by reclassification into groups

[H04L 67/02](#), [H04L 67/025](#), [H04L 67/04](#), [H04L 67/06](#), [H04L 67/08](#), [H04L 67/10](#), [H04L 67/1001](#), [H04L 67/1004](#), [H04L 67/1006](#), [H04L 67/1008](#), [H04L 67/101](#), [H04L 67/1012](#), [H04L 67/1014](#), [H04L 67/1017](#), [H04L 67/1019](#), [H04L 67/1021](#), [H04L 67/1023](#), [H04L 67/1025](#), [H04L 67/1027](#), [H04L 67/1029](#), [H04L 67/1031](#), [H04L 67/1034](#), [H04L 67/1036](#), [H04L 67/1038](#), [H04L 67/104](#), [H04L 67/1042](#), [H04L 67/1044](#), [H04L 67/1046](#), [H04L 67/1048](#), [H04L 67/1051](#), [H04L 67/1053](#), [H04L 67/1055](#), [H04L 67/1057](#), [H04L 67/1059](#), [H04L 67/1061](#), [H04L 67/1063](#), [H04L 67/1065](#), [H04L 67/1068](#), [H04L 67/107](#), [H04L 67/1072](#), [H04L 67/1074](#), [H04L 67/1076](#), [H04L 67/1078](#), [H04L 67/108](#), [H04L 67/1082](#), [H04L 67/1085](#), [H04L 67/1087](#), [H04L 67/1089](#), [H04L 67/1091](#), [H04L 67/1093](#), [H04L 67/1095](#), [H04L 67/1097](#), [H04L 67/12](#), [H04L 67/125](#), [H04L 67/131](#), [H04L 67/133](#), [H04L 67/1396](#), [H04L 67/2866](#), [H04L 67/2869](#), [H04L 67/2871](#), [H04L 67/2876](#), [H04L 67/288](#), [H04L 67/2885](#), [H04L 67/289](#), [H04L 67/2895](#), [H04L 67/30](#), [H04L 67/303](#) and [H04L 67/306](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- M H04L 67/02
- ~~{involving the use of web-based technology, e.g. hyper text~~*based on web technology, e.g. hypertext* transfer protocol [HTTP] ~~(information retrieval from the Internet G06F 16/95)}~~
- WARNING**  
Groups *H04L 67/02* and *H04L 67/025* are incomplete pending reclassification of documents from group *H04L 67/01*.  
Groups *H04L 67/01*, *H04L 67/02* and *H04L 67/025* should be considered in order to perform a complete search.
- M H04L 67/025
- ~~{for remote control or remote monitoring of the application applications~~(network management using Internet technology H04L 41/0246; network monitoring H04L 43/00; management of end-device applications over a special purpose or proprieter network H04L 67/125)}
- M H04L 67/04
- ~~{specially adapted for terminals or networks with limited resources or for terminal portability, e.g. wireless application protocol [WAP] capabilities~~(services or facilities specially adapted for wireless communication networks H04W 4/00)}; *specially adapted for terminal portability*
- WARNING**  
Group *H04L 67/04* is incomplete pending reclassification of documents from group *H04L 67/01*.  
Groups *H04L 67/01* and *H04L 67/04* should be considered in order to perform a complete search.
- M H04L 67/06
- ~~{specially adapted for file transfer, e.g. file transfer protocol [FTP]}~~
- WARNING**  
Group *H04L 67/06* is incomplete pending reclassification of documents from group *H04L 67/01*.  
Groups *H04L 67/01* and *H04L 67/06* should be considered in order to perform a complete search.
- M H04L 67/08
- ~~{specially adapted for terminal emulation, e.g. telnet Telnet~~(protocols for telewriting or protocols for networked simulations; virtual reality or games H04L 67/38; emulation or software simulation G06F 9/455)}
- WARNING**  
Group *H04L 67/08* is incomplete pending reclassification of documents from group *H04L 67/01*.  
Groups *H04L 67/01* and *H04L 67/08* should be considered in order to perform a complete search.
- M H04L 67/10
- ~~{in which an application is distributed across nodes in the network (software deployment G06F 8/60; multiprogramming arrangements G06F 9/46)}~~
- WARNING**  
Group *H04L 67/10* is incomplete pending reclassification of documents from group *H04L 67/01*.  
Groups *H04L 67/01* and *H04L 67/10* should be considered in order to perform a complete search.
- N H04L 67/1001
- • for accessing one among a plurality of replicated servers
- WARNING**  
Group *H04L 67/1001* is incomplete pending reclassification of documents from groups *H04L 9/40* and *H04L 67/01*.  
Groups *H04L 9/40*, *H04L 67/01* and *H04L 67/1001* should be considered in order to perform a complete search.

- N H04L 67/10015 . . . . {Access to distributed or replicated servers, e.g. using brokers}
- WARNING  
Group [H04L 67/10015](#) is incomplete pending reclassification of documents from group [H04L 9/40](#).  
Groups [H04L 9/40](#) and [H04L 67/10015](#) should be considered in order to perform a complete search.
- D H04L 67/1002 . . {for accessing one among a plurality of replicated servers, e.g. load balancing (arrangements or protocols for peer-to-peer networking H04L 67/104; protocols for client-server architectures H04L 67/42; allocation of processing resources to service requests in a distributed system G06F 9/5027; rebalancing the processing load in a distributed system G06F 9/5083; wireless network traffic load balancing H04W 28/08; network load balancing; traffic engineering H04L 47/125; video servers using load balancing strategies H04N 21/23103; error detection or correction of the data by redundancy in hardware G06F 11/16)}
- <administratively transferred to [H04L 67/1001](#)>
- M H04L 67/1004 . . . . ~~{Server selection in load balancing}~~ *Server selection for load balancing*
- WARNING  
Group [H04L 67/1004](#) is incomplete pending reclassification of documents from group [H04L 67/01](#).  
Groups [H04L 67/01](#) and [H04L 67/1004](#) should be considered in order to perform a complete search.
- M H04L 67/1006 . . . . ~~{with static server selection, e.g. the same server being selected for a specific client (allocation of processing resources considering data affinity G06F 9/5033)}~~
- WARNING  
Group [H04L 67/1006](#) is incomplete pending reclassification of documents from group [H04L 67/01](#).  
Groups [H04L 67/01](#) and [H04L 67/1006](#) should be considered in order to perform a complete search.
- M H04L 67/1008 . . . . ~~{based on parameters of servers, e.g. available memory or workload (allocation of processing resources to a machine considering the load G06F 9/505 monitoring of computer activity G06F 11/30)}~~
- WARNING  
Group [H04L 67/1008](#) is incomplete pending reclassification of documents from group [H04L 67/01](#).  
Groups [H04L 67/01](#) and [H04L 67/1008](#) should be considered in order to perform a complete search.
- M H04L 67/101 . . . . ~~{based on network conditions}~~
- WARNING  
Group [H04L 67/101](#) is incomplete pending reclassification of documents from group [H04L 67/01](#).  
Groups [H04L 67/01](#) and [H04L 67/101](#) should be considered in order to perform a complete search.
- M H04L 67/1012 . . . . ~~{based on compliance of requirements or conditions with available server resources}~~
- WARNING  
Group [H04L 67/1012](#) is incomplete pending reclassification of documents from group [H04L 67/01](#).

*Groups H04L 67/01 and H04L 67/1012 should be considered in order to perform a complete search.*

M H04L 67/1014 . . . . ~~{based on the content of a request}~~

**WARNING**

*Group H04L 67/1014 is incomplete pending reclassification of documents from group H04L 67/01.  
Groups H04L 67/01 and H04L 67/1014 should be considered in order to perform a complete search.*

M H04L 67/1017 . . . . ~~{based on a round robin mechanism}~~

**WARNING**

*Group H04L 67/1017 is incomplete pending reclassification of documents from group H04L 67/01.  
Groups H04L 67/01 and H04L 67/1017 should be considered in order to perform a complete search.*

M H04L 67/1019 . . . . ~~{based on random server selection}~~ Random or heuristic server selection

**WARNING**

*Group H04L 67/1019 is incomplete pending reclassification of documents from group H04L 67/01.  
Groups H04L 67/01 and H04L 67/1019 should be considered in order to perform a complete search.*

M H04L 67/1021 . . . . ~~{based on client or server locations}~~

**WARNING**

*Group H04L 67/1021 is incomplete pending reclassification of documents from group H04L 67/01.  
Groups H04L 67/01 and H04L 67/1021 should be considered in order to perform a complete search.*

M H04L 67/1023 . . . . ~~{based on other criteria, e.g. hash applied to IP address, specific algorithms or cost}~~ based on a hash applied to IP addresses or costs

**WARNING**

*Group H04L 67/1023 is incomplete pending reclassification of documents from group H04L 67/01.  
Groups H04L 67/01 and H04L 67/1023 should be considered in order to perform a complete search.*

M H04L 67/1025 . . . . ~~{dynamic}~~ Dynamic adaptation of the criteria on which the server selection is based

**WARNING**

*Group H04L 67/1025 is incomplete pending reclassification of documents from group H04L 67/01.  
Groups H04L 67/01 and H04L 67/1025 should be considered in order to perform a complete search.*

M H04L 67/1027 . . . . ~~{Persistence of sessions during load balancing}~~

**WARNING**

*Group H04L 67/1027 is incomplete pending reclassification of documents from group H04L 67/01.  
Groups H04L 67/01 and H04L 67/1027 should be considered in order to perform a complete search.*

- M H04L 67/1029      • • • ~~{using data related to the state of servers by a load balancer (server selection based on server parameters H04L 67/1008; performance measurement for load balancing G06F 11/3433; information retrieval in structured data stores G06F 16/20)}~~
- WARNING  
Group H04L 67/1029 is incomplete pending reclassification of documents from group H04L 67/01.  
Groups H04L 67/01 and H04L 67/1029 should be considered in order to perform a complete search.
- M H04L 67/1031      • • • ~~{Controlling of the operation of servers by a load balancer, e.g. adding or removing servers that serve requests}~~
- WARNING  
Group H04L 67/1031 is incomplete pending reclassification of documents from group H04L 67/01.  
Groups H04L 67/01 and H04L 67/1031 should be considered in order to perform a complete search.
- M H04L 67/1034      • • • ~~{Reaction to server failures by a load balancer (network fault restoration H04L 41/0654; departure or maintenance mechanisms in Peer-to-Peer networks H04L 67/1048; intermediate processing providing operational support to end devices by emulation or by off-loading in the network H04L 67/2861; techniques for recovering from a failure of a protocol instance or entity H04L 69/40; error detection or correction of the data by redundancy in hardware G06F 11/16; failing over workload from one server to another one G06F 11/202)}~~
- WARNING  
Group H04L 67/1034 is incomplete pending reclassification of documents from group H04L 67/01.  
Groups H04L 67/01 and H04L 67/1034 should be considered in order to perform a complete search.
- M H04L 67/1036      • • • ~~{Load balancing of requests to servers for services different from user content provisioning, e.g. load balancing to DNS servers or firewalls across domain name servers (internet service provider selection H04L 12/5691)}~~
- WARNING  
Group H04L 67/1036 is incomplete pending reclassification of documents from group H04L 67/01.  
Groups H04L 67/01 and H04L 67/1036 should be considered in order to perform a complete search.
- M H04L 67/1038      • • • ~~{Load balancing arrangements to avoid a single path through a load balancer}~~
- WARNING  
Group H04L 67/1038 is incomplete pending reclassification of documents from group H04L 67/01.  
Groups H04L 67/01 and H04L 67/1038 should be considered in order to perform a complete search.

- M H04L 67/104
- • • {for peer ~~Peer~~-to-peer [P2P] ~~networking~~*networks*; Functionalities or architectural details of P2P networks (file transfer, upload, download H04L 67/06; accessing replicated servers H04L 67/1002; presence management H04L 67/24; scheduling provisions H04L 67/32; real-time communications H04L 65/00; information retrieval using distributed database systems G06F 16/27; small scale hierarchical wireless network topologies H04W 84/10; wireless interfaces between terminal devices H04W 92/18; P2P connections between video clients H04N 21/632; P2P connections between video game machines A63F 13/34)}
- WARNING**  
*Groups H04L 67/104, H04L 67/1042, H04L 67/1044, H04L 67/1046, H04L 67/1048, H04L 67/1051, H04L 67/1053, H04L 67/1055, H04L 67/1057, H04L 67/1059, H04L 67/1061, H04L 67/1063, H04L 67/1065, H04L 67/1068, H04L 67/107, H04L 67/1072, H04L 67/1074, H04L 67/1076, H04L 67/1078, H04L 67/108, H04L 67/1082, H04L 67/1085, H04L 67/1087, H04L 67/1089, H04L 67/1091 and H04L 67/1093 are incomplete pending reclassification of documents from group H04L 67/01. All groups listed in this Warning should be considered in order to perform a complete search.*
- M H04L 67/1042
- • • {involving *using* topology management mechanisms}
- M H04L 67/1044
- • • {Group management mechanisms (~~user group management in wireless communication networks H04W 4/08~~; management of multicast group membership H04L 12/185; reconfiguring of node membership in a computing system to eliminate errors G06F 11/1425)}
- M H04L 67/1048
- • • • {Departure or maintenance mechanisms (~~methods for recovering from a failure of a protocol instance or entity H04L 69/40~~; intermediate processing providing operational support to end devices by emulation or by off-loading in the network H04L 67/2861; reactions to server failures by a load balancer H04L 67/1034; error detection or correction of the data by redundancy in operation G06F 11/14)}
- U H04L 67/1059
- • • {Inter-group management mechanisms, e.g. splitting, merging or interconnection of groups}
- M H04L 67/1061
- • • {involving *using* node-based peer discovery mechanisms (~~access to replicated servers H04L 67/1002~~; *static access to replicated servers H04L 67/1006*; service discovery H04L 67/16 H04L 67/51; topology discovery for routing H04L 45/02; information retrieval in distributed file systems G06F 16/10; information retrieval in structured data stores; indexing, querying G06F 16/20)}
- M H04L 67/1063
- • • • {Discovery through ~~centralizing~~*centralising* entities}
- M H04L 67/1065
- • • • {Discovery involving distributed pre-established resource-based relationships among peers, e.g. based on distributed hash tables [DHT] (pre-configuration of logical or physical connections H04L 67/1053)}
- M H04L 67/1068
- • • • {Discovery involving direct consultation or announcement among potential requesting and potential source peers}
- M H04L 67/107
- • • • • {with limitation or expansion of the discovery scope}
- M H04L 67/1072
- • • • {Discovery involving ranked list compilation of candidate peers}
- M H04L 67/1074
- • • {for supporting ~~resource~~*for supporting data block* transmission mechanisms (~~routing over an overlay routing layer H04L 45/64~~; file transfer H04L 67/06)}
- M H04L 67/1076
- • • • {Resource dissemination mechanisms or network resource keeping policies for optimal resource availability in the overlay network}
- M H04L 67/1078
- • • • {Resource delivery mechanisms}



- M H04L 67/108 . . . . . {~~characterized~~*characterised* by resources being split in blocks or fragments}
- M H04L 67/1082 . . . . . {involving incentive schemes}
- M H04L 67/1085 . . . . . {involving dynamic management of active down- or uploading connections}
- M H04L 67/1087 . . . . {~~involving cross functional networking aspects~~*using cross-functional networking aspects*}
- M H04L 67/1089 . . . . . {Hierarchical topologies}
- M H04L 67/1091 . . . . . {Interfacing with client-server systems or between P2P systems}
- M H04L 67/1093 . . . . . {Some peer nodes performing special functions}
- M H04L 67/1095 . . . . {~~for supporting replication~~*Replication* or mirroring of data, e.g. scheduling or transport for data synchronisation between network nodes ~~or user terminals or syncML (synchronisation in information retrieval in file systems G06F 16/10; synchronisation in structured data stores G06F 16/27; mass storage redundancy by mirroring for error detection or correction of data G06F 11/2056)~~}
- WARNING*  
Group *H04L 67/1095* is incomplete pending reclassification of documents from group *H04L 67/01*.  
Groups *H04L 67/01* and *H04L 67/1095* should be considered in order to perform a complete search.
- M H04L 67/1097 . . . . {~~for distributed storage of data in a network, e.g. networks, e.g. transport arrangements for~~ network file system [NFS], ~~transport mechanisms for~~ storage area networks [SAN] or network attached storage [NAS] ~~(temporary storage of data at an intermediate stage H04L 67/2842; dedicated interfaces to storage systems G06F 3/0601)~~}
- WARNING*  
Group *H04L 67/1097* is incomplete pending reclassification of documents from group *H04L 67/01*.  
Groups *H04L 67/01* and *H04L 67/1097* should be considered in order to perform a complete search.
- M H04L 67/12 . . . . {~~special~~*ly* adapted for proprietary or special ~~purpose~~ networking environments, e.g. medical networks, sensor networks, networks in ~~a car~~*vehicles* or remote metering networks ~~(home automation networks H04L 12/2803; total factory control characterised by the network communication G05B 19/4185; games involving transmission systems A63F 13/30)~~}
- WARNING*  
Groups *H04L 67/12* and *H04L 67/125* are incomplete pending reclassification of documents from group *H04L 67/01*.  
All groups listed in this Warning should be considered in order to perform a complete search.
- M H04L 67/125 . . . . {~~involving the~~*involving* control of end-device applications over a network ~~(network management of network elements H04L 41/00; end-device control or monitoring using web-based technology H04L 67/025)~~}
- N H04L 67/131 . . . . . Protocols for games, networked simulations or virtual reality
- WARNING*  
Group *H04L 67/131* is incomplete pending reclassification of documents from groups *H04L 9/40* and *H04L 67/01*.

Groups [H04L 9/40](#), [H04L 67/01](#) and [H04L 67/131](#) should be considered in order to perform a complete search.

- |   |              |  |
|---|--------------|--|
| N | H04L 67/133  | <ul style="list-style-type: none"> <li>• <del>Protocols for remote procedure calls [RPC]</del></li> </ul> <p><u>WARNING</u><br/>Group <a href="#">H04L 67/133</a> is incomplete pending reclassification of documents from groups <a href="#">H04L 9/40</a> and <a href="#">H04L 67/01</a>.<br/>Groups <a href="#">H04L 9/40</a>, <a href="#">H04L 67/01</a> and <a href="#">H04L 67/133</a> should be considered in order to perform a complete search.</p>   |
| N | H04L 67/1396 | <ul style="list-style-type: none"> <li>• <del> specially adapted for monitoring users' activity</del></li> </ul> <p><u>WARNING</u><br/>Group <a href="#">H04L 67/1396</a> is incomplete pending reclassification of documents from groups <a href="#">H04L 9/40</a> and <a href="#">H04L 67/01</a>.<br/>Groups <a href="#">H04L 9/40</a>, <a href="#">H04L 67/01</a> and <a href="#">H04L 67/1396</a> should be considered in order to perform a complete search.</p>  |
| M | H04L 67/14   | <ul style="list-style-type: none"> <li>• <del>{for session</del><b>Session</b><del> management (session control for real-time communications H04L 65/1066; session initiation protocol H04L 65/1006; negotiation of communication capabilities H04L 69/24; computer conference arrangements H04L 12/1813; connection management in wireless networks H04W 76/00; session management for telephonic communication and services H04M 7/00; intertask communications in multiprogramming arrangements G06F 9/54</del><b>for real-time applications in data packet communications networks H04L 65/1066)}</b></li> </ul> |
| M | H04L 67/141  | <ul style="list-style-type: none"> <li>• <del>{provided for setup of an application session</del><b>Setup of application sessions (session setup for real-time communications H04L 65/1069 admission control or resource allocation in data switching networks H04L 47/70)}</b></li> </ul>   |
| M | H04L 67/142  | <ul style="list-style-type: none"> <li>• <del>{provided for managing session state</del><b>Managing session states</b><del> for stateless protocols; -Signalling a session state</del><b>session states</b><del>; -State transitions; -Keeping-state mechanisms}</del></li> </ul>  |
| M | H04L 67/143  | <ul style="list-style-type: none"> <li>• <del>{provided for session termination, e.g., event controlled end of session}</del><b>Termination or inactivation of sessions, e.g. event-controlled end of session</b></li> </ul>   |
| M | H04L 67/145  | <ul style="list-style-type: none"> <li>• <del>{provided for</del> avoiding end of session, e.g. keep-alive, heartbeats, resumption message; <b>or</b> wake-up for inactive or interrupted session</li> </ul>   |
| M | H04L 67/146  | <ul style="list-style-type: none"> <li>• <del>{Markers provided</del><b>Markers</b><del> for unambiguous identification of a particular session, e.g. session identifier, session cookie or URL-encoding (IP multimedia subsystem H04L 65/1016; cryptographic mechanisms for verifying the identity or authority of a user or a system, ID-based authentication H04L 9/32; cryptographic mechanisms for ID-based key exchange H04L 9/08)}</del></li> </ul>   |
| M | H04L 67/147  | <ul style="list-style-type: none"> <li>• <del>{provided for signalling methods or particular messages providing extensions to IETF, ITU, ETSI or 3GPP protocols, e.g., additional proprietary messages; standard messages enhanced by additional header fields or standard messages being used for purposes other than originally intended}</del><b>Signalling methods or messages providing extensions to protocols defined by standardisation</b></li> </ul>   |
| M | H04L 67/148  | <ul style="list-style-type: none"> <li>• <del>{provided for migration</del><b>Migration</b><del> or transfer of sessions (in-session procedures in real-time communications H04L 65/1083; control or signalling for completing the hand-off in wireless networks H04W 36/0005)}</del></li> </ul>   |

- D H04L 67/16
- {Service discovery or service management, e.g. service location protocol [SLP] or Web services (network service management for ensuring proper service fulfilment according to an agreement or contract between two parties H04L 41/50; address allocation to terminals or nodes connected to a network H04L 61/30; mobile application services specially adapted for wireless communication networks H04W 4/00)}
- <administratively transferred to [H04L 67/51](#)>
- D H04L 67/18
- {in which the network application is adapted for the location of the user terminal (wireless application services making use of the location of users or terminals H04W 4/02 takes precedence; location based Web retrieval G06F 16/9537)}
- <administratively transferred to [H04L 67/52](#)>
- D H04L 67/20
- {involving third party service providers (e-commerce G06Q 30/00)}
- <administratively transferred to [H04L 67/53](#)>
- D H04L 67/22
- {Tracking the activity of the user (network monitoring arrangements H04L 43/00; recording of computer activity G06F 11/34; e-commerce G06Q 30/00)}
- <administratively transferred to [H04L 67/535](#)>
- D H04L 67/24
- {Presence management (use and manipulation of presence information in instant messaging H04L 51/043)}
- <administratively transferred to [H04L 67/54](#)>
- D H04L 67/26
- {Push-based network services (broadcast or multicast push services H04L 12/1859)}
- <administratively transferred to [H04L 67/55](#)>
- D H04L 67/28
- {for the provision of proxy services, e.g. intermediate processing or storage in the network (network management provisions H04L 41/00; network monitoring provisions H04L 43/00; proxies for network security H04L 63/0281; media manipulation, adaptation or conversion in real-time communications H04L 65/601; protocol conversion H04L 69/08)}
- <administratively transferred to [H04L 67/56](#)>
- D H04L 67/2804
- {for adding application control or application functional data, e.g. adding metadata}
- <administratively transferred to [H04L 67/561](#)>
- D H04L 67/2809
- {for brokering (negotiation of communication capabilities H04L 69/24; e-commerce G06Q 30/00)}
- <administratively transferred to [H04L 67/562](#)>
- D H04L 67/2814
- {for data redirection (load balancing of replicated servers H04L 67/1002; access network selection H04L 12/5691; routing or path finding of packets H04L 45/00; content or context based routing H04L 67/327; network addressing or naming provisions H04L 61/00)}
- <administratively transferred to [H04L 67/563](#)>
- D H04L 67/2819
- {Enhancement of application control based on intercepted application data}
- <administratively transferred to [H04L 67/564](#)>
- D H04L 67/2823
- {for conversion or adaptation of application content or format (message adaptation based on network or terminal capabilities H04L 51/06; media manipulation, adaptation or conversion in real-time communications H04L 65/601; protocol conversion H04L 69/08; optimising visualization of content for web browsing G06F 16/9577)}
- <administratively transferred to [H04L 67/565](#)>

- D H04L 67/2828
  - • {for reducing the amount or size of exchanged application data (protocols for data compression H04L 69/04; digital video compression H04N 19/00)}
  - <administratively transferred to [H04L 67/5651](#)>
- D H04L 67/2833
  - {for grouping or aggregating service requests, e.g. for unified processing of service requests (networking arrangements or communication protocols for scheduling or organising the servicing of application requests H04L 67/32)}
  - <administratively transferred to [H04L 67/566](#)>
- D H04L 67/2838
  - {for integrating service provisioning from a plurality of service providers (web site content organization and management G06F 16/958)}
  - <administratively transferred to [H04L 67/567](#)>
- D H04L 67/2842
  - {for storing data temporarily at an intermediate stage, e.g. caching (distributed storage of data in a network H04L 67/1097; browsing optimization of access to content by caching G06F 16/9574; addressing of a cache within a hierarchically structured memory system G06F 12/0802; disk caching G06F 12/0866)}
  - <administratively transferred to [H04L 67/568](#)>
- D H04L 67/2847
  - • {involving pre-fetching or pre-delivering data based on network characteristics (cache prefetching within a hierarchical structured memory system G06F 12/0862)}
  - <administratively transferred to [H04L 67/5681](#)>
- D H04L 67/2852
  - • {involving policies or rules for updating, deleting or replacing the stored data based on network characteristics (replacement control in memory systems G06F 12/12)}
  - <administratively transferred to [H04L 67/5682](#)>
- D H04L 67/2857
  - • {involving storage of data provided by user terminals, i.e. reverse caching}
  - <administratively transferred to [H04L 67/5683](#)>
- D H04L 67/2861
  - {for providing operational support to end devices by emulation, e.g. when they are unavailable, or by off-loading in the network (techniques for recovering from a failure of a protocol instance or entity H04L 69/40; reactions to server failures by a load balancer H04L 67/1034; departure or maintenance mechanisms in peer-to-peer networks H04L 67/1048; terminal emulation H04L 67/08; disconnected operation in file systems G06F 16/10; emulation or software simulation G06F 9/455; input/output emulation function for peripheral devices G06F 13/105)}
  - <administratively transferred to [H04L 67/59](#)>
- M H04L 67/2866
  - • ~~{Architectural aspects}~~ *Architectures; Arrangements*

**WARNING**

*Groups [H04L 67/2866](#), [H04L 67/2869](#), [H04L 67/2871](#), [H04L 67/2876](#), [H04L 67/288](#), [H04L 67/2885](#), [H04L 67/289](#), [H04L 67/2895](#), [H04L 67/30](#), [H04L 67/303](#) and [H04L 67/306](#) are incomplete pending reclassification of documents from group [H04L 67/01](#). All groups listed in this Warning should be considered in order to perform a complete search.*
- N H04L 67/2869
  - • *Terminals specially adapted for communication*
- M H04L 67/2871
  - • ~~{Implementation details of a single intermediate entity}~~ *single intermediate entities*
- M H04L 67/2876
  - • ~~{Pairs of interprocessing}~~ *Pairs of inter-processing* entities at each side of the network, e.g. split proxies}
- M H04L 67/288
  - • ~~{Distributed intermediate devices, i.e. intermediate device}~~ *devices for interaction with other intermediate devices on the same level}*

- M H04L 67/2885
- ~~{Hierarchically arranged intermediate devices, e.g. *for* hierarchical caching}~~
- M H04L 67/289
- ~~{where the intermediate processing is functionally located closer *Intermediate processing functionally located close* to the data consumer application, e.g. in same machine, in same home or in same subnetwork} *sub-network*~~
- M H04L 67/2895
- ~~{where the intermediate processing is functionally located closer *Intermediate processing functionally located close* to the data provider application, e.g. reverse proxies; *in same machine, in same cluster or subnetwork*}~~
- M H04L 67/30
- ~~{involving profiles} *Profiles*~~
- M H04L 67/303
- ~~{Terminal profiles}~~
- M H04L 67/306
- ~~{User profiles *(configuring for programme initiating G06F 9/44505; information retrieval by personalized querying G06F 16/9535)*}~~
- D H04L 67/32
- {for scheduling or organising the servicing of application requests, e.g. requests for application data transmissions involving the analysis and optimisation of the required network resources (computer conference arrangements H04L 12/1813; broadcast or conference with schedule organisation H04L 12/1881; network service management, ensuring proper service fulfilment according to an agreement or contract between two parties H04L 41/50; intermediate grouping or aggregating of service requests H04L 67/2833)}
- <administratively transferred to [H04L 67/60](#)>
- D H04L 67/322
- {whereby quality of service [QoS] or priority requirements are taken into account (monitoring of QoS metrics H04L 43/08; QoS aspects in real-time communications H04L 65/80)}
- <administratively transferred to [H04L 67/61](#)>
- D H04L 67/325
- {whereby a time schedule is established for servicing the requests}
- <administratively transferred to [H04L 67/62](#)>
- D H04L 67/327
- {whereby the routing of a service request to a node providing the service depends on the content or context of the request, e.g. profile, connectivity status, payload or application type}
- <administratively transferred to [H04L 67/63](#)>
- M H04L 67/34
- {involving the movement of software or configuration parameters (*configuration management of network or network elements H04L 41/08; remote booting G06F 9/4416; programme loading or initiating G06F 9/445 network booting or remote initial program loading [RIPL] G06F 9/4416*)}
- D H04L 67/36
- {involving the display of network or application conditions affecting the network application to the application user (graphical user interfaces for network management H04L 41/22)}
- <administratively transferred to [H04L 67/75](#)>
- D H04L 67/38
- {Protocols for telewriting; Protocols for networked simulations, virtual reality or games (games using an electronically generated display A63F 13/00; remote windowing or X-Windows G06F 9/452)}
- <administratively transferred to [H04L 67/131](#)>
- D H04L 67/40
- {Protocols for remote procedure calls [RPC] (remote procedure calls G06F 9/547)}
- <administratively transferred to [H04L 67/133](#)>
- D H04L 67/42
- {Protocols for client-server architectures (access to replicated servers H04L 67/1002)}
- <administratively transferred to [H04L 67/01](#)>



- N H04L 67/50
- Network services
- WARNING  
 Group [H04L 67/50](#) is incomplete pending reclassification of documents from group [H04L 9/40](#).  
 Groups [H04L 9/40](#) and [H04L 67/50](#) should be considered in order to perform a complete search.
- N H04L 67/51
- • Discovery or management thereof, e.g. service location protocol [SLP] or web services
- N H04L 67/52
- • specially adapted for the location of the user terminal
- N H04L 67/53
- • using third party service providers
- N H04L 67/535
- • {Tracking the activity of the user (network monitoring arrangements [H04L 43/00](#); recording of computer activity [G06F 11/34](#))}
- N H04L 67/54
- • Presence management, e.g. monitoring or registration for receipt of user log-on information, or the connection status of the users
- N H04L 67/55
- • Push-based network services
- N H04L 67/56
- • Provisioning of proxy services (store-and-forward switching systems in data switching networks [H04L 12/54](#))
- N H04L 67/561
- • • Adding application-functional data or data for application control, e.g. adding metadata
- N H04L 67/562
- • • Brokering proxy services
- N H04L 67/563
- • • Data redirection of data network streams
- N H04L 67/564
- • • Enhancement of application control based on intercepted application data
- N H04L 67/565
- • • Conversion or adaptation of application format or content (adding application control or application functional data [H04L 67/561](#))
- N H04L 67/5651
- • • • Reducing the amount or size of exchanged application data
- N H04L 67/566
- • • • Grouping or aggregating service requests, e.g. for unified processing
- N H04L 67/567
- • • • Integrating service provisioning from a plurality of service providers
- N H04L 67/568
- • • • Storing data temporarily at an intermediate stage, e.g. caching
- N H04L 67/5681
- • • • • Pre-fetching or pre-delivering data based on network characteristics
- N H04L 67/5682
- • • • • Policies or rules for updating, deleting or replacing the stored data
- N H04L 67/5683
- • • • • Storage of data provided by user terminals, i.e. reverse caching
- N H04L 67/59
- • • Providing operational support to end devices by off-loading in the network or by emulation, e.g. when they are unavailable
- N H04L 67/60
- • Scheduling or organising the servicing of application requests, e.g. requests for application data transmissions using the analysis and optimisation of the required network resources (admission control or resource allocation [H04L 47/70](#))
- N H04L 67/61
- • • taking into account QoS or priority requirements
- N H04L 67/62
- • • Establishing a time schedule for servicing the requests
- N H04L 67/63
- • • Routing a service request depending on the request content or context
- N H04L 67/75
- • Indicating network or usage conditions on the user display



- M H04L 69/00** ~~{Application independent communication protocol aspects or techniques in packet data networks~~*Network arrangements, protocols or services independent of the application payload and not provided for in the other groups of this subclass* (data switching networks H04L 12/00; broadcast or multicast H04L 12/18; network topologies, i.e. networks characterized by the path configuration, media access control H04L 12/28; hybrid switching systems H04L 12/64; gateways H04L 12/66; network management H04L 41/00; network monitoring or testing H04L 43/00; routing of packets H04L 45/00; flow control H04L 47/10; packet switches and switching fabrics H04L 49/00; intermediate storage or scheduling H04L 49/90; message switching systems, e.g. email, H04L 51/00; interconnection arrangements between CPUs, memories, or peripherals within a single computer G06F 13/00; transmission systems H04B; networks specially adapted for wireless communication H04W*networks security protocols H04L 9/40; wireless communication networks H04W*)}
- M H04L 69/03** • {Protocol definition or specification (protocol conformance testing [H04L 1/244](#); ~~specification techniques G06F 8/10~~)}
- M H04L 69/04** • {Protocols for data compression, e.g. *ROHC* (compression in general H03M 7/30; reduction of the amount or size of exchanged application data at an intermediate network processing stage H04L 67/2828; optimizing, e.g. header compression, information sizing in wireless communication networks H04W 28/06)}
- M H04L 69/06** • {Notations for structuring of protocol data, e.g. abstract syntax notation one [ASN.1]}
- C H04L 69/08** • {Protocols for interworking or protocol conversion (arrangements for connecting between networks having differing types of switching systems, e.g. gateways, H04L 12/66; network management protocols conversion H04L 41/0226)}; *Protocol conversion*
- WARNING**  
Group [H04L 69/08](#) is impacted by reclassification into group [H04L 69/085](#). Groups [H04L 69/08](#) and [H04L 69/085](#) should be considered in order to perform a complete search.
- N H04L 69/085** • • specially adapted for interworking of IP-based networks with other networks  
**WARNING**  
Group [H04L 69/085](#) is incomplete pending reclassification of documents from group [H04L 69/08](#). Groups [H04L 69/08](#) and [H04L 69/085](#) should be considered in order to perform a complete search.
- M H04L 69/10** • {Streamlined, light-weight or high-speed protocols, e.g. express transfer protocol [XTP] or byte stream}
- M H04L 69/12** • {Protocol engines, e.g. VLSIs or transputers} *Protocol engines*
- M H04L 69/14** • {Multichannel or multilink protocols}
- M H04L 69/16** • {Transmission control protocol/internet protocol [TCP/IP] or *Implementation or adaptation of Internet protocol [IP], of transmission control protocol [TCP] or of user datagram protocol [UDP]* (flow control or congestion control in data switching networks H04L 47/10; transport layer addressing aspects H04L 61/6063; special adaptations of TCP, UDP or IP for interworking of IP-based networks with other networks H04L 69/169; adapting video multiplex streams to a specific network H04N 21/2381; network layer protocol adaptations for supporting mobility, e.g. mobile IP, H04W 80/04)}

- M H04L 69/161
  - {Implementation details of TCP/IP or UDP/IP stack architecture; Specification of modified or new header fields (~~protocols engines in general H04L 69/12; OSI stack based layering aspects H04L 69/32; protocol header analysis in general H04L 69/22; addressing aspects in multiple interfaces involving dual-stack hosts H04L 61/6086~~)}
- M H04L 69/163
  - {~~Adaptation of TCP data-exchange control procedures~~ *In-band adaptation of TCP data exchange* (generic OSI layer 4 protocols, e.g. SCTP H04L 69/326; TCP or UDP flow-control procedures H04L 47/19; error control procedures in general H04L 1/18); *In-band control procedures*}
- M H04L 69/164
  - {Adaptation or special uses of UDP protocol}
- M H04L 69/165
  - {~~involving combined use or selection criteria between~~ *Combined use of* TCP and UDP protocols (~~multi-protocol arrangements in general H04L 69/18; multilink protocols in general H04L 69/14~~); *selection criteria therefor*}
- M H04L 69/166
  - {~~IP fragmentation or TCP segmentation aspects~~ *IP fragmentation* (evaluation of maximum transfer unit [MTU] H04L 47/36; assembly or disassembly of packets in wireless networks H04W 28/065); *TCP segmentation*}
- M H04L 69/167
  - {~~Transitional provisions between~~ *Adaptation for transition between two IP versions, e.g. between* IPv4 and IPv6 (address translation between IPv4 and IPv6 H04L 61/251; involvement of different protocol versions in wireless network layer protocols, e.g. MIPv4 and MIPv6 H04W 80/045 *translation of Internet protocol [IP] addresses H04L 61/2503*)}
- M H04L 69/168
  - {~~Special adaptations of TCP, UDP or IP to match specific~~ *specially adapted for* link layer protocols, e.g. ATM, SONET or PPP *asynchronous transfer mode [ATM], synchronous optical network [SONET] or point-to-point protocol [PPP]* (IP over ATM H04L 2012/5667; special adaptation of TCP protocol for wireless media H04W 80/06)}
- M H04L 69/169
  - {Special adaptations of TCP, UDP or IP for interworking of IP based networks with other networks (protocols for interworking ~~in general, protocol conversion~~ *H04L 69/08*)}
- M H04L 69/18
  - {~~Multi-protocol handler, e.g. single device~~ *Multiprotocol handlers, e.g. single devices* capable of handling multiple protocols (~~multilayer or multiprotocol switches H04L 49/602~~)}
- M H04L 69/22
  - {~~Header parsing or analysis~~ *Parsing or analysis of headers* (traffic monitoring by flow aggregation or filtering H04L 43/02; flow identification in packet-switching networks H04L 47/2483)}
- M H04L 69/24
  - {Negotiation of communication capabilities}
- M H04L 69/28
  - {~~Timer mechanisms used in protocols~~ *Timers or timing mechanisms used in protocols*}
- M H04L 69/30
  - {Definitions, standards or architectural aspects of layered protocol stacks}
- C H04L 69/32
  - {~~High-level architectural aspects of 7-layer~~ *Architecture of* open systems interconnection [OSI] ~~type protocol stacks~~ *7-layer type protocol stacks, e.g. the interfaces between the data link level and the physical level*}

#### WARNING

Group H04L 69/32 is impacted by reclassification into groups H04L 69/321, H04L 69/322, H04L 69/323, H04L 69/324, H04L 69/325, H04L 69/326, H04L 69/327, H04L 69/328, and H04L 69/329.  
All groups listed in this Warning should be considered in order to perform a complete search.

- M H04L 69/321
- • {~~Aspects of inter-layer~~ *Interlayer* communication protocols or service data unit [SDU] definitions; -Interfaces between layers}
- WARNING*  
*Group H04L 69/321 is incomplete pending reclassification of documents from group H04L 69/32.*  
*Groups H04L 69/32 and H04L 69/321 should be considered in order to perform a complete search.*
- M H04L 69/322
- • {~~Aspects of intra-layer~~ *Intralayer* communication protocols among peer entities or protocol data unit [PDU] definitions}
- WARNING*  
*Groups H04L 69/322 H04L 69/323, H04L 69/324, H04L 69/325, H04L 69/326, H04L 69/327, H04L 69/328 and H04L 69/329 are incomplete pending reclassification of documents from group H04L 69/32.*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- M H04L 69/323
- • • {~~in the physical layer, i.e. layer one~~ *in the physical layer [OSI layer 1]*{arrangements for detecting or preventing errors in the information received H04L 1/00; baseband systems H04L 25/00; modulated-carrier systems H04L 27/00}}
- M H04L 69/324
- • • {~~in the data link layer, i.e. layer two~~ *[OSI layer 2]*, e.g. HDLC {arrangements for detecting or preventing errors in the information received H04L 1/00; bus networks H04L 12/40}}
- M H04L 69/325
- • • {~~in the network layer, i.e. layer three~~ *in the network layer [OSI layer 3]*, e.g. X.25 (packet switching systems, packet routing H04L 45/00; TCP/IP H04L 69/16 *H04L 69/16 takes precedence*)}
- M H04L 69/326
- • • {~~in the transport layer, i.e. layer four~~ *in the transport layer [OSI layer 4]* (TCP/IP H04L 69/16; streaming protocols, e.g. RTP; H04L 65/608 *H04L 69/16 takes precedence*)}
- M H04L 69/327
- • • {~~in the session layer, i.e. layer five~~ *in the session layer [OSI layer 5]*{session-initiation protocol H04L 65/1006; session-control in real time communications H04L 65/1066; arrangements for session-management H04L 67/14}}
- M H04L 69/328
- • • {~~in the presentation layer, i.e. layer six~~ *in the presentation layer [OSI layer 6]*{graphical user interfaces G06F 3/048; terminal emulation, e.g. telnet, H04L 67/08}}
- M H04L 69/329
- • • {~~in the application layer, i.e. layer seven~~ *in the application layer [OSI layer 7]*{network arrangements or network communication protocols for networked applications H04L 67/00; data processing systems and methods specially adapted for administrative, commercial, financial or managerial purposes G06Q}}
- M H04L 69/40
- {~~Techniques for recovering from a failure of a protocol instance or entity, e.g. failover routines, service redundancy protocols, protocol state redundancy or protocol service redirection in case of a failure or disaster recovery~~ (network fault management H04L 41/06; route fault recovery in network routing H04L 45/28; fault recovery in packet switches H04L 49/557; reactions to failures of replicated servers by a load balancer H04L 67/1034; departure or maintenance mechanisms in peer-to-peer networks H04L 67/1048; intermediate processing of operational support to end devices when they are unavailable, H04L 67/2861 *management of faults, events, alarms or notifications in data switching networks H04L 41/06*)}
- N H04L 2101/00      **Indexing scheme associated with group [H04L 61/00](#)**
- N H04L 2101/30      • Types of network names

N	H04L 2101/32	• • containing non-Latin characters, e.g. Chinese domain names
N	H04L 2101/33	• • containing protocol addresses or telephone numbers
N	H04L 2101/345	• • containing wildcard characters
N	H04L 2101/35	• • containing special prefixes
N	H04L 2101/355	• • containing special suffixes
N	H04L 2101/365	• • Application layer names, e.g. buddy names, unstructured names chosen by a user or home appliance name
N	H04L 2101/37	• • E-mail addresses
N	H04L 2101/375	• • Access point names [APN]
N	H04L 2101/38	• • Telephone uniform resource identifier [URI]
N	H04L 2101/385	• • Uniform resource identifier for session initiation protocol [SIP URI]
N	H04L 2101/39	• • Globally routable user-agent uniform resource identifier [GRUU] for the session initiation protocol [SIP]
N	H04L 2101/395	• • Internet protocol multimedia private identity [IMPI]; Internet protocol multimedia public identity [IMPU]
N	H04L 2101/60	• Types of network addresses
N	H04L 2101/604	• • Address structures or formats
N	H04L 2101/618	• • Details of network addresses
N	H04L 2101/622	• • • Layer-2 addresses, e.g. medium access control [MAC] addresses
N	H04L 2101/627	• • • Controller area network [CAN] identifiers
N	H04L 2101/631	• • • Small computer system interface [SCSI] addresses
N	H04L 2101/636	• • • IEEE1394 identification numbers
N	H04L 2101/64	• • • Asynchronous transfer mode [ATM] addresses
N	H04L 2101/645	• • • Fibre channel identifiers
N	H04L 2101/65	• • • Telephone numbers
N	H04L 2101/654	• • • International mobile subscriber identity [IMSI] numbers
N	H04L 2101/659	• • • Internet protocol version 6 [IPv6] addresses
N	H04L 2101/663	• • • Transport layer addresses, e.g. aspects of transmission control protocol [TCP] or user datagram protocol [UDP] ports
N	H04L 2101/668	• • Internet protocol [IP] address subnets
N	H04L 2101/672	• • Short addresses
N	H04L 2101/677	• • Multiple interfaces, e.g. multihomed nodes
N	H04L 2101/681	• • using addresses for wireless personal area networks or wireless sensor networks, e.g. Zigbee addresses
N	H04L 2101/686	• • using dual-stack hosts, e.g. in Internet protocol version 4 [IPv4]/Internet protocol version 6 [IPv6] networks
N	H04L 2101/69	• • using geographic information, e.g. room number
N	H04L 2101/695	• • using masks or ranges of addresses
U	H04L 2209/00	<b>Additional information or applications relating to cryptographic mechanisms or cryptographic arrangements for secret or secure communication</b> <a href="#">H04L 9/00</a>
D	H04L 2209/38	• Chaining, e.g. hash chain or certificate chain <administratively transferred to <a href="#">H04L 9/50</a> >

**Project: RP10460 (H04M)**

- U H04M 1/00** Substation equipment, e.g. for use by subscribers (subscriber services or facilities provided at exchanges [H04M 3/00](#); prepayment telephone coin boxes [H04M 17/00](#); current supply arrangements [H04M 19/08](#))
- U H04M 1/253  
H04M 1/2535
- Telephone sets using digital voice transmission
  - {adapted for voice communication over an Internet Protocol [IP] network (Voice over Internet Protocol (VoIP) network equipment and services [H04M 7/006](#); ~~internet protocols~~ [H04L 29/06095](#); *implementation or adaptation of Internet protocol [IP], of transmission control protocol [TCP] or of user datagram protocol [UDP]* [H04L 69/16](#))}
- U H04M 3/00** Automatic or semi-automatic exchanges
- U H04M 3/42
- Systems providing special services or facilities to subscribers (specially adapted for wireless communication networks [H04W 4/00](#))
- U H04M 3/50
- • Centralised arrangements for answering calls; Centralised arrangements for recording messages for absent or busy subscribers ([H04M 3/487](#) takes precedence; centralised dictation systems [H04M 11/10](#)); {Centralised arrangements for recording messages}
- U H04M 3/51  
H04M 3/5141
- • • Centralised call answering arrangements requiring operator intervention {, e.g. call or contact centers for telemarketing}
  - • • {Details of processing calls and other types of contacts in an unified manner (unified messaging in packet-switching networks [H04L 51/36](#) [H04L 51/56](#))}
- U H04M 3/56
- • Arrangements for connecting several subscribers to a common circuit, i.e. affording conference facilities (video conference systems [H04N 7/15](#))
- U H04M 3/563  
H04M 3/566
- • • {User guidance or feature selection}
  - • • {relating to a participants right to speak (~~protocols for floor control~~ [H04L 29/06421](#), [H04L 29/06428](#), [H04L 29/06435](#) *arrangements for multi-party communication with floor control, e.g. for conferences, [H04L 65/4038](#), [H04L 65/4046](#), [H04L 65/4053](#)*)}
- U H04M 7/00** Arrangements for interconnection between switching centres
- U H04M 7/0024  
H04M 7/0039
- {Services and arrangements where telephone services are combined with data services (arrangements which combine a telephonic equipment and a computer [H04M 7/0012](#))}
  - • {where the data service is provided by a stream of packets which are rendered in real time by the receiving terminal (~~audio-streaming or audio-streaming details of combined audio and video-streaming~~ [H04L 29/06476](#) *network streaming of media packets* [H04L 65/60](#))}
- U H04M 2203/00** Aspects of automatic or semi-automatic exchanges
- U H04M 2203/45  
H04M 2203/4509  
H04M 2203/4545  
H04M 2203/4581
- related to voicemail messaging
  - • Unified messaging with single point of access to voicemail and other mail or messaging systems (unified messaging in packet switching networks [H04L 51/36](#) [H04L 51/56](#))
  - • Message forwarding (selective message forwarding in packet switching networks [H04L 51/14](#) [H04L 51/214](#))
  - • Sending message identifiers instead of whole messages (notification of incoming messages in packet-switching networks [H04L 51/24](#) [H04L 51/224](#))
- U H04M 2203/65  
H04M 2203/655
- related to applications where calls are combined with other types of communication
  - • Combination of telephone service and social networking (messaging within social networks [H04L 51/32](#) [H04L 51/52](#))



**Project: RP10460 (H04N)**

- U H04N 1/00 Scanning, transmission or reproduction of documents or the like, e.g. facsimile transmission; Details thereof**
- U H04N 1/00127 · {Connection or combination of a still picture apparatus with another apparatus, e.g. for storage, processing or transmission of still picture signals or of information associated with a still picture}
- U H04N 1/00204 · · {with a digital computer or a digital computer system, e.g. an internet server (programmed control between transmitter and receiver or between image input and image output device [H04N 1/32561](#))}
- U H04N 1/00209 · · · {Transmitting or receiving image data, e.g. facsimile data, via a computer, e.g. using e-mail, a computer network, the internet, I-fax}
- U H04N 1/00222 · · · · {details of image data generation or reproduction, e.g. scan-to-email or network printing}
- H04N 1/00228 · · · · · {Image push arrangements, e.g. from an image reading device to a specific network destination (~~push-based network services H04L 67/26~~[push-based network services H04L 67/55](#))}
- U H04N 21/00 Selective content distribution, e.g. interactive television or video on demand [VOD] (real-time bi-directional transmission of motion video data [H04N 7/14](#) {; broadcast or conference over packet switching networks [H04L 12/18](#)})**

**NOTES****1. This group covers :**

- interactive video distribution processes, systems, or elements thereof, which are characterised by point-to-multipoint system configurations, and which are mainly used for motion video data unidirectional distribution or delivery resulting from interactions between systems operators, e.g. access or service providers, or users e.g. subscribers, and system elements.
- such systems include dedicated communication systems, such as television distribution systems, which primarily distribute or deliver motion video data in the manner indicated, which may, in addition, provide a framework for further, diverse data communications or services in either unidirectional or bi-directional form. However, video will occupy most of the downlink bandwidth in the distribution process.
- typically, system operators interface with transmitter-side elements or users' interface with receiver-side elements in order to facilitate, through interaction with such elements, the dynamic control of data processing or data flow at various points in the system. This interaction is typically occasional or intermittent in nature.
- processes, systems or elements thereof specially adapted to the generation, distribution and processing of data, which is either associated with video content, e.g. metadata, ratings, or related to the user or his environment and which has been actively or passively gathered. This data is either used to facilitate interaction or to alter or target the content.

2. In this main group, the first place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the first appropriate place.

3. In this main group, the following terms and expressions are used with the meaning indicated:

additional data - designates still pictures, textual, graphical or executable data such as software. It is used to convey supplemental information and can be generated prior to or during the distribution process itself, e.g. metadata, keys.

content designates video or audio streams, which may be combined with additional data. Video data will always be present and occupy most of the downlink bandwidth in the distribution process



server - designates an apparatus designed for adapting the content received from the content provider to the distribution network. It also manages the distribution to client devices or intermediate components over a network. Further servers may also be present for gathering or generating additional data, e.g. rights management server

additional data server - designates a server, which sole purpose is the distribution or management of additional data. It is not in charge of the distribution of video or audio data

client - designates an apparatus such as a TV receiver, a set-top-box, a PC-TV, a mobile appliance (e.g. mobile phone or receiver in a vehicle), for receiving video, audio and possibly additional data from one or several servers or intermediate components via a network for further processing, storing or displaying. It can also transmit this data on a home-based local network to further devices, e.g. a home server transmitting video to PCs and set-top-boxes within a home.

local network - pertains to a restricted area, e.g. a home or a vehicle, and designates the link between a client and its peripheral devices

network - is to be distinguished from "local network": "network" designates the link between the server and the clients, or between the server and the intermediate components, or between the intermediate components and the clients, or between remotely located clients

distribution - encompasses broadcasting, multicasting and unicasting techniques for transmitting content from one or more sources to one or more receiving stations. The distribution follows a request by a receiving station to the source, e.g. VOD or from a customization of the content by the source, e.g. targeting advertisements to a demographic group in a unidirectional or bidirectional system. Additionally, distribution encompasses techniques where the client acts as a source and another client acts as a receiving station, e.g. a peer-to-peer system for sharing video among client devices

end-user - designates a physical person, e.g. a TV viewer, who consumes the content using the client device. He is the final recipient of the content distributed by the server

interaction - covers actions occurring between or among two or more objects that have an effect upon one another, wherein objects comprise users, system operators, system elements, or content. The user may interact with content locally at the client device, e.g. for requesting additional data stored within the client device. The user may interact with content remotely through a server e.g. for VOD playback control or for uploading video to a server. The client device may interact with the content e.g. selecting content based upon the user profile. The client device may interact with a server using a return channel, e.g. for authenticating client or uploading client hardware capabilities. The server may interact with a client device, e.g. to force a client to tune to an advertisement channel

upstream - designates the direction of data flow towards the source, e.g. a server receiving a request via a mobile phone network.

downstream - designates the direction of data flow towards a client, e.g. a client receiving data originating from a server elementary stream An elementary stream (ES) as defined by the MPEG system layer designates the output of an audio or video encoder.

- U H04N 21/20      • Servers specifically adapted for the distribution of content, e.g. VOD servers; Operations thereof
- U H04N 21/21      • • Server components or server architectures
- U H04N 21/218    • • • Source of audio or video content {, e.g. local disk arrays (details of retrieval in video databases [G06F 16/739](#))}

- H04N 21/2181
  - • • {comprising remotely distributed storage units, e.g. when movies are replicated over a plurality of video servers (~~distributed storage of data in a network~~ H04L 29/08549 *distributed storage of data in networks, e.g. transport arrangements for network file system [NFS], storage area networks [SAN] or network attached storage [NAS], H04L 67/1097*)}
- H04N 21/2183
  - • • Cache memory {(caches in web servers or browsers [G06F 16/9574](#); intermediate storage and caching in data networks ~~H04L 29/08801~~ *H04L 67/568*)}
- H04N 21/222
  - • • Secondary servers, e.g. proxy server, cable television Head-end {(~~intermediate processing or storage in data networks~~ ~~H04L 29/08702~~ *provisioning of proxy services in data packet switching networks H04L 67/56*)}
- U H04N 21/226
  - • • {Characteristics of the server or} Internal components of the server
- H04N 21/2265
  - • • {Server identification by a unique number or address, e.g. serial number (~~addressing and naming in data networks~~ ~~H04L 29/12009~~ *network arrangements, protocols or services for addressing or naming H04L 61/00*)}
- U H04N 21/23
  - • Processing of content or additional data; Elementary server operations; Server middleware
- U H04N 21/231
  - • • Content storage operation, e.g. caching movies for short term storage, replicating data over plural servers, prioritizing data for deletion
- H04N 21/23103
  - • • {using load balancing strategies, e.g. by placing or distributing content on different disks, different memories or different servers (storage management [G06F 3/0604](#); allocation of resources considering the load in multiprogramming arrangements [G06F 9/505](#); techniques for rebalancing the load in a distributed system [G06F 9/5083](#); access to distributed or replicated servers, e.g. load balancing, in data networks ~~H04L 29/08144~~ *H04L 67/1001*)}
- H04N 21/23106
  - • • {involving caching operations (prefetching while addressing of a memory level in which the access to the desired data or data block requires associative addressing means within memory systems or architectures [G06F 12/0862](#); caching at an intermediate stage in a data network ~~H04L 29/08801~~ *H04L 67/568*)}
- H04N 21/23116
  - • • {involving data replication, e.g. over plural servers (synchronization of replicated data [G06F 11/1658](#); error detection or correction by means of data replication [G06F 11/2053](#); replication in distributed file systems [G06F 16/10](#); replication in distributed file systems [G06F 16/27](#); replication or mirroring of data in data networks ~~H04L 29/0854~~ *H04L 67/1095*)}
- U H04N 21/234
  - • • Processing of video elementary streams, e.g. splicing of video streams, manipulating MPEG-4 scene graphs
- H04N 21/2343
  - • • involving reformatting operations of video signals for distribution or compliance with end-user requests or end-user device requirements {(~~media manipulation, adaptation or conversion at the source in one-way streaming for real-time multimedia communications~~ ~~H04L 29/06489~~; video transcoding [H04N 19/40](#); *media packet handling at the source H04L 65/762*)}
- U H04N 21/235
  - • • Processing of additional data, e.g. scrambling of additional data or processing content descriptors

- H04N 21/2355
- • • {involving reformatting operations of additional data, e.g. HTML pages (optimising the visualization of content for information retrieval from the Internet [G06F 16/9577](#); ~~media manipulation, adaptation or conversion at the source in one-way streaming for real-time multimedia communications H04L 29/06489~~; ~~message adaptation based on network or terminal capabilities in stored and forward packet switching H04L 51/34~~; *tracking of instant messages H04L 51/234*; *media packet handling at the source H04L 65/762*)}
- H04N 21/238
- • • Interfacing the downstream path of the transmission network, e.g. adapting the transmission rate of a video stream to network bandwidth; Processing of multiplex streams {(~~hybrid Fiber Coaxial HFC networks for downstream channel allocation for video distribution H04L 12/2801~~; ~~formation of RTP packets H04L 29/06176~~; ~~application layer Quality of Service and content dependent routing H04L 29/08945~~; *hybrid fiber coaxial [HFC] networks for downstream channel allocation for video distribution H04L 12/2801*; flow control in packet networks [H04L 47/10](#); *real-time communication protocols in data switching networks H04L 65/00*; *scheduling or organising the servicing of application requests H04L 67/60*)}
- H04N 21/239
- • • Interfacing the upstream path of the transmission network, e.g. prioritizing client {content} requests (~~hybrid Fiber Coaxial [HFC] networks for upstream channel allocation for video distribution H04L 12/2801~~; ~~formation of RTP packets H04L 29/06176~~; ~~application layer Quality of Service and content dependent routing of client requests H04L 29/08945~~; *hybrid fiber coaxial [HFC] networks for upstream channel allocation for video distribution H04L 12/2801*; flow control in data networks [H04L 47/10](#); *real-time communication protocols in data switching networks H04L 65/00*; *scheduling or organising the servicing of application requests H04L 67/60*)}
- H04N 21/2393
- • • {involving handling client requests (scheduling ~~and/or~~ organising the servicing of ~~requests in data switching networks~~*application requests H04L 29/08945*[H04L 67/60](#))}
- H04N 21/2396
- • • • {characterized by admission policies (admission control, resource allocation in open networks [H04L 12/5692](#); arrangements for network security using user profiles for access control ~~H04L 29/06836~~[H04L 63/102](#); access security in wireless networks [H04W 12/08](#))}
- U H04N 21/24
- • • Monitoring of processes or resources, e.g. monitoring of server load, available bandwidth, upstream requests {(monitoring of server performance or load [G06F 11/34](#); arrangements for observation, testing or troubleshooting for broadcast or for distribution combined with broadcast [H04H 20/12](#))}
- H04N 21/2408
- • • • {Monitoring of the upstream path of the transmission network, e.g. client requests (~~protocols for scheduling and organising the servicing of requests in network applications in communication control or processing H04L 29/08945~~; monitoring data switching networks utilization [H04L 43/0876](#); *scheduling or organising the servicing of application requests H04L 67/60*)}
- U H04N 21/25
- • Management operations performed by the server for facilitating the content distribution or administrating data related to end-users or client devices, e.g. end-user or client device authentication, learning user preferences for recommending movies {(maintenance or administration in data networks [H04L 41/00](#))}

- H04N 21/254
  - • • Management at additional data server, e.g. shopping server, rights management server {(protocols involving third party service providers for network applications in communication control or processing H04L 29/08666; arrangements for maintenance or administration in data networks H04L 41/00; network services using third party service providers H04L 67/53)}
- H04N 21/2541
  - • • {Rights Management (protecting software against unauthorised usage in a vending or licensing environment G06F 21/10; security management or policies for network security H04L 29/06986; security in data switching network management H04L 41/28; security management or policies for network security H04L 63/20; access security in wireless networks H04W 12/08)}
- H04N 21/258
  - • • Client or end-user data management, e.g. managing client capabilities, user preferences or demographics, processing of multiple end-users preferences to derive collaborative data {(arrangements for services using the result on the distributing side of broadcast systems H04H 60/66; data switching network applications involving user or terminal profiles H04L 29/08918; profiles in network data switching protocols H04L 67/30)}
- H04N 21/25808
  - • • {Management of client data (protocols involving terminal profiles for network applications in communication control or processing H04L 29/08927 terminal profiles in network data switching protocols H04L 67/303)}
- H04N 21/25816
  - • • • {involving client authentication (restricting access to computer systems by authenticating users using a predetermined code G06F 21/33; authentication mechanisms for network security in communication control or processing H04L 29/06755; cryptographic authentication protocols H04L 9/32; networks authentication protocols H04L 63/08; authentication in wireless network security H04W 12/06)}
- H04N 21/25841
  - • • • {involving the geographical location of the client (retrieval from the Internet by querying based on geographical locations G06F 16/9537; arrangements for identifying locations of receiving stations in broadcast systems H04H 60/51; protocols in which the network application is adapted for the location of the user terminal in communication control or processing H04L 29/08657; location of the user terminal in data switching networks H04L 67/52; services making use of the location of users or terminals in wireless networks H04W 4/02; locating users or terminals in wireless networks H04W 64/00)}
- U H04N 21/25866
  - • • • {Management of end-user data (customer care in data networks H04L 41/5077)}
- H04N 21/25875
  - • • • {involving end-user authentication (restricting access to computer systems by authenticating users using a predetermined code G06F 21/33; arrangements for secret or secure communication including means for verifying the identity or authority of a user of the system H04L 9/32; authentication mechanisms for network security in communication control or processing H04L 29/06755; networks authentication protocols H04L 63/08; authentication in wireless network security H04W 12/06)}
- H04N 21/25891
  - • • • {being end-user preferences (retrieval of video data in a video database based on user preferences G06F 16/739; arrangements for recognizing users' preferences H04H 60/46; protocols involving user profiles for network applications in communication control or processing H04L 29/08936; user profiles in network data switching protocols H04L 67/306; processing of user preferences or user profiles in wireless networks H04W 8/18)}

- H04N 21/262
- • • Content or additional data distribution scheduling, e.g. sending additional data at off-peak times, updating software modules, calculating the carousel transmission frequency, delaying a video stream transmission, generating play-lists {(scheduling strategies for dispatcher in multiprogramming arrangements [G06F 9/4881](#); arrangements for scheduling broadcast services or broadcast-related services [H04H 60/06](#); ~~protocols for scheduling and organising the servicing of requests, whereby a time schedule is established for servicing the requests in network applications in communication control or processing~~ [H04L 29/08963](#); flow control in packet networks [H04L 47/10](#); *establishing a time schedule or organising the servicing of application requests* [H04L 67/62](#))}
- U H04N 21/26208
- • • • {the scheduling operation being performed under constraints}
- H04N 21/26216
- • • • {involving the channel capacity, e.g. network bandwidth (admission control, resource allocation in open networks [H04L 12/5692](#); ~~protocols for scheduling and organising the servicing of requests, whereby quality of service and priority requirements are taken into account in network applications in communication control or processing~~ [H04L 29/08954](#); flow control in packet networks [H04L 47/10](#); *establishing a schedule or organising the servicing of application requests taking into account QoS* [H04L 67/61](#))}
- U H04N 21/266
- • • Channel or content management, e.g. generation and management of keys and entitlement messages in a conditional access system, merging a VOD unicast channel into a multicast channel
- H04N 21/26613
- • • • {for generating or managing keys in general (key distribution for secret or secure communication involving central third party, e.g. key distribution center [KDC] or trusted third party [TTP] [H04L 9/083](#); ~~key management for security in wireless networks~~ [H04L 29/06707](#); *network support of key management* [H04L 63/06](#); key management for network security in communication control or processing [H04W 12/04](#))}
- U H04N 21/40
- Client devices specifically adapted for the reception of or interaction with content, e.g. set-top-box [STB]; Operations thereof
- U H04N 21/41
- • Structure of client; Structure of client peripherals
- U H04N 21/4104
- • • {Peripherals receiving signals from specially adapted client devices}
- WARNING
- Group [H04N 21/4104](#) is impacted by reclassification into groups [H04N 21/411](#) and [H04N 21/4112](#).
- All groups listed in this Warning should be considered in order to perform a complete search.
- H04N 21/4108
- • • • {characterised by an identification number or address, e.g. local network address (protecting specific internal or external computer components using identification number [G06F 21/73](#); ~~addressing and naming in data networks~~ [H04L 29/12009](#); *network arrangements, protocols or services for addressing or naming* [H04L 61/00](#))}
- U H04N 21/426
- • • Internal components of the client {; Characteristics thereof} ([H04N 5/44](#) takes precedence)
- H04N 21/42684
- • • • {Client identification by a unique number or address, e.g. serial number, MAC address, socket ID (~~addressing and naming in data networks~~ [H04L 29/12009](#) *network arrangements, protocols or services for addressing or naming* [H04L 61/00](#))}



- H04N 21/43
  - • Processing of content or additional data, e.g. demultiplexing additional data from a digital video stream; Elementary client operations, e.g. monitoring of home network or synchronising decoder's clock; Client middleware *{{demultiplexing of data packets for data networks, e.g. RTP/UDP H04L 29/06176 real-time communication protocols in data switching networks H04L 65/00}}*
- U H04N 21/435
  - • Processing of additional data, e.g. decrypting of additional data, reconstructing software from modules extracted from the transport stream
- H04N 21/4355
  - • • {involving reformatting operations of additional data, e.g. HTML pages on a television screen (optimising the visualization of content for information retrieval from the Internet [G06F 16/9577](#); ~~media manipulation, adaptation or conversion at the destination in one way streaming for real-time multimedia communications H04L 29/06496~~; adaptation of message content in packet-switching networks [H04L 51/066](#); *media handling at the source in data packet switching networks H04L 65/764*}}
- H04N 21/437
  - • Interfacing the upstream path of the transmission network, e.g. for transmitting client requests to a VOD server *{{formation of RTP packets H04L 29/06176; application layer Quality of Service and content dependent routing of client requests H04L 29/08945; flow control in data networks [H04L 47/10](#); streaming protocols, e.g. RTP or RTCP, H04L 65/65; scheduling or organising the servicing of application requests in data packet switching networks H04L 67/60}}*
- H04N 21/438
  - • Interfacing the downstream path of the transmission network originating from a server, e.g. retrieving MPEG packets from an IP network *{{transmission of MPEG streams over ATM [H04L 12/5601](#); ~~processing of real-time packets H04L 29/06176~~; flow control in data networks [H04L 47/10](#); real-time communication protocols in data switching networks H04L 65/00}}*
- U H04N 21/44
  - • Processing of video elementary streams, e.g. splicing a video clip retrieved from local storage with an incoming video stream, rendering scenes according to MPEG-4 scene graphs
- H04N 21/4402
  - • • involving reformatting operations of video signals for household redistribution, storage or real-time display *{{adapting incoming signals to the display format of the display terminal [G09G 5/005](#); ~~media manipulation, adaptation or conversion at the destination in one way streaming for real-time multimedia communications H04L 29/06496~~; details of conversion of video standards at pixel level [H04N 7/01](#); video transcoding [H04N 19/40](#); *adapting incoming signals to the display format of the display terminal [G09G 5/005](#); media handling at the source in data packet switching networks H04L 65/764*}}*
- U H04N 21/441
  - • Acquiring end-user identification {, e.g. using personal code sent by the remote control or by inserting a card}
- H04N 21/4415
  - • • using biometric characteristics of the user, e.g. by voice recognition or fingerprint scanning *{{authentication mechanisms using biometrical features for network security H04L 29/06809 cryptography using biological data [H04L 9/3231](#); authentication in networks using biometric H04L 63/0861}}*
- U H04N 21/45
  - Management operations performed by the client for facilitating the reception of or the interaction with the content or administrating data related to the end-user or to the client device itself, e.g. learning user preferences for recommending movies, resolving scheduling conflicts
- U H04N 21/4508
  - • {Management of client data or end-user data}

## WARNING

Group [H04N 21/4508](#) is impacted by reclassification into group [H04N 21/4518](#).



Groups [H04N 21/4508](#) and [H04N 21/4518](#) should be considered in order to perform a complete search.

- H04N 21/4524

- • • {involving the geographical location of the client (retrieval from the Internet by querying based on geographical locations [G06F 16/9537](#); systems specially adapted for using geographical information in broadcast systems [H04H 60/70](#); protocols in which the network application is adapted for the location of the user terminal in communication control or processing [H04L 29/08657](#)[H04L 67/52](#); services making use of the location of users or terminals in wireless networks [H04W 4/02](#); locating users or terminals in wireless networks [H04W 64/00](#))}
- H04N 21/4532

- • • {involving end-user characteristics, e.g. viewer profile, preferences (monitoring of user activities for profile generation for accessing a video database [G06F 16/739](#); ~~protocols involving user profiles for network applications in communication control or processing~~ [H04L 29/08936](#); *user profiles in network data switching protocols* [H04L 67/306](#); processing of user preferences or user profiles in wireless networks [H04W 8/18](#))}
- U H04N 21/462

- • • Content or additional data management, e.g. creating a master electronic program guide from data received from the Internet and a Head-end, controlling the complexity of a video stream by scaling the resolution or bit-rate based on the client capabilities
- H04N 21/4627

- • • Rights management {associated to the content (~~security management or policies for network security~~ [H04L 29/06986](#); security in data switching network management [H04L 41/28](#); *security management or policies for network security* [H04L 63/20](#); access security in wireless networks [H04W 12/08](#))}
- U H04N 21/466

- • • Learning process for intelligent management, e.g. learning user preferences for recommending movies {(services using the results of monitoring in broadcast systems [H04H 60/61](#))}
- H04N 21/4661

- • • {Deriving a combined profile for a plurality of end-users of the same client, e.g. for family members within a home (~~data switching network applications using user profiles~~ [H04L 29/08936](#)*user profiles in network data switching protocols* [H04L 67/306](#))}
- U H04N 21/47

- End-user applications
- H04N 21/472

- • • End-user interface for requesting content, additional data or services; End-user interface for interacting with content, e.g. for content reservation or setting reminders, for requesting event notification, for manipulating displayed content {(end-user interfaces for retrieving video data from a database [G06F 16/739](#); ~~content on-demand in one-way streaming for real-time multimedia communications~~ [H04L 29/06462](#); *network services for supporting unicast streaming* [H04L 65/612](#))}
- H04N 21/47214

- • • {for content reservation or setting reminders; for requesting event notification, e.g. of sport results or stock market (stock exchange data over packet-switching network [H04L 12/1804](#); push services over packet-switching network [H04L 12/1859](#); notification of incoming messages in packet switching networks [H04L 51/24](#)[H04L 51/224](#))}
- U H04N 21/475

- • • End-user interface for inputting end-user data, e.g. personal identification number [PIN], preference data
- H04N 21/4753

- • • {for user identification, e.g. by entering a PIN or password (~~authentication mechanisms using passwords for network security~~ [H04L 29/06782](#)*cryptographic authentication protocols* [H04L 9/32](#); *networks authentication protocols* [H04L 63/08](#))}

- H04N 21/4755
  - • • {for defining user preferences, e.g. favourite actors or genre (retrieval personalisation and generation of user profiles for the retrieval of video data [G06F 16/739](#); [data switching network applications using user profiles H04L 29/08936](#); [user profiles in network data switching protocols H04L 67/306](#))}
- U H04N 21/478
  - • • Supplemental services, e.g. displaying phone caller identification, shopping application
- H04N 21/4788
  - • • communicating with other users, e.g. chatting {(arrangements for providing for computer conferences, e.g. chat rooms, to substation in data switching networks [H04L 12/1813](#); [protocols for peer-to-peer networking in communication control or processing H04L 29/08306](#); [distributed application using peer-to-peer \[P2P\] networks H04L 67/104](#))}
- U H04N 21/60
  - Network structure or processes for video distribution between server and client or between remote clients; Control signalling between clients, server and network components; Transmission of management data between server and client {, e.g. sending from server to client commands for recording incoming content stream}; Communication details between server and client
- H04N 21/63
  - • Control signaling {related to video distribution} between client, server and network components; Network processes for video distribution between server and clients {or between remote clients}, e.g. transmitting basic layer and enhancement layers over different transmission paths, setting up a peer-to-peer communication via Internet between remote STB's; Communication protocols; Addressing ([signalling, control or architecture for real-time multimedia communications H04L 29/06183](#); [arrangements for peer-to-peer communications H04L 29/08306](#); [real-time session protocols H04L 65/1101](#); [distributed application using peer-to-peer \[P2P\] networks H04L 67/104](#))
- H04N 21/632
  - • • {using a connection between clients on a wide area network, e.g. setting up a peer-to-peer communication via Internet for retrieving video segments from the hard-disk of other client devices (broadcast-related systems characterised by transmission among terminal devices [H04H 60/80](#); [protocols for peer-to-peer networking in communication control or processing H04L 29/08306](#); [distributed application using peer-to-peer \[P2P\] networks H04L 67/104](#))}
- U H04N 21/633
  - • • Control signals issued by server directed to the network components or client {(management of faults, events, alarms in data networks [H04L 41/06](#))}
- U H04N 21/6332
  - • • • directed to client
- U H04N 21/6334
  - • • • for authorisation, e.g. by transmitting a key {(wireless communications network key management [H04W 12/04](#); wireless communications network access security [H04W 12/08](#))}
- H04N 21/63345
  - • • • • {by transmitting keys (key distribution for secret or secure communication [H04L 9/08](#); [arrangements for network security key management H04L 29/06707](#); [network support of key management H04L 63/06](#))}
- U H04N 21/637
  - • • Control signals issued by the client directed to the server or network components
- H04N 21/6375
  - • • for requesting retransmission {, e.g. of data packets lost or corrupted during transmission from server} (ARQ protocols [H04L 1/18](#); [Transmission Control Protocol / Internet Protocol \[TCP/IP\] H04L 29/06095](#); [implementation or adaptation of Internet protocol \[IP\], of transmission control protocol \[TCP\] or of user datagram protocol \[UDP\] H04L 69/16](#))

- H04N 21/6377
  - • • directed to server {(control of source by destination in one-way streaming for real-time multimedia communications H04L 29/06469 one-way streaming services wherein the source is controlled by the destination H04L 65/613)}
- H04N 21/63775
  - • • • {for uploading keys, e.g. for a client to communicate its public key to the server (arrangements for network security key management H04L 29/06707 key management H04L 9/08; network support of key management H04L 63/06)}
- H04N 21/64
  - • Addressing {(multicast or broadcast in one-way streaming for real-time multimedia communications H04L 29/06455; arrangements for addressing and naming in data networks H04L 29/12009 network arrangements, protocols or services for addressing or naming H04L 61/00; support for multicast or broadcast of one-way stream services H04L 65/611)}
- H04N 21/6402
  - • • Address allocation for clients {(address allocation in data networks H04L 29/12207 H04L 61/50)}
- H04N 21/643
  - • Communication protocols {(streaming protocols for real-time multimedia communications H04L 29/06517 network streaming protocols, e.g. real-time transport protocol [RTP] or real-time control protocol [RTCP], H04L 65/65)}
- H04N 21/647
  - • Control signaling between network components and server or clients; Network processes for video distribution between server and clients, e.g. controlling the quality of the video stream, by dropping packets, protecting content from unauthorised alteration within the network, monitoring of network load, bridging between two different networks, e.g. between IP and wireless {(signalling, control or architecture for real-time multimedia communications H04L 29/06183 real-time session protocols H04L 65/1101)}
- H04N 21/64715
  - • • {Protecting content from unauthorized alteration within the network (verifying the information received for network security in communication control or processing H04L 29/06857 H04L 63/12; integrity in wireless network security H04W 12/10)}
- U H04N 21/64723
  - • • • {Monitoring of network processes or resources, e.g. monitoring of network load (traffic related reporting in data switching networks H04L 43/062)}
- H04N 21/6473
  - • • • {Monitoring network processes errors (counter-measures to a fault in communication control or processing H04L 29/14 for recovering from a failure of a protocol instance or entity H04L 69/40)}
- U H04N 21/64746
  - • • • {Control signals issued by the network directed to the server or the client}
- U H04N 21/64761
  - • • • {directed to the server}
- H04N 21/64776
  - • • • • {for requesting retransmission, e.g. of data packets lost or corrupted during transmission from server (ARQ protocols H04L 1/18; transmission Control Protocol / Internet Protocol [TCP/IP] H04L 29/06095; implementation or adaptation of Internet protocol [IP], of transmission control protocol [TCP] or of user datagram protocol [UDP] H04L 69/16)}
- H04N 21/64784
  - • • • {Data processing by the network (data processing in packet switching systems H04L 12/56; protocols involving intermediate processing or storage in communication networks H04L 29/08702; flow control in packet networks H04L 47/10; intermediate storage or scheduling H04L 49/90; provisioning of proxy services in data packet switching networks H04L 67/56)}

- H04N 21/64792
  - • • • {Controlling the complexity of the content stream, e.g. by dropping packets (~~media manipulation, adaptation or conversion at an intermediate station in one-way streaming for real-time multimedia communications H04L 29/06503; arrangements for reducing the amount or size of exchanged application data in the network H04L 29/08783; intermediate media network packet handling H04L 65/765; proxy provisioning conversion or adaptation for reducing the amount or size of exchanged application data H04L 67/5651; negotiation of resources in wireless networks H04W 28/16~~)}
- U H04N 21/80
  - Generation or processing of content or additional data by content creator independently of the distribution process; Content per se {(arrangements for generating broadcast information [H04H 60/02](#))}
- U H04N 21/81
  - Monomedia components thereof
- H04N 21/8166
  - • {involving executable data, e.g. software (arrangements for executing specific programs [G06F 9/44](#); broadcasting computer programmes in broadcast systems [H04H 20/91](#); ~~movement of software or configuration parameters, in data networks H04L 29/08981; involving the movement of software or configuration parameters H04L 67/34~~)}
- U H04N 21/85
  - • Assembly of content; Generation of multimedia applications
- U H04N 21/858
  - • • Linking data to content, e.g. by linking an URL to a video object, by creating a hotspot
- H04N 21/8586
  - • • {by using a URL (processing chained hypermedia data for information retrieval [G06F 16/94](#); information retrieval from the Internet by using URLs [G06F 16/955](#); URL in broadcast information [H04H 20/93](#); ~~protocols for network applications involving the use of web-based technology H04L 29/0809; Web-based protocols H04L 67/02~~)}

## Project: RP10460 (H04T)

- U H04T 2029/00
    - Standards related to data transmission protocols not covered by any of the codes [H04T 2001/00](#) - [H04T 2012/00](#)
  - M H04T 2029/06
    - Internet Standards
- NOTE
- The indexing codes of this scheme are to be used mainly with classification in subgroups ~~H04L 29/06-H04L 9/40 H04L 29/06544 and H04L 69/02 - H04L 69/26~~. In this scheme [H04T 2029/06](#) codes are mapped whenever possible or appropriate to the corresponding entries and have the same meaning.

## Project: RP10463 (G04B)

- U G04B 1/00
  - Driving mechanisms {(driving mechanisms for Turkish time [G04B 19/22](#); driving mechanisms in the hands [G04B 45/043](#); driving mechanisms for phonographic apparatus [G11B 19/00](#); springs, driving weight engines [F03G](#); driving mechanisms for cinematography [G03B 1/00](#); driving mechanisms; driving mechanisms for time fuses for missiles [F42C](#); driving mechanisms for toys [A63H 29/00](#))}
- U G04B 1/10
  - with mainspring {(synchronous motors with power reserve [G04C 15/0054](#); springs in general [F16F](#))}
- U G04B 1/14
  - Mainsprings; Bridles therefor (mainsprings with bridles [G04B 1/18](#); alloys [C22C](#); springs in general [F16F](#) {; constructions for compensation of changes in the motive power of the mainspring [G04B 1/22](#); construction of the hairspring [G04B 17/066](#); arrangements facilitating the removal of the mainspring [G04B 33/14](#))}

- G04B 1/145
- • {Composition and manufacture of the springs (compositions and manufacture of components, wheels, spindles, pivots, or the like [G04B 13/026](#) [G04B 13/02](#); compositions of component escapements [G04B 15/14](#); composition and manufacture of hairsprings [G04B 17/066](#); compensation for the effects of variations of temperature of springs using alloys, especially for hairsprings [G04B 17/227](#); materials for bearings of clockworks [G04B 31/00](#); ~~iron and steel alloys C22C~~; heat treatment and chemical or mechanical treatment for control of the structure [C21D 8/00](#); ~~iron and steel alloys C22C~~; non-ferrous alloys [C22C](#) and [B22F](#))}
- U G04B 13/00 **Gearwork** {(gearwork for driving the hands [G04B 19/02](#); calibers [G04B 33/00](#); dispositions and components for transmission in general [F16H](#))}
- M G04B 13/02
- Wheels; Pinions; Spindles; Pivots (bearings [G04B 31/00](#) {; chain wheels, spindles for chain wheels, also chains and driving weights [G04B 1/08](#))}
- WARNING  
Groups [G04B 13/02](#), [G04B 13/021](#), [G04B 13/022](#), [G04B 13/023](#), [G04B 13/025](#), [G04B 13/027](#) and [G04B 13/028](#) are ~~not complete pending reorganisation, see also~~ *incomplete pending reclassification of documents from group [G04B 13/026](#).*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- F G04B 13/026  
(Frozen)
- {Assembly and manufacture (assembly and manufacture of springs [G04B 1/145](#); machines and tools for the manufacture of chain wheels for clocks [G04D 3/00](#); component parts and manufacture of the escape wheel [G04B 15/14](#); steel alloys [C22C 33/00](#) - [C22C 38/00](#); manufacture of pinions from synthetic material [B29](#); non-ferrous alloys [C22C](#); pinions manufactured by milling and planing [B23F](#))}
- WARNING  
~~This group~~ *Group [G04B 13/026](#) is no longer used for the classification of new documents as from documents as of March 1, 2011* May 1, 2022.  
The ~~backlog content~~ of this group is being reclassified ~~to subgroups of into groups~~ *into groups [G04B 13/02](#), [G04B 13/021](#), [G04B 13/022](#), [G04B 13/023](#), [G04B 13/025](#), [G04B 13/027](#) and [G04B 13/028](#).*  
*All groups listed in this Warning should be considered in order to perform a complete search.*
- U G04B 15/00 **Escapements** {(magnetic [G04C 5/005](#); in striking mechanisms [G04B 21/06](#))}
- G04B 15/14
- Component parts or constructional details, e.g. construction of the lever or the escape wheel {(assembly and manufacture of the spring [G04B 1/145](#); assembly and manufacture of components, e.g. pinions, spindles [G04B 13/026](#) [G04B 13/02](#); ~~oils for clockwork bearings in general~~ [G04B 31/08](#); lubrication of clockwork bearings [G04B 31/008](#); *oils for clockwork bearings in general [G04B 31/08](#)*)}
- U G04B 19/00 **Indicating the time by visual means** {(indicating the time optically by electric means [G04C 17/00](#), e.g.) by electric lamps [G04C 17/02](#); display arrangements in general [G09F](#))}
- U G04B 19/22
- Arrangements for indicating different local apparent times; Universal time pieces {(indicating by means of numbers or signs disposed on moving devices [G04B 19/20](#); illumination of dials or hands [G04B 19/30](#); combination with a terrestrial globe in general [G04B 47/02](#); electronic time-zone watches [G04G 9/0076](#))}



- M G04B 19/221
- {mechanisms for correcting the hours hand only, i.e. independently for minutes and seconds hands}
- WARNING**  
Not complete pending reclassification; see also G04B 19/22
- M G04B 19/223
- {with rotary disc, rotary bezel, or rotary dial}
- WARNING**  
Not complete pending reclassification; see also G04B 19/22
- M G04B 19/225
- • {driving mechanism for the bezel}
- WARNING**  
Not complete pending reclassification; see also G04B 19/22
- M G04B 19/226
- {three-dimensionally shaped, e.g. terrestrial globes, cylinders and the like}
- WARNING**  
Not complete pending reclassification; see also G04B 19/22
- M G04B 19/228
- {with linear time graduation}
- WARNING**  
Not complete pending reclassification; see also G04B 19/22
- U G04B 19/23
- by means of additional hands or additional pairs of hands {(simultaneous indication on several dials [G04B 19/025](#); indicating devices giving several simultaneous indications [G04B 19/048](#))}
- M G04B 19/235
- • {mechanisms for correcting the additional hand or hands (time setting [G04B 27/00](#))}
- WARNING**  
Not complete pending reclassification; see also G04B 19/23
- U G04B 19/28
- Adjustable guide marks or pointers for indicating determined points of time {(inscriptions or pictures moved by hand [G04B 45/003](#))}
- U G04B 19/283
- • {on rotatable rings, i.e. bezel (for graduations on the bezels [G04B 19/18](#))}
- M G04B 19/286
- • {with locking means to prevent undesired rotations in both directions}
- WARNING**  
Not complete pending reclassification; see also G04B 19/283
- U **G04B 37/00**
- Cases {(cases with a special shape [G04B 45/0069](#); ornamentation of the case [G04B 47/04](#); cartridges [A45C 11/00](#) - [A45C 11/38](#))}**
- M G04B 37/22
- Materials or processes of manufacturing pocket watch or wrist watch cases {(machines or tools for the manufacture of clockwork cases [G04D 3/0064](#), [G04D 3/0097](#), [G04D 3/029](#); decoration or tools therefor [G04B 45/0076](#))}
- WARNING**  
*Groups G04B 37/22, G04B 37/223, G04B 37/225, G04B 37/226 and G04B 37/228 are incomplete pending reclassification of documents from group G04B 37/221.  
All groups listed in this Warning should be considered in order to perform a complete search.*
- F G04B 37/221  
(Frozen)
- {Wear resistant cases}
- WARNING**  
This group **Group G04B 37/221** is no longer used for the classification of **new documents as from documents as of March 1, 2011** May 1, 2022.



G04B 37/221

(Frozen)

(continued)

The **backlog content** of this group is being reclassified ~~to other subgroups of into groups~~ [G04B 37/22](#), [G04B 37/223](#), [G04B 37/225](#), [G04B 37/226](#) and [G04B 37/228](#).

*All groups listed in this Warning should be considered in order to perform a complete search.*

M G04B 37/223

- {metallic cases coated with a nonmetallic layer}

**WARNING**

~~Not complete pending reclassification; see also G04B 37/22~~

U G04B 47/00

Time-pieces combined with other articles which do not interfere with the running or the time-keeping of the time-piece ({clockwork cases for special purposes [G04B 37/12](#); clocks with magnifying glass built in the face [G04B 39/00](#); time-pieces in which parts or cases produce special effects, e.g. aesthetic effects, [G04B 45/00](#), particularly with inscriptions or pictures moved by hand [G04B 45/003](#), with specially shaped cases or parts [G04B 45/0069](#); combination of} writing or drawing implements with devices for indicating time [B43K 29/087](#); combined with cameras, projectors, or photographic printing apparatus [G03B 29/00](#))

U G04B 47/06

- with attached measuring instruments, e.g. pedometer, barometer, thermometer or compass {(in combination with a tachometer which winds up the clockwork [G04B 5/206](#))}

M G04B 47/063

- {measuring physiological quantities, e.g. pedometers, heart-rate sensors, blood pressure gauges and the like}

**WARNING**

~~Not complete pending reclassification; see also G04B 47/06 and G04B 47/061~~

M G04B 47/066

- {with a pressure sensor}

**WARNING**

~~Not complete pending reclassification; see also G04B 47/06 and G04B 47/061~~

M G04B 47/068

- {with a thermometer}

**WARNING**

~~Not complete pending reclassification; see also G04B 47/06 and G04B 47/061~~

**Project: RP10478 (B01J)**

U B01J 20/00

**Solid sorbent compositions or filter aid compositions; Sorbents for chromatography; Processes for preparing, regenerating or reactivating thereof**

M B01J 20/281

- Sorbents specially adapted for preparative, analytical or investigative chromatography

**NOTE**

In groups [B01J 20/281](#) - [B01J 20/292](#) it is desirable to add indexing codes for aspects relating to sorbents specially adapted for preparative, analytical or investigative chromatography. The indexing codes are chosen from groups [B01J 2220/80](#) - [B01J 2220/86](#)

**WARNING**

*Groups [B01J 20/281](#) - [B01J 20/29](#) are incomplete pending reclassification of documents from groups [G01N 30/48](#), [G01N 30/482](#) and [G01N 2030/484](#).*

*All groups listed in this Warning should be considered in order to perform a complete search.*

## Project: RP10478 (G01N)

- U G01N 30/00 Investigating or analysing materials by separation into components using adsorption, absorption or similar phenomena or using ion-exchange, e.g. chromatography {or field flow fractionation} ([G01N 3/00](#), [G01N 5/00](#), [G01N 7/00](#), [G01N 9/00](#), [G01N 11/00](#), [G01N 13/00](#), [G01N 15/00](#), [G01N 17/00](#), [G01N 19/00](#), [G01N 21/00](#), [G01N 22/00](#), [G01N 23/00](#), [G01N 24/00](#), [G01N 25/00](#), [G01N 27/00](#), [G01N 29/00](#) take precedence)

### NOTE

In this group, the following term is used with the meaning indicated:

- "conditioning" refers to the adjustment or control of environmental parameters, e.g. temperature or pressure.

- U G01N 30/02  
F G01N 30/48  
(Frozen)
- Column chromatography
  - {Sorbent materials therefor}

### WARNING

*Group [G01N 30/48](#) is no longer used for the classification of documents as of May 1, 2022.*

*The content of this group is being reclassified into groups [B01J 20/281](#) - [B01J 20/29](#).*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- F G01N 30/482  
(Frozen)
- • • {Solid sorbents}

### WARNING

*Group [G01N 30/482](#) is no longer used for the classification of documents as of May 1, 2022.*

*The content of this group is being reclassified into groups [B01J 20/281](#) - [B01J 20/29](#).*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- F G01N 2030/484  
(Frozen)
- • • {Solid sorbents}

### WARNING

*Group [G01N 2030/484](#) is no longer used for the classification of documents as of May 1, 2022.*

*The content of this group is being reclassified into groups [B01J 20/281](#) - [B01J 20/29](#).*

*All groups listed in this Warning should be considered in order to perform a complete search.*

- D G01N 2030/486  
D G01N 2030/488
- • • {gels}
  - <administratively transferred to [B01J 20/291](#)>
  - • • {liquid sorbents}
  - <administratively transferred to [B01J 20/292](#)>

## Project: N/A (B81)

B81

## MICROSTRUCTURAL TECHNOLOGY

### NOTES

1. This class covers microstructural devices or systems, including at least one essential element or formation characterised by its very small size typically

within the range of  $10^{-4}$  to  $10^{-7}$  meters, i.e. its significant features can not, in at least one dimension, be completely discerned without the use of an optical microscope.

2. In this class, the following expressions are used with the meaning indicated :

- "microstructural devices" covers:
  - i. micromechanical devices comprising movable, flexible or deformable elements; and
  - ii. three-dimensional structures without movable, flexible or deformable elements, comprising microformations designed to accomplish an essential structural function for interacting with their environment, as opposed to purely electronic or chemical functions, regardless of whether the structures are combined with microelectronic devices or formed from specific materials;
- "microstructural systems" covers:
  - i. systems of cooperating microstructural devices; and
  - ii. microelectro-mechanical or microopto-mechanical systems, which combine on a common substrate the specific features of microstructural devices and electrical or optical components, e.g. for controlling, analysing or signalling the functioning of microstructural devices.

## Project: N/A (H01M)

U H01M 4/00

### Electrodes

#### NOTE

In classifying electrodes of hybrid cells, the individual half-cells of the hybrid cell are considered separately, e.g. an electrode in the primary half of a primary/fuel type hybrid cell is considered to be a primary-cell electrode covered by [H01M 4/06](#).

U H01M 4/02

- Electrodes composed of, or comprising, active material

U H01M 4/36

- • Selection of substances as active materials, active masses, active liquids

U H01M 4/58

- • • of inorganic compounds other than oxides or hydroxides, e.g. sulfides, selenides, tellurides, halogenides or  $\text{LiCoF}_y$ ; of polyanionic structures, e.g. phosphates, silicates or borates

H01M 4/5825

- • • {Oxygenated metallic ~~slats~~salts or polyanionic structures, e.g. borates, phosphates, silicates, olivines}

#### NOTE

Polyanionic structures comprises elements not changing oxidation state during electrochemical reaction, e.g. P, Si, B