

## Compilation of Changes to the CPC Scheme Between 2019.05 and 2019.08

### 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>                    |
- 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: RP0414-F (A01K)

- |   |            |  |
|---|------------|--|
| M | A01K 61/00 | <p><b>Culture of aquatic animals (receptacles for live fish, e.g. aquaria, <u>A01K 63/00</u>)</b></p> <p><u>WARNING</u></p> <p>Group A01K 61/00 is impacted by reclassification into groups A01K 61/00, A01K 61/10, A01K 61/13, A01K 61/20, A01K 61/30, A01K 61/40, A01K 61/50, A01K 61/51, A01K 61/53, A01K 61/60, A01K 61/65, A01K 61/80, A01K 61/85, A01K 61/90, and A01K 61/95.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p> |
| M | A01K 61/10 | <p>• of fish</p> <p><u>WARNING</u></p> <p>Groups A01K 61/10 — A01K 61/13 are incomplete pending reclassification of documents from group A01K 61/00.</p> <p>Groups A01K 61/00 and A01K 61/10 — A01K 61/13 should be considered in order to perform a complete search.</p>  |
| M | A01K 61/20 | <p>• of zooplankton, e.g. water fleas or Rotatoria</p> <p><u>WARNING</u></p> <p>Group A01K 61/20 is incomplete pending reclassification of documents from group A01K 61/00.</p> <p>Groups A01K 61/00 and A01K 61/20 should be considered in order to perform a complete search.</p>  |
| M | A01K 61/30 | <p>• of sponges, sea urchins or sea cucumbers</p> <p><u>WARNING</u></p> <p>Group A01K 61/30 is incomplete pending reclassification of documents from group A01K 61/00.</p> <p>Groups A01K 61/00 and A01K 61/30 should be considered in order to perform a complete search.</p>   |
| M | A01K 61/40 | <p>• of annelids, e.g. lugworms or Eunice</p> <p><u>WARNING</u></p> <p>Group A01K 61/40 is incomplete pending reclassification of documents from group A01K 61/00.</p> <p>Groups A01K 61/00 and A01K 61/40 should be considered in order to perform a complete search.</p>   |

- M A01K 61/50
- of shellfish ([A01K 61/30](#), [A01K 61/40](#) take precedence)
- WARNING  
Groups A01K 61/50 – A01K 61/53 are incomplete pending reclassification of documents from group A01K 61/00.  
Groups A01K 61/00 and A01K 61/50 – A01K 61/53 should be considered in order to perform a complete search.
- M A01K 61/54
- of bivalves, e.g. oysters or mussels
- WARNING  
Group A01K 61/54 is impacted by reclassification of documents into groups A01K 61/55 – A01K 61/57.  
Groups A01K 61/54 and A01K 61/55 – A01K 61/57 should be considered in order to perform a complete search.
- M A01K 61/55
- • Baskets therefor
- WARNING  
Group A01K 61/55 is incomplete pending reclassification of documents from group A01K 61/54.  
Groups A01K 61/54 and A01K 61/55 should be considered in order to perform a complete search.
- M A01K 61/56
- • for pearl production
- WARNING  
Group A01K 61/56 is incomplete pending reclassification of documents from group A01K 61/54.  
Groups A01K 61/54 and A01K 61/56 should be considered in order to perform a complete search.
- M A01K 61/57
- • • Pearl seeds
- WARNING  
Group A01K 61/57 is incomplete pending reclassification of documents from group A01K 61/54.  
Groups A01K 61/54 and A01K 61/57 should be considered in order to perform a complete search.
- M A01K 61/60
- Floating cultivation devices, e.g. rafts or floating fish-farms
- WARNING  
Group A01K 61/60 is incomplete pending reclassification of documents from group A01K 61/00. Group A01K 61/60 is also impacted by reclassification into groups A01K 61/65.  
Groups A01K 61/60, A01K 61/00 and A01K 61/65 should be considered in order to perform a complete search.
- M A01K 61/65
- • Connecting or mooring devices therefor
- WARNING  
Group A01K 61/65 is incomplete pending reclassification of documents from groups A01K 61/00 and A01K 61/60.  
Groups A01K 61/65, A01K 61/00, and A01K 61/60 should be considered in order to perform a complete search.
- M A01K 61/70
- Artificial fishing banks or reefs
- WARNING  
Group A01K 61/70 is impacted by reclassification into groups A01K 61/72, A01K 61/73, A01K 61/75, A01K 61/77, and A01K 61/78.

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

M A01K 61/72

- made of tyres

WARNING

Group A01K 61/72 is incomplete pending reclassification of documents from group A01K 61/70.  
Groups A01K 61/70 and A01K 61/72 should be considered in order to perform a complete search:

M A01K 61/73

- assembled of components ([A01K 61/72](#) takes precedence)

WARNING

Group A01K 61/73 is incomplete pending reclassification of documents from group A01K 61/70.  
Groups A01K 61/70 and A01K 61/73 should be considered in order to perform a complete search:

M A01K 61/75

- floating ([A01K 61/72](#) takes precedence)

WARNING

Group A01K 61/75 is incomplete pending reclassification of documents from group A01K 61/70.  
Groups A01K 61/70 and A01K 61/75 should be considered in order to perform a complete search:

M A01K 61/77

- of monolithic form, e.g. blocks

WARNING

Group A01K 61/77 is incomplete pending reclassification of documents from group A01K 61/70.  
Groups A01K 61/70 and A01K 61/77 should be considered in order to perform a complete search:

M A01K 61/78

- Arrangements for sinking or mooring thereof

WARNING

Group A01K 61/78 is incomplete pending reclassification of documents from group A01K 61/70.  
Groups A01K 61/70 and A01K 61/78 should be considered in order to perform a complete search:

M A01K 61/80

- Feeding devices

WARNING

Group A01K 61/80 is incomplete pending reclassification of documents from group A01K 61/00.  
Groups A01K 61/00 and A01K 61/80 should be considered in order to perform a complete search:

M A01K 61/85

- for use with aquaria

WARNING

Group A01K 61/85 is incomplete pending reclassification of documents from group A01K 61/00.  
Groups A01K 61/00 and A01K 61/85 should be considered in order to perform a complete search:

- M A01K 61/90
- Sorting, grading, counting or marking live aquatic animals, e.g. sex determination
- WARNING**  
Group A01K 61/90 is impacted by reclassification of documents into group A01K 61/95.  
Groups A01K 61/90 and A01K 61/95 should be considered in order to perform a complete search.
- M A01K 61/95
- specially adapted for fish
- WARNING**  
Group A01K 61/95 is incomplete pending reclassification of documents from group A01K 61/90.  
Groups A01K 61/90 and A01K 61/95 should be considered in order to perform a complete search.
- M A01K 63/00
- Receptacles for live fish, e.g. aquaria (keepnets or other containers for keeping captured fish [A01K 97/20](#)); Terraria
- WARNING**  
Group A01K 63/00 is impacted by reclassification into group A01K 63/10.  
Groups A01K 63/00 and A01K 63/10 should be considered in order to perform a complete search.
- M A01K 63/10
- Cleaning bottoms or walls of ponds or receptacles
- WARNING**  
Group A01K 63/10 is incomplete pending reclassification of documents from group A01K 63/00.  
Groups A01K 63/00 and A01K 63/10 should be considered in order to perform a complete search.

**Project: MP0441 (A01K)**

- M A01K 2227/00 Animals characterised by species **(Not used)**
- M A01K 2267/00 Animals characterised by purpose **(Not used)**

**Project: MP0441 (A23C)**

- M A23C 2210/00 Physical treatment of dairy products **(not used, see subgroups)**
- M A23C 2210/20
- Treatment using membranes, including sterile filtration **(not used, see subgroups)**
- M A23C 2210/25
- Separating and blending **(not used, see subgroups)**
- M A23C 2220/00 Biochemical treatment **(not used, see subgroups below)**
- M A23C 2220/10
- Enzymatic treatment **(not used, see subgroups below)**
- M A23C 2220/20
- Treatment with microorganisms **(not used, see subgroups below)**
- M A23C 2230/00 Aspects relating to animal feed or genotype **(not used, see subgroups below)**
- M A23C 2240/00 Use or particular additives or ingredients **(not used, see subgroups below)**
- M A23C 2250/00 Particular aspects related to cheese **(not used, see subgroups below)**
- M A23C 2250/05
- Emulsifying cheese **(not used, see subgroups below)**
- M A23C 2260/00 Particular aspects or types of dairy products **(not used, see subgroups below)**

- M A23C 2260/10      • Spreadable dairy products ~~(not used; see subgroups below)~~
- M A23C 2260/15      • Frozen dairy products ~~(not used; see subgroups below)~~
- M A23C 2270/00      Aspects relating to packaging ~~(not used; see subgroups below)~~**

**Project: MP0441 (A23G)**

- U A23G 1/00      Cocoa; Cocoa products, e.g. chocolate; Substitutes therefor (kitchen equipment for cocoa preparation [A47J](#), e.g. apparatus for making beverages [A47J 31/00](#))**
- NOTE  
Attention is drawn to the internal note after the subclass title
- U A23G 1/0003      • {Processes of manufacture not relating to composition or compounding ingredients}
- U A23G 1/005      • • {Moulding, shaping, cutting, or dispensing chocolate ([A23G 1/0076](#) - [A23G 1/0096](#) take precedence)}
- M A23G 1/0053      • • • {Processes of shaping not covered elsewhere ~~(Not used)~~}
- U A23G 1/0079      • • {Chocolate moulds processing ([A23G 1/0076](#) takes precedence)}
- M A23G 1/0083      • • • {characterised by the material of the moulds ~~(Not used)~~}
- U A23G 1/04      • Apparatus specially adapted for manufacture or treatment of cocoa or cocoa products (machines for roasting cocoa [A23N 12/00](#); crushing or grinding apparatus in general [B02C](#))
- U A23G 1/20      • • Apparatus for moulding, cutting, or dispensing chocolate
- U A23G 1/22      • • • Chocolate moulds ([A23G 1/21](#) takes precedence)
- M A23G 1/223      • • • • {Mould materials ~~(not used)~~}
- U A23G 7/00      Other apparatus {or process} specially adapted for the chocolate or confectionery industry**
- U A23G 7/0043      • {Other processes specially adapted for the chocolate or confectionery industry ([A23G 7/0006](#) - [A23G 7/02](#))}
- M A23G 7/005      • • {General processes ~~(Not used)~~}

**Project: MP0441 (A23V)**

- M A23V 2200/00      Function of food ingredients ~~(not used; see subgroups)~~**
- NOTE  
The indexing codes under this group are used in combination with the codes for ingredients compositions
- M A23V 2250/00      Food ingredients ~~(not used; see subgroups)~~**
- U A23V 2250/18      • Lipids
- M A23V 2250/184      • • Emulsifier (emulsifier as function [A23V 2200/222](#); ~~not used; see subgroups~~)
- M A23V 2300/00      Processes ~~(not used; see subgroups)~~**

**Project: RP0364 (A47G)**

- U A47G 1/00      Mirrors (as optical elements [G02B 5/08](#)); Picture frames or the like, {e.g. provided with heating, lighting or ventilating means}**
- U A47G 1/06      • Picture frames (making from paper [B31D](#))
- M A47G 1/0616      • • {Ornamental frames, e.g. with illumination, speakers *or decorative features*}

C A47G 1/10

- • Corner clips or corner-connecting appliances for frames

**WARNING**

Group [A47G 1/10](#) is impacted by reclassification into groups [A47G 1/101](#) and [A47G 1/102](#).

Groups [A47G 1/10](#), [A47G 1/101](#), and [A47G 1/102](#) should be considered in order to perform a complete search.

N A47G 1/101

- • • {for insertion within frame members}

**WARNING**

Group [A47G 1/101](#) is incomplete pending reclassification of documents from group [A47G 1/10](#).

Groups [A47G 1/10](#) and [A47G 1/101](#) should be considered in order to perform a complete search.

N A47G 1/102

- • • {having an aperture to receive a fastener to connect to a frame member}

**WARNING**

Group [A47G 1/102](#) is incomplete pending reclassification of documents from group [A47G 1/10](#).

Groups [A47G 1/10](#) and [A47G 1/102](#) should be considered in order to perform a complete search.

**Project: MP0381 (A61B)**

M A61B

**DIAGNOSIS; SURGERY; IDENTIFICATION** (analysing biological material [G01N](#), e.g. [G01N 33/48](#); obtaining records using waves other than optical waves, in general [G03B 42/00](#))

**NOTE**

This subclass covers instruments, implements and processes for diagnostic, surgical and person-identification purposes, including obstetrics, instruments for cutting corns, vaccination instruments, finger-printing, psycho-physical tests.

**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="#">A61B 5/0295</a>	covered by	<a href="#">A61B 5/026</a>
<a href="#">A61B 5/151</a>	covered by	<a href="#">A61B 5/1411</a>
<a href="#">A61B 5/153</a>	covered by	<a href="#">A61B 5/1405</a>
<a href="#">A61B 5/154</a>	covered by	<a href="#">A61B 5/1438</a>
<a href="#">A61B 5/157</a>	covered by	<a href="#">A61B 5/00 and s. gr.</a>
<a href="#">A61B 17/03</a>	covered by	<a href="#">A61B 17/00</a>
<a href="#">A61B 17/125</a>	covered by	<a href="#">A61B 17/122</a>
<a href="#">A61B 17/138</a>	covered by	<a href="#">A61B 17/12</a>
<a href="#">A61B 17/76</a>	covered by	<a href="#">A61B 17/744</a>
<a href="#">A61B 17/78</a>	covered by	<a href="#">A61B 17/744</a>
<a href="#">A61B 17/90</a>	covered by	<a href="#">A61B 17/88</a> , <a href="#">A61B 2017/90</a>
<a href="#">A61B 17/94</a>	covered by	<a href="#">A61B 17/29</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.

**Project: MP0441 (A61B)**

U A61B 17/00

**Surgical instruments, devices or methods**, e.g. tourniquets ([A61B 18/00](#) takes precedence; contraceptive devices, pessaries, or applicators therefor [A61F 6/00](#); eye surgery [A61F 9/007](#); ear surgery [A61F 11/00](#))

- M A61B 2017/00681 • {Aspects not otherwise provided for ~~(not used)~~}
- U A61B 17/16 • {Bone cutting, breaking or removal means other than saws, e.g.} Osteoclasts; Drills or chisels for bones; Trepan {arthroscopic bone cutters [A61B 17/320016](#); dental implant drills potentially for other surgical use [A61C 8/0089](#); bone grinders [A61F 2/4644](#), [A22C 17/06](#); [A61B 17/1662](#) takes precedence over all other subgroups except [A61B 17/17](#)}
- M A61B 17/1613 • • {Component parts ~~(not used, see subgroups)~~}
- U A61B 17/42 • Gynaecological or obstetrical instruments or methods ({ligaturing clamps or clips for the umbilical cord [A61B 17/122](#); curettage [A61B 17/3207](#)}; dilators [A61M 29/00](#))
- M A61B 17/425 • • for reproduction or fertilisation (specially adapted for use with animals [A61D 19/00](#))~~(not used, see subgroups)~~}
- U A61B 17/56 • Surgical instruments or methods for treatment of bones or joints; Devices specially adapted therefor ({orthopaedic methods or devices for non-surgical treatment of bones or joints [A61F 5/00](#)})

**NOTES**

1. Documents concerning exclusively surgical methods are classified only in this group.
2. Surgical instruments or devices are classified only in the relevant subgroups

- U A61B 17/58 • • for osteosynthesis, e.g. bone plates, screws, {setting implements} or the like ([A61B 17/14](#), [A61B 17/16](#) take precedence; {splints [A61B 5/01](#); traction bandages [A61F 13/10](#)})
- U A61B 17/60 • • • for external osteosynthesis, e.g. distractors, contractors
- M A61B 17/64 • • • Devices extending alongside the bones to be positioned ~~(not used, see subgroups and A61B 17/60)~~}

**Project: MP0441 (A61C)**

- U A61C 13/00 **Dental prostheses; Making same (tooth crowns for capping teeth [A61C 5/70](#); dental implants [A61C 8/00](#))**
  - U A61C 13/225 • Fastening prostheses in the mouth (securing tooth crowns in capping teeth [A61C 5/30](#))
- WARNING**  
Group [A61C 13/225](#) is impacted by reclassification into group [A61C 5/30](#). Groups [A61C 13/225](#) and [A61C 5/30](#) should be considered in order to perform a complete search.
- M A61C 13/265 • • Sliding or snap attachments ~~(not used, see subgroups)~~}
  - U A61C 15/00 **Devices for cleaning between the teeth**
  - M A61C 15/04 • Dental floss; Floss holders ~~(not used, see subgroups)~~}

**Project: MP0381 (A61F)**

- M A61F **FILTERS IMPLANTABLE INTO BLOOD VESSELS; PROSTHESES; DEVICES PROVIDING PATENCY TO, OR PREVENTING COLLAPSING OF, TUBULAR STRUCTURES OF THE BODY, e.g. STENTS; ORTHOPAEDIC, NURSING OR CONTRACEPTIVE DEVICES; FOMENTATION; TREATMENT OR PROTECTION OF EYES OR EARS; BANDAGES, DRESSINGS OR ABSORBENT PADS; FIRST-AID KITS (dental prosthetics [A61C](#))**

**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:  
[A61F 2/48](#) covered by [A61F 2/02](#), [A61F 2002/48](#)



<a href="#">A61F 2/56</a>	covered by	<a href="#">A61F 2/54</a>
<a href="#">A61F 2/62</a>	covered by	<a href="#">A61F 2/60</a>
<a href="#">A61F 2/74</a>	covered by	<a href="#">A61F 2/68</a> , <a href="#">A61F 2002/74</a>
<a href="#">A61F 5/045</a>	covered by	<a href="#">A61G 13/12</a>
<a href="#">A61F 5/052</a>	covered by	<a href="#">A61F 5/05</a>
<a href="#">A61F 5/447</a>	covered by	<a href="#">A61F 5/445</a>
<a href="#">A61F 5/452</a>	covered by	<a href="#">A61F 5/451</a>
<a href="#">A61F 5/457</a>	covered by	<a href="#">A61F 5/451</a>
<a href="#">A61F 5/458</a>	covered by	<a href="#">A61F 5/451</a>
<a href="#">A61F 6/10</a>	covered by	<a href="#">A61F 6/08</a>
<a href="#">A61F 9/01</a>	covered by	<a href="#">A61F 9/00802</a> - <a href="#">A61F 9/00825</a>
<a href="#">A61F 9/011</a>	covered by	<a href="#">A61F 9/00802</a> - <a href="#">A61F 9/00825</a>
<a href="#">A61F 13/22</a>	covered by	<a href="#">A61F 13/206</a>
<a href="#">A61F 13/24</a>	covered by	<a href="#">A61F 13/2037</a> <a href="#">A61F 13/2045</a>
<a href="#">A61F 13/30</a>	covered by	<a href="#">A61F 13/26</a>
<a href="#">A61F 13/32</a>	covered by	<a href="#">A61F 13/26</a>
<a href="#">A61F 13/40</a>	covered by	<a href="#">A61M 35/006</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.

## Project: RP0016-F (A61F)

- U A61F 2/00** Filters implantable into blood vessels; Prostheses, i.e. artificial substitutes or replacements for parts of the body; Appliances for connecting them with the body; Devices providing patency to, or preventing collapsing of, tubular structures of the body, e.g. stents (as cosmetic articles, see the relevant subclasses, e.g. wigs, hair pieces, [A41G 3/00](#), [A41G 5/00](#), artificial nails [A45D 31/00](#); dental prostheses [A61C 13/00](#); materials for prostheses [A61L 27/00](#); artificial hearts [A61M 1/10](#); artificial kidneys [A61M 1/14](#))
- U A61F 2/0077** • {Special surfaces of prostheses, e.g. for improving ingrowth ([A61F 2/30767](#) takes precedence)}
- U A61F 2002/009** • • {for hindering or preventing attachment of biological tissue (of bone tissue onto implantable joints [A61F 2002/30932](#))}
- M A61F 2002/0091** • • • {Having cellular growth inhibitors}

### WARNING

~~Group A61F-2002/0091 is incomplete pending reclassification of documents from groups A61F-2002/009.~~  
~~Groups A61F-2002/009 and A61F-2002/0091 should be considered in order to perform a complete search.~~

- U A61F 2/02** • Prostheses implantable into the body {(closure means for urethra or rectum or for artificial body openings therefor [A61F 2/0004](#))}
- U A61F 2/14** • • Eye parts, e.g. lenses, corneal implants; {Implanting instruments specially adapted therefor}; Artificial eyes
- M A61F 2/145** • • • {Corneal inlays, onlays, or lenses for refractive correction}

### WARNING

~~Group A61F-2/145 is impacted by reclassification into groups A61F 2/1451 and A61F-2/1453.~~  
~~Groups A61F-2/145, A61F 2/1451, and A61F 2/1453 should be considered in order to perform a complete search.~~



- M A61F 2/15
- • • {Implant having one or more holes, e.g. for nutrient transport, for facilitating handling}
- WARNING  
Group A61F 2/15 is incomplete pending reclassification of documents from group A61F 2/14.  
Groups A61F 2/14 and A61F 2/15 should be considered in order to perform a complete search.
- M A61F 2/16
- • • Intraocular lenses
- WARNING  
Group A61F 2/16 is impacted by reclassification into groups A61F 2/1601, A61F 2/16015, A61F 2002/1696, and A61F 2002/16965.  
All groups listed should be considered in order to perform a complete search.
- M A61F 2002/1681
- • • {having supporting structure for lens, e.g. haptics}
- WARNING  
Group A61F 2002/1681 is impacted by reclassification into groups A61F 2002/1682, A61F 2002/169, A61F 2002/16901, A61F 2002/16902, A61F 2002/16903, A61F 2002/16905, A61F 2002/169051, A61F 2002/169052, and A61F 2002/169053.  
All groups listed should be considered in order to perform a complete search.

**Project: MP0441 (A61F)**

- U A61F 2/30
- • Joints
- M A61F 2/3094
- • • {Designing or manufacturing processes ~~(not used, see subgroups)~~}
- U A61F 2/50
- Prostheses not implantable in the body {(closure means for urethra or rectum or for artificial body openings therefor [A61F 2/0004](#))}
- M A61F 2/5044
- • {Designing or manufacturing processes ~~(not used, see subgroup)~~}

**Project: MP0441 (A61H)**

- U A61H 33/00
- Bathing devices for special therapeutic or hygienic purposes ([A61H 35/00](#) takes precedence; {sprays acting on a body or body part not immersed in water [A61H 9/00](#); means for washing bed-ridden persons [A61G 7/0005](#); } for sub aquatic intestinal cleaning [A61M 9/00](#); {isolation chambers [A61M 21/0094](#); } electric or magnetic baths, applying ionised fluids [A61N 1/44](#) {; heater for bath tubs [F24H 1/0081](#)})
- M A61H 2033/0008
- {Arrangement for cleaning the installation before or after use ~~(not used)~~}

**Project: MP0381 (A61K)**

- M A61K
- PREPARATIONS FOR MEDICAL, DENTAL, OR TOILET PURPOSES**  
(devices or methods specially adapted for bringing pharmaceutical products into particular physical or administering forms [A61J 3/00](#); chemical aspects of, or use of materials for deodorisation of air, for disinfection or sterilisation, or for bandages, dressings, absorbent pads or surgical articles [A61L](#); soap compositions [C11D](#))

NOTES

1. This subclass covers the following subject matter, whether set forth as a composition (mixture), process of preparing the composition or process of treating using the composition:
  - a. Drug or other biological compositions which are capable of:

- preventing, alleviating, treating or curing abnormal or pathological conditions of the living body by such means as destroying a parasitic organism, or limiting the effect of the disease or abnormality by chemically altering the physiology of the host or parasite (biocides [A01N 25/00](#) - [A01N 65/00](#));
  - maintaining, increasing, decreasing, limiting, or destroying a physiological body function, e.g. vitamin compositions, sex sterilants, fertility inhibitors, growth promoters, or the like (sex sterilants for invertebrates, e.g. insects, [A01N](#); plant growth regulators [A01N 25/00](#) - [A01N 65/00](#));
  - diagnosing a physiological condition or state by an *in vivo* test, e.g. X-ray contrast or skin patch test compositions (measuring or testing processes involving enzymes or microorganisms [C12Q](#); *in vitro* testing of biological material, e.g. blood, urine, [G01N](#), e.g. [G01N 33/48](#))
- b. Body treating compositions generally intended for deodorising, protecting, adorning or grooming the body, e.g. cosmetics, dentifrices, tooth filling materials.
2. Attention is drawn to the definitions of groups of chemical elements following the title of section [C](#).
3. Attention is drawn to the notes in class [C07](#), for example the notes following the title of the subclass [C07D](#), setting forth the rules for classifying organic compounds in that class, which rules are also applicable, if not otherwise indicated, to the classification of organic compounds in [A61K](#).
4. In this subclass, with the exception of group [A61K 8/00](#), 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.

#### 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="#">A61K 9/133</a>	covered by	<a href="#">A61K 9/127</a>
<a href="#">A61K 9/18</a>	covered by	<a href="#">A61K 9/14</a>
<a href="#">A61K 9/22</a>	covered by	<a href="#">A61K 9/20</a>
<a href="#">A61K 9/24</a>	covered by	<a href="#">A61K 9/209</a>
<a href="#">A61K 9/26</a>	covered by	<a href="#">A61K 9/2077</a> , <a href="#">A61K 9/2081</a>
<a href="#">A61K 9/30</a>	covered by	<a href="#">A61K 9/28</a>
<a href="#">A61K 9/32</a>	covered by	<a href="#">A61K 9/28</a>
<a href="#">A61K 9/34</a>	covered by	<a href="#">A61K 9/28</a>
<a href="#">A61K 9/36</a>	covered by	<a href="#">A61K 9/28</a>
<a href="#">A61K 9/38</a>	covered by	<a href="#">A61K 9/28</a>
<a href="#">A61K 9/40</a>	covered by	<a href="#">A61K 9/28</a>
<a href="#">A61K 9/42</a>	covered by	<a href="#">A61K 9/28</a>
<a href="#">A61K 9/44</a>	covered by	<a href="#">A61K 9/2072</a>
<a href="#">A61K 9/46</a>	covered by	<a href="#">A61K 9/0007</a>
<a href="#">A61K 9/52</a>	covered by	<a href="#">A61K 9/50</a>
<a href="#">A61K 9/54</a>	covered by	<a href="#">A61K 9/5073</a> , <a href="#">A61K 9/5078</a> , <a href="#">A61K 9/5084</a>
<a href="#">A61K 9/56</a>	covered by	<a href="#">A61K 9/50</a>
<a href="#">A61K 9/58</a>	covered by	<a href="#">A61K 9/50</a>
<a href="#">A61K 9/60</a>	covered by	<a href="#">A61K 9/50</a>
<a href="#">A61K 9/62</a>	covered by	<a href="#">A61K 9/50</a>
<a href="#">A61K 9/64</a>	covered by	<a href="#">A61K 9/50</a>
<a href="#">A61K 9/66</a>	covered by	<a href="#">A61K 9/48</a>
<a href="#">A61K 9/68</a>	covered by	<a href="#">A61K 9/0058</a>

<a href="#">A61K 9/72</a>	covered by	<a href="#">A61K 9/0073</a>
<a href="#">A61K 39/108</a>	covered by	<a href="#">A61K 39/0258</a> , <a href="#">A61K 39/0266</a>
<a href="#">A61K 39/112</a>	covered by	<a href="#">A61K 39/0275</a> , <a href="#">A61K 39/0283</a>
<a href="#">A61K 45/08</a>	covered by	<a href="#">A61K 31/00</a> , <a href="#">A61K 47/00</a>
<a href="#">A61K 47/04</a>	covered by	<a href="#">A61K 47/02</a>
<a href="#">A61K 50/00</a>	covered by	<a href="#">A61K 9/0009</a> , <a href="#">C09J 9/02</a>

The following IPC indexing codes are not ~~used~~ in the CPC scheme:

[A61K 101/00](#) - [A61K 103/00](#) covered by [A61K 51/00](#) - [A61K 51/1296](#)  
[A61K 125/00](#) - [A61K 135/00](#) covered by [A61K 36/00](#) - [A61K 36/9068](#)  
~~[A61K 101/00](#) - [A61K 135/00](#)~~

2. Subgroups of [A61K 48/00](#) are incomplete (Jan. 2003). Documents are being reclassified from [A61K 48/00](#) to its subgroups

3. 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.

## Project: MP0381 (A61L)

### M A61L

**METHODS OR APPARATUS FOR STERILISING MATERIALS OR OBJECTS IN GENERAL; DISINFECTION, STERILISATION, OR DEODORISATION OF AIR; CHEMICAL ASPECTS OF BANDAGES, DRESSINGS, ABSORBENT PADS, OR SURGICAL ARTICLES; MATERIALS FOR BANDAGES, DRESSINGS, ABSORBENT PADS, OR SURGICAL ARTICLES (preservation of bodies or disinfecting characterised by the agent employed [A01N](#); preserving, e.g. sterilising, food or foodstuffs [A23](#); preparations for medical, dental or toilet purposes [A61K](#); preparation of ozone [C01B 13/10](#))**

#### 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="#">A61L 33/10</a>	covered by	<a href="#">A61L 33/0011</a>
<a href="#">A61L 33/14</a>	covered by	<a href="#">A61L 33/0011</a>
<a href="#">A61L 33/16</a>	covered by	<a href="#">A61L 33/0047</a>
<a href="#">A61L 101/00</a> - <a href="#">A61L 101/56</a>	covered by	<a href="#">A61L 2300/00</a> - <a href="#">A61L 2300/802</a>

2. IPC7 groups [A61L 2/07](#) and subgroups, and [A61L 9/012](#) - [A61L 9/014](#) might be incomplete as relevant documents might still be classified in the hierarchical higher groups

3. 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.

## Project: RP0004-F (A61M)

### M A61M 11/00

**Sprayers or atomisers specially adapted for therapeutic purposes (in general [B05B](#); {aerosol containers [B65D 83/14](#)})**

#### WARNING

Groups [A61M 11/001](#) - [A61M 11/008](#), [A61M 11/042](#) - [A61M 11/048](#), [A61M 11/065](#) are incomplete pending reclassification of documents from group [A61M 11/00](#) or respective subgroup.

Until reclassification is complete, groups [A61M 11/00](#) or respective subgroup and [A61M 11/001](#) - [A61M 11/008](#), [A61M 11/042](#) - [A61M 11/048](#), [A61M 11/065](#) should be considered in order to perform a complete search.

**U A61M 13/00** Insufflators for therapeutic or disinfectant purposes {, i.e. devices for blowing a gas, powder or vapour into the body (hand-held units in which gas flow is produced by muscular energy at the moment of use [B05B 11/062](#))}

**M A61M 13/003** - {Blowing gases other than for carrying powders, e.g. for inflating, dilating or rinsing}

**WARNING**

Group A61M 13/006 is incomplete pending reclassification of documents from group A61M 13/003.

Until reclassification is complete, groups A61M 13/003 and A61M 13/006 should be considered in order to perform a complete search.

**M A61M 15/00** Inhalators {(drug delivery in endotracheal tubes [A61M 16/04](#))}

**WARNING**

Groups A61M 15/0001 - A61M 15/0026, A61M 15/003 - A61M 15/0043, A61M 15/0046 - A61M 15/0063, A61M 15/0066 - A61M 15/0083, A61M 15/0088, A61M 15/0093 - A61M 15/0098, A61M 15/025, A61M 15/085 are incomplete pending reclassification of documents from group A61M 15/00 or respective subgroup.

Until reclassification is complete, groups A61M 15/00 or respective subgroup and A61M 15/0001 - A61M 15/0026, A61M 15/003 - A61M 15/0043, A61M 15/0046 - A61M 15/0063, A61M 15/0066 - A61M 15/0083, A61M 15/0088, A61M 15/0093 - A61M 15/0098, A61M 15/025, A61M 15/085 should be considered in order to perform a complete search.

**Project: RP0003-F (A61M)**

**M A61M 16/00** Devices for influencing the respiratory system of patients by gas treatment, e.g. mouth-to-mouth respiration; Tracheal tubes (stimulating the respiratory movement by mechanical, pneumatic or electrical means, iron lungs combined with gas breathing means [A61H 31/00](#))

**WARNINGS**

1. Groups A61M 16/0003 - A61M 16/0012, A61M 16/006 - A61M 16/0063, A61M 16/0069, A61M 16/0081 - A61M 16/0084, A61M 16/0093, A61M 16/0402 - A61M 16/0431, A61M 16/0436 - A61M 16/0438, A61M 16/0443 - A61M 16/0459, A61M 16/0475 - A61M 16/0486, A61M 16/049 - A61M 16/0495, A61M 16/0605 - A61M 16/0655, A61M 16/0672 - A61M 16/0677, A61M 16/0688 - A61M 16/0694, A61M 16/0825 - A61M 16/0866, A61M 16/0883 - A61M 16/0891, A61M 16/1005 - A61M 16/1015, A61M 16/106 - A61M 16/107, A61M 16/108 - A61M 16/1095, A61M 16/122 - A61M 16/127, A61M 16/142 - A61M 16/147, A61M 16/161, A61M 16/164 - A61M 16/168, A61M 16/201 - A61M 16/207, A61M 16/209 are incomplete pending reclassification of documents from group A61M 16/00 or respective subgroup.

Until reclassification is complete, groups A61M 16/00 or respective subgroup and A61M 16/0003 - A61M 16/0012, A61M 16/006 - A61M 16/0063, A61M 16/0069, A61M 16/0081 - A61M 16/0084, A61M 16/0093, A61M 16/0402 - A61M 16/0431, A61M 16/0436 - A61M 16/0438, A61M 16/0443 - A61M 16/0459, A61M 16/0475 - A61M 16/0486, A61M 16/049 - A61M 16/0495, A61M 16/0605 - A61M 16/0655, A61M 16/0672 - A61M 16/0677, A61M 16/0688 - A61M 16/0694, A61M 16/0825 - A61M 16/0866, A61M 16/0883 - A61M 16/0891, A61M 16/1005 - A61M 16/1015, A61M 16/106 - A61M 16/107, A61M 16/108 - A61M 16/1095, A61M 16/122 - A61M 16/127, A61M 16/142 - A61M 16/147, A61M 16/161, A61M 16/164 -

A61M 16/168, A61M 16/201 – A61M 16/207, A61M 16/209 should be considered in order to perform a complete search.

2. Group A61M 16/00 is impacted by reclassification into groups A61M 16/021, A61M 16/022, A61M 16/024 and A61M 16/026.

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

M A61M 16/0051

- {with alarm devices}

**WARNING**

Group A61M 16/0051 is impacted by reclassification into groups A61M 16/021, A61M 16/022, A61M 16/024 and A61M 16/026.

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

M A61M 16/021

- {operated by electrical means ([A61M 16/202](#) – [A61M 16/205](#) take precedence)}

**WARNING**

Group A61M 16/021 is incomplete pending reclassification of documents from groups A61M 16/00 and A61M 16/0051.

Groups A61M 16/00, A61M 16/0051 and A61M 16/021 should be considered in order to perform a complete search.

M A61M 16/022

- • {Control means therefor}

**WARNING**

Group A61M 16/022 is incomplete pending reclassification of documents from groups A61M 16/00 and A61M 16/0051.

Groups A61M 16/00, A61M 16/0051 and A61M 16/022 should be considered in order to perform a complete search.

M A61M 16/024

- • • {including calculation means, e.g. using a processor}

**WARNING**

Group A61M 16/024 is incomplete pending reclassification of documents from groups A61M 16/00 and A61M 16/0051.

Groups A61M 16/00, A61M 16/0051 and A61M 16/024 should be considered in order to perform a complete search.

M A61M 16/026

- • • {specially adapted for predicting, e.g. for determining an information representative of a flow limitation during a ventilation cycle by using a root square technique or a regression analysis}

**WARNING**

Group A61M 16/026 is incomplete pending reclassification of documents from groups A61M 16/00 and A61M 16/0051.

Groups A61M 16/00, A61M 16/0051 and A61M 16/026 should be considered in order to perform a complete search.

**Project: MP0441 (A61M)**

U A61M 25/00

Catheters; Hollow probes (dilators [A61M 29/00](#); {peritoneal catheters [A61M 1/285](#); tracheal tubes [A61M 16/04](#); for drainage [A61M 27/00](#); for uterus, vagina or rectum [A61M 31/00](#)} ; for measuring or testing [A61B](#); {materials for catheters [A61L 29/00](#)})

M A61M 2025/0001

- {for pressure measurement ~~(not used)~~}

U A61M 25/01

- Introducing, guiding, advancing, emplacing or holding catheters ([A61M 25/10](#) takes precedence)

U A61M 25/09

- • Guide wires

M A61M 2025/09058

- • • {Basic structures of guide wires ~~(not used)~~}

- U A61M 25/10 • Balloon catheters ({[A61M 25/0125](#) takes precedence; embolectomy [A61B 17/22032](#); retractors [A61B 17/02](#);} inflatable balloons for placing stents or stent-grafts [A61F 2/958](#) {; stomach balloons for treatment of obesity [A61F 5/0003](#); oesophageal tubes [A61J 15/00](#)})
- M A61M 2025/1043 • {with special features or adapted for special applications-~~(not used)~~}

**Project: MP0381 (A61N)**

**M A61N** **ELECTROTHERAPY; MAGNETOTHERAPY; RADIATION THERAPY; ULTRASOUND THERAPY (measurement of bioelectric currents [A61B](#); surgical instruments, devices or methods for transferring non-mechanical forms of energy to or from the body [A61B 18/00](#); anaesthetic apparatus in general [A61M](#); incandescent lamps [H01K](#); infra-red radiators for heating [H05B](#))**

NOTE

In this subclass, the following term is used with the meaning indicated: In this subclass, the following term is used with the meaning indicated:

- "therapy" implies that the treatment, when it aims at destroying sick or abnormal cells, is performed within the limits of healthy cell life, the destruction thereof being undesired, contrary to that which takes place with instruments, devices or methods covered by group [A61B 18/00](#).

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:

<a href="#">A61N 1/34</a>	covered by	<a href="#">A61N 1/36021</a> , <a href="#">A61N 1/36071</a>
<a href="#">A61N 2/04</a>	covered by	<a href="#">A61N 2/02</a>
<del><a href="#">A61N 5/067</a></del>	<del>covered by</del>	<del><a href="#">A61N 5/06</a></del>
<del><a href="#">A61N 5/08</a></del> <a href="#">A61N 2/08</a>	covered by	<del><a href="#">A61N 5/06</a></del> <a href="#">A61N 2/06</a>
<del><a href="#">A61N 2/08</a></del> <a href="#">A61N 2/10</a>	covered by	<a href="#">A61N 2/06</a>
<del><a href="#">A61N 2/10</a></del> <a href="#">A61N 5/067</a>	covered by	<del><a href="#">A61N 2/06</a></del> <a href="#">A61N 5/06</a> , <a href="#">A61N 2005/067</a>
<a href="#">A61N 5/073</a>	covered by	<a href="#">A61N 5/06</a> , <a href="#">A61N 2005/073</a>
<del><a href="#">A61N 5/08</a></del>	<del>covered by</del>	<del><a href="#">A61N 5/06</a></del>

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.

**Project: MP0381 (A63B)**

**M A63B** **APPARATUS FOR PHYSICAL TRAINING, GYMNASTICS, SWIMMING, CLIMBING, OR FENCING; BALL GAMES; TRAINING EQUIPMENT (apparatus for passive exercising, massage [A61H](#))**

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="#">A63B 7/06</a>	covered by	<a href="#">A63G 1/00</a>
<del><a href="#">A63B 21/075</a></del> <a href="#">A63B 22/08</a>	covered by	<del><a href="#">A63B 21/072</a></del> <a href="#">A63B 22/0605</a>
<a href="#">A63B 22/10</a>	covered by	<a href="#">A63B 22/0605</a> <del>in combination with</del> , <a href="#">A63B 22/0002</a>
<a href="#">A63B 22/12</a>	covered by	<a href="#">A63B 22/0605</a> <del>in combination with</del> , <a href="#">A63B 22/001</a>
<del><a href="#">A63B 22/08</a></del>	<del>covered by</del>	
<a href="#">A63B 29/04</a>	covered by	<a href="#">A63B 29/00</a>
<a href="#">A63B 31/16</a>	covered by	<a href="#">A63B 31/14</a> - <a href="#">A63B 31/18</a>

<a href="#">A63B 63/02</a>	covered by	<a href="#">A63B 63/00</a>
<a href="#">A63B 63/04</a>	covered by	<a href="#">A63B 63/00</a>
<a href="#">A63B 69/22</a>	covered by	<a href="#">A63B 69/20</a>
<a href="#">A63B 69/28</a>	covered by	<a href="#">A63B 69/20</a>
<a href="#">A63B 69/30</a>	covered by	<a href="#">A63B 69/20</a>
<a href="#">A63B 71/16</a>	covered by	<a href="#">A63B 71/14</a> - <a href="#">A63B 71/148</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.

## Project: MP0441 (A63B)

<b>U</b>	<b>A63B 69/00</b>	<b>Training appliances or apparatus for special sports (training of parachutists <a href="#">B64D 23/00</a>)</b>
M	A63B 69/0073	• {Means for releasably holding a ball in position; Balls constrained to move around a fixed point, e.g. by tethering <del>{(not used, see subgroups and <a href="#">A63B 69/00</a>)}</del> }
U	A63B 69/36	• for golf
M	A63B 2069/3602	• • {Player's game information devices <del>{(not used)}</del> }
U	A63B 69/3623	• • {for driving ( <a href="#">A63B 69/3608</a> , <a href="#">A63B 69/3658</a> , <a href="#">A63B 69/3661</a> , <a href="#">A63B 69/3667</a> and <a href="#">A63B 69/3691</a> take precedence)}
M	A63B 2069/3626	• • • {Details <del>{(not used)}</del> }
U	A63B 69/3676	• • {for putting ( <a href="#">A63B 69/3608</a> , <a href="#">A63B 69/3661</a> , <a href="#">A63B 69/3667</a> and <a href="#">A63B 69/3697</a> take precedence)}
M	A63B 2069/3679	• • • {Details <del>{(not used)}</del> }
<b>M</b>	<b>A63B 2208/00</b>	<b>Characteristics or parameters related to the user or player <del>{(not used)}</del>(measuring physical characteristics of the user <a href="#">A63B 2230/00</a>)</b>
M	A63B 2208/05	• the user being at least partly surrounded by a pressure different from the atmospheric pressure <del>{(not used)}</del>
<b>M</b>	<b>A63B 2244/00</b>	<b>Sports without balls <del>{(not used)}</del></b>

## Project: MP0441 (A63C)

<b>U</b>	<b>A63C 7/00</b>	<b>Devices preventing skis from slipping back; Ski-stoppers or ski-brakes</b>
M	A63C 7/10	• Hinged stoppage blades attachable to the skis in such manner that these blades can be moved out of the operative position <del>{(not used, see subgroups)}</del>
M	A63C 7/1006	• • {Ski-stoppers <del>{(not used, see subgroups)}</del> }
M	A63C 7/1013	• • • {actuated by the boot ( <a href="#">A63C 7/106</a> takes precedence; <del>not used, see subgroups</del> )}
M	A63C 7/1073	• • {Ski-brakes <del>{(not used, see subgroups)}</del> }

## Project: MP0441 (A63F)

<b>U</b>	<b>A63F 7/00</b>	<b>Indoor games using small moving playing bodies, e.g. balls, discs or blocks (board games, raffle games <a href="#">A63F 3/00</a>; roulette games <a href="#">A63F 5/00</a>; miniature bowling games <a href="#">A63D 3/00</a>; bagatelle or similar games <a href="#">A63D 13/00</a>; billiards, pocket billiards <a href="#">A63D 15/00</a>)</b>
U	A63F 7/06	• Games simulating outdoor ball games, e.g. hockey {or football (if physically beneficial for the human body <a href="#">A63B 67/00</a> )}
M	A63F 7/07	• • in which the playing bodies contact, or are supported by, the playing surface continuously, e.g. using air-cushion support <del>{(not used, see subgroups of <a href="#">A63F 7/06</a> <a href="#">A63F 7/0604</a> - <a href="#">A63F 7/0696</a> take precedence)}</del>



- M A63F 7/20
- in which the playing bodies are projected through the air ~~{{(not used, see subgroups of A63F 7/06 A63F 7/0604 - A63F 7/0696 take precedence)}}~~

**Project: MP0441 (A63J)**

- U A63J 5/00 **Auxiliaries for producing special effects on stages, or in circuses or arenas**
- U A63J 2005/001
- {enhancing the performance by involving senses complementary to sight or hearing}
- M A63J 2005/005
- {Climate ~~(not used)~~}

**Project: RP0144 (B01L)**

- C B01L 1/00 **Enclosures; Chambers (fume cupboards B08B; provided with manipulation devices, glove boxes B25J; {industrial clean rooms F24F 3/161;} cooling chambers F25D)**

**WARNING**

Group B01L 1/00 is impacted by reclassification into group B01L 1/52. Groups B01L 1/00 and B01L 1/52 should be considered in order to perform a complete search.

- U B01L 1/02
- Air-pressure chambers; Air-locks therefor
- M B01L 1/025
- {Environmental chambers (incubators for culturing cells C12M 41/14; ~~Test chambers to test weather resistance G01N 17/002; test chambers to test weather resistance G01N 17/002~~)}
- M B01L 1/50
- {for storing hazardous materials in the laboratory, e.g. cupboards, waste containers (sample containers B01L 3/50)}
- N B01L 1/52
- {Transportable laboratories; Field kits}

**WARNING**

Group B01L 1/52 is incomplete pending reclassification of documents from groups B01L 1/00 and B01L 99/00. Groups B01L 1/00, B01L 99/00, and B01L 1/52 should be considered in order to perform a complete search.

- C B01L 9/00 **Supporting devices; Holding devices (tweezers, tongs B25B)**

**WARNING**

Group B01L 9/00 is impacted by reclassification into group B01L 9/56. Groups B01L 9/00 and B01L 9/56 should be considered in order to perform a complete search.

- M B01L 9/52
- {Supports specially adapted for flat sample ~~carrier~~carriers, e.g. ~~used~~ for plates, slides, chips}
- M B01L 9/54
- {Supports ~~related to~~specially adapted for pipettes and burettes (automated pipetting stations G01N 35/10)}
- U B01L 9/547
- {for dispensing pins}
- N B01L 9/56
- {Means for indicating position of a recipient or sample in an array}

**WARNING**

Group B01L 9/56 is incomplete pending reclassification of documents from groups B01L 9/00 and B01L 99/00. Groups B01L 9/00, B01L 99/00, and B01L 9/56 should be considered in order to perform a complete search.

**N B01L 13/00 {Cleaning or rinsing apparatus}**WARNING

Group [B01L 13/00](#) is incomplete pending reclassification of documents from group [B01L 99/00](#).

Groups [B01L 99/00](#) and [B01L 13/00](#) should be considered in order to perform a complete search.

**N B01L 13/02 • {for receptacle or instruments}**WARNING

Group [B01L 13/02](#) is incomplete pending reclassification of documents from group [B01L 99/00](#).

Groups [B01L 99/00](#) and [B01L 13/02](#) should be considered in order to perform a complete search.

**C B01L 99/00 Subject matter not provided for in other groups of this subclass ~~{(chemical indicators in general G01N)}~~**WARNING

Group [B01L 99/00](#) is impacted by reclassification into groups [B01L 1/52](#), [B01L 9/56](#), [B01L 13/00](#), and [B01L 13/02](#).

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

**Project: MP0381 (B03D)****M B03D**

**FLOTATION; DIFFERENTIAL SEDIMENTATION (sedimentation in general [B01D 21/00](#); in combination with other separation of solids [B03B](#); sink-float separation [B03B 5/28](#); detergents, soaps [C11D](#))**

WARNINGS

1. The following groups are not complete:

[B03D 1/023](#), see also [B03D 1/02](#)  
[B03D 1/025](#), see also [B03D 1/02](#)  
[B03D 1/026](#), see also [B03D 1/02](#)  
[B03D 1/028](#), see also [B03D 1/02](#)  
[B03D 1/082](#), see also [B03D 1/08](#)  
[B03D 1/085](#), see also [B03D 1/08](#)  
[B03D 1/087](#), see also [B03D 1/08](#)  
[B03D 1/1406](#), see also [B03D 1/14](#)  
[B03D 1/1443](#), see also [B03D 1/14](#)  
[B03D 1/145](#), see also [B03D 1/14](#)  
[B03D 1/1456](#), see also [B03D 1/14](#)  
[B03D 1/1462](#), see also [B03D 1/14](#)  
[B03D 1/1468](#), see also [B03D 1/14](#)  
[B03D 1/1475](#), see also [B03D 1/14](#)  
[B03D 1/1487](#), see also [B03D 1/14](#)  
[B03D 1/1493](#), see also [B03D 1/14](#)  
[B03D 1/242](#), see also [B03D 1/24](#)  
[B03D 1/247](#), see also [B03D 1/24](#)

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

[B03D 101/00-B03D 103/10](#) covered by [B03D 2201/00](#) -  
[B03D 2203/10](#)

3. 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.

**Project: MP0381 (B07B)****M B07B**

**SEPERATING SOLIDS FROM SOLIDS BY SIEVING, SCREENING, OR SIFTING OR BY USING GAS CURRENTS; OTHER SEPERATING BY DRY METHODS APPLICABLE TO BULK MATERIAL, e.g. LOOSE ARTICLES FIT TO BE HANDLED LIKE BULK MATERIAL (combinations of dry separating apparatus with wet separating apparatus [B03B](#); hand sorting, postal sorting, sorting by switching or other devices actuated in response to detection or measurement of some feature of articles or samples of material [B07C](#))**

NOTE

In this subclass any sorting or grading of bulk material or loose articles fit to be handled like bulk material results automatically from the construction of the apparatus and properties of the material, e.g. by a trap opening under an object of a certain minimum weight, by an aperture of graduated size. Sorting of articles is included in so far as the same conditions apply, e.g. sorting of timber by passing it over successively longer openings; the articles may or may not be orientated for the purpose of sorting.

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:

[B07B 1/32](#) covered by [B07B 1/30](#)

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.

**Project: MP0381 (B25D)****M B25D**

**PERCUSSIVE TOOLS {(percussive machines for forging [B21J](#); hand-held drilling machines, in general [B23B 45/00](#), for wood [B27C 3/08](#); drilling machines, used for mining or quarrying, with reciprocating tool which is turned intermittently when out of contact with the working face [E21B 1/00](#))}**

WARNING

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="#">B25D 13/00</a>	covered by	<a href="#">B25D 11/064</a>
<a href="#">B25D 15/00</a>	covered by	<a href="#">B25D 11/066</a>
<a href="#">B25D 15/02</a>	covered by	<a href="#">B25D 11/068</a>
<a href="#">B25D 17/10</a>	covered by	<a href="#">B25D 17/00</a> , <a href="#">F16P</a>
<a href="#">B25D 17/14</a>	covered by	<a href="#">B23Q 11/0042</a>
<a href="#">B25D 17/16</a>	covered by	<a href="#">B23Q 11/0042</a>
<a href="#">B25D 17/18</a>	covered by	<a href="#">B23Q 11/0042</a>

**Project: MP0381 (B27B)****M B27B**

**SAWS FOR WOOD OR SIMILAR MATERIAL; COMPONENTS OR ACCESSORIES THEREFOR (saws specially adapted for pruning or debranching [A01G 3/08](#); sawing apparatus specially adapted for felling trees [A01G 23/091](#); features not restricted to a particular type of wood saw [B23D](#), e.g. attaching saw blades [B23D 51/00](#); machine tool frames, beds, pillars or like members, in general [B23Q 1/01](#))**

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:

B27B 33/18

covered by

B27B 5/12

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.

## Project: RP0172-F (B29C)

U	B29C 44/00	<b>Shaping by internal pressure generated in the material, e.g. swelling or foaming {; Producing porous or cellular expanded plastics articles}</b>
U	B29C 44/20	• for articles of indefinite length
M	B29C 44/32	<ul style="list-style-type: none"> <li>• Incorporating or moulding on preformed parts, e.g. linings, inserts or reinforcements</li> </ul> <p><u>WARNING</u> Group B29C 44/32 is impacted by reclassification into groups B29C 44/32, B29C 44/321, B29C 44/3215, B29C 44/329, B29C 44/332, and B29C 44/334. All groups listed in this Warning should be considered in order to perform a complete search.</p>
M	B29C 44/321	<ul style="list-style-type: none"> <li>• • {the preformed part being a lining, e.g. a film or a support lining}</li> </ul> <p><u>WARNING</u> Group B29C 44/321 is incomplete pending reclassification of documents from group B29C 44/32. Groups B29C 44/32 and B29C 44/321 should be considered in order to perform a complete search.</p>
M	B29C 44/329	<ul style="list-style-type: none"> <li>• • {the preformed parts being partially embedded}</li> </ul> <p><u>WARNING</u> Group B29C 44/329 is incomplete pending reclassification of documents from group B29C 44/32. Groups B29C 44/32 and B29C 44/321 should be considered in order to perform a complete search.</p>
M	B29C 44/332	<ul style="list-style-type: none"> <li>• • {the preformed parts being three-dimensional structures}</li> </ul> <p><u>WARNING</u> Group B29C 44/332 is incomplete pending reclassification of documents from group B29C 44/32. Groups B29C 44/32 and B29C 44/332 should be considered in order to perform a complete search.</p>
M	B29C 44/334	<ul style="list-style-type: none"> <li>• • {Filling the preformed spaces or cavities}</li> </ul> <p><u>WARNING</u> Group B29C 44/334 is incomplete pending reclassification of documents from group B29C 44/32. Groups B29C 44/32 and B29C 44/334 should be considered in order to perform a complete search.</p>
M	B29C 44/34	<ul style="list-style-type: none"> <li>• Auxiliary operations</li> </ul> <p><u>WARNING</u> Group B29C 44/34 is impacted by reclassification into groups B29C 44/34 and B29C 44/3402. Groups B29C 44/34 and B29C 44/3402 should be considered in order to perform a complete search.</p>

- M B29C 44/3402
- {Details of processes or apparatus for reducing environmental damage or for working-up compositions comprising inert blowing agents or biodegradable components}
- WARNING  
 Group B29C 44/3402 is incomplete pending reclassification of documents from group B29C 44/34.  
 Group B29C 44/32 and B29C 44/3402 should be considered in order to perform a complete search.
- U B29C 44/36
- • Feeding the material to be shaped {(B29C 44/0492 takes precedence)}
- U B29C 44/46
- • • into an open space or onto moving surfaces, i.e. to make articles of indefinite length {(B29C 44/365, B29C 44/367 take precedence)}
- M B29C 44/50
- • • using pressure difference, e.g. by extrusion or by spraying {(B29C 44/468 takes precedence)}
- WARNING  
 Group B29C 44/50 is impacted by reclassification into groups B29C 44/50, B29C 44/505, and B29C 44/507.  
 Groups B29C 44/50, B29C 44/505, and B29C 44/507 should be considered in order to perform a complete search.
- M B29C 44/505
- • • • {extruding the compound through a flat die (in general B29C 48/03)}
- WARNING  
 Group B29C 44/505 is incomplete pending reclassification of documents from group B29C 44/50.  
 Groups B29C 44/505 and B29C 44/50 should be considered in order to perform a complete search.
- M B29C 44/507
- • • • {extruding the compound through an annular die (in general B29C 48/03)}
- WARNING  
 Group B29C 44/507 is incomplete pending reclassification of documents from group B29C 44/50.  
 Groups B29C 44/507 and B29C 44/50 should be considered in order to perform a complete search.

## Project: MP0381 (B32B)

M B32B **LAYERED PRODUCTS, i.e. PRODUCTS BUILT-UP OF STRATA OF FLAT OR NON-FLAT, e.g. CELLULAR OR HONEYCOMB, FORM**

### NOTES

1. This subclass covers:

- layered products comprising different kinds of material or layered products not characterised by the particular kind of material used;
- a product similar to a layered product but comprising only material in the form of a sheet or network embedded in a mass of plastics or of physically-similar substances which mass penetrates the said sheet or network and lies on both sides of the latter (e.g. so that the sheet or network reinforces the plastics substance) PROVIDED THAT the embedded sheet or network extends coherently or connectedly over substantially the whole area of the product; thus the embedded sheet or network may be a fabric or a series of rods connected by cross wires. The manner of making such a product is, however, classified in this subclass only if it is essentially a process of building-up an assembly of layers of which at least one outer

layer is preformed. If the embedded material comprises only a series of unconnected rods, the product is not classified in this subclass.

2. This subclass does not cover:

- processes or apparatus used in, or in connection with, the production or treatment of any product, if the process or apparatus is fully classifiable in a single other class or subclass for processes or apparatus, e.g. [B05](#), [B29](#), [B44D](#), [C08J](#), [C09J](#), [C23](#);
- compositions or preparation or treatment thereof, unless they are essentially restricted to layered products and cannot be fully classified in another class without ignoring this restriction;
- etched metallic pattern on the surface of a printed circuit board.

3. In this subclass:

- a film formed on a layer by spreading a substance thereon is not considered to constitute a layer itself if it serves only as an adhesive or its purpose is merely to finish a surface of a product;
- groups designating products cover also methods or apparatus specially adapted for producing such products.

4. In this subclass, the following terms or expressions are used with the meanings indicated:

- "layer" is a sheet or strip or anything else having a small thickness relatively to its other dimensions which, together with at least one other layer, exists in a product, whether it pre-existed, e.g. as a separate sheet or strip, or was formed during the production of the layered product. It may or may not be homogeneous or cohesive; it may be an assembly of fibres or pieces of material. It may be discontinuous, e.g. in the form of a grating, honeycomb, or frame. It may or may not be in complete contact with the next layer, e.g. a corrugated layer against a flat layer;
- "layered product" comprises at least two layers secured together. The term "secured" includes any method of uniting layers, e.g. needling, stitching, gluing, nailing, dovetailing or the interposition of an adhesive or adhesive impregnated support. It may also be an intermediate stage in the production of an article which is not layered in its final form, e.g. a panel with a protective layer which is stripped off when the panel is placed in its position of use. The layers are preformed layers or layers formed IN SITU on a preformed layer and may consist of coherent solid materials, including honeycombs and other cellular materials or of non-coherent solid materials composed of assemblies of strands, strips, fibres, tiles or the like;
- "filamentary layer" means a layer of threads or filaments of any substance (e.g. wires) of more or less unlimited length placed in an orderly arrangement and secured together; it may be woven, knitted, braided, or netted, or formed of threads crossed or laid side by side and bonded together;
- "fibrous layer" means a random assembly of fibres of limited length, e.g. felt, fleece; the fibres {being} interengaged or connected, e.g. by adhesive.

5. In this subclass,

- "First place rule" is used in the following groups [B32B 9/04](#), [B32B 11/04](#), [B32B 13/04](#), [B32B 15/04](#), [B32B 19/04](#), [B32B 21/04](#), [B32B 23/046](#) - [B32B 23/12](#), [B32B 25/04](#), [B32B 27/06](#), [B32B 29/002](#).

However, when these groups are not characterised by the specific material adjacency to be classified, then, multiple classification is given, e.g. a layered product having a stone layer next to a bituminous layer would be classified in [B32B 9/04](#) and in [B32B 11/04](#). For a cellulosic plastic layer next to a metal layer or to a wood layer [B32B 23/042](#) or [B32B 23/044](#), respectively, take precedence (i.e. first rule does not apply). For layered products comprising at least two ceramic layers, products comprising only ceramic layers are classified in group

[B32B 18/00](#) and products comprising two ceramics layers and at least one layer of another material are classified in [B32B 18/00](#) and [B32B 9/04](#).

#### WARNING

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

<del>B32B 1/04</del>	covered by	<del>B32B 3/02 – B32B 3/08</del>
<del>B32B 1/06</del>	covered by	<del>B32B 13/02</del>
<del>B32B 3/08 – B32B 3/22</del>	covered by	<del>B32B 3/08 – B32B 3/22</del>
<a href="#">B32B 3/24</a>	covered by	<a href="#">B32B 3/266</a>
<del>B32B 5/28</del>	covered by	<del>B32B 2260/021 – B32B 2260/023</del>
<del>B32B 17/02</del>	covered by	<del>B32B 2262/101</del>
<del>B32B 17/04</del>	covered by	<del>B32B 2262/101 and B32B 2260/04</del>
<a href="#">B32B 17/12</a>	covered by	<a href="#">B32B 17/067</a>
<del>B32B 23/02</del>	covered by	<del>B32B 2262/04 and B32B 5/02 – B32B 5/12</del>
<del>B32B 27/02</del>	covered by	<del>B32B 2262/02 – B32B 2262/0292 and B32B 5/02 – B32B 5/12</del>
<del>B32B 27/04</del>	covered by	<del>B32B 2260/048</del>

#### Project: MP0381 (B62B)

##### M B62B

#### **HAND-PROPELLED VEHICLES, e.g. HAND CARTS, PERAMBULATORS; SLEDGES**

##### NOTES

1. In this subclass, the term "hand carts" also embraces hand-propelled wheeled devices in so far as the features thereof are generic to hand carts. This term also embraces pedestrian-controlled power-driven vehicles in so far as the features thereof are generic to hand carts
2. Rollers are taken as being equivalent to wheels

##### 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:

[B62B 3/065](#) covered by [B62B 3/0618](#)

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.



**Project: MP0381 (B62D)****M B62D**

**MOTOR VEHICLES; TRAILERS** (steering, or guiding on a desired track, of agricultural machines or implements [A01B 69/00](#); wheels, castors, axles, increasing wheel adhesion [B60B](#); vehicle tyres, tyre inflation or tyre changing [B60C](#); connections between vehicles of a train or the like [B60D](#); vehicles for use on rail and road, amphibious or convertible vehicles [B60F](#); suspension arrangements [B60G](#); heating, cooling, ventilating or other air treating devices [B60H](#); windows, windscreens, non-fixed roofs, doors or similar devices, protective coverings for vehicles not in use [B60J](#); propulsion plant arrangements, auxiliary drives, transmissions, controls, instrumentation or dashboards [B60K](#); electric equipment or propulsion of electrically-propelled vehicles [B60L](#); power supply for electrically-propelled vehicles [B60M](#); passenger accommodation not otherwise provided for [B60N](#); adaptations for load transportation or to carry special loads or objects [B60P](#); arrangement of signalling or lighting devices, the mounting or supporting thereof or circuits therefor, for vehicles in general [B60Q](#); vehicles, vehicle fittings or vehicle parts not otherwise provided for [B60R](#); servicing, cleaning, repairing, supporting, lifting, or manoeuvring, not otherwise provided for, [B60S](#); brake arrangements, brake control systems or parts thereof [B60T](#); air-cushion vehicles [B60V](#); motor-cycles, accessories therefor [B62J](#), [B62K](#); testing of vehicles [G01M](#))

NOTE

In this subclass, the following terms are used with the meanings indicated:

- "vehicles" include motor vehicles and trailers;
- "trailers" include forecars or sidecars.

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="#">B62D 25/13</a>	covered by	<a href="#">B60J 1/20</a> , <a href="#">B60R 13/07</a>
<a href="#">B62D 25/22</a>	covered by	<a href="#">B60R 3/00</a>
<a href="#">B62D 65/08</a>	covered by	<a href="#">B60J 10/45</a>
<a href="#">B62D 101/00-B62D 137/00</a>	covered by	<a href="#">B62D 6/00 - B62D 6/008</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.

**Project: RP0238 (B64D)****U B64D 45/00**

**Aircraft indicators or protectors not otherwise provided for (camouflage [F41H 3/00](#))**

**C B64D 45/0015**

- {Devices specially adapted for the protection against criminal attack, e.g. anti-hijacking systems}

WARNING

*Group [B64D 45/0015](#) is impacted by reclassification into groups [B64D 45/0018](#), [B64D 45/0021](#), [B64D 45/0026](#), [B64D 45/0028](#) and [B64D 45/0029](#).*

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

**N B64D 45/0018**

- {means on aircraft for restricting unauthorized access to the aircraft}

WARNING

*Group [B64D 45/0018](#) is incomplete pending reclassification of documents from group [B64D 45/0015](#).*

*Groups [B64D 45/0015](#) and [B64D 45/0018](#) should be considered in order to perform a complete search.*

- D B64D 2045/002      • • {by disabling or restraining attackers}  
                                  <administratively transferred to [B64D 45/0036](#) INV>
- N B64D 45/0021      • • {means for restricting access to flight deck}  
                                  WARNING  
                                  Group [B64D 45/0021](#) is incomplete pending reclassification of documents from group [B64D 45/0015](#).  
                                  Groups [B64D 45/0015](#) and [B64D 45/0021](#) should be considered in order to perform a complete search.
- D B64D 2045/0025      • • • {by spraying gases in cabins, or by shooting darts with anesthetic effects}  
                                  <administratively transferred to [B64D 45/0042](#) INV>
- N B64D 45/0026      • • • {by creating a secure space between the flight deck and cabin}  
                                  WARNING  
                                  Group [B64D 45/0026](#) is incomplete pending reclassification of documents from group [B64D 45/0015](#).  
                                  Groups [B64D 45/0015](#) and [B64D 45/0026](#) should be considered in order to perform a complete search.
- N B64D 45/0028      • • • {doors or door arrangements specially adapted to restrict unauthorized access}  
                                  WARNING  
                                  Group [B64D 45/0028](#) is incomplete pending reclassification of documents from group [B64D 45/0015](#).  
                                  Groups [B64D 45/0015](#) and [B64D 45/0028](#) should be considered in order to perform a complete search.
- N B64D 45/0029      • • • • {electrically actuated}  
                                  WARNING  
                                  Group [B64D 45/0029](#) is incomplete pending reclassification of documents from group [B64D 45/0015](#).  
                                  Groups [B64D 45/0015](#) and [B64D 45/0029](#) should be considered in order to perform a complete search.
- D B64D 2045/003      • • {by monitoring cabins}  
                                  <administratively transferred to [B64D 45/0051](#) INV>
- Q B64D 45/0031      • • {means for overriding or restricting access to flight controls}  
                                  WARNING  
                                  Group [B64D 45/0031](#) is impacted by reclassification into group [B64D 45/0034](#).  
                                  Groups [B64D 45/0031](#) and [B64D 45/0034](#) should be considered in order to perform a complete search.
- N B64D 45/0034      • • • {by ground-control override}  
                                  WARNING  
                                  Group [B64D 45/0034](#) is incomplete pending reclassification of documents from group [B64D 45/0031](#).  
                                  Groups [B64D 45/0031](#) and [B64D 45/0034](#) should be considered in order to perform a complete search.
- D B64D 2045/0035      • • • {using cameras}  
                                  <administratively transferred to [B64D 45/0053](#) INV>

- Q B64D 45/0036
- • {by disabling or restraining attackers}
- WARNING  
Group [B64D 45/0036](#) is impacted by reclassification into groups [B64D 45/0039](#), [B64D 45/0044](#), and [B64D 45/0048](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- N B64D 45/0039
- • • {by electrical shock}
- WARNING  
Group [B64D 45/0039](#) is incomplete pending reclassification of documents from group [B64D 45/0036](#).  
Groups [B64D 45/0036](#) and [B64D 45/0039](#) should be considered in order to perform a complete search.
- D B64D 2045/004
- • • {detecting passenger or pilot behaviors by sensors, e.g. biometrics}
- <administratively transferred to [B64D 45/0056](#) INV>
- N B64D 45/0042
- • • {by spraying or injecting chemicals}
- N B64D 45/0044
- • • {by restraining within seats}
- WARNING  
Group [B64D 45/0044](#) is incomplete pending reclassification of documents from group [B64D 45/0036](#).  
Groups [B64D 45/0036](#) and [B64D 45/0044](#) should be considered in order to perform a complete search.
- D B64D 2045/0045
- • {by communicating emergency situations to ground control, or between crew members}
- <administratively transferred to [B64D 45/0059](#) INV>
- N B64D 45/0048
- • • {by harnesses, nets, ropes, or the like ([B64D 45/0044](#) takes precedence)}
- WARNING  
Group [B64D 45/0048](#) is incomplete pending reclassification of documents from group [B64D 45/0036](#).  
Groups [B64D 45/0036](#) and [B64D 45/0048](#) should be considered in order to perform a complete search.
- D B64D 2045/005
- • {by protecting cabin or luggage from bombs}
- <administratively transferred to [B64D 45/0061](#) INV>
- N B64D 45/0051
- • {by monitoring passengers or crew on aircraft}
- N B64D 45/0053
- • • {using visual equipment, e.g. cameras}
- D B64D 2045/0055
- • {by overriding pilot's controls, or by directing aircraft from ground control to avoid certain paths or zones}
- <administratively transferred to [B64D 45/0031](#) INV>
- N B64D 45/0056
- • • {detecting passenger or crew behavior by sensors, e.g. biometrics}
- N B64D 45/0059
- • {by communicating emergency situations to ground control or between crew members}
- D B64D 2045/006
- • {by avoiding the use of electronic equipment during flight, e.g. of mobile phones or laptops}
- <administratively transferred to [B64D 45/0063](#) INV>
- N B64D 45/0061
- • {by protecting cabin or cargo hold from bombs}
- N B64D 45/0063
- • {by avoiding the use of electronic equipment during flight, e.g. of mobile phones or laptops}

**Project: MP0381 (B65D)****M B65D****CONTAINERS FOR STORAGE OR TRANSPORT OF ARTICLES OR MATERIALS, e.g. BAGS, BARRELS, BOTTLES, BOXES, CANS, CARTONS, CRATES, DRUMS, JARS, TANKS, HOPPERS, FORWARDING CONTAINERS; ACCESSORIES, CLOSURES, OR FITTINGS THEREFOR; PACKAGING ELEMENTS; PACKAGES**NOTES

1. In this subclass, the indexing codes of [B65D 2519/00004](#) - [B65D 2519/00995](#) should be added, if applicable
2. This subclass covers:
  - containers, packaging elements or packages with auxilliary means or provisions for displaying articles or materials;
  - methods of packaging which are wholly characterised by the form of the package produced or the form of the container or packaging element used, as distinct from the operations performed or the apparatus employed, which are covered by subclass [B65B](#)
3. This subclass, which is intended to be as comprehensive as possible, only excludes containers or packages of a nature clearly confined to a single other subclass, which are classified in that subclass
4. In this subclass, groups [B65D 5/00](#), [B65D 27/00](#), [B65D 29/00](#), [B65D 31/00](#) or [B65D 65/00](#) include constructional features of foldable or erectable container or wrapper blanks as well as the containers or wrappers formed by folding or erecting such blanks
5. Containers, packaging elements or packages classified in group [B65D 85/00](#), are also classified according to the constructional or functional features, if such features are of interest
6. In this subclass, the following terms or expressions are used with the meanings indicated:
  - "rigid or semi-rigid containers" includes:
    - a. containers not deformed by, or not taking-up the shape of, their contents;
    - b. containers adapted to be temporarily deformed to expel their contents;
    - c. pallets;
    - d. trays;
  - "flexible containers" includes:
    - a. containers deformed by, or taking-up the shape of, their contents;
    - b. containers adapted to be permanently deformed to expel their contents;
  - "packaging elements" includes:
    - a. elements, other than containers, for covering, protecting, stiffening, or holding together articles or materials to be stored or transported;
    - b. packaging materials of special type or form not provided for in other subclasses;
  - "packages" includes:
    - a. combination of containers or packaging elements with articles or materials to be stored or transported;
    - b. articles joined together for convenience of storage or transport;
  - "paper" includes materials, e.g. cardboard, plastic sheet materials, laminated materials, or metal foils, worked in a manner analogous to paper;
  - "large containers", in groups [B65D 88/00](#) or [B65D 90/00](#), means containers having about the size of containers used in container traffic, sometimes

referred to as freight, forwarding or "ISO" (International Standardization) containers, or larger containers

7. Tamper-indicating means for containers or closures are classified in the group appropriate to the type of container or closure, e.g. [B65D 5/54](#), [B65D 17/00](#), [B65D 27/30](#), [B65D 27/30](#), [B65D 27/34](#), [B65D 33/34](#), [B65D 41/32](#), [B65D 47/36](#), [B65D 49/12](#), [B65D 51/20](#), [B65D 55/06](#)

#### 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="#">B65D 5/34</a>	covered by	<a href="#">B65D 5/325</a>
<a href="#">B65D 5/35</a>	covered by	<del>B65D 5/32</del> <a href="#">B65D 5/325</a>
<a href="#">B65D 5/355</a>	covered by	<a href="#">B65D 5/0005</a>
<a href="#">B65D 5/43</a>	covered by	<a href="#">B65D 5/42</a>
<a href="#">B65D 5/462</a>	covered by	<a href="#">B65D 5/46008</a> - <a href="#">B65D 5/46032</a>
<a href="#">B65D 5/465</a>	covered by	<a href="#">B65D 5/46008</a> - <a href="#">B65D 5/46032</a>
<a href="#">B65D 5/468</a>	covered by	<a href="#">B65D 5/4608</a>
<a href="#">B65D 5/472</a>	covered by	<a href="#">B65D 5/46048</a>
<a href="#">B65D 5/475</a>	covered by	<a href="#">B65D 5/46008</a>
<a href="#">B65D 5/478</a>	covered by	<a href="#">B65D 5/46056</a>
<a href="#">B65D 5/4805</a> - <a href="#">B65D 5/489</a>	covered by	<a href="#">B65D 5/48002</a>
<a href="#">B65D 5/49</a> - <a href="#">B65D 5/499</a>	covered by	<a href="#">B65D 5/48024</a>
<a href="#">B65D 5/63</a>	covered by	<a href="#">B65D 5/72</a>
<a href="#">B65D 6/00</a> - <a href="#">B65D 6/40</a>	covered by	<a href="#">B65D 7/00</a> , <a href="#">B65D 9/00</a> , <a href="#">B65D 11/00</a> , <a href="#">B65D 15/00</a>
<a href="#">B65D 8/00</a> - <a href="#">B65D 8/22</a>	covered by	<a href="#">B65D 7/00</a> , <a href="#">B65D 9/00</a> , <a href="#">B65D 11/00</a> , <a href="#">B65D 15/00</a>
<a href="#">B65D 19/22</a>	covered by	<a href="#">B65D 19/0004</a>
<a href="#">B65D 19/24</a>	covered by	<a href="#">B65D 19/0004</a>
<a href="#">B65D 19/26</a>	covered by	<a href="#">B65D 19/0004</a>
<a href="#">B65D 19/28</a>	covered by	<a href="#">B65D 19/0004</a>
<a href="#">B65D 19/30</a>	covered by	<a href="#">B65D 19/0004</a>
<a href="#">B65D 19/31</a>	covered by	<a href="#">B65D 19/0004</a>
<del>B65D 19/34</del> <a href="#">B65D 19/32</a>	covered by	<a href="#">B65D 19/0002</a> , <a href="#">B65D 19/0004</a>
<del>B65D 19/32</del> <a href="#">B65D 19/34</a>	covered by	<del>B65D 19/0002</del> , <a href="#">B65D 19/0004</a>
<a href="#">B65D 21/024</a>	covered by	<a href="#">B65D 21/0201</a>
<a href="#">B65D 21/028</a>	covered by	<a href="#">B65D 21/0204</a>
<a href="#">B65D 21/032</a>	covered by	<del>B65D 21/0211</del> <a href="#">B65D 21/0209</a>
<a href="#">B65D 21/036</a>	covered by	<a href="#">B65D 21/0217</a>
<a href="#">B65D 25/26</a>	covered by	<a href="#">B65D 81/02</a>
<a href="#">B65D 30/00</a> - <a href="#">B65D 30/28</a>	covered by	<a href="#">B65D 29/00</a> , <a href="#">B65D 31/00</a>
<a href="#">B65D 33/17</a>	covered by	<a href="#">B65D 33/1633</a>
<a href="#">B65D 33/36</a>	covered by	<a href="#">B65D 75/58</a>
<a href="#">B65D 33/38</a>	covered by	<a href="#">B65D 75/5861</a>
<a href="#">B65D 35/48</a> - <a href="#">B65D 35/54</a>	covered by	<a href="#">B65D 47/2018</a>
<a href="#">B65D 39/18</a>	covered by	<a href="#">B65D 39/00</a>
<a href="#">B65D 41/01</a>	covered by	<a href="#">B65D 41/00</a>
<a href="#">B65D 43/03</a>	covered by	<a href="#">B65D 43/00</a> + <a href="#">B65D 2543/00027</a>

<i>B65D 43/04</i>	<i>covered by</i>	<i>B65D 43/02 14</i>
<i>B65D 43/10</i>	<i>covered by</i>	<i>B65D 43/02 04</i>
B65D 47/22	covered by	B65D 47/20
B65D 47/34	covered by	B05B 11/00
<del>B65D 50/06</del>	<del>covered by</del>	<del>B65D 55/02</del>
B65D 50/08	covered by	B65D 55/02
B65D 50/10	covered by	B65D 55/02
B65D 50/12	covered by	B65D 55/02
B65D 50/14	covered by	B65D 55/02
B65D 65/26 - B65D 65/32	covered by	B65D 75/58
B65D 65/34	covered by	B65D 75/66
B65D 65/36	covered by	B65D 75/58
B65D 71/52 - B65D 71/68	covered by	B65D 71/0003 - B65D 71/0077
B65D 75/60 - B65D 75/64	covered by	B65D 75/58
B65D 81/15	covered by	B65D 81/05
B65D 81/17	covered by	B65D 81/02
B65D 83/18 - <del>B65D 83/74</del>	covered by	<del>B65D 83/14</del> B65D 83/201, B65D 83/16 B65D 83/206
<del>B65D 83/18</del>	<del>covered by</del>	<del>B65D 83/201</del>
B65D 83/58	covered by	B65D 83/44
B65D 83/76	covered by	B65D 83/0005
B65D 85/57	covered by	G11B 23/00
B65D 85/575	covered by	G11B 23/00
B65D 85/86 - B65D 85/90	covered by	H01L 21/00, H05K 13/00

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.

## Project: MP0381 (B65G)

### M B65G

**TRANSPORT OR STORAGE DEVICES, e.g. CONVEYORS FOR LOADING OR TIPPING, SHOP CONVEYOR SYSTEMS OR PNEUMATIC TUBE CONVEYORS** (packaging [B65B](#); handling thin or filamentary materials, e.g. paper sheets or thread, [B65H](#); cranes [B66C](#); portable mobile or lifting or hauling appliances, e.g. hoists, [B66D](#); devices for lifting or lowering goods for loading or unloading purposes, e.g. fork-lift trucks, [B66F 9/00](#); emptying bottles, jars, casks, barrels or similar containers, not otherwise provided for, [B67C 9/00](#); delivering or transferring liquids [B67D](#); filling or discharging vessels for liquefied, solidified or compressed gases [F17C](#); pipe-line systems for fluids [F17D](#))

#### NOTE

This subclass does not cover road or railway vehicles, waterborne vessels or aircraft per se, or their adaptation for transport purposes. This subject matter is covered by classes [B60](#) - [B64](#), for example in the following places:

- vehicles adapted for load transportation [B60P](#);
- railway wagons adapted for load transportation [B61D](#);
- hand carts [B62B](#);
- superstructures for load-carrying vehicles [B62D 33/00](#);
- loading or load-accommodating arrangements on ships or vessels [B63B 25/00](#), [B63B 27/00](#);



- equipment for handling freight in aircraft [B64D 9/00](#)

#### 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:

<del>B65G33/28</del>	covered by	<del>B65G 33/265</del>
B65G 47/10	covered by	<a href="#">B65G 1/1373</a>
B65G 47/86	covered by	<a href="#">B65G 47/842</a> , <a href="#">B65G 47/847</a>
<del>B65G 49/07</del>	covered by	<del>H01L 21/677</del>
B65G 69/32	covered by	<a href="#">B65G 69/28</a>
B65G 69/34	covered by	<a href="#">B65G 69/28</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.

### Project: MP0381 (B65H)

M B65H

#### HANDLING THIN OR FILAMENTARY MATERIAL, e.g. SHEETS, WEBS, CABLES

##### NOTES

1. This subclass does not cover methods or devices intimately associated with other operations on thin or filamentary material, e.g. sheets, webs, cables or means for performing such operations, which are classified in the relevant subclasses for these operations, e.g.:

<a href="#">B07C</a>	Postal sorting, similar sorting of documents, e.g. cheques
<a href="#">B08B 1/02</a>	Cleaning travelling work, e.g. webs, by methods involving the use of tools, brushes or like members
<a href="#">B21B 41/00</a>	Metal rolling involving guiding, conveying or accumulating easily-flexible work, e.g. wire, sheet metal bands, in loops or curves
<a href="#">B21C 47/00</a>	, Winding-up,coiling, winding-off or temporarily
<a href="#">B21C 49/00</a>	accumulating metal wire, metal band or other flexible metal material, characterised by features relevant to metal processing only, other than by rolling
<a href="#">B21D 43/00</a>	Feeding, positioning or storing devices, combined with, or arranged in, or specially adapted for use in connection with, apparatus for working or processing sheet metal without essentially removing material
<a href="#">B23K 9/12</a>	Means for automatic feeding of electrodes for spot or seam welding or cutting
<a href="#">B29C 31/00</a>	Handling for shaping or joining of plastics, for shaping of substances in a plastic state in general or for after-treatment of shaped products, e.g. feeding the material to be shaped
<a href="#">B41B 15/32</a>	, Film-handling mechanisms in photographic
<a href="#">B41B 21/32</a>	composing machines
<a href="#">B41F 13/02</a>	Conveying or guiding webs through rotary printing presses or machines
<a href="#">B41J 11/00</a>	to Handling of copy- or impression-transfer material
<a href="#">B41J 17/00</a>	in typewriters or selective printing mechanisms
<a href="#">B41K 3/44</a>	Means for handling copy matter in stamping or numbering apparatus or devices
<a href="#">B41L</a>	Handling sheets or webs in apparatus or devices for manifolding, duplicating or printing for office or other commercial purposes, or on addressing machines or like series-printing machines



<a href="#">B42B</a>	Handling relating to permanently attaching together sheets, quires, or signatures
<a href="#">B42C</a>	Handling sheets in book-binding
<a href="#">B65B</a>	Handling of sheets or webs in apparatus for, or methods of, packaging articles, not of interest apart from their application in packaging machines
<a href="#">B65C</a>	Handling of labels in labelling or tagging apparatus
<a href="#">C14B 1/62</a>	Winding or stacking hides or leather in machines or devices for manufacturing leather
<a href="#">D01- D07</a>	Spinning, weaving, braiding, lace-making, knitting, sewing, making ropes or cables
<a href="#">D21F 2/00</a>	Transferring webs from wet ends to press sections in paper-making
<a href="#">F26B 13/00</a>	Handling fabrics, fibres, yarns or other material in long lengths in drying apparatus
<a href="#">G03B</a>	Film-strip handling or handling of pictures in apparatus for taking photographs or for projecting or viewing them
<a href="#">G06K 13/00</a>	Conveying record carriers from one station to another
<a href="#">G06M 7/00</a>	Counting of flat articles, e.g. sheets, carried by a conveyor
<a href="#">G11B 15/00</a>	to Information storage based on relative movement
<a href="#">G11B 19/00</a>	, between record carrier and transducer,
<a href="#">G11B 23/00</a>	, involving handling record carriers for
<a href="#">G11B 25/00</a>	recording or reproducing
<a href="#">H01F 41/06</a>	Manufacturing coils for magnets, inductances, transformers, by winding
<a href="#">H01G 13/02</a>	Machines for winding capacitors
<a href="#">H04N 1/00</a>	Sheet handling not of interest apart from its use in systems for transmission or reproduction of pictures or patterns not varying in time, e.g. facsimile transmission

2. In this subclass:

- the groups relating to thin material, as defined under (i) of Note (3) below, are primarily intended to cover the handling of articles made of paper or cardboard, but also include the handling of articles made of other materials which have similar characteristics or present similar handling problems, e.g. articles made of sheet- plastics or leather;
- the groups relating to filamentary material (groups [B65H 49/00](#) onwards,) as defined in Note (3) below, cover only methods or devices of general application or interest.

3. In this subclass, the following terms or expressions are used with the meanings indicated:

- "handling" includes feeding, folding (other than in the manufacture of products), guiding, orientating, storing, unwinding, and winding;
- "thin material" includes:
  - i. sheets, signatures, envelopes, blanks, and thin and thin piles thereof (hereinafter referred to as "articles"), and
  - ii. webs, tapes, and films, e.g. of paper, fabric, metal foil, or plastics;
- "filamentary material" includes thread, wires, ropes, cables, and hoses;
- "package" means a mass of filamentary material, formed by coiling, depositing, or winding, with or without a supporting core or former or an enclosing container or receptacle.
- {"yarn" also covers similar filamentary materials.}

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:

[B65H 19/16](#) covered by [B65H 19/1889](#)

B65H 35/07	covered by	B65H 35/0006
B65H 77/00	covered by	B65H 23/00, B65H 59/00
B65H 83/00, B65H 83/02	covered by	B07C 1/025, G07D 11/00 and s.gr
B65H 85/00	covered by	G03B 27/62, G03B 27/6264, G03B 27/6257

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.

## Project: MP0381 (C01B)

### M C01B

#### NON-METALLIC ELEMENTS; COMPOUNDS THEREOF; {METALLOIDS OR COMPOUNDS THEREOF NOT COVERED BY SUBCLASS C01C}

##### NOTES

1. In this subclass, tradenames that are often found in scientific and patent literature have been used in order to define precisely the scope of the groups.
2. Attention is drawn to the definitions of groups of chemical elements following the title of section C.

##### 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:

<del>C01B31/16</del>	covered by	B01J 39/24, B01J 41/18
C01B 35/16, C01B 35/18	covered by	G01B 35/00 C01B 35/02 + s.gr - C01B 35/146

2. General concordance IPC4 or IPC5 to IPC6 groups is as follows:

C01B 25/37	(partly)	:	C01B 37/002
C01B 25/453	:	C01B 37/00,	
C01B 39/54			
C01B 33/185	:	C01B 37/02	
C01B 33/28	and subgroups	:	C01B 37/00,
C01B 39/00			
C01B 35/1009	:	C01B 37/06,	
C01B 39/12,	C01B 39/54		

3. 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.

## Project: MP0381 (C03C)

### M C03C

#### CHEMICAL COMPOSITION OF GLASSES, GLAZES, OR VITREOUS ENAMELS; SURFACE TREATMENT OF GLASS; SURFACE TREATMENT OF FIBRES OR FILAMENTS MADE FROM GLASS, MINERALS OR SLAGS; JOINING GLASS TO GLASS OR OTHER MATERIALS

##### NOTES

1. This subclass covers compositions of polycrystalline fibres
2. This subclass does not cover the preparation of single-crystal fibres, which is covered by subclass C30B

##### 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:

C03C 6/00 - C03C 6/10	covered by	C03C 1/00 - C03C 1/105
<del>C03C 6/02-C03C 6/10</del>	covered by	
C03C 10/02 - C03C 10/14	covered by	C03C 10/00
C03C 13/02	covered by	C03C 13/00

[C03C 27/12](#)

covered by

[B32B 17/00](#)

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.

## Project: MP0381 (C04B)

M C04B

**LIME, MAGNESIA; SLAG; CEMENTS; COMPOSITIONS THEREOF, e.g. MORTARS, CONCRETE OR LIKE BUILDING MATERIALS; ARTIFICIAL STONE {(roofing granules [E04D 7/005](#)); CERAMICS (devitrified glass-ceramics [C03C 10/00](#)); REFRACTORIES; TREATMENT OF NATURAL STONE**

### NOTES

1. In this subclass, the following terms or expressions are used with the meanings indicated:

- "fillers" includes pigments, aggregates and fibrous reinforcing materials;
- "active ingredients" includes processing aids or property improvers, e.g. grinding aids used after the burning process or used in the absence of a burning process;
- "mortars", "concrete" and "artificial stone" are to be considered as a single group of materials, and therefore, in the absence of an indication to the contrary, they include mortar, concrete and other cementitious compositions.

2. In groups [C04B 7/00](#) - [C04B 32/00](#), in the absence of an indication to the contrary, classification is made in the last appropriate place.

3. A composition classified in groups [C04B 26/00](#) or [C04B 28/00](#) is also classified in groups [C04B 14/00](#) - [C04B 24/00](#) if a filler or active ingredient is of interest.

4. In groups [C04B 2/00](#) - [C04B 32/00](#) and [C04B 38/00](#) - [C04B 41/00](#) it is desirable to classify the individual constituents of the mixtures, or other aspects relating to the mixtures or constituents, using Combination Sets with symbols chosen from groups [C04B 2/00](#) - [C04B 41/00](#).

5. In groups [C04B 2/00](#) - [C04B 32/00](#) and [C04B 38/00](#) - [C04B 41/00](#) it is desirable to classify the function of the individual constituents of the mixtures, or other aspects relating to the properties or uses of the mixtures or products obtained, using Combination Sets with symbols chosen from groups [C04B 2103/00](#) - [C04B 2111/00](#).

6. Groups [C04B 20/123](#) and [C04B 20/126](#) are used for indexing purposes only of documents classified in [C04B 20/12](#)

### 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:

[C04B 5/02](#)

covered by

[B01J 2/00](#), [C21B 3/06](#)

[C04B 28/20](#), [C04B 28/22](#)

covered by

[C04B 28/18](#), [C04B 28/182](#),  
[C04B 28/184](#), [C04B 28/186](#),  
[C04B 28/188](#)

[C04B 35/035](#)

covered by

[C04B 35/26](#), [C04B 35/2608](#),  
[C04B 35/2616](#),  
[C04B 35/2625](#),  
[C04B 35/2633](#),  
[C04B 35/2641](#),  
[C04B 35/265](#), [C04B 35/2658](#),  
[C04B 35/2666](#),  
[C04B 35/2675](#),  
[C04B 35/2683](#),  
[C04B 35/2691](#)

C04B 35/28- <del>C04B 35/40</del>	covered by	<u>C04B 35/26</u>
<u>C04B 35/30</u>	covered by	<u>C04B 35/26</u>
<u>C04B 35/32</u>	covered by	<u>C04B 35/26</u>
<u>C04B 35/34</u>	covered by	<u>C04B 35/26</u>
<u>C04B 35/36</u>	covered by	<u>C04B 35/26</u>
<u>C04B 35/38</u>	covered by	<u>C04B 35/26</u>
<u>C04B 35/40</u>	covered by	<u>C04B 35/2608,</u> <u>C04B 35/2641,</u> <u>C04B 35/2675</u>
C04B 35/567, C04B 35/569, C04B 35/576, C04B 35/577	covered by	<u>C04B 35/565, C04B 35/571,</u> <del>C04B 35/573, C04B 35/575,</del> <u>C04B 35/5755, C04B 35/806</u>
C04B 35/582	covered by	<u>C04B 35/581, C04B 35/806</u>
C04B 35/5833, C04B 35/5835	covered by	<u>C04B 35/583, C04B 35/806</u>
C04B 35/586, <del>C04B 35/587,</del> C04B 35/594, C04B 35/596	covered by	<u>C04B 35/584, C04B 35/589,</u> <u>C04B 35/591, C04B 35/593,</u> <u>C04B 35/5935, C04B 35/806</u>
C04B 35/599	covered by	<u>C04B 35/597</u>
C04B 35/81	covered by	<u>C04B 35/78</u>
C04B 35/84	covered by	<u>C04B 35/628, C04B 35/78</u>

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.

## Project: MP0381 (C05G)

### M C05G

**MIXTURES OF FERTILISERS COVERED INDIVIDUALLY BY DIFFERENT SUBCLASSES OF CLASS C05; MIXTURES OF ONE OR MORE FERTILISERS WITH MATERIALS NOT HAVING A SPECIFIC FERTILISING ACTIVITY, e.g. PESTICIDES, SOIL-CONDITIONERS, WETTING AGENTS (organic fertilisers containing added bacterial cultures, mycelia, or the like C05F 11/08; organic fertilisers containing plant vitamins or hormones C05F 11/10); FERTILISERS CHARACTERISED BY THEIR FORM**

#### NOTES

1. This subclass covers mixtures of fertilisers with soil-conditioning or soil-stabilising materials characterised by their fertilising activity.
2. This subclass does not cover mixtures of fertilisers with soil-conditioning or soil-stabilising materials characterised by their soil-conditioning or soil-stabilising activity, which are covered by group C09K 17/00.

#### WARNING

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

C05G 1/02 - C05G 1/10	covered by	<del>C05</del> <u>C05G 1/00</u> - <u>C05B 19/02, C05C 1/00 -</u> <u>C05C 11/00, C05D 1/00</u> <u>- C05D 9/02, C05F 1/00 -</u> <u>C05F 17/0294</u>
C05G 3/10	covered by	<u>C05G 3/0088</u>
C05G 5/00	covered by	<u>C05G 3/0005</u>
<del>(see internal note after the title of class C05)</del>		

## Project: MP0381 (C07B)

M C07B

**GENERAL METHODS OF ORGANIC CHEMISTRY; APPARATUS THEREFOR (preparation of carboxylic acid esters by telomerisation [C07C 67/47](#); telomerisation [C08F](#))**

NOTES

1. In this subclass, the functional group which is present already in some residue being introduced and is not substantially involved in a chemical reaction, is not considered as the functional group which is formed or introduced as a result of the chemical reaction.
2. In this subclass, the following term is used with the meaning indicated:
  - "separation" means separation only for the purposes of recovering organic compounds.
3. 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
4. In this subclass, 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 according to the type of reaction employed, noting the bond or the functional group which is formed or introduced as a result of the chemical reaction.
5. {[C07B 59/00](#) and subgroups thereof are used for the classification of individual labelled compounds as well as for general methods.}
6. {[C07B 61/02](#) is used for the classification of individual free radicals as well as for general methods.}

WARNING

The following IPC ~~groups are~~ *group is* not in the CPC scheme. The subject matter for ~~these~~ *this* IPC ~~groups~~ *group* is classified in the following CPC ~~groups~~ *group*:

[C07B 60/00](#) covered by [C07B 61/02](#)

## Project: MP0381 (C08B)

M C08B

**POLYSACCHARIDES; DERIVATIVES THEREOF (polysaccharides containing less than six saccharide radicals attached to each other by glycosidic linkages [C07H](#); fermentation or enzyme-using processes [C12P 19/00](#); sugar industry [C13](#); production of cellulose [D21](#))**

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="#">C08B 37/02</a>	covered by	<a href="#">C08B 37/0021</a>
<a href="#">C08B 37/04</a>	covered by	<a href="#">C08B 37/0084</a>
<a href="#">C08B 37/06</a>	covered by	<a href="#">C08B 37/0045</a>
<a href="#">C08B 37/08</a>	covered by	<a href="#">C08B 37/003 (chitin)</a> , <a href="#">C08B 37/0072 (hyaluronic acid)</a> and <a href="#">C08B 37/0069 (chondroitin sulfate)</a>
<a href="#">C08B 37/10</a>	covered by	<a href="#">C08B 37/0075</a>
<del>C08B 37/12</del> <a href="#">C08B 37/16</a>	covered by	<del>C08B 37/0039</del> <a href="#">C08B 37/0012</a>
<del>C08B 37/16</del>	covered by	

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.

**Project: MP0381 (C08H)****M C08H**

**DERIVATIVES OF NATURAL MACROMOLECULAR COMPOUNDS**  
 (polysaccharides [C08B](#); natural rubber [C08C](#); natural resins or their derivatives [C09F](#); bituminous materials [C10](#))

WARNING

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

[C08H 7/00](#) covered by [C08H 6/00](#)

**Project: MP0381 (C08J)****M C08J**

**WORKING-UP; GENERAL PROCESSES OF COMPOUNDING; AFTER-TREATMENT NOT COVERED BY SUBCLASSES [C08B](#), [C08C](#), [C08F](#), [C08G](#)**  
 (mechanical aspects [B29](#); layered products, manufacture thereof [B32B](#); treatment of macromolecular material specially adapted to enhance its filling properties in mortars, concrete or artificial stone [C04B 16/04](#), [C04B 18/20](#), [C04B 20/00](#); treatment of textiles [D06](#))

NOTES

1. This subclass covers processes, not covered by subclasses [C08B](#) - [C08H](#), for treating polymers.

In this subclass, in the absence of an indication to the contrary, classification is made in the last appropriate place

2. When classifying in subclass [C08J](#), the treatment of specific polymers is indicated using indexing codes chosen from [C08J 2300/00](#) or subgroups thereof.

Example:

- Preparation of particles of polystyrene by impregnation of the particles with the blowing agent: [C08J 9/18](#) and [C08J 2325/06](#).

The use of a polymeric component in minority, e.g. masterbatch, coating, impregnating agent or thin binder is indicated using indexing codes chosen from [C08J 2400/00](#) or subgroups thereof. Examples:

- Use of PMMA as masterbatch in a polystyrene composition: [C08J 3/226](#) and [C08J 2325/06](#) and [C08J 2433/10](#)
- Bonding of polystyrene by heating: [C08J 5/121](#) and [C08J 2325/06](#)
- Coating of a polyethylene substrate with a polyurethane coating: [C08J 7/047](#) and [C08J 2323/06](#) and [C08J 2475/04](#)
- Use of ABS as an additive for foamed polyacrylamide : [C08J 9/0061](#) and [C08J 2333/26](#) and [C08J 2455/02](#)

In the following subgroups, the codes of [C08J 2300/00](#) - [C08J 2399/00](#) are used to specify:

- [C08J 3/226](#) : the polymeric material to which the masterbatch carrier is added.
- [C08J 7/047](#) : the polymeric substrate to be coated.
- [C08J 9/0061](#) : the polymeric component in majority in a multicomponents foamable blend.

3. Group [C08J 2400/00](#) was introduced on January 1st, 2012. Patent documents are continuously being reclassified. As a consequence, documents published before 01/01/2012, and to which [C08J 2400/00](#) indexing codes were allocated, are indexed in the corresponding head group. Example:

- Use of PMMA as masterbatch in a polystyrene composition: [C08J 3/226](#) and [C08J 2325/06](#) and [C08J 2433/00](#), instead of [C08J 2433/10](#).

In the following subgroups, the codes of [C08J 2400/00](#) - [C08J 2499/00](#) are used to specify:

- [C08J 3/226](#) : the polymeric carrier in a masterbatch.
- [C08J 5/12](#) : the chemical nature of the adhesive

- [C08J 7/047](#) : the chemical nature of the coating(s).
- [C08J 9/0061](#) : the polymeric component in minority in a multicomponents foamable blend.
- [C08J 9/224](#), [C08J 9/236](#), [C08J 9/36](#), [C08J 9/40](#) and [C08J 9/42](#) : the polymer used for coating, binding, or impregnating the foam. [C08J 9/26](#) : the polymer to be leached out.
- [C08J 9/33](#) and [C08J 9/35](#) : the foam fragments included in the (foamable) polymer matrix.
- in all other subgroups, when the presence of a polymeric component in minority is of relevance.

#### 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:

[C08J 5/14](#) covered by [B24D 3/20](#), [B24D 3/22](#), [B24D 3/28](#), [F16D 69/02](#)

[C08J 5/16](#) covered by [C10M C10N 2250/18](#)

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.

#### Project: MP0373 (C08K)

M C08K

**USE OF INORGANIC OR NON-MACROMOLECULAR ORGANIC SUBSTANCES AS COMPOUNDING INGREDIENTS** *Use of inorganic or non-macromolecular organic substances as compounding ingredients (pesticides, herbicides A01N; pharmaceuticals, cosmetics A61K; explosives C06B; paints, inks, varnishes, dyes, polishes, adhesives C09; lubricants C10M; detergents C11D; artificial filaments or fibres D01F; textile treating compositions D06)*

#### NOTES

1. The use of an ingredient for a specific polymer is classified by adding, in a G-set, to the group symbol of C08K, the subdivision of C08L 1/00 – C08L 99/00. Example: Polystyrene containing a carboxylic amide is classified in (C08K 5/20; C08L 25/06).

2. From April 2012, the use of an ingredient for a specific polymer is classified by adding, in a G-set, to the group symbol of C08K, the subdivision of C08L 1/00 – C08L 99/00. Example: Polystyrene containing a carboxylic amide is classified in (C08K 5/20; C08L 25/06).

3. 1. In this subclass, in the absence of an indication to the contrary, an ingredient is classified in the last appropriate place.

4. 2. In this subclass:

- a mixture of ingredients is classified in the most indented group covering all the essential ingredients of the mixture, e.g.:

a mixture of a monohydric and a polyhydric alcohol C08K 5/05  
a mixture of two polyhydric alcohols C08K 5/053  
a mixture of an alcohol and an ether C08K 5/04  
a mixture of an ether and an amine C08K 5/00  
a mixture of an amine and a metal C08K 13/02

a mixture of a monohydric and a polyhydric alcohol C08K 5/05  
a mixture of two polyhydric alcohols C08K 5/053  
a mixture of an alcohol and an ether C08K 5/04  
a mixture of an ether and an amine C08K 5/00  
a mixture of an amine and a metal C08K 13/02

{This note is applied only for mixtures with more than three essential ingredients. Mixtures with two or three ingredients are classified in the



*appropriate groups of C08K, e.g. a mixture of Al<sub>2</sub>O<sub>3</sub>, an ether and an amine is classified in C08K 3/22, C08K 5/06 and C08K 5/17}*

*{ This note is applied only for mixtures with more than three essential ingredients. Mixtures with two or three ingredients are classified in the appropriate groups of C08K, e.g. a mixture of Al<sub>2</sub>O<sub>3</sub>, an ether and an amine is classified in C08K 3/22, C08K 5/06 and C08K 5/17}*

- ammonium salts are classified in the same way as metal salts

*5. In this subclass, organic acid salts, alcoholates, phenolates or mercaptides are classified in the groups or subgroups of the parent compounds*

*3. In this subclass, any ingredient of a mixture which is not identified by the classification according to Note (2) above, and the use of which is determined to be novel and non-obvious, must also be classified in this subclass according to Note (1). The ingredient can be either a single compound or a composition in itself. ".{This IPC Note does not apply in CPC}*

*6. The use of an ingredient for a specific polymer is classified by adding to the group symbol of C08K and separated therefrom by a "+" sign, the subdivision of C08L 1/00 - C08L 99/00.*

*Example: Polystyrene containing a carboxylic amide is classified in C08K 5/20 + C08L 25/06*

*4. Any ingredient of a mixture which is not identified by the classification according to Notes (2) or (3) above, and which is considered to represent information of interest for search, may also be classified in this subclass according to Note (1). This can, for example, be the case when it is considered of interest to enable searching of mixtures using a combination of classification symbols. Such non-obligatory classification should be given as "additional information".{This IPC Note does not apply in CPC}*

*7. In this subclass are considered as compounding ingredients:*

- inert additives
- radical crosslinking agents, e.g. peroxides, S-containing vulcanisation agents
- coupling agents, i.e. compounds able to improve the adhesion between filler and macromolecule

*Are not considered as compounding ingredients:*

- chemical modifying or crosslinking agents which react via a condensation or addition mechanism (for C08B polymers C08B, for diene rubbers C08C 19/30, for other vinyl polymers C08F 8/00, for polysiloxanes C08L 83/00, for other C08G polymers C08G)
- solvents or dispersion agents for making polymer solutions, emulsions or dispersions (C08J 3/02)
- blowing agents (C08J 9/04)

*5. {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 C08K}*

*6. {In this subclass, organic acid salts, alcoholates, phenolates or mercaptides are classified in the groups or subgroups of the parent compounds}*

#### WARNING

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

C08K 5/5445 covered by C08K 5/544

## M C08K 3/00

### Use of inorganic substances as compounding 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.*

<b>M C08K 5/00</b>	<b>Use of organic ingredients</b>
<p><u>NOTE</u></p> <p><i>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 <a href="#">C08K</a>.</i></p>	
<b>M C08K 7/00</b>	<b>Use of ingredients characterised by shape</b>
<p><u>NOTE</u></p> <p><i>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 <a href="#">C08K</a>.</i></p>	
<b>M C08K 9/00</b>	<b>Use of pretreated ingredients</b>
<p><u>NOTE</u></p> <p><i>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 <a href="#">C08K</a>.</i></p>	
<b>M C08K 11/00</b>	<b>Use of ingredients of unknown constitution, e.g. undefined reaction products</b>
<p><u>NOTE</u></p> <p><i>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 <a href="#">C08K</a>.</i></p>	
<b>M C08K 13/00</b>	<b>Use of mixtures of ingredients not covered by one single of the preceding main groups, each of these compounds being essential</b>
<p><u>NOTE</u></p> <p><i>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 <a href="#">C08K</a>.</i></p>	

**Project: MP0374, MP0381 (C08L)**

<b>M C08L</b>	<p><b>COMPOSITIONS OF MACROMOLECULAR COMPOUNDS (<del>pesticides</del>, <del>herbicides</del> <b>A01N</b>; <del>pharmaceuticals</del>, <del>cosmetics</del> <b>A61K</b>; <del>explosives</del> <b>C06B</b>; compositions based on polymerisable monomers <b>C08F</b>, <b>C08G</b>; <del>paints</del>, <del>inks</del>, <del>varnishes</del>, <del>dyes</del>, <del>polishes</del>, <del>adhesives</del> <b>C09</b>; <del>lubricants</del> <b>C10M</b>; <del>detergents</del> <b>C11D</b>; artificial filaments or fibres <b>D01F</b>; textile treating compositions <b>D06</b>)</b></p>
<p><u>NOTES</u></p> <p>1. In this subclass, the following term is used with the meaning indicated:</p> <ul style="list-style-type: none"> <li>• Rubber includes: <ul style="list-style-type: none"> <li>a. natural or conjugated diene rubbers;</li> <li>b. rubber in general (for a specific rubber, other than a natural rubber or a conjugated diene rubber, see the group provided for compositions of such macromolecular compounds).</li> </ul> </li> </ul>	
<p>2. In this subclass:</p> <ul style="list-style-type: none"> <li>a. compositions are classified according to the mutual proportions by weight of only the macromolecular constituents;</li> <li>b. compositions are classified according to the macromolecular constituent or constituents present in the highest proportion: if all these constituents are present in equal proportions the composition is classified according to each of these constituents.</li> </ul>	
<p>3. Any macromolecular constituent of a composition which is not identified by the classification according to Note (2) above, and the use of which is determined to be novel and non-obvious, must also be classified in this subclass. For example, a composition containing 80 parts polyethene and 20 parts polyvinyl chloride</p>	

*is classified in both groups [C08L 23/06](#) and [C08L 27/06](#), if the use of polyvinyl chloride is determined to be novel and non-obvious. {This IPC Note does not apply in CPC}*

*4. Any macromolecular constituent of a composition which is not identified by the classification according to Notes (2) or (3) above, and which is considered to represent information of interest for search, may also be classified in this subclass. This can, for example, be the case when it is considered of interest to enable searching of compositions using a combination of classification symbols. Such non-obligatory classification should be given as "additional information". {This IPC Note does not apply in CPC}*

~~1-5.~~ {Compositions classified in [C08K](#) according to note 3 of [C08K](#), are not classified in [C08L](#).}

~~2.~~ Documents classified before 09.2003: Classification is given in the form of C-Sets. The polymer in majority is given a C08L symbol, and the minor components are characterised by Indexing Codes taken from the list below. The Indexing Codes are linked. The polymer in majority is always first in the C-set. List of C08L codes: C08L 23/00, C08L 23/26, C08L 25/00, C08L 27/00, C08L 27/04, C08L 27/12, C08L 29/00, C08L 31/00, C08L 33/00, C08L 35/00, C08L 37/00, C08L 51/00, C08L 53/00, C08L 55/02, C08L 61/04, C08L 61/20, C08L 63/00, C08L 67/00, C08L 67/02, C08L 67/025, C08L 67/03, C08L 67/04, C08L 67/06, C08L 67/07, C08L 69/00, C08L 69/005, C08L 71/00, C08L 75/04, C08L 77/00, C08L 77/08, C08L 77/12, C08L 79/08, C08L 79/085, C08L 81/00, C08L 83/00, C08L 85/00, C08L 91/06, C08L 95/00 or C08L 2666/00 - C08L 2666/86. Documents from group C08L 23/00 - C08L 23/36, C08L 45/00 - C08L 45/02 and C08L 49/00 have all been reclassified following Note 3 below. An additive is classified in the last appropriate place in the list as selected for each C08L group. Examples:-

- a. A composition based on a polyamide and a graft polymer is classified in ( C08L 77/00, C08L 2666/24 ).
- b. A composition based on polyvinylchloride and containing CaCO<sub>3</sub> is classified according to note 4 of C08K, i.e. in ( C08K 3/26, C08L 27/06 ). If this composition contains also a polyamide, then the classification will be ( C08L 27/06, C08L 77/00, C08K 3/26 ).
- c. A composition based on a polysiloxane ( C08L 83/04 ) and containing a second polysiloxane, a phenol and silica is classified in ( C08L 83/04, C08L 83/04, C08L 2666/34, C08L 2666/58 ).

*6. {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 [C08L](#)}*

*7. {[C08L 2666/00](#) indexing codes were used for C-Sets classification of documents before April 2012. In addition to note (6), for searching documents classified before April 2012, see also [C08L 2666/00](#) in the definitions of [C08L](#).}*

~~3-8.~~ From 01.09.2003 until April 2012: Classification is given in the form of C-Sets. The polymer in majority is given a [C08L](#) class, and the minor components are characterised by Indexing Codes taken from [C08L](#) or [C08K](#) and they are linked or unlinked. The polymer in majority is always first in the C-Set. List of [C08L](#) codes in the C-Set: [C08L 1/00](#), [C08L 81/00](#), [C08L 83/00](#), [C08L 91/06](#), [C08L 95/00](#) or [C08L 2666/02](#) - [C08L 2666/08](#), [C08L 2666/14](#) - [C08L 2666/26](#).

Examples:

- a. A blend of 60 parts polyvinylchloride ( [C08L 27/06](#) ) and 40 parts polyamide is classified in ( [C08L 27/06](#), [C08L 2666/20](#) ) and [C08L 77/00](#).
- b. A blend of 50 parts polyvinylchloride ( [C08L 27/06](#) ) and 50 parts polyamide ( [C08L 77/00](#) ) is classified in ( [C08L 27/06](#), [C08L 2666/20](#) ) and [C08L 77/00](#), as well as in ( [C08L 77/00](#), [C08L 2666/04](#) ) and [C08L 27/06](#).
- c. A composition based on polyvinylchloride and containing CaCO<sub>3</sub> is classified according to [N: Note 4 of [C08K](#), i.e. in ( [C08K 3/26](#), [C08L 27/06](#) ). If this composition contains also a polyamide, then the classification will be ( [C08L 27/06](#), [C08L 2666/20](#) ) and [C08K 3/26](#).

- d. A composition based on a first polysiloxane ([C08L 83/04](#)) and containing a second polysiloxane, a phenol and silica is classified in ( [C08L 83/04](#), [C08L 83/04](#), [C08K 5/13](#), [C08K 3/36](#) ) and [C08L 2205/02](#).

**4.9.** From April 2012 onwards, after the notation [C08L](#), notations concerning the other constituents of the composition may be added, in the form of C-Sets. The further constituent is added with an indexing code. The indexing codes are chosen from [C08L 1/00](#) -[C08L 2555/86](#) or [C08K](#) and they may be linked or unlinked: - [C08L 1/00](#) - [C08L 101/10](#) are linked. - [C08L 2201/00](#) - [C08L 2555/86](#) are unlinked. The polymer in majority is always first in the C-Set. Examples:

- a. A blend of 60 parts polyvinylchloride ( [C08L 27/06](#) ) and 40 parts polyamide ( [C08L 77/00](#) ) is classified in ( [C08L 27/06](#), [C08L 77/00](#) ).
- b. A blend of 50 parts polyvinylchloride ( [C08L 27/06](#) ) and 50 parts polyamide ( [C08L 77/00](#) ) is classified in ( [C08L 27/06](#), [C08L 77/00](#) ) and ( [C08L 77/00](#), [C08L 27/06](#) ).
- c. A composition based on polyvinylchloride and containing CaCO<sub>3</sub> is classified according to [N: Note 4 of [C08K](#), i.e. in ( [C08K 3/26](#), [C08L 27/06](#) ). If this composition contains also a polyamide, then the classification will be ( [C08L 27/06](#), [C08L 77/00](#), [C08K 3/26](#) ).
- d. A composition based on a first polysiloxane ( [C08L 83/04](#) ) and containing a second polysiloxane, a phenol and silica is classified in ( [C08L 83/04](#), [C08L 83/00](#), [C08K 5/13](#), [C08K 3/36](#) ) and [C08L 2205/02](#).
- e. A composition containing a polyamide in majority, a polyester and a polyethylene is classified in ( [C08L 77/00](#), [C08L 67/00](#), [C08L 23/06](#) ) and [C08L 2205/03](#).

**5.10.** "Rubber" includes:

- natural or conjugated diene rubbers;
- rubber in general (for a specific rubber, other than a natural rubber or a conjugated diene rubber, see the group provided for compositions of such macromolecular compounds).

**6.11.** In this subclass:

- a. compositions are classified according to the mutual proportions by weight of only the macromolecular constituents;
- b. compositions are classified according to the macromolecular constituent or constituents present in the highest proportion: if all these constituents are present in equal proportions the composition is classified according to each of these constituents.

#### 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="#">C08L 61/08</a> - <a href="#">C08L 61/10</a>	covered by	<a href="#">C08L 61/06</a>
<a href="#">C08L 63/02</a>	covered by	<a href="#">C08L 63/00</a>
<a href="#">C08L 83/05</a>	covered by	<a href="#">C08L 83/04</a>
<a href="#">C08L 83/07</a>	covered by	<a href="#">C08L 83/04</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.

#### Project: MP0374 (C08L)

**M** C08L 1/00

**Compositions of cellulose, modified cellulose or cellulose derivatives**

#### 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 [C08L](#).*

M	C08L 3/00	<b>Compositions of starch, amylose or amylopectin or of their derivatives or degradation products</b>  <u>NOTE</u> <i>In this group, C-Sets are used.</i> <i>The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of <a href="#">C08L</a>.</i>
M	C08L 5/00	<b>Compositions of polysaccharides or of their derivatives not provided for in groups <a href="#">C08L 1/00</a> or <a href="#">C08L 3/00</a></b>  <u>NOTE</u> <i>In this group, C-Sets are used.</i> <i>The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of <a href="#">C08L</a>.</i>
M	C08L 7/00	<b>Compositions of natural rubber</b>  <u>NOTE</u> <i>In this group, C-Sets are used.</i> <i>The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of <a href="#">C08L</a>.</i>
M	C08L 9/00	<b>Compositions of homopolymers or copolymers of conjugated diene hydrocarbons</b>  <u>NOTE</u> <i>In this group, C-Sets are used.</i> <i>The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of <a href="#">C08L</a>.</i>
M	C08L 11/00	<b>Compositions of homopolymers or copolymers of chloroprene</b>  <u>NOTE</u> <i>In this group, C-Sets are used.</i> <i>The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of <a href="#">C08L</a>.</i>
M	C08L 13/00	<b>Compositions of rubbers containing carboxyl groups</b>  <u>NOTE</u> <i>In this group, C-Sets are used.</i> <i>The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of <a href="#">C08L</a>.</i>
M	C08L 15/00	<b>Compositions of rubber derivatives (<a href="#">C08L 11/00</a>, <a href="#">C08L 13/00</a> take precedence)</b>  <u>NOTE</u> <i>In this group, C-Sets are used.</i> <i>The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of <a href="#">C08L</a>.</i>
M	C08L 17/00	<b>Compositions of reclaimed rubber</b>  <u>NOTE</u> <i>In this group, C-Sets are used.</i> <i>The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of <a href="#">C08L</a>.</i>

<b>M C08L 19/00</b>	<b>Compositions of rubbers not provided for in groups <a href="#">C08L 7/00</a> - <a href="#">C08L 17/00</a></b>
<div data-bbox="477 241 1449 398"><b><u>NOTE</u></b> <i>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 <a href="#">C08L</a>.</i></div>	
<b>M C08L 21/00</b>	<b>Compositions of unspecified rubbers</b>
<div data-bbox="477 465 1449 622"><b><u>NOTE</u></b> <i>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 <a href="#">C08L</a>.</i></div>	
<b>M C08L 23/00</b>	<b>Compositions of homopolymers or copolymers of unsaturated aliphatic hydrocarbons having only one carbon-to-carbon double bond; Compositions of derivatives of such polymers</b>
<div data-bbox="477 757 1449 913"><b><u>NOTE</u></b> <i>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 <a href="#">C08L</a>.</i></div>	
<b>M C08L 25/00</b>	<b>Compositions of, homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by an aromatic carbocyclic ring; Compositions of derivatives of such polymers</b>
<div data-bbox="477 1070 1449 1227"><b><u>NOTE</u></b> <i>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 <a href="#">C08L</a>.</i></div>	
<b>M C08L 27/00</b>	<b>Compositions of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a halogen; Compositions of derivatives of such polymers</b>
<div data-bbox="477 1384 1449 1541"><b><u>NOTE</u></b> <i>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 <a href="#">C08L</a>.</i></div>	
<b>M C08L 29/00</b>	<b>Compositions of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by an alcohol, ether, aldehydo, ketonic, acetal or ketal radical; Compositions of hydrolysed polymers of esters of unsaturated alcohols with saturated carboxylic acids; Compositions of derivatives of such polymers</b>
<div data-bbox="477 1765 1449 1921"><b><u>NOTE</u></b> <i>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 <a href="#">C08L</a>.</i></div>	



- M C08L 31/00** Compositions of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by an acyloxy radical of a saturated carboxylic acid, of carbonic acid or of a haloformic acid (of hydrolysed polymers [C08L 29/00](#)); Compositions of derivatives of such polymers
- 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 [C08L](#).*
- M C08L 33/00** Compositions of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and only one being terminated by only one carboxyl radical, or of salts, anhydrides, esters, amides, imides or nitriles thereof; Compositions of derivatives of such polymers
- 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 [C08L](#).*
- M C08L 35/00** Compositions of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a carboxyl radical, and containing at least one other carboxyl radical in the molecule, or of salts, anhydrides, esters, amides, imides or nitriles thereof; Compositions of derivatives of such polymers
- 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 [C08L](#).*
- M C08L 37/00** Compositions of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a heterocyclic ring containing oxygen (of cyclic esters of polyfunctional acids [C08L 31/00](#); of cyclic anhydrides of unsaturated acids [C08L 35/00](#)); Compositions of derivatives of such polymers
- 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 [C08L](#).*
- M C08L 39/00** Compositions of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a single or double bond to nitrogen or by a heterocyclic ring containing nitrogen; Compositions of derivatives of such polymers
- 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 [C08L](#).*



- M C08L 41/00** Compositions of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a bond to sulfur or by a heterocyclic ring containing sulfur; Compositions of derivatives of such polymers
- 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 [C08L](#).*
- M C08L 43/00** Compositions of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and containing boron, silicon, phosphorus, selenium, tellurium or a metal; Compositions of derivatives of such polymers (of metal salts, e.g. phenolates, alcoholates, see the parent compounds)
- 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 [C08L](#).*
- M C08L 45/00** Compositions of homopolymers or copolymers of compounds having no unsaturated aliphatic radicals in side chain, and having one or more carbon-to-carbon double bonds in a carbocyclic or in a heterocyclic ring system; Compositions of derivatives of such polymers (of cyclic anhydrides or imides [C08L 35/00](#); of cyclic esters of polyfunctional acids [C08L 31/00](#))
- 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 [C08L](#).*
- M C08L 47/00** Compositions of homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, at least one having two or more carbon-to-carbon double bonds; Compositions of derivatives of such polymers ([C08L 45/00](#) takes precedence; of conjugated diene rubbers [C08L 9/00](#) - [C08L 21/00](#))
- 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 [C08L](#).*
- M C08L 49/00** Compositions of homopolymers or copolymers of compounds having one or more carbon-to-carbon triple bonds; Compositions of derivatives of such polymers
- 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 [C08L](#).*

M	C08L 51/00	Compositions of graft polymers in which the grafted component is obtained by reactions only involving carbon-to-carbon unsaturated bonds (for ABS polymers <a href="#">C08L 55/02</a> ); Compositions of derivatives of such polymers
		<b>NOTE</b> <i>In this group, C-Sets are used.</i> <i>The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of <a href="#">C08L</a>.</i>
M	C08L 53/00	Compositions of block copolymers containing at least one sequence of a polymer obtained by reactions only involving carbon-to-carbon unsaturated bonds; Compositions of derivatives of such polymers
		<b>NOTE</b> <i>In this group, C-Sets are used.</i> <i>The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of <a href="#">C08L</a>.</i>
M	C08L 55/00	Compositions of homopolymers or copolymers, obtained by polymerisation reactions only involving carbon-to-carbon unsaturated bonds, not provided for in groups <a href="#">C08L 23/00</a> - <a href="#">C08L 53/00</a>
		<b>NOTE</b> <i>In this group, C-Sets are used.</i> <i>The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of <a href="#">C08L</a>.</i>
M	C08L 57/00	Compositions of unspecified polymers obtained by reactions only involving carbon-to-carbon unsaturated bonds
		<b>NOTE</b> <i>In this group, C-Sets are used.</i> <i>The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of <a href="#">C08L</a>.</i>
M	C08L 59/00	Compositions of polyacetals; Compositions of derivatives of polyacetals (of polyvinyl acetals <a href="#">C08L 29/14</a> )
		<b>NOTE</b> <i>In this group, C-Sets are used.</i> <i>The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of <a href="#">C08L</a>.</i>
M	C08L 61/00	Compositions of condensation polymers of aldehydes or ketones (with polyalcohols <a href="#">C08L 59/00</a> ; with polynitriles <a href="#">C08L 77/00</a> ); Compositions of derivatives of such polymers
		<b>NOTE</b> <i>In this group, C-Sets are used.</i> <i>The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of <a href="#">C08L</a>.</i>
M	C08L 63/00	Compositions of epoxy resins; Compositions of derivatives of epoxy resins
		<b>NOTE</b> <i>In this group, C-Sets are used.</i> <i>The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of <a href="#">C08L</a>.</i>

M	C08L 65/00	Compositions of macromolecular compounds obtained by reactions forming a carbon-to-carbon link in the main chain ( <a href="#">C08L 7/00</a> - <a href="#">C08L 57/00</a> , <a href="#">C08L 61/00</a> take precedence); Compositions of derivatives of such polymers
		<b>NOTE</b> <i>In this group, C-Sets are used.</i> <i>The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of <a href="#">C08L</a>.</i>
M	C08L 67/00	Compositions of polyesters obtained by reactions forming a carboxylic ester link in the main chain (of polyester-amides <a href="#">C08L 77/12</a> ; of polyester-imides <a href="#">C08L 79/08</a> ); Compositions of derivatives of such polymers
		<b>NOTE</b> <i>In this group, C-Sets are used.</i> <i>The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of <a href="#">C08L</a>.</i>
M	C08L 69/00	Compositions of polycarbonates; Compositions of derivatives of polycarbonates
		<b>NOTE</b> <i>In this group, C-Sets are used.</i> <i>The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of <a href="#">C08L</a>.</i>
M	C08L 71/00	Compositions of polyethers obtained by reactions forming an ether link in the main chain (of polyacetals <a href="#">C08L 59/00</a> ; of epoxy resins <a href="#">C08L 63/00</a> ; of polythioether-ethers <a href="#">C08L 81/02</a> ; of polyether-sulfones <a href="#">C08L 81/06</a> ); Compositions of derivatives of such polymers
		<b>NOTE</b> <i>In this group, C-Sets are used.</i> <i>The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of <a href="#">C08L</a>.</i>
M	C08L 73/00	Compositions of macromolecular compounds obtained by reactions forming a linkage containing oxygen or oxygen and carbon in the main chain, not provided for in groups <a href="#">C08L 59/00</a> - <a href="#">C08L 71/00</a> ; Compositions of derivatives of such polymers
		<b>NOTE</b> <i>In this group, C-Sets are used.</i> <i>The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of <a href="#">C08L</a>.</i>
M	C08L 75/00	Compositions of polyureas or polyurethanes; Compositions of derivatives of such polymers
		<b>NOTE</b> <i>In this group, C-Sets are used.</i> <i>The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of <a href="#">C08L</a>.</i>

M C08L 77/00	<p>Compositions of polyamides obtained by reactions forming a carboxylic amide link in the main chain (of polyhydrazides <a href="#">C08L 79/06</a>; of polyamideimides or polyamide acids <a href="#">C08L 79/08</a>); Compositions of derivatives of such polymers</p> <p><u>NOTE</u>  <i>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 <a href="#">C08L</a>.</i></p>
M C08L 79/00	<p>Compositions of macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing nitrogen with or without oxygen or carbon only, not provided for in groups <a href="#">C08L 61/00</a> - <a href="#">C08L 77/00</a></p> <p><u>NOTE</u>  <i>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 <a href="#">C08L</a>.</i></p>
M C08L 81/00	<p>Compositions of macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing sulfur with or without nitrogen, oxygen or carbon only; Compositions of polysulfones; Compositions of derivatives of such polymers</p> <p><u>NOTE</u>  <i>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 <a href="#">C08L</a>.</i></p>
M C08L 83/00	<p>Compositions of macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing silicon with or without sulfur, nitrogen, oxygen or carbon only; Compositions of derivatives of such polymers</p> <p><u>NOTE</u>  <i>In this main group, from 01.09.2010 onwards, new documents are classified according to the following system. The composition is identified with the C-Set, e.g. (<a href="#">C08L 83/04</a>, <a href="#">C08L 83/04</a>) (for a composition containing two or more siloxanes), while the info</i></p> <p><i>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 <a href="#">C08L</a>.</i></p>
U C08L 83/04	<ul style="list-style-type: none"> <li>• Polysiloxanes</li> </ul>
M C08L 83/06	<ul style="list-style-type: none"> <li>• containing silicon bound to oxygen-containing groups (<a href="#">C08L 83/12</a> takes precedence)</li> </ul> <p><u>NOTE</u>  <i>This group does not comprise Si-OH and Si-OR groups that are classified in <a href="#">C08L 83/04</a>.</i></p>
M C08L 85/00	<p>Compositions of macromolecular compounds obtained by reactions forming a linkage in the main chain of the macromolecule containing atoms other than silicon, sulfur, nitrogen, oxygen and carbon; Compositions of derivatives of such polymers</p> <p><u>NOTE</u>  <i>In this group, C-Sets are used.</i></p>

*The detailed information about the C-Sets construction and the associated syntax rules is present in the Definitions of C08L.*

M C08L 87/00

**Compositions of unspecified macromolecular compounds, obtained otherwise than by polymerisation reactions only involving unsaturated carbon-to-carbon bonds**

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 C08L.*

M C08L 89/00

**Compositions of proteins; Compositions of derivatives thereof (foodstuff preparations [A23J 3/00](#))**

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 C08L.*

M C08L 91/00

**Compositions of oils, fats or waxes; Compositions of derivatives thereof (~~polishing compositions, ski waxes C09G~~; ~~soaps, detergent compositions C11D~~)**

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 C08L.*

M C08L 93/00

**Compositions of natural resins; Compositions of derivatives thereof (~~polishing compositions C09G~~ of polysaccharides C08L 1/00 - C08L 5/00; of natural rubber C08L 7/00)**

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 C08L.*

M C08L 95/00

**Compositions of bituminous materials, e.g. asphalt, tar, pitch**

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 C08L.*

M C08L 97/00

**Compositions of lignin-containing materials (of polysaccharides C08L 1/00 - C08L 5/00)**

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 C08L.*

M C08L 99/00

**Compositions of natural macromolecular compounds or of derivatives thereof not provided for in groups [C08L 89/00](#) - [C08L 97/00](#)**

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 C08L.*

M C08L 101/00

Compositions of unspecified macromolecular compounds

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 C08L.*

M C08L 2666/00

Composition of polymers characterized by a further compound in the blend, being organic macromolecular compounds, natural resins, waxes or and bituminous materials, non-macromolecular organic substances, inorganic substances or characterized by their function in the composition (not used)

NOTE

*These Indexing codes are of C08L 2666/00 have not been used for the classification of new documents since April 2012. They However, they are a replacement used in C-Sets searches for documents prior to April 2012. The detailed information about how to search using C08L 2666/00 C-Sets is presented in the Definitions of C08L, C09D the combination and C09J classes.*

Project: MP0448, MP0381, MP0369 (C09D)

M C09D

COATING COMPOSITIONS, e.g. PAINTS, VARNISHES OR LACQUERS; FILLING PASTES; CHEMICAL PAINT OR INK REMOVERS; INKS; CORRECTING FLUIDS; WOODSTAINS; PASTES OR SOLIDS FOR COLOURING OR PRINTING; USE OF MATERIALS THEREFOR (cosmetics A61K; processes for applying liquids or other fluent materials to surfaces, in general, B05D; staining wood B27K 5/02; glazes or vitreous enamels C03C; ~~organic macromolecular compounds C08; organic dyes or closely-related compounds for producing dyes, mordants or lakes, per se, C09B; treatment of inorganic materials other than fibrous fillers used as pigments or fillers C09C~~; natural resins, French polish, drying-oils, driers, turpentine, per se, C09F; polishing compositions other than French polish, ski waxes C09G; ~~preparation of glue or gelatine C09H, {C08H 1/06}~~; adhesives or use of materials as adhesives C09J; materials for sealing or packing joints or covers C09K 3/10; materials for stopping leaks C09K 3/12; processes for the electrolytic or electrophoretic production of coatings C25D; ~~textile treating compositions D06; paper-making D21; conductors, insulators H01B~~)

NOTES

1. In this subclass, the following terms or expressions are used with the meanings indicated:

- a. "use of materials for coating compositions" means the use of known or new polymers or products;
- b. "rubber" includes:
  - a. natural or conjugated diene rubbers;
  - b. rubber in general (for a specific rubber, other than a natural rubber or a conjugated diene rubber, see the group provided for coating compositions based on such macromolecular compounds);
  - c. *based on" is defined by means of Note 3, below;*
  - d. *filling pastes" means materials used to fill up the holes or cavities of a substrate in order to smooth its surface prior to coating.*
- e. ~~"based on" is defined by means of Note 3, below;~~



d. "filling pastes" means materials used to fill up the holes or cavities of a substrate in order to smooth its surface prior to coating.

2. In this subclass, coating compositions containing specific macromolecular substances are classified only according to the macromolecular substance, non-macromolecular substances not being taken into account.

- Example: a coating composition containing polyethene and amino-propyltrimethoxysilane is classified in group [C09D 123/06](#).
- However, coating compositions containing combinations of organic non-macromolecular compounds having at least one polymerisable carbon-to-carbon unsaturated bond with prepolymers or polymers other than unsaturated polymers of groups [C09D 159/00](#) - [C09D 187/00](#) are classified according to the unsaturated non-macromolecular component in group [C09D 4/00](#).
- Example: a coating composition containing polyethene and styrene monomer is classified in group [C09D 4/06](#).
- Aspects relating to the physical nature of the coating compositions or to the effects produced, as defined in group [C09D 5/00](#), if clearly and explicitly stated, are also classified in this subclass.
- Coating compositions characterised by other features, e.g. additives, are classified in group [C09D 7/00](#), unless the macromolecular constituent is specified.

3. In this subclass, coating compositions comprising two or more macromolecular constituents are classified according to the macromolecular constituent or constituents present in the highest proportion, i.e. the constituent on which the composition is based. If the composition is based on two or more constituents, present in equal proportions, the composition is classified according to each of these constituents.

Examples:

- A coating composition containing 80 parts of polyethene and 20 parts of polyvinylchloride is classified in group [C09D 123/06](#);
- A coating composition containing 40 parts of polyethene and 40 parts of polyvinylchloride is classified in groups [C09D 123/06](#) and [C09D 127/06](#).

4. Documents classified up until 04.2012: after the notation of group [C09D 4/06](#), and separated therefrom by a + sign, notations concerning the macromolecular compound may be added. The notations are selected from the main groups [C08F 251/00](#) - [C08F 291/00](#) and from the subgroups of [C08F 290/00](#) - [C08F 290/048](#) and [C08F 290/08](#) - [C08F 290/128](#).

Example: a paint based on a mixture of methylmethacrylate monomer and a polymer of vinylchloride is classified in [C09D 4/06](#) + [C08F 259/04](#).

4. {In this subclass, combination sets [C-Sets] are used. Detailed information about the C-Sets construction and the associated syntax rules is found in the definitions for [C09D](#).}

5. From April 2012 onwards, after the notation [C09D 4/00](#), classification concerning the monomer may be added, in the form of C-sets. The notation is selected from [C08F 210/00](#) - [C08F 246/00](#), [C08G 77/00](#) - [C08G 77/04](#) or [C08G 77/20](#) - [C08G 77/30](#). Ex.: A paint based on a mixture of methylmethacrylate monomer and a polymer of vinylchloride is classified ( [C09D 4/06](#), [C08F 259/04](#) ).

5. {In addition to Note (4) above [C08L 2666/00](#) indexing codes were used for C-Sets classification of documents before April 2012. See C-Sets Search Rules in [C08L](#), in [C09D](#), or in [C09J](#) Definitions.}

6. Documents classified up until 09-2003: Classification is given in the form of C-Sets. The polymer in majority is given a [C09D 101/00](#) - [C09D 201/10](#) symbol, and the minor components are characterised by Indexing Codes taken from the list below. The Indexing Codes are linked. The polymer in majority is always first in the C-set. List of [C08L](#) codes: [C08L 23/00](#), [C08L 23/26](#), [C08L 25/00](#), [C08L 27/00](#), [C08L 27/04](#), [C08L 27/12](#), [C08L 29/00](#), [C08L 31/00](#);



C08L 33/00, C08L 35/00, C08L 37/00, C08L 51/00, C08L 53/00, C08L 55/02, C08L 61/04, C08L 61/20, C08L 63/00, C08L 67/00, C08L 67/02, C08L 67/025, C08L 67/03, C08L 67/04, C08L 67/06, C08L 67/07, C08L 69/00, C08L 69/005, C08L 71/00, C08L 75/04, C08L 77/00, C08L 77/08, C08L 77/12, C08L 79/08, C08L 79/085, C08L 81/00, C08L 83/00, C08L 85/00, C08L 91/06, C08L 95/00 or C08L 2666/00 - C08L 2666/86. Documents from group C09D 123/00 - C09D 123/36, C09D 145/00 - C09D 145/02 and C09D 149/00 have all been reclassified following Note 3 below. An additive is classified in the last appropriate place in the list as selected for each C09D group.

Examples:

- a. A coating composition based on a polyamide and a graft polymer is classified in (C09D 177/00, C08L 2666/24).
- b. A coating composition based on polyvinylchloride and containing CaCO<sub>3</sub> is classified according to note 4 of C08K, i.e. in C08K 3/26 and C09D 127/06. If this coating composition contains also a polyamide, then the classification will be (C09D 127/06, C08L 77/00, C08K 3/26).
- c. A coating composition based on a polysiloxane (C09D 183/04) and containing a second polysiloxane, a phenol and silica is classified in (C09D 183/04, C08L 83/04, C08L 2666/34, C08L 2666/54).

7. From 01.09.2003 until April 2012: Classification is given in the form of C-Sets. The polymer in majority is given a C09D symbol, and the minor components are characterised by Indexing Codes taken from C08L or C08K and they are linked or unlinked. The polymer in majority is always first in the C-set. List of indexing codes in the C-Sets: C08L 1/00, C08L 81/00, C08L 83/00, C08L 91/06, C08L 95/00 or C08L 2666/02 - C08L 2666/08, C08L 2666/14 - C08L 2666/26.

Examples:

- a. A coating of 60 parts polyvinylchloride (C09D 127/06) and 40 parts polyamide is classified in (C09D 127/06, C08L 2666/20), C08L 77/00.
- b. A coating of 50 parts polyvinylchloride (C09D 127/06) and 50 parts polyamide (C09D 177/00) is classified in (C09D 127/06, C08L 2666/20), and C08L 77/00, as well as (C09D 177/00, C08L 2666/04) and C08L 27/06.
- c. A coating composition based on polyvinylchloride and containing CaCO<sub>3</sub> is classified according to [N: Note 4 of C08K, i.e. in C08K 3/26, C09D 127/06. If this composition contains also a polyamide, then the classification will be (C09D 127/06, C08L 2666/20) and C08K 3/26.
- d. A composition based on a first polysiloxane (C09D 183/04) and containing a second polysiloxane, a phenol and silica is classified in (C09D 183/04, C08L 83/00, C08K 5/13, C08K 3/36) and C08L 2205/02.

8. From April 2012 onwards, after the notation of groups C09D 101/00 - C09D 201/00, notations concerning the other constituents of the coating composition may be added, in the form of C-Sets. The further constituent is added with an indexing code. The indexing codes are chosen from C08L 1/00 - C08L 2555/86 or C08K and they may be linked or unlinked: - C08L 1/00 - C08L 101/10 are linked. - C08L 2201/00 - C08L 2555/86 are unlinked. The polymer in majority is always first in the C-set. Examples:

- a. A coating composition containing polyethylene and amino-propyltrimethoxysilane is classified in groups C09D 123/06 and C08K 5/544 (unlinked).
- b. A coating composition containing 80 parts of polyethylene and 20 parts of polyvinylchloride is classified in (C09D 123/06, C08L 27/06).
- c. A coating composition containing 40 parts of polyethylene and 40 parts of polyvinylchloride is classified in (C09D 123/06, C08L 27/06) and (C09D 127/06, C08L 23/06).

d. A coating composition containing 90% of polysiloxane (C09D 183/04) further containing 10% of polyester (C08L 67/00) and an alcohol is classified in (C09D 183/04, C08L 67/00, C08K 5/05).

#### 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:

C09D 4/02	covered by	C09D 4/00, <del>C08F 220/00</del>
C09D 4/04	covered by	C09D 4/00, <del>C08F 222/00</del>
<del>C09D 5/23</del>	<del>covered by</del>	<del>H01F 41/16</del>
C09D 5/25	covered by	<del>H01B 3/308</del> <u>H01B 3/30</u>
C09D 5/33	covered by	C09D 5/004
C09D 5/46	covered by	C09D 5/03
C09D 161/08, C09D 161/10	covered by	C09D 161/06
C09D 163/02	covered by	C09D 163/00
<del>C09D 171/08</del>	<del>covered by</del>	<del>C09D 171/02</del>
<del>C09D 171/10</del>	<del>covered by</del>	<del>C09D 171/12</del>
C09D 183/05	covered by	C09D 183/04
C09D 183/07	covered by	C09D 183/04, C09D 183/06

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.

#### Project: MP0448 (C09D)

M C09D 4/00

Coating compositions, e.g. paints, varnishes or lacquers, based on organic non-macromolecular compounds having at least one polymerisable carbon-to-carbon unsaturated bond {; Coating compositions, based on monomers of macromolecular compounds of groups C09D 183/00 - C09D 183/16}

#### 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 C09D}*

#### Project: MP0369 (C09D)

M C09D 5/00

Coating compositions, e.g. paints, varnishes or lacquers, characterised by their physical nature or the effects produced *{{(electrically insulating plastics, resins or waxes H01B 3/30)}}*; Filling pastes *{{(magnetisable or magnetic paints ~~H01F 1/00~~; electrically insulating paints H01B 3/00; paints for electrophoretic applications ~~C25D 13/00~~)}}*

#### Project: MP0448 (C09D)

M C09D 101/00

Coating compositions based on cellulose, modified cellulose, or cellulose derivatives

#### 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 C09D}*

M	C09D 103/00	<b>Coating compositions based on starch, amylose or amylopectin or on their derivatives or degradation products</b>  <i><u>NOTE</u></i> <i>{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 <u>C09D</u>}</i>
M	C09D 105/00	<b>Coating compositions based on polysaccharides or on their derivatives, not provided for in groups <a href="#">C09D 101/00</a> or <a href="#">C09D 103/00</a></b>  <i><u>NOTE</u></i> <i>{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 <u>C09D</u>}</i>
M	C09D 107/00	<b>Coating compositions based on natural rubber</b>  <i><u>NOTE</u></i> <i>{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 <u>C09D</u>}</i>
M	C09D 109/00	<b>Coating compositions based on homopolymers or copolymers of conjugated diene hydrocarbons</b>  <i><u>NOTE</u></i> <i>{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 <u>C09D</u>}</i>
M	C09D 111/00	<b>Coating compositions based on homopolymers or copolymers of chloroprene</b>  <i><u>NOTE</u></i> <i>{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 <u>C09D</u>}</i>
M	C09D 113/00	<b>Coating compositions based on rubbers containing carboxyl groups</b>  <i><u>NOTE</u></i> <i>{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 <u>C09D</u>}</i>
M	C09D 115/00	<b>Coating compositions based on rubber derivatives (<a href="#">C09D 111/00</a>, <a href="#">C09D 113/00</a> take precedence)</b>  <i><u>NOTE</u></i> <i>{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 <u>C09D</u>}</i>

<b>M C09D 117/00</b>	<b>Coating compositions based on reclaimed rubber</b>
<div data-bbox="477 241 1447 398"><u>NOTE</u> {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 <u>C09D</u>}</div>	
<b>M C09D 119/00</b>	<b>Coating compositions based on rubbers, not provided for in groups <a href="#">C09D 107/00</a> - <a href="#">C09D 117/00</a></b>
<div data-bbox="477 499 1447 656"><u>NOTE</u> {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 <u>C09D</u>}</div>	
<b>M C09D 121/00</b>	<b>Coating compositions based on unspecified rubbers</b>
<div data-bbox="477 723 1447 880"><u>NOTE</u> {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 <u>C09D</u>}</div>	
<b>M C09D 123/00</b>	<b>Coating compositions based on homopolymers or copolymers of unsaturated aliphatic hydrocarbons having only one carbon-to-carbon double bond; Coating compositions based on derivatives of such polymers</b>
<div data-bbox="477 1003 1447 1160"><u>NOTE</u> {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 <u>C09D</u>}</div>	
<b>M C09D 125/00</b>	<b>Coating compositions based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by an aromatic carbocyclic ring; Coating compositions based on derivatives of such polymers</b>
<div data-bbox="477 1361 1447 1518"><u>NOTE</u> {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 <u>C09D</u>}</div>	
<b>M C09D 127/00</b>	<b>Coating compositions based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a halogen; Coating compositions based on derivatives of such polymers</b>
<div data-bbox="477 1675 1447 1832"><u>NOTE</u> {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 <u>C09D</u>}</div>	

- M C09D 129/00** Coating compositions based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by an alcohol, ether, aldehydo, ketonic, acetal, or ketal radical; Coating compositions based on hydrolysed polymers of esters of unsaturated alcohols with saturated carboxylic acids; Coating compositions based on derivatives of such polymers
- 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 [C09D](#)}*
- M C09D 131/00** Coating compositions based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by an acyloxy radical of a saturated carboxylic acid, of carbonic acid, or of a haloformic acid (based on hydrolysed polymers [C09D 129/00](#)); Coating compositions based on derivatives of such polymers
- 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 [C09D](#)}*
- M C09D 133/00** Coating compositions based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by only one carboxyl radical, or of salts, anhydrides, esters, amides, imides, or nitriles thereof; Coating compositions based on derivatives of such polymers
- 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 [C09D](#)}*
- M C09D 135/00** Coating compositions based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a carboxyl radical, and containing at least another carboxyl radical in the molecule, or of salts, anhydrides, esters, amides, imides or nitriles thereof; Coating compositions based on derivatives of such polymers
- 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 [C09D](#)}*

- M C09D 137/00** Coating compositions based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a heterocyclic ring containing oxygen (based on polymers of cyclic esters of polyfunctional acids [C09D 131/00](#); based on polymers of cyclic anhydrides of unsaturated acids [C09D 135/00](#)); Coating compositions based on derivatives of such polymers
- 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 [C09D](#)}*
- M C09D 139/00** Coating compositions based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a single or double bond to nitrogen or by a heterocyclic ring containing nitrogen; Coating compositions based on derivatives of such polymers
- 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 [C09D](#)}*
- M C09D 141/00** Coating compositions based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a bond to sulfur or by a heterocyclic ring containing sulfur; Coating compositions based on derivatives of such polymers
- 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 [C09D](#)}*
- M C09D 143/00** Coating compositions based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and containing boron, silicon, phosphorus, selenium, tellurium, or a metal; Coating compositions based on derivatives of such polymers
- 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 [C09D](#)}*
- M C09D 145/00** Coating compositions based on homopolymers or copolymers of compounds having no unsaturated aliphatic radicals in a side chain, and having one or more carbon-to-carbon double bonds in a carbocyclic or in a heterocyclic system; Coating compositions based on derivatives of such polymers (based on polymers of cyclic esters of polyfunctional acids [C09D 131/00](#); based on polymers of cyclic anhydrides or imides [C09D 135/00](#))
- 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 [C09D](#)}*

M C09D 147/00	<b>Coating compositions based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, at least one having two or more carbon-to-carbon double bonds; Coating compositions based on derivatives of such polymers (<a href="#">C09D 145/00</a> takes precedence; based on conjugated diene rubbers <a href="#">C09D 109/00</a> - <a href="#">C09D 121/00</a>)</b>
<div data-bbox="477 376 1441 533"><b>NOTE</b> <i>{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 <a href="#">C09D</a>}</i></div>	
M C09D 149/00	<b>Coating compositions based on homopolymers or copolymers of compounds having one or more carbon-to-carbon triple bonds; Coating compositions based on derivatives of such polymers</b>
<div data-bbox="477 660 1441 817"><b>NOTE</b> <i>{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 <a href="#">C09D</a>}</i></div>	
M C09D 151/00	<b>Coating compositions based on graft polymers in which the grafted component is obtained by reactions only involving carbon-to-carbon unsaturated bonds (based on ABS polymers <a href="#">C09D 155/02</a>); Coating compositions based on derivatives of such polymers</b>
<div data-bbox="477 978 1441 1135"><b>NOTE</b> <i>{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 <a href="#">C09D</a>}</i></div>	
M C09D 153/00	<b>Coating compositions based on block copolymers containing at least one sequence of a polymer obtained by reactions only involving carbon-to-carbon unsaturated bonds; Coating compositions based on derivatives of such polymers</b>
<div data-bbox="477 1296 1441 1453"><b>NOTE</b> <i>{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 <a href="#">C09D</a>}</i></div>	
M C09D 155/00	<b>Coating compositions based on homopolymers or copolymers, obtained by polymerisation reactions only involving carbon-to-carbon unsaturated bonds, not provided for in groups <a href="#">C09D 123/00</a> - <a href="#">C09D 153/00</a></b>
<div data-bbox="477 1581 1441 1738"><b>NOTE</b> <i>{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 <a href="#">C09D</a>}</i></div>	
M C09D 157/00	<b>Coating compositions based on unspecified polymers obtained by reactions only involving carbon-to-carbon unsaturated bonds</b>
<div data-bbox="477 1832 1441 1989"><b>NOTE</b> <i>{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 <a href="#">C09D</a>}</i></div>	



M	C09D 159/00	Coating compositions based on polyacetals; Coating compositions based on derivatives of polyacetals  <i><u>NOTE</u></i> <i>{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 <u>C09D</u>}</i>
M	C09D 161/00	Coating compositions based on condensation polymers of aldehydes or ketones (with polyalcohols <a href="#">C09D 159/00</a> ; with polynitriles <a href="#">C09D 177/00</a> ); Coating compositions based on derivatives of such polymers  <i><u>NOTE</u></i> <i>{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 <u>C09D</u>}</i>
M	C09D 163/00	Coating compositions based on epoxy resins; Coating compositions based on derivatives of epoxy resins  <i><u>NOTE</u></i> <i>{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 <u>C09D</u>}</i>
M	C09D 165/00	Coating compositions based on macromolecular compounds obtained by reactions forming a carbon-to-carbon link in the main chain ( <a href="#">C09D 107/00</a> - <a href="#">C09D 157/00</a> , <a href="#">C09D 161/00</a> take precedence); Coating compositions based on derivatives of such polymers  <i><u>NOTE</u></i> <i>{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 <u>C09D</u>}</i>
M	C09D 167/00	Coating compositions based on polyesters obtained by reactions forming a carboxylic ester link in the main chain (based on polyester-amides <a href="#">C09D 177/12</a> ; based on polyester-imides <a href="#">C09D 179/08</a> ); Coating compositions based on derivatives of such polymers  <i><u>NOTE</u></i> <i>{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 <u>C09D</u>}</i>
M	C09D 169/00	Coating compositions based on polycarbonates; Coating compositions based on derivatives of polycarbonates  <i><u>NOTE</u></i> <i>{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 <u>C09D</u>}</i>

M C09D 171/00	<b>Coating compositions based on polyethers obtained by reactions forming an ether link in the main chain (based on polyacetals <a href="#">C09D 159/00</a>; based on epoxy resins <a href="#">C09D 163/00</a>; based on polythioether-ethers <a href="#">C09D 181/02</a>; based on polyethersulfones <a href="#">C09D 181/06</a>); Coating compositions based on derivatives of such polymers</b>
<b>NOTE</b> <i>{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 <a href="#">C09D</a>}</i>	
M C09D 173/00	<b>Coating compositions based on macromolecular compounds obtained by reactions forming a linkage containing oxygen or oxygen and carbon in the main chain, not provided for in groups <a href="#">C09D 159/00</a> - <a href="#">C09D 171/00</a>; Coating compositions based on derivatives of such polymers</b>
<b>NOTE</b> <i>{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 <a href="#">C09D</a>}</i>	
M C09D 175/00	<b>Coating compositions based on polyureas or polyurethanes; Coating compositions based on derivatives of such polymers</b>
<b>NOTE</b> <i>{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 <a href="#">C09D</a>}</i>	
M C09D 177/00	<b>Coating compositions based on polyamides obtained by reactions forming a carboxylic amide link in the main chain (based on polyhydrazides <a href="#">C09D 179/06</a>; based on polyamide-imides <a href="#">C09D 179/08</a>); Coating compositions based on derivatives of such polymers</b>
<b>NOTE</b> <i>{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 <a href="#">C09D</a>}</i>	
M C09D 179/00	<b>Coating compositions based on macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing nitrogen, with or without oxygen, or carbon only, not provided for in groups <a href="#">C09D 161/00</a> - <a href="#">C09D 177/00</a></b>
<b>NOTE</b> <i>{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 <a href="#">C09D</a>}</i>	
M C09D 181/00	<b>Coating compositions based on macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing sulfur, with or without nitrogen, oxygen, or carbon only; Coating compositions based on polysulfones; Coating compositions based on derivatives of such polymers</b>
<b>NOTE</b> <i>{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 <a href="#">C09D</a>}</i>	

- M C09D 183/00** Coating compositions based on macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing silicon, with or without sulfur, nitrogen, oxygen, or carbon only; Coating compositions based on derivatives of such polymers
- NOTE  
 In this main group and its subgroups, from 01.09.2010 onwards, new documents are classified according to the following system. The coating composition is identified with the C-Set, e.g. ( C09D 183/04, C08L 83/04 ) (for a coating composition containing two or more siloxanes), while the information as to which different polymers are present in the coating composition is identified with additional indexing codes, e.g. C08G 77/12 and C08G 77/20.
- {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 C09D}*
- M C09D 185/00** Coating compositions based on macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing atoms other than silicon, sulfur, nitrogen, oxygen, and carbon; Coating compositions based on derivatives of such polymers
- 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 C09D}*
- M C09D 187/00** Coating compositions based on unspecified macromolecular compounds, obtained otherwise than by polymerisation reactions only involving unsaturated carbon-to-carbon bonds
- 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 C09D}*
- M C09D 189/00** Coating compositions based on proteins; Coating compositions based on derivatives thereof (foodstuff preparations [A23J 3/00](#))
- 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 C09D}*
- M C09D 191/00** Coating compositions based on oils, fats or waxes; Coating compositions based on derivatives thereof (polishing compositions, ski waxes [C09G](#); ~~soaps, detergent compositions C11D~~)
- 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 C09D}*

<b>M C09D 193/00</b>	<b>Coating compositions based on natural resins; Coating compositions based on derivatives thereof (<i>based on polysaccharides C09D 101/00 - C09D 105/00</i>; <i>based on natural rubber C09D 107/00</i>; polishing compositions C09G)</b>
<div data-bbox="477 342 1414 474"><b>NOTE</b> {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 C09D}</div>	
<b>M C09D 195/00</b>	<b>Coating compositions based on bituminous materials, e.g. asphalt, tar, pitch</b>
<div data-bbox="477 595 1414 728"><b>NOTE</b> {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 C09D}</div>	
<b>M C09D 197/00</b>	<b>Coating compositions based on lignin-containing materials (<i>based on polysaccharides C09D 101/00 - C09D 105/00</i>)</b>
<div data-bbox="477 848 1414 981"><b>NOTE</b> {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 C09D}</div>	
<b>M C09D 199/00</b>	<b>Coating compositions based on natural macromolecular compounds or on derivatives thereof, not provided for in groups <i>C09D 101/00 - C09D 107/00</i> or C09D 189/00 - C09D 197/00</b>
<div data-bbox="477 1133 1414 1265"><b>NOTE</b> {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 C09D}</div>	
<b>M C09D 201/00</b>	<b>Coating compositions based on unspecified macromolecular compounds</b>
<div data-bbox="477 1352 1414 1485"><b>NOTE</b> {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 C09D}</div>	

Project: MP0449, MP0381 (C09J)

M C09J

**ADHESIVES** *Adhesives*; **NON-MECHANICAL ASPECTS OF ADHESIVE PROCESSES IN GENERAL** *non-mechanical aspects of adhesive processes in general*; **ADHESIVE PROCESSES NOT PROVIDED FOR ELSEWHERE** *adhesive processes not provided for elsewhere*; **USE OF MATERIALS AS ADHESIVES** *use of material as adhesives* (surgical adhesives [A61L 24/00](#); **processes for applying liquids or other fluent materials to surfaces in general** [B05D](#); adhesives on the basis of non-specified organic macromolecular compounds used as bonding agents in layered products [B32B](#); organic labelling fabrics or comparable materials or articles with deformable surface using adhesives and thermo-activatable adhesives respectively [B65C 5/02](#), [B65C 5/04](#); **organic macromolecular compounds** [C08](#); **production of multi-layer textile fabrics** [D06M 17/00](#); preparation of glue or gelatine [C09H](#); adhesive labels, tag tickets or similar identification of indication means [G09F 3/10](#))

#### NOTES

1. In this subclass, the following terms or expressions are used with the meanings indicated:

- "use of materials as adhesives" means the use of known or new polymers or products;
- "rubber" includes:
  - a. natural or conjugated diene rubbers;
  - b. rubber in general (for a specific rubber, other than a natural rubber or a conjugated diene rubber, see the group provided for adhesives based on such macromolecular compounds);
- "based on" is defined by means of Note 3, below.

1. In this subclass, the following terms or expressions are used with the meanings indicated:

2. "use of materials as adhesives" means the use of known or new polymers or products;

- "rubber" includes:
  - a. natural or conjugated diene rubbers;
  - b. rubber in general (for a specific rubber, other than a natural rubber or a conjugated diene rubber, see the group provided for adhesives based on such macromolecular compounds);
- "based on" is defined by means of Note 3, below.

2-3. In this subclass, adhesives containing specific macromolecular substances are classified only according to the macromolecular substance, non-macromolecular substances not being taken into account.

- Example: an adhesive containing polyethene and amino-propyltrimethoxysilane is classified in group [C09J 123/06](#).
- However, adhesives containing combinations of organic non-macromolecular compounds having at least one polymerisable carbon-to-carbon unsaturated bond with prepolymers or polymers other than unsaturated polymers of groups [C09J 159/00](#) - [C09J 187/00](#) are classified according to the unsaturated non-macromolecular component in group [C09J 4/00](#).
- Example: an adhesive containing polyethene and styrene monomer is classified in group [C09J 4/06](#).
- Aspects relating to the physical nature of the adhesives or to the effects produced, as defined in group [C09J 9/00](#), if clearly and explicitly stated, are also classified in this subclass. ~~Adhesives characterised by other features, e.g. additives, are classified in group C09J 11/00, unless the macromolecular constituent is specified.~~

- *Adhesives characterised by other features, e.g. additives, are classified in group C09J 11/00, unless the macromolecular constituent is specified.*

~~3.4.~~ In this subclass, adhesives comprising two or more macromolecular constituents are classified according to the macromolecular constituent or constituents present in the highest proportion, i.e. the constituent on which the adhesive is based. If the adhesive is based on two or more constituents, present in equal proportions, the adhesive is classified according to each of these constituents.

- Examples: An adhesive containing 80 parts of polyethene and 20 parts of polyvinylchloride is classified in group C09J 123/06; *An a n* adhesive containing 40 parts of polyethene and 40 parts of polyvinylchloride is classified in groups C09J 123/06 and C09J 127/06.

~~4.5.~~ {An adhesive composition containing polyethylene and amino-propyltrimethoxysilane is classified in groups C09J 123/06 and C08K 5/544}

~~5.~~ Documents classified up until 09-2003: Classification is given in the form of C-Sets. The polymer in majority is given a C09J 101/00 – C09J 201/10 symbol, and the minor components are characterised by Indexing Codes taken from the list below. The Indexing Codes are linked. The polymer in majority is always first in the C-set.

List of C08L codes: C08L 23/00, C08L 23/26, C08L 25/00, C08L 27/00, C08L 27/04, C08L 27/12, C08L 29/00, C08L 31/00, C08L 33/00, C08L 35/00, C08L 37/00, C08L 51/00, C08L 53/00, C08L 55/02, C08L 61/04, C08L 61/20, C08L 63/00, C08L 67/00, C08L 67/02, C08L 67/025, C08L 67/03, C08L 67/04, C08L 67/06, C08L 67/07, C08L 69/00, C08L 69/005, C08L 71/00, C08L 75/04, C08L 77/00, C08L 77/08, C08L 77/12, C08L 79/08, C08L 79/085, C08L 81/00, C08L 83/00, C08L 85/00, C08L 91/06, C08L 95/00 or C08L 2666/00 – C08L 2666/86. An additive is classified in the last appropriate place in the list as selected for each C09J group. Examples:

- a. An adhesive composition based on a polyamide and a graft polymer is classified in (C09J 177/00, C08L 2666/24).
- b. An adhesive composition based on polyvinylchloride and containing CaCO<sub>3</sub> is classified according to note 4 of C08K, i.e. in C08K 3/26 and C09J 127/06. If this adhesive composition contains also a polyamide, then the classification will be (C09J 127/06, C08L 77/00, C08K 3/26).
- c. An adhesive composition based on a polysiloxane (C09J 183/04) and containing a second polysiloxane, a phenol and silica is classified in (C09J 183/04, C08L 83/04, C08L 2666/34, C08L 2666/54

*6. {In this subclass, combination sets [C-Sets] are used. The detailed information about the C-Sets construction and the associated syntax rules are found in the Definitions of C09J }*

~~6.~~ From April 2012, after the notation C09J 4/00, classification concerning the monomer may be added, in the form of C-sets. The notation is selected from C08F 210/00 – C08F 246/00, C08G 77/00 – C08G 77/04 or C08G 77/20 – C08G 77/30.

Ex. 1: An adhesive based on methylmethacrylate monomer is classified in ( C09J 4/00, C08F 220/00 ).

Ex. 2: An adhesive based on a dialkoxysilane monomer compound is classified in ( C09J 4/00, C08G 77/04 ).

*7. {In addition to note (5), C08L 2666/00 indexing codes were used for C-Sets classification of documents before April 2012 (see also C-Sets search rules in C08L, C09D, in C09J definition) }*

~~7.~~ From 01.09.2003 until April 2012: Classification is given in the form of C-Sets. The polymer in majority is given a C08L class, and the minor components are characterised by Indexing Codes taken from C08L or C08K and they are linked or unlinked. The polymer in majority is always first in the C-set. List of indexing codes in the C-Sets: C08L 1/00, C08L 81/00, C08L 83/00, C08L 91/06,



C08L 95/00 or C08L 2666/02 - C08L 2666/08, C08L 2666/14 - C08L 2666/26.

Examples:

- a. An adhesive blend of 60 parts polyvinylchloride (C09J 127/06) and 40 parts polyamide is classified in (C09J 127/06, C08L 2666/20), C08L 77/00.
- b. An adhesive blend of 50 parts polyvinylchloride (C09J 127/06) and 50 parts polyamide (C09J 177/00) is classified in (C09J 127/06, C08L 2666/20), (C09J 177/00, C08L 2666/04), C08L 77/00 and C08L 27/06.
- c. An adhesive composition based on polyvinylchloride and containing CaCO<sub>3</sub> is classified according to [N: Note 4 of C08K, i.e. in C08K 3/26, C09J 127/06. If this composition contains also a polyamide, then the classification will be (C09J 127/06, C08L 2666/20) and C08K 3/26.
- d. A composition based on a first polysiloxane (C09J 183/04) and containing a second polysiloxane, a phenol and silica is classified in (C09J 183/04, C08L 83/00, C08K 5/13, C08K 3/36) and C08L 2205/02.

8. From April 2012 onwards, after the notation of groups C09J 101/00 - C09J 201/00, notations concerning the other constituents of the adhesive composition may be added, in the form of C-sets. The further constituent is added with an indexing code. The indexing codes are chosen from C08L 1/00 - C08L 2555/86 or C08K and they may be linked or unlinked: - C08L 1/00 - C08L 101/16 are linked. - C08L 2201/00 - C08L 2555/86 are unlinked. The polymer in majority is always first in the C-set.

Examples:

- a. An adhesive composition containing polyethylene and amino-propyltrimethoxysilane is classified in groups C09J 123/06 and C08K 5/544 (unlinked).
- b. An adhesive containing 80 parts of polyethene and 20 parts of polyvinylchloride is classified in group (C09J 123/06, C08L 27/06).
- c. An adhesive containing 40 parts of polyethene and 40 parts of polyvinylchloride is classified in groups (C09J 123/06, C08L 27/06) and (C09J 127/06, C08L 23/06).
- d. An adhesive containing 90% of polysiloxane (C09J 183/04) further containing of polyester (C08L 67/00) and an alcohol is classified in (C09J 183/04, C08L 67/00, C08K 5/05).

#### 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:

C09J 4/02	covered by	<a href="#">C09J 4/00</a>
C09J 4/04	covered by	<a href="#">C09J 4/00</a>
C09J 161/08 - C09J 161/10	covered by	<a href="#">C09J 161/06</a>
C09J 163/02	covered by	<a href="#">C09J 163/00</a>
C09J 183/05	covered by	<a href="#">C09J 183/04</a>
C09J 183/07	covered by	<a href="#">C09J 183/04</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.

#### Project: MP0449 (C09J)

M C09J 4/00

**Adhesives based on organic non-macromolecular compounds having at least one polymerisable carbon-to-carbon unsaturated bond {; adhesives, based on monomers of macromolecular compounds of groups [C09J 183/00](#) - [C09J 183/16](#)}**

#### 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 [C09J](#)}*



M	C09J 4/06	<ul style="list-style-type: none"> <li>{Organic non-macromolecular compounds having at least one polymerisable carbon-to-carbon unsaturated bond} in combination with a macromolecular compound other than an unsaturated polymer of groups <a href="#">C09J 159/00</a> - <a href="#">C09J 187/00</a></li> </ul> <p><u>NOTE</u>  <i>{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 <a href="#">C09J</a>}</i></p>
M	C09J 5/00	<p>Adhesive processes in general; Adhesive processes not provided for elsewhere, e.g. relating to primers <del>(devices for applying glue to surfaces to be joined B05, B27G 11/00)</del></p>
M	C09J 101/00	<p>Adhesives based on cellulose, modified cellulose, or cellulose derivatives</p> <p><u>NOTE</u>  <i>{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 <a href="#">C09J</a>}</i></p>
M	C09J 103/00	<p>Adhesives based on starch, amylose or amylopectin or on their derivatives or degradation products</p> <p><u>NOTE</u>  <i>{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 <a href="#">C09J</a>}</i></p>
M	C09J 105/00	<p>Adhesives based on polysaccharides or on their derivatives, not provided for in groups <a href="#">C09J 101/00</a> or <a href="#">C09J 103/00</a></p> <p><u>NOTE</u>  <i>{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 <a href="#">C09J</a>}</i></p>
M	C09J 107/00	<p>Adhesives based on natural rubber</p> <p><u>NOTE</u>  <i>{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 <a href="#">C09J</a>}</i></p>
M	C09J 109/00	<p>Adhesives based on homopolymers or copolymers of conjugated diene hydrocarbons</p> <p><u>NOTE</u>  <i>{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 <a href="#">C09J</a>}</i></p>
M	C09J 111/00	<p>Adhesives based on homopolymers or copolymers of chloroprene</p> <p><u>NOTE</u>  <i>{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 <a href="#">C09J</a>}</i></p>

M	C09J 113/00	<b>Adhesives based on rubbers containing carboxyl groups</b>  <i><u>NOTE</u></i> <i>{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 <u>C09J</u>}</i>
M	C09J 115/00	<b>Adhesives based on rubber derivatives (<a href="#">C09J 111/00</a>, <a href="#">C09J 113/00</a> take precedence)</b>  <i><u>NOTE</u></i> <i>{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 <u>C09J</u>}</i>
M	C09J 117/00	<b>Adhesives based on reclaimed rubber</b>  <i><u>NOTE</u></i> <i>{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 <u>C09J</u>}</i>
M	C09J 119/00	<b>Adhesives based on rubbers, not provided for in groups <a href="#">C09J 107/00</a> - <a href="#">C09J 117/00</a></b>  <i><u>NOTE</u></i> <i>{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 <u>C09J</u>}</i>
M	C09J 121/00	<b>Adhesives based on unspecified rubbers</b>  <i><u>NOTE</u></i> <i>{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 <u>C09J</u>}</i>
M	C09J 123/00	<b>Adhesives based on homopolymers or copolymers of unsaturated aliphatic hydrocarbons having only one carbon-to-carbon double bond; Adhesives based on derivatives of such polymers</b>  <i><u>NOTE</u></i> <i>{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 <u>C09J</u>}</i>
M	C09J 125/00	<b>Adhesives based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by an aromatic carbocyclic ring; Adhesives based on derivatives of such polymers</b>  <i><u>NOTE</u></i> <i>{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 <u>C09J</u>}</i>

- M C09J 127/00** Adhesives based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a halogen; Adhesives based on derivatives of such polymers
- 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 [C09J](#)}*
- M C09J 129/00** Adhesives based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by an alcohol, ether, aldehydo, ketonic, acetal, or ketal radical; Adhesives based on hydrolysed polymers of esters of unsaturated alcohols with saturated carboxylic acids; Adhesives based on derivatives of such polymers
- 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 [C09J](#)}*
- M C09J 131/00** Adhesives based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by an acyloxy radical of a saturated carboxylic acid, of carbonic acid, or of a haloformic acid (based on hydrolysed polymers [C09J 129/00](#)); Adhesives based on derivatives of such polymers
- 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 [C09J](#)}*
- M C09J 133/00** Adhesives based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by only one carboxyl radical, or of salts, anhydrides, esters, amides, imides, or nitriles thereof; Adhesives based on derivatives of such polymers
- 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 [C09J](#)}*
- M C09J 135/00** Adhesives based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a carboxyl radical, and containing at least another carboxyl radical in the molecule, or of salts, anhydrides, esters, amides, imides or nitriles thereof; Adhesives based on derivatives of such polymers
- 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 [C09J](#)}*

- M C09J 137/00** Adhesives based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a heterocyclic ring containing oxygen (based on polymers of cyclic esters of polyfunctional acids [C09J 131/00](#); based on polymers of cyclic anhydrides of unsaturated acids [C09J 135/00](#)); Adhesives based on derivatives of such polymers
- 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 [C09J](#)}*
- M C09J 139/00** Adhesives based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a single or double bond to nitrogen or by a heterocyclic ring containing nitrogen; Adhesives based on derivatives of such polymers
- 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 [C09J](#)}*
- M C09J 141/00** Adhesives based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and at least one being terminated by a bond to sulfur or by a heterocyclic ring containing sulfur; Adhesives based on derivatives of such polymers
- 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 [C09J](#)}*
- M C09J 143/00** Adhesives based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, each having only one carbon-to-carbon double bond, and containing boron, silicon, phosphorus, selenium, tellurium, or a metal; Adhesives based on derivatives of such polymers
- 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 [C09J](#)}*
- M C09J 145/00** Adhesives based on homopolymers or copolymers of compounds having no unsaturated aliphatic radicals in a side chain, and having one or more carbon-to-carbon double bonds in a carbocyclic or in a heterocyclic system; Adhesives based on derivatives of such polymers (based on polymers of cyclic esters of polyfunctional acids [C09J 131/00](#); based on polymers of cyclic anhydrides or imides [C09J 135/00](#))
- 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 [C09J](#)}*

- M C09J 147/00** Adhesives based on homopolymers or copolymers of compounds having one or more unsaturated aliphatic radicals, at least one having two or more carbon-to-carbon double bonds; Adhesives based on derivatives of such polymers ([C09J 145/00](#) takes precedence; based on conjugated diene rubbers [C09J 109/00](#) - [C09J 121/00](#))
- 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 [C09J](#)}
- M C09J 149/00** Adhesives based on homopolymers or copolymers of compounds having one or more carbon-to-carbon triple bonds; Adhesives based on derivatives of such polymers
- 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 [C09J](#)}
- M C09J 151/00** Adhesives based on graft polymers in which the grafted component is obtained by reactions only involving carbon-to-carbon unsaturated bonds (based on ABS polymers [C09J 155/02](#)); Adhesives based on derivatives of such polymers
- 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 [C09J](#)}
- M C09J 153/00** Adhesives based on block copolymers containing at least one sequence of a polymer obtained by reactions only involving carbon-to-carbon unsaturated bonds; Adhesives based on derivatives of such polymers
- 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 [C09J](#)}
- M C09J 155/00** Adhesives based on homopolymers or copolymers, obtained by polymerisation reactions only involving carbon-to-carbon unsaturated bonds, not provided for in groups [C09J 123/00](#) - [C09J 153/00](#)
- 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 [C09J](#)}
- M C09J 157/00** Adhesives based on unspecified polymers obtained by reactions only involving carbon-to-carbon unsaturated bonds
- 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 [C09J](#)}

M	C09J 159/00	<b>Adhesives based on polyacetals; Adhesives based on derivatives of polyacetals</b>  <i><u>NOTE</u></i> <i>{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 <u>C09J</u>}</i>
M	C09J 161/00	<b>Adhesives based on condensation polymers of aldehydes or ketones (with polyalcohols <a href="#">C09J 159/00</a>; with polynitriles <a href="#">C09J 177/00</a>); Adhesives based on derivatives of such polymers</b>  <i><u>NOTE</u></i> <i>{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 <u>C09J</u>}</i>
M	C09J 163/00	<b>Adhesives based on epoxy resins; Adhesives based on derivatives of epoxy resins</b>  <i><u>NOTE</u></i> <i>{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 <u>C09J</u>}</i>
M	C09J 165/00	<b>Adhesives based on macromolecular compounds obtained by reactions forming a carbon-to-carbon link in the main chain (<a href="#">C09J 107/00</a> - <a href="#">C09J 157/00</a>, <a href="#">C09J 161/00</a> take precedence); Adhesives based on derivatives of such polymers</b>  <i><u>NOTE</u></i> <i>{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 <u>C09J</u>}</i>
M	C09J 167/00	<b>Adhesives based on polyesters obtained by reactions forming a carboxylic ester link in the main chain (based on polyester-amides <a href="#">C09J 177/12</a>; based on polyester-imides <a href="#">C09J 179/08</a>); Adhesives based on derivatives of such polymers</b>  <i><u>NOTE</u></i> <i>{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 <u>C09J</u>}</i>
M	C09J 169/00	<b>Adhesives based on polycarbonates; Adhesives based on derivatives of polycarbonates</b>  <i><u>NOTE</u></i> <i>{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 <u>C09J</u>}</i>



- M C09J 171/00** Adhesives based on polyethers obtained by reactions forming an ether link in the main chain (based on polyacetals [C09J 159/00](#); based on epoxy resins [C09J 163/00](#); based on polythioether-ethers [C09J 181/02](#); based on polyethersulfones [C09J 181/06](#)); Adhesives based on derivatives of such polymers
- 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 [C09J](#)}
- M C09J 173/00** Adhesives based on macromolecular compounds obtained by reactions forming a linkage containing oxygen or oxygen and carbon in the main chain, not provided for in groups [C09J 159/00](#) - [C09J 171/00](#); Adhesives based on derivatives of such polymers
- 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 [C09J](#)}
- M C09J 175/00** Adhesives based on polyureas or polyurethanes; Adhesives based on derivatives of such polymers
- 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 [C09J](#)}
- M C09J 177/00** Adhesives based on polyamides obtained by reactions forming a carboxylic amide link in the main chain (based on polyhydrazides [C09J 179/06](#); based on polyamide-imides [C09J 179/08](#)); Adhesives based on derivatives of such polymers
- 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 [C09J](#)}
- M C09J 179/00** Adhesives based on macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing nitrogen, with or without oxygen, or carbon only, not provided for in groups [C09J 161/00](#) - [C09J 177/00](#)
- 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 [C09J](#)}
- M C09J 181/00** Adhesives based on macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing sulfur, with or without nitrogen, oxygen, or carbon only; Adhesives based on polysulfones; Adhesives based on derivatives of such polymers
- 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 [C09J](#)}

- M C09J 183/00** Adhesives based on macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing silicon, with or without sulfur, nitrogen, oxygen, or carbon only; Adhesives based on derivatives of such polymers
- NOTE  
In this main group, from 01.09.2010 onwards, new documents are classified according to the following system. The adhesive is identified with the previous existing ECLA(+B) notation, e.g. C09J 183/04 +**B4S** (for an adhesive containing two or more siloxanes), while the information as to which different polymers are present in the adhesive is identified with additional indexing codes, e.g. C08G 77/12 and C08G 77/20
- {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 C09J}*
- M C09J 185/00** Adhesives based on macromolecular compounds obtained by reactions forming in the main chain of the macromolecule a linkage containing atoms other than silicon, sulfur, nitrogen, oxygen, and carbon; Adhesives based on derivatives of such polymers
- 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 C09J}*
- M C09J 187/00** Adhesives based on unspecified macromolecular compounds, obtained otherwise than by polymerisation reactions only involving unsaturated carbon-to-carbon bonds
- 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 C09J}*
- M C09J 189/00** Adhesives based on proteins; Adhesives based on derivatives thereof (~~foodstuff preparations A23J 3/00~~)
- 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 C09J}*
- M C09J 191/00** Adhesives based on oils, fats or waxes; Adhesives based on derivatives thereof (~~polishing compositions, ski waxes C09G; soaps, detergent compositions C11D~~)
- 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 C09J}*

**M C09J 193/00** Adhesives based on natural resins; Adhesives based on derivatives thereof (~~polishing compositions C09G~~)

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 C09J}*

**M C09J 195/00** Adhesives based on bituminous materials, e.g. asphalt, tar, pitch

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 C09J}*

**M C09J 197/00** Adhesives based on lignin-containing materials (**based on polysaccharides C09J 101/00 - C09J 105/00**)

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 C09J}*

**M C09J 199/00** Adhesives based on natural macromolecular compounds or on derivatives thereof, not provided for in groups **C09J 101/00 - C09J 107/00 or C09J 189/00 - C09J 197/00**

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 C09J}*

**M C09J 201/00** Adhesives based on unspecified macromolecular compounds

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 C09J}*

## Project: MP0381 (C09K)

**M C09K** MATERIALS FOR MISCELLANEOUS APPLICATIONS, NOT PROVIDED FOR ELSEWHERE

NOTES

1. This subclass covers also the use of specified materials in general or their use for the applications not specially provided for elsewhere.
2. In this subclass, the following term is used with the meaning indicated:
  - "materials" includes compositions.

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:

**C09K 11/78-C09K 11/86** covered by **C09K 11/77 - C09K 11/7798, C09K 11/87, C09K 11/88, C09K 11/89**

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.

**Project: MP0381 (C11D)****M C11D**

**DETERGENT COMPOSITIONS** (preparations specially adapted for washing the hair [A61Q 5/02](#), [A61K 8/00](#); methods or apparatus for disinfection or sterilisation [A61L](#); special washing compositions for cleaning semi-permeable membranes [B01D 65/06](#)); **USE OF SINGLE SUBSTANCES AS DETERGENTS; SOAP OR SOAP-MAKING; RESIN SOAPS; RECOVERY OF GLYCEROL**

NOTE

Documents classified in groups [C11D 1/37](#), [C11D 1/645](#) - [C11D 1/655](#), [C11D 1/825](#) - [C11D 1/86](#), [C11D 1/94](#) - [C11D 1/945](#) and [C11D 10/00](#) - [C11D 10/047](#), are indexed using codes chosen from [C11D 1/00](#) - [C11D 1/92](#) to provide information on the individual ingredients on the compositions

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="#">C11D 1/68</a>	covered by	<a href="#">C11D 3/2003</a>
<a href="#">C11D 1/70</a>	covered by	<a href="#">C11D 3/2003</a>
<a href="#">C11D 3/44</a>	covered by	<a href="#">C11D 3/43</a>
<a href="#">C11D 3/46</a>	covered by	<a href="#">C11D 3/2079</a> , <a href="#">C11D 9/48</a>
<a href="#">C11D 3/60</a>	covered by	<a href="#">C11D 3/00</a>
<a href="#">C11D 7/18</a>	covered by	<a href="#">C11D 3/39</a>
<a href="#">C11D 7/38</a>	covered by	<a href="#">C11D 3/39</a>
<a href="#">C11D 7/42</a>	covered by	<a href="#">C11D 3/386</a>
<a href="#">C11D 7/52</a>	covered by	<a href="#">C11D 7/50</a>
<a href="#">C11D 7/54</a>	covered by	<a href="#">C11D 3/395</a>
<a href="#">C11D 7/56</a>	covered by	<a href="#">C11D 3/395</a>
<a href="#">C11D 7/60</a>	covered by	<a href="#">C11D 7/00</a>
<a href="#">C11D 9/20</a>	covered by partly covered by	<a href="#">C11D 9/444</a>
<a href="#">C11D 9/50</a>	covered by	<a href="#">C11D 3/48</a>
<a href="#">C11D 9/60</a>	covered by	<a href="#">C11D 9/00</a>
<a href="#">C11D 10/02</a>	covered by	<a href="#">C11D 3/00</a>
<a href="#">C11D 10/06</a>	covered by	<a href="#">C11D 9/00</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.

**Project: RP0144 (C12M)****U C12M 23/00**

{**Constructional details, e.g. recesses, hinges (flow directing inserts in [C12M 27/18](#)-[C12M 27/24](#); apparatus for chemical or physical processes in general [B01J](#), chemical or physical laboratory apparatus in general [B01L](#))**}

C12M 23/52

• {Mobile; Means for transporting the apparatus (transportable laboratories ~~[B01L 99/00](#)~~ [B01L 1/52](#))}

**C12M 39/00**

{**Means for cleaning the apparatus or avoiding unwanted deposits of microorganisms (apparatus for cleaning laboratory receptacles or instruments ~~[B01L 99/00](#)~~ [B01L 13/02](#); cleaning in general [B08B](#))**}

## Project: MP0381 (C12N)

## M C12N

**MICROORGANISMS OR ENZYMES; COMPOSITIONS THEREOF** (biocides, pest repellants or attractants, or plant growth regulators, containing microorganisms, viruses, microbial fungi, enzymes, fermentates or substances produced by or extracted from microorganisms or animal material [A01N 63/00](#); food compositions [A21](#), [A23](#); medicinal preparations [A61K](#); chemical aspects of, or use of materials for, bandages, dressings, absorbent pads or surgical articles [A61L](#); fertilisers [C05](#)); **PROPAGATING, PRESERVING OR MAINTAINING MICROORGANISMS** (preservation of living parts of humans or animals [A01N 1/02](#)); **MUTATION OR GENETIC ENGINEERING; CULTURE MEDIA** (microbiological testing media [C12Q](#))

## NOTES

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.
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.

## 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	<del><a href="#">C12N 5/00</a></del> <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> and subgroups
<del><a href="#">C12N 5/18</a></del> - <del><a href="#">C12N 5/28</a></del>	covered by	<a href="#">C12N 5/16</a> and subgroups
<del><a href="#">C12N 5/18</a></del>	covered by	<del><a href="#">C12N 5/16</a></del>
<a href="#">C12N 5/20</a>	covered by	<a href="#">C12N 5/163</a>
<a href="#">C12N 5/22</a>	covered by	<a href="#">C12N 5/16</a>
<a href="#">C12N 5/24</a>	covered by	<a href="#">C12N 5/163</a>
<a href="#">C12N 5/26</a>	covered by	<a href="#">C12N 5/166</a>
<a href="#">C12N 5/28</a>	covered by	<a href="#">C12N 5/166</a>
<a href="#">C12N 15/53</a>	covered by	<a href="#">C12N 9/0004</a>
<a href="#">C12N 7/01</a>	covered by	<a href="#">C12N 7/00</a>
<a href="#">C12N 9/02</a> - <a href="#">C12N 9/08</a>	covered by	<a href="#">C12N 9/0004</a>
<a href="#">C12N 9/26</a>	covered by	<a href="#">C12N 9/2408</a>
<a href="#">C12N 9/28</a> - <a href="#">C12N 9/30</a>	covered by	<a href="#">C12N 9/2414</a> - <a href="#">C12N 9/242</a>
<a href="#">C12N 9/32</a>	covered by	<a href="#">C12N 9/2422</a>
<a href="#">C12N 9/34</a>	covered by	<a href="#">C12N 9/2428</a>
<a href="#">C12N 9/36</a>	covered by	<a href="#">C12N 9/2462</a>
<a href="#">C12N 9/38</a>	covered by	<a href="#">C12N 9/2468</a>
<a href="#">C12N 9/40</a>	covered by	<a href="#">C12N 9/2465</a>
<a href="#">C12N 9/42</a>	covered by	<a href="#">C12N 9/2434</a>
<a href="#">C12N 9/44</a>	covered by	<a href="#">C12N 9/2451</a>
<a href="#">C12N 9/46</a>	covered by	<a href="#">C12N 9/2454</a>
<a href="#">C12N 9/56</a>	covered by	<a href="#">C12N 9/54</a>
<a href="#">C12N 9/66</a>	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="#">C12N9/02</a> <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.

## Project: RP0345 (C12Q)

<b>M</b>	<b>C12Q 2500/00</b>	<b>Analytical methods involving nucleic acids <del>(not used)</del></b>
<b>M</b>	<b>C12Q 2520/00</b>	<b>Reactions involving nucleic acids <del>(not used)</del></b>
<b>M</b>	<b>C12Q 2521/00</b>	<b>Reaction characterised by the enzymatic activity <del>(not used)</del></b>
M	C12Q 2521/10	• Nucleotidyl transferring <del>(not used)</del>
M	C12Q 2521/30	• Phosphoric diester hydrolysing, i.e. nuclease <del>(Not used)</del>
M	C12Q 2521/50	• Other enzymatic activities <del>(Not used)</del>
M	C12Q 2521/525	• • Phosphatase <del>(Not used with code C12Q 2565/301)</del>
<b>M</b>	<b>C12Q 2522/00</b>	<b>Reaction characterised by the use of non-enzymatic proteins <del>(not used)</del></b>
M	C12Q 2522/10	• Nucleic acid binding proteins <del>(not used)</del>
<b>M</b>	<b>C12Q 2523/00</b>	<b>Reactions characterised by treatment of reaction samples <del>(not used)</del></b>
M	C12Q 2523/10	• Characterised by chemical treatment <del>(Not used)</del>
M	C12Q 2523/30	• Characterised by physical treatment <del>(Not used)</del>
<b>U</b>	<b>C12Q 2525/00</b>	<b>Reactions involving modified oligonucleotides, nucleic acids, or nucleotides</b>
U	C12Q 2525/10	• Modifications characterised by
M	C12Q 2525/143	• • incorporating a promoter sequence <del>(Not used with code C12Q 2531/143)</del>
M	C12Q 2525/185	• • incorporating <b>base(s)</b> <b>bases</b> where the precise position of the <b>base(s)</b> <b>bases</b> in the nucleic acid string is important <del>(Not to be used for 3'-end base)</del>
M	C12Q 2525/186	• • incorporating a non-extendable or blocking moiety <del>(not used with C12Q 2535/101)</del>
<b>T</b>	<b>C12Q 2527/00</b>	<b>Reactions demanding special reaction conditions <del>(not used)</del></b>
D	C12Q 2527/10	• Reaction conditions characterised by (metal/ion C12Q 2563/137)(not used) <administratively transferred to <a href="#">C12Q 2527/00</a> ADD>
M	C12Q 2527/101	• <del>▮</del> Temperature
M	C12Q 2527/107	• <del>▮</del> Temperature of melting, i.e. T <sub>m</sub>
M	C12Q 2527/109	• <del>▮</del> Pressure
M	C12Q 2527/113	• <del>▮</del> Time
M	C12Q 2527/119	• <del>▮</del> pH
M	C12Q 2527/125	• <del>▮</del> Specific component of sample, medium or buffer <del>(for metal/ion use C12Q 2563/137)</del>

- M C12Q 2527/127 • the enzyme inhibitor or activator used
- M C12Q 2527/137 • Concentration of a component of medium
- M C12Q 2527/143 • Concentration of primer/ *or* probe
- M C12Q 2527/146 • Concentration of target/ *or* template
- M C12Q 2527/149 • Concentration of an enzyme
- M C12Q 2527/15 • Gradients
- M C12Q 2527/153 • Viscosity
- M C12Q 2527/156 • Permeability

**U C12Q 2531/00****Reactions of nucleic acids characterised by**

- M C12Q 2531/10 • the purpose being amplify/increase the copy number of target nucleic acid ~~(Not used)~~

**Project: N/A (C12Q)**

- C12Q 2531/107 • ~~Asymmetric PCR~~ *Probe or oligonucleotide ligation*

**Project: RP0345 (C12Q)****U C12Q 2533/00****Reactions characterised by the enzymatic reaction principle used**

- M C12Q 2533/10 • the purpose being to increase the length of an oligonucleotide strand ~~(ligase detection reaction, LDR C12Q 2561/125)~~
- M C12Q 2533/101 • • Primer extension ~~(see also codes C12Q 2535/125, C12Q 2565/537)~~
- M C12Q 2533/107 • • Probe/ *or* oligonucleotide ligation ~~(Not used with code C12Q 2531/137, C12Q 2561/125)~~

**T C12Q 2535/00****Reactions characterised by the assay type for determining the identity of a nucleotide base *or a sequence of oligonucleotides***

- D C12Q 2535/10 • the purpose being to determine the identity or sequence oligonucleotides characterised by ~~(Not used)~~  
<administratively transferred to [C12Q 2535/00](#) ADD>
- M C12Q 2535/101 • Sanger sequencing method, i.e. oligonucleotide sequencing using primer elongation and dideoxynucleotides as chain terminators
- M C12Q 2535/107 • Maxam and Gilbert method, i.e. sequential release and detection of nucleotides
- M C12Q 2535/113 • Cycle sequencing
- M C12Q 2535/119 • Double strand sequencing
- M C12Q 2535/122 • Massive parallel sequencing
- M C12Q 2535/125 • Allele specific primer extension
- M C12Q 2535/131 • Allele specific probes
- M C12Q 2535/137 • Amplification Refractory Mutation System [ARMS]
- M C12Q 2535/138 • Amplified fragment length polymorphism [AFLP]
- M C12Q 2535/139 • Random amplification polymorphism detection [RAPD] ~~(not to be used with C12Q 2525/179)~~

**U C12Q 2537/00****Reactions characterised by the reaction format or use of a specific feature**

- U C12Q 2537/10 • the purpose or use of
- M C12Q 2537/137 • a displacement step ~~(Not used with code C12Q 2531/119)~~
- M C12Q 2537/149 • Sequential reactions ~~(Not used with reactions implicitly known to be sequential, e.g. amplification reactions)~~
- M C12Q 2537/155 • Cyclic reactions ~~(Not used with codes C12Q 2531/101 - C12Q 2531/149)~~

M	C12Q 2537/161	• • A competitive reaction step <del>(Not used with code C12Q 2545/107)</del>
M	C12Q 2537/163	• • blocking probe <del>(not used in combination with C12Q 2527/127 or C12Q 2525/186)</del>
<b>U</b>	<b>C12Q 2541/00</b>	<b>Reactions characterised by directed evolution</b>
M	C12Q 2541/10	• the purpose being the selection/ <del>or</del> design of target specific nucleic acid binding sequences <del>(not used)</del>
<b>U</b>	<b>C12Q 2545/00</b>	<b>Reactions characterised by their quantitative nature</b>
M	C12Q 2545/10	• the purpose being quantitative analysis <del>(Not used)</del>
M	C12Q 2545/114	• • involving a quantitation step <del>(not to be used with C12Q 2545/101, C12Q 2545/107, C12Q 2545/113)</del>
<b>U</b>	<b>C12Q 2547/00</b>	<b>Reactions characterised by the features used to prevent contamination</b>
M	C12Q 2547/10	• the purpose being preventing contamination <del>(Not used)</del>
<b>U</b>	<b>C12Q 2549/00</b>	<b>Reactions characterised by the features used to influence the efficiency or specificity</b>
M	C12Q 2549/10	• the purpose being that of reducing false positive/ <del>or false</del> negative signals <del>(Not used)</del>
M	C12Q 2549/126	• • using oligonucleotides as clamps <del>(not to be used with C12Q 2525/107)</del>
<b>M</b>	<b>C12Q 2560/00</b>	<b>Nucleic acid detection <del>(not used)</del></b>
<b>T</b>	<b>C12Q 2561/00</b>	<b>Nucleic acid detection characterised by assay method <del>(not used)</del></b>
D	C12Q 2561/10	• Characterised by assay method <del>(Not used)</del> <administratively transferred to <a href="#">C12Q 2561/00</a> ADD>
M	C12Q 2561/101	• <del>▪</del> Taqman
M	C12Q 2561/107	• <del>▪</del> Enzyme complementation
M	C12Q 2561/108	• <del>▪</del> Hybridisation protection assay [HPA]
M	C12Q 2561/109	• <del>▪</del> Invader technology
M	C12Q 2561/113	• <del>▪</del> Real time assay
M	C12Q 2561/119	• <del>▪</del> Fluorescence polarisation
M	C12Q 2561/12	• <del>▪</del> Fluorescence lifetime measurement
M	C12Q 2561/125	• <del>▪</del> Ligase Detection Reaction [LDR]
M	C12Q 2561/127	• <del>▪</del> Protein truncation assay
<b>M</b>	<b>C12Q 2563/00</b>	<b>Nucleic acid detection <del>characterised</del> <del>characterized</del> by the use of <i>physical, structural and functional properties</i> <del>(not used)</del></b>
M	C12Q 2563/116	• electrical properties of nucleic acids, e.g. impedance, conductivity or resistance <b>NOTE</b> <del>Not to be used with C12Q 2563/113</del>
M	C12Q 2563/119	• the label being proteinic <b>NOTE</b> <del>Not to be used with code C12Q 2565/531</del>
M	C12Q 2563/125	• the label being enzymatic, i.e. proteins, and non proteins, such as nucleic acid with enzymatic activity <b>NOTE</b> <del>This code is restricted in use to ENZYMES as a LABEL</del>

<b>U C12Q 2565/00</b>	<b>Nucleic acid analysis characterised by mode or means of detection</b>
M C12Q 2565/10	• Detection mode being characterised by <i>the assay principle</i> <del>(Not used)</del>
M C12Q 2565/20	• Detection means characterised by being a gene reporter based analysis <del>(Not used)</del>
M C12Q 2565/30	• Detection characterised by liberation/ <i>or</i> release of label <del>(Not used)</del>
M C12Q 2565/40	• Detection characterised by signal amplification of label <del>(not used)</del>
U C12Q 2565/50	• Detection characterised by immobilisation to a surface
M C12Q 2565/501	• • being <i>on</i> /an array of oligonucleotides
M C12Q 2565/543	• • characterised by the use of two or more capture oligonucleotide primers in concert, e.g. bridge amplification <del>(Not used with code C12Q 2537/149)</del>
M C12Q 2565/60	• Detection means characterised by use of a special device <del>(Not used)</del>
M C12Q 2565/627	• • being a mass spectrometer <del>(not to be used with C12Q 2563/167)</del>
<b>M C12Q 2600/00</b>	<b>Oligonucleotides characterized by their use <del>(not used, see subgroups)</del></b>

**Project: MP0381 (C12R)****M C12R PROCESSES USING MICROORGANISMS**NOTE

The basis for the bacteria terminology is "Bergey's Manual of Determinative Bacteriology", Eighth Edition, 1975.

WARNINGS

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

C12R 1/92-C12R 1/94 covered by *C12R 1/91, C12N 2710/00 - C12N 2795/00*

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.

**Project: MP0381 (C22B)****M C22B PRODUCTION AND REFINING OF METALS (electrolytic C25); PRETREATMENT OF RAW MATERIALS**NOTE

In this subclass, groups for obtaining metals include obtaining the metals by non-metallurgical processes, and obtaining metal compounds by metallurgical processes, {as far as specifically indicated in the relevant groups} . Thus, for example, group *C22B 11/00* covers the production of silver by reduction of ammoniacal silver oxide in solution, and group *C22B 17/00* includes the production of cadmium oxide by a metallurgical process. Furthermore, although compounds of arsenic and antimony are classified in *C01G*, production of the elements themselves is included in *C22B*, as well as the production of their compounds by metallurgical processes.

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:

*C22B 3/26 - C22B 3/40* covered by *C22B 3/0005*

~~C22B 9/187~~ covered by

*C22B 9/187 - C22B 9/193* covered by *C22B 9/18*

*C22B 9/21* covered by *C22B 9/20*

*C22B 15/02-C22B 15/14* covered by *C22B 15/0032*

*C22B 15/04* covered by *C22B 15/0036*

<a href="#">C22B 15/06</a>	covered by	<a href="#">C22B 15/0041</a> , <a href="#">C22B 15/0043</a>
<a href="#">C22B 15/14</a>	covered by	<a href="#">C22B 15/006</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.

## Project: MP0381 (C22C)

### M C22C

#### ALLOYS (flints [C06C 15/00](#); treatment of alloys [C21D](#), [C22F](#))

##### NOTES

1. In this subclass, the following terms or expressions are used with the meanings indicated:

- "alloys" includes also:
  - a. metallic composite materials containing a substantial proportion of fibres or other somewhat larger particles;
  - b. ceramic compositions containing free metal bonded to carbides, diamond, oxides, borides, nitrides or silicides, e.g. cermets, or other metal compounds, e.g. oxynitrides or sulfides, other than as macroscopic reinforcing agents;
- "based on" requires at least 50% by weight of the specified constituent or of the specified group of constituents.

2. In the absence of an indication to the contrary, in groups [C22C 5/00](#) - [C22C 32/00](#) an alloy is classified in the last appropriate place.

3. In this subclass it is desirable to classify the individual aspects of combinations of processes or materials for powder metallurgy using Combination Sets with symbols chosen from groups [C22C 1/00](#) - [C22C 43/00](#) or from groups [B22F 1/00](#) - [B22F 9/00](#).

4. In this subclass the special database "ALLOYS" is used. This system includes patent documents classified in groups [C22C 1/04](#) and [C22C 5/00](#) - [C22C 49/14](#) and provides information on the composition of the alloys, their uses and characteristics.

##### 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:

[C22C 101/00](#), ~~[C22C 101/22](#)~~ covered by [C04B 35/62227](#)  
[C22C 101/20](#)

<a href="#">C22C 101/02</a>	covered by	<a href="#">C04B 35/62231</a>
<a href="#">C22C 101/04</a>	covered by	<a href="#">C04B 35/62236</a>
<a href="#">C22C 101/06</a>	covered by	<a href="#">C04B 35/62245</a>
<a href="#">C22C 101/08</a>	covered by	<a href="#">C04B 35/62272</a>
<a href="#">C22C 101/10</a>	covered by	<a href="#">D01F 9/12</a>
<a href="#">C22C 101/12</a>	covered by	<a href="#">C04B 35/62277</a>
<a href="#">C22C 101/14</a>	covered by	<a href="#">C04B 35/62281</a>
<a href="#">C22C 101/16</a>	covered by	<a href="#">C04B 35/62286</a>
<a href="#">C22C 101/18</a>	covered by	<a href="#">C04B 35/62295</a>
<a href="#">C22C 101/22</a>	covered by	<a href="#">C04B 35/6229</a>
<a href="#">C22C 111/00</a> - <a href="#">C22C 111/02</a>	covered by	<a href="#">C22C 47/00</a> , <a href="#">C22C 49/00</a>
<a href="#">C22C 121/00</a> - <a href="#">C22C 121/02</a>	covered by	<a href="#">C22C 47/02</a> - <a href="#">C22C 47/068</a> , <a href="#">C22C 49/00</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.

## Project: MP0381 (C23C)

M C23C

COATING METALLIC MATERIAL; COATING MATERIAL WITH METALLIC MATERIAL; SURFACE TREATMENT OF METALLIC MATERIAL BY DIFFUSION INTO THE SURFACE, BY CHEMICAL CONVERSION OR SUBSTITUTION; COATING BY VACUUM EVAPORATION, BY SPUTTERING, BY ION IMPLANTATION OR BY CHEMICAL VAPOUR DEPOSITION, IN GENERAL (making metal-coated products by extrusion [B21C 23/22](#); covering with metal by connecting pre-existing layers to articles, see the relevant places, e.g. [B21D 39/00](#), [B23K](#); metallising of glass [C03C](#); metallising mortars, concrete, artificial stone, ceramics or natural stone [C04B 41/00](#); enamelling of, or applying a vitreous layer to, metals [C23D](#); treating metal surfaces or coating of metals by electrolysis or electrophoresis [C25D](#); single-crystal film growth [C30B](#); by metallising textiles [D06M 11/83](#); decorating textiles by locally metallising [D06Q 1/04](#))

NOTE

In this subclass, an operation is considered as pre-treatment or after-treatment when it is specially adapted for, but quite distinct from, the coating process concerned and constitutes an independent operation. If an operation results in the formation of a permanent sub- or upper layer, it is not considered as pre-treatment or after-treatment and is classified as a multi-coating process.

WARNING

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="#">C23C 14/36</a> - <a href="#">C23C 14/44</a>	covered by	<a href="#">C23C 14/34</a> and subgroups, - <a href="#">C23C 14/358</a>
<a href="#">C23C 18/28</a>	covered by	<a href="#">C23C 18/2006</a> -- <a href="#">C23C 18/2093</a>

## Project: MP0381 (C23F)

M C23F

NON-MECHANICAL REMOVAL OF METALLIC MATERIAL FROM SURFACE (working metal by laser beams [B23K 26/00](#); desurfacing by applying flames [B23K 7/00](#); working of metal by electro-erosion [B23H](#); producing decorative effects by removing surface material, e.g. by engraving, by etching, [B44C 1/22](#); electrolytic etching or polishing [C25F](#)); INHIBITING CORROSION OF METALLIC MATERIAL OR INCRUSTATION IN GENERAL; MULTI-STEP PROCESSES FOR SURFACE TREATMENT OF METALLIC MATERIAL INVOLVING AT LEAST ONE PROCESS PROVIDED FOR IN CLASS [C23](#) AND AT LEAST ONE PROCESS COVERED BY SUBCLASS [C21D](#) OR [C22F](#) OR CLASS [C25](#)

NOTES

1. protective layers or coating compositions or methods of applying them; these are classified in the appropriate places, e.g. [B05](#), [B44](#), [C09D](#), [C23C](#).
2. mechanical devices or constructional features of particular articles for inhibiting incrustation; these are classified in the appropriate places, e.g. in pipes or pipe fittings [F16L 58/00](#).
3. articles characterised by being made of materials selected for their properties of resistance to corrosion or incrustation; these are classified in the appropriate places, e.g. turbine blades [F01D 5/28](#).

WARNINGS

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



C23F 1/24 covered by [C09K 13/00](#), [H01L 21/00](#)

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.

## Project: MP0381 (C25B)

M C25B

**ELECTROLYTIC OR ELECTROPHORETIC PROCESSES FOR THE PRODUCTION OF COMPOUNDS OR NON-METALS; APPARATUS THEREFOR** (anodic or cathodic protection [C23F 13/00](#); single-crystal growth [C30B](#))

### NOTES

1. In this subclass, in the absence of an indication to the contrary, classification is made in the last appropriate place.
2. Compounds of particular interest are also classified in the relevant classes, e.g. [C01](#), [C07](#).

### 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:

[C25B 11/06](#) covered by [B01J](#), [C25B 11/0442](#)

[C25B 11/08](#) covered by [B01J](#), [C25B 11/0473](#),  
[G25B 11/0442](#)

[C25B 11/10](#) covered by [C25B 11/0442](#)

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.

## Project: MP0381 (C25D)

M C25D

**PROCESSES FOR THE ELECTROLYTIC OR ELECTROPHORETIC PRODUCTION OF COATINGS; ELECTROFORMING** (decorating textiles by metallising [D06Q 1/04](#); manufacturing printed circuits by metal deposition [H05K 3/18](#)); **APPARATUS THEREFOR**

### 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:

[C25D 2/00](#) covered by [B23K 28/006](#)

[C25D 5/24](#) covered by [C25D 5/34](#)

[C25D 5/26](#) covered by [C25D 5/36](#)

[C25D 5/28](#) covered by [C25D 5/38](#)

[C25D 5/30](#) covered by [C25D 5/42](#), [C25D 5/44](#)

[C25D 5/32](#) covered by [C25D 5/46](#)

[G25D 13/06](#) covered by [G09D 5/44](#)

[G25D 13/08](#) covered by [G09D 5/4476](#)

[G25D 13/10](#) covered by [G09D 5/448](#)

[C25D 19/00](#) covered by [C25D 17/00](#)

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.

**Project: MP0381 (C30B)****M C30B**

**SINGLE-CRYSTAL-GROWTH** (by using ultra-high pressure, e.g. for the formation of diamonds [B01J 3/06](#)); **UNIDIRECTIONAL SOLIDIFICATION OF EUTECTIC MATERIAL OR UNIDIRECTIONAL DEMIXING OF EUTECTOID MATERIAL**; **REFINING BY ZONE-MELTING OF MATERIAL** (zone-refining of metals or alloys [C22B](#)); **PRODUCTION OF A HOMOGENEOUS POLYCRYSTALLINE MATERIAL WITH DEFINED STRUCTURE** (casting of metals, casting of other substances by the same processes or devices [B22D](#); working of plastics [B29](#); modifying the physical structure of metals or alloys [C21D](#), [C22F](#)); **SINGLE CRYSTALS OR HOMOGENEOUS POLYCRYSTALLINE MATERIAL WITH DEFINED STRUCTURE**; **AFTER-TREATMENT OF SINGLE CRYSTALS OR A HOMOGENEOUS POLYCRYSTALLINE MATERIAL WITH DEFINED STRUCTURE** (for producing semiconductor devices or parts thereof [H01L](#)); **APPARATUS THEREFOR**

NOTES

1. In this subclass, the following expressions are used with the meaning indicated:

- "single-crystal" includes also twin crystals and a predominantly single crystal product;
- "homogeneous polycrystalline material" means a material with crystal particles, all of which have the same chemical composition;
- "defined structure" means the structure of a material with grains which are oriented in a preferential way or have larger dimensions than normally obtained.

2. In this subclass:

- the preparation of single crystals or a homogeneous polycrystalline material with defined structure of particular materials or shapes is classified in the group for the process as well as in group [C30B 29/00](#);
- an apparatus specially adapted for a specific process is classified in the appropriate group for the process. Apparatus to be used in more than one kind of process is classified in group [C30B 35/00](#).

3. After the notation of [C30B](#) and separated therefrom by a + sign, notations concerning the particular composition or shape of the material may be added. These notations are selected from [C30B 29/00](#).

Example: A crystal-growth process by zone-melting directly related to  $\text{Al}_2\text{O}_3$  crystal material is classified in [C30B 13/00](#) + [C30B 29/20](#)

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:**

[C30B 29/64](#), [C30B 29/66](#) covered by [C30B 29/60](#)

~~2.~~ **1.** 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.

**Project: MP0381 (D01D)****M D01D****MECHANICAL METHODS OR APPARATUS IN THE MANUFACTURE OF ARTIFICIAL FILAMENTS, THREADS, FIBRES, BRISTLES OR RIBBONS**NOTES

1. Attention is drawn to the note following the title of Class [D01](#).
2. Apparatus specially adapted for the manufacture of carbon filaments are classified in group [D01F 9/12](#)

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:~~

~~D01D 5/10~~ covered by ~~D01D 5/08 and subgroups~~

- ~~2. 1.~~ 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.

**Project: MP0381 (D06N)****M D06N**

**WALL, FLOOR OR LIKE COVERING MATERIALS, e.g. LINOLEUM, OILCLOTH, ARTIFICIAL LEATHER, ROOFING FELT, CONSISTING OF A FIBROUS WEB COATED WITH A LAYER OF MACROMOLECULAR MATERIAL; FLEXIBLE SHEET MATERIAL NOT OTHERWISE PROVIDED FOR (laminates in general [B32B](#); coated webs which retain the character of paper or cardboard [D21](#))**

NOTE

Layered products classified in this subclass are also classified in subclass [B32B](#).

WARNING

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

[D06N 7/02](#) covered by ~~D06M~~ [D06N 7/0002](#), ~~—~~ ~~D06N~~ [D06N 7/0097](#)

[D06N 7/04](#) covered by ~~D06M~~ [D06N 7/0002](#), ~~—~~ ~~D06N~~ [D06N 7/0097](#)

[D06N 7/06](#) covered by ~~D06M~~ [D06N 7/0002](#), ~~—~~ ~~D06N~~ [D06N 7/0097](#)

**Project: MP0381 (D21H)****M D21H**

**PULP COMPOSITIONS; PREPARATION THEREOF NOT COVERED BY SUBCLASSES [D21C](#) OR [D21D](#); IMPREGNATING OR COATING OF PAPER; TREATMENT OF FINISHED PAPER NOT COVERED BY CLASS [B31](#) OR SUBCLASS [D21G](#); PAPER NOT OTHERWISE PROVIDED FOR**

NOTES

1. This subclass covers also pulp compositions for the preparation of fibreboard or other fibrous articles by wet processes.
2. In this subclass, the following terms are used with the meaning indicated:
  - "pulp" means a dispersion, { e.g. an aqueous suspension, } comprising paper-making fibres and optional additives, which is to be processed, and covers the term "stock"; it also means dry paper-making fibres which are to be made into paper by either wet or dry processes;

- "paper" means paper, cardboard or wet-laid non-woven fabrics.
3. In groups [D21H 11/00](#) - [D21H 15/00](#), in the absence of an indication to the contrary, classification is made in the last appropriate place.

#### WARNINGS

1. The following IPC ~~groups are~~ *group is* not in the CPC scheme. The subject matter for ~~these~~ *this* IPC ~~groups~~ *group* is classified in the following CPC ~~groups~~ *group*:  
[D21H 27/12](#) covered by [D21H 27/00](#), [H01B 3/52](#)
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.

### Project: MP0381 (E01D)

**M E01D CONSTRUCTION OF BRIDGES, {ELEVATED ROADWAYS} OR VIADUCTS; ASSEMBLY OF BRIDGES (bridges extending between terminal buildings and aircraft for embarking or disembarking passengers [B64F 1/305](#); {tracks for special kinds of railways [E01B 25/00](#); culverts [E01F 5/005](#)})**

#### 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:  
[E01D 24/00](#) covered by [E01D 22/00](#)
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.

### Project: MP0445 (E02D)

**U E02D 29/00 {Independent} underground or underwater structures (underground tanks [B65D 88/76](#); hydraulic engineering, e.g. sealings or joints, [E02B](#); underground garages [E04H 6/00](#); underground air-raid shelters [E04H 9/12](#); burial vaults [E04H 13/00](#)); Retaining walls**

**U E02D 29/02** • Retaining or protecting walls (piers or quay walls [E02B 3/06](#))

**M E02D 29/0258** • • ~~{not used, see subgroups~~ *{characterised by constructional features}* ~~(E02D 29/0208 – E02D 29/025 take precedence)}~~

### Project: MP0445 (E02F)

**U E02F 3/00 Dredgers; Soil-shifting machines (for special purposes [E02F 5/00](#); other machines or apparatus for mining [E21C](#); tunnelling [E21D](#))**

**U E02F 3/04** • mechanically-driven

**U E02F 3/08** • • with digging elements on an endless chain (conveyors [B65G](#))

**U E02F 3/12** • • • Component parts {, e.g. bucket troughs}

**M E02F 3/14** • • • • Buckets; Chains; Guides for buckets or chains; Drives for chains ~~{not used, see subgroups}~~

**U E02F 9/00 Component parts of dredgers or soil-shifting machines, not restricted to one of the kinds covered by groups [E02F 3/00](#) - [E02F 7/00](#) (laying-out or take-up devices for trailing electric cables [B66C](#))**

**U E02F 9/20** • Drives; Control devices (gearings in general [F16H](#); controlling in general [G05](#); electric multi-motor drives [H02K](#), [H02P](#))

**U E02F 9/22** • • Hydraulic or pneumatic drives {(for dipper or bucket arm position control [E02F 3/43](#), for blade position control for graders [E02F 3/844](#); for turntables [E02F 9/121](#); for fork-lift trucks [B66F 9/22](#))}

**M E02F 9/2278** • • • {Hydraulic circuits ~~{not used}~~}

**Project: RP0255 (E04D)**

<b>C</b>	<b>E04D 1/00</b>	<b>Roof covering by making use of tiles, slates, shingles, or other small roofing elements (roofing supports {<b>and/or</b> underlayers} <a href="#">E04D 12/00</a>)</b>
		<b><u>WARNING</u></b> Groups <a href="#">E04D 1/00-E04D 2001/3497</a> are impacted by reclassification into groups <a href="#">E04D 1/29</a> , <a href="#">E04D 1/2907</a> , <a href="#">E04D 1/2914</a> , <a href="#">E04D 1/2916</a> , <a href="#">E04D 1/2918</a> , <a href="#">E04D 1/2921</a> , <a href="#">E04D 1/2928</a> , <a href="#">E04D 1/2935</a> , <a href="#">E04D 1/2942</a> , <a href="#">E04D 1/2949</a> , <a href="#">E04D 1/2956</a> , <a href="#">E04D 1/2963</a> , and <a href="#">E04D 1/2984</a> . All groups listed in this Warning should be considered in order to perform a complete search.
C	E04D 2001/005	• {the roofing elements having a granulated surface}
C	E04D 1/02	• Grooved or vaulted roofing elements ( <a href="#">E04D 1/28</a> , <a href="#">E04D 1/30</a> take precedence)
C	E04D 1/025	• • {Diamond shaped and installed in diagonal lines}
C	E04D 1/04	• • of ceramics, glass or concrete, with or without reinforcement
C	E04D 1/045	• • • {Vaulted roofing elements laid alternately side-up and side-down, e.g. monks and nuns tiles}
C	E04D 1/06	• • of metal
C	E04D 1/08	• • of plastics; {of asphalt; } of fibrous materials
C	E04D 1/085	• • • {of wood}
C	E04D 1/10	• • of specified materials {not covered by any one of groups <a href="#">E04D 1/04</a> - <a href="#">E04D 1/085</a> }, or of combinations of materials, {where at least one is} not covered by any one of groups <a href="#">E04D 1/04</a> - <a href="#">E04D 1/085</a>
C	E04D 1/12	• Roofing elements shaped as plain tiles or shingles, i.e. with flat outer surface ( <a href="#">E04D 1/28</a> , <a href="#">E04D 1/30</a> take precedence)
C	E04D 1/125	• • {Diamond shaped <b>and elements specially adapted for being</b> installed in diagonal lines}
C	E04D 1/14	• • of slate material, with or without fastening means
C	E04D 1/16	• • of ceramics, glass or concrete, with or without reinforcement
C	E04D 1/18	• • of metal
C	E04D 1/20	• • of plastics; {of asphalt; } of fibrous materials
C	E04D 1/205	• • • {of wood}
C	E04D 1/22	• • of specified materials {not covered by any one of groups <a href="#">E04D 1/14</a> - <a href="#">E04D 1/205</a> }, or of combinations of materials, {where at least one is} not covered by any one of groups <a href="#">E04D 1/14</a> - <a href="#">E04D 1/205</a>
N	E04D 1/23	• • {with tapered thickness}
C	E04D 1/24	• Roofing elements with cavities, e.g. hollow tiles ( <a href="#">E04D 1/28</a> takes precedence)
C	E04D 1/26	• Strip-shaped roofing elements <b>{simulating a repetitive pattern, e.g.}</b> appearing as a row of shingles
C	E04D 1/265	• • {the roofing elements being rigid, e.g. made of metal, wood or concrete}
C	E04D 1/28	• Roofing elements comprising two or more layers, e.g. for insulation
N	E04D 1/29	• {Means for connecting or fastening adjacent roofing elements}
		<b><u>WARNING</u></b> Groups <a href="#">E04D 1/29</a> - <a href="#">E04D 1/2984</a> are incomplete pending reclassification of documents from groups <a href="#">E04D 1/00</a> - <a href="#">E04D 2001/3497</a> . All groups listed in this Warning should be considered in order to perform a complete search.
N	E04D 1/2907	• • {by interfitted sections}

- N E04D 1/2914 . . . {having fastening means or anchors at juncture of adjacent roofing elements}
- N E04D 1/2916 . . . . {the fastening means taking hold directly on adjacent elements of the same row}
- N E04D 1/2918 . . . . {the fastening means taking hold directly on adjacent elements of succeeding rows}
- N E04D 1/2921 . . . {having resilient detents adapted to be biased to a position to resist separation}
- N E04D 1/2928 . . . {having slits receiving marginal edge of adjacent section}
- N E04D 1/2935 . . . {folded, rolled, or indented *in situ*}
- N E04D 1/2942 . . . {having folded sections receiving interfitted part of adjacent section}
- N E04D 1/2949 . . . {having joints with fluid-handling feature, e.g. a fluid channel for draining}
- N E04D 1/2956 . . . {having tongues and grooves}
- N E04D 1/2963 . . . {having laminated layers overlapping adjacent sections}
- N E04D 1/2984 . . {with spacing or space-forming features, e.g. braces, fillers or drains}
- C E04D 1/30 . Special roof-covering elements, e.g. ridge tiles, gutter tiles, gable tiles, ventilation tiles ([E04D 3/40](#), ~~E04D 13/03~~, ~~E04D 13/14~~) take takes precedence)
- C E04D 2001/301 . . {at roof edges, e.g. intersections with walls}
- C E04D 2001/302 . . . {Gable tiles}
- C E04D 2001/303 . . . {Eave tiles}
- C E04D 2001/304 . . {at roof intersections, e.g. valley tiles, ridge tiles}
- C E04D 2001/305 . . . {Ridge or hip tiles}
- C E04D 2001/306 . . . . {Under-ridge tiles}
- C E04D 2001/307 . . {for passages in the roof surface}
- C E04D 2001/308 . . {for special purposes not otherwise provided for, e.g. turfing tiles, step tiles}
- C E04D 2001/309 . . {Ventilation tiles}
- C E04D 1/34 . Fastenings for attaching roof-covering elements to the supporting elements
- C E04D 1/3402 . . {for ridge or roofhip tiles}
- C E04D 1/3405 . . {for eaves-, valley-, or verge tiles}
- C E04D 2001/3408 . . {characterised by the fastener type or material}
- C E04D 2001/3411 . . . {Metal wires or rods}
- C E04D 2001/3414 . . . {Metal strips or sheet metal}
- C E04D 2001/3417 . . . {Synthetic, composite or molded material}
- C E04D 2001/342 . . . {Flexible filamentous ties, e.g. to be twisted or forming nets}
- C E04D 2001/3423 . . . {Nails, rivets, staples or straps piercing or perforating the roof covering material}
- C E04D 2001/3426 . . . {Threaded elements, e.g. screws or bolts}
- C E04D 2001/3429 . . . {Press-studs elements *or hook and loop elements, e.g. Velcro elements*}
- C E04D 2001/3432 . . . {Strips covering the gap between the roof covering elements}
- C E04D 2001/3435 . . . {Adhesive, hardenable or heat-sensitive material}
- C E04D 2001/3438 . . . {Fasteners comprising several coacting elements}
- C E04D 2001/3441 . . . {Series of easily separable fasteners}
- C E04D 2001/3444 . . {characterised by the roof covering or structure with integral or premounted fastening means}
- C E04D 2001/3447 . . . {the fastening means being integral or premounted to the roof covering}
- C E04D 2001/345 . . . {the fastening means being integral or premounted to the roof structure}



- C E04D 2001/3452     • • {characterised by the location of the fastening means}
- C E04D 2001/3455     • • • {on the internal surface of the roof covering elements}
- C E04D 2001/3458     • • • {on the upper or lower transverse edges of the roof covering elements}
- C E04D 2001/3461     • • • {on the lateral edges of the roof covering elements}
- C E04D 2001/3464     • • • {on the lateral corners of the roof covering elements for diagonally tiled roofs}
- C E04D 2001/3467     • • • {through apertures, holes or slots}
- C E04D 2001/347     • • {characterised by the fastening pattern}
- C E04D 2001/3473     • • • {fastening single roof elements to the roof structure with or without indirect clamping of neighbouring roof covering elements}
- C E04D 2001/3476     • • • {the fastening means taking hold directly on adjacent elements of the same row and fastening them simultaneously to the roof structure}
- D E04D 2001/3479     • • • {the fastening means taking hold directly on adjacent elements of the same row and fastening them only to each other}  
    <administratively transferred to [E04D 1/2916](#) INV>
- D E04D 2001/3485     • • • {the fastening means taking hold directly on elements of succeeding rows and fastening them only to each other}  
    <administratively transferred to [E04D 1/2918](#) INV>
- C E04D 2001/3488     • • {characterised by the type of roof covering elements being fastened}
- C E04D 2001/3491     • • • {made of flexible material, e.g. shingles}
- C E04D 2001/3494     • • • {made of rigid material having a flat external surface}
- C E04D 2001/3497     • • • {Spanish type tiles}

**Project: MP0381 (E04F)**

**M E04F                      FINISHING WORK ON BUILDINGS, e.g. STAIRS, FLOORS (windows, doors [E06B](#))**

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="#">E04F 11/09</a>	covered by	<a href="#">E04F 11/02</a>
<a href="#">E04F 11/17</a>	covered by	<a href="#">E04F 11/16</a>

**2-1.** 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.

**Project: MP0445 (E04F)**

- U E04F 13/00              Coverings or linings, e.g. for walls or ceilings (flooring [E04F 15/00](#); decoration of surfaces, mosaic work [B44](#), e.g. paper-hanging [B44C 7/00](#); made of webs, e.g. of fabrics or wallpaper {, as such, or their manufacturing} [D03D](#), [D04G](#), [D04H](#), [D06N](#), [D21H](#); construction of {false} ceilings [E04B 9/00](#); roofings or similar water-tight coverings against precipitation [E04D](#))**
- U E04F 13/07             • composed of covering or lining elements; Sub-structures therefor; Fastening means therefor
- U E04F 13/08             • • composed of a plurality of similar covering or lining elements, ([E04F 13/072](#) takes precedence; borders, skirtings [E04F 19/02](#); {of webs or fabrics [E04F 13/002](#); fixing strips [E04F 19/06](#); separate provisional spacers between adjacent tiles [E04F 21/0092](#); implements or means for setting tiles [E04F 21/18](#)})

- U E04F 13/0801 . . . {Separate fastening elements ([E04F 13/088](#), [E04F 13/0885](#) take precedence)}
- U E04F 13/0832 . . . {without load-supporting elongated furring elements between wall and covering elements}
- M E04F 13/0833 . . . {not adjustable ([E04F 13/0857](#) takes precedence; ~~not used, see subgroups~~)}
- U E04F 19/00 Other details of constructional parts for finishing work on buildings (ladders, e.g. climbing irons, [E06C 9/04](#))**
- U E04F 19/02 . Borders; Finishing strips, e.g. beadings; Light coves (for protecting edges of plaster [E04F 13/06](#))
- U E04F 19/04 . . for use between floor or ceiling and wall, e.g. skirtings
- M E04F 19/0459 . . . {characterised by the fixing method (~~not used, see subgroups~~)}

**Project: MP0381 (E04G)**

**M E04G SCAFFOLDING; FORMS; SHUTTERING; BUILDING IMPLEMENTS OR OTHER BUILDING AIDS, OR THEIR USE; HANDLING BUILDING MATERIALS ON THE SITE; REPAIRING, BREAKING-UP OR OTHER WORK ON EXISTING BUILDINGS**

NOTE

In this subclass the word "scaffolding" includes other supports for like purposes

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:

[E04G 23/03](#) covered by [E04G 23/0266](#)

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.

**Project: MP0381 (E05B)**

**M E05B LOCKS; ACCESSORIES THEREFOR; HANDCUFFS**

NOTES

1. Operating or controlling of locks for vehicle wings are classified in groups [E05B 77/00-E05B 81/00](#).

2. Knobs, handles or press buttons for locks of vehicle wings are classified in [E05B 79/00-E05B 85/00](#).

3. {In this subclass, it is desirable to add the indexing code(s) of [E05Y](#).}

WARNING

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="#">E05B 1/02</a>	covered by	<a href="#">E05B 1/00</a>
<a href="#">E05B 5/02</a>	covered by	<a href="#">E05B 5/003</a>
<a href="#">E05B 5/04</a>	covered by	<a href="#">E05B 5/003</a>
<del>E05B 1/02-E05B 9/06</del>	covered by	<a href="#">E05B 9/00 - E05B 9/048</a>
<del>E05B 13/02-E05B 13/08</del>	covered by	<a href="#">E05B 11/00, E05B 15/08 and E05B 17/14</a>
<a href="#">E05B 13/06</a>	covered by	<a href="#">E05B 11/00, E05B 15/08 and E05B 17/14</a>
<a href="#">E05B 13/08</a>	covered by	<a href="#">E05B 13/00</a>
<a href="#">E05B 15/12</a>	covered by	<a href="#">E05B 17/2007</a>
<a href="#">E05B 17/02</a>	covered by	<a href="#">E05C 7/02</a>

E05B 19/02	covered by	<u>E05B 19/00</u>
E05B 19/06-E05B 19/08	covered by	<u>E05B 19/00</u>
E05B 19/08	covered by	<u>E05B 19/0017, E05B 19/14, E05B 35/003 and E05B 35/14</u>
E05B 19/10-E05B 19/12	covered by	<u>E05B 19/04</u>
E05B 19/12	covered by	<u>E05B 35/003</u>
E05B 19/16	covered by	<u>E05B 35/007, E05B 27/0028 and E05B 29/0006</u>
E05B 21/02-E05B 21/04	covered by	<u>E05B 21/00</u>
E05B 21/04	covered by	<u>E05B 21/00</u>
E05B 25/00-E05B 25/10	covered by	<u>E05B 21/00 and E05B 23/00</u>
E05B 27/04-E05B 27/06	covered by	<u>E05B 27/0003 - E05B 27/0096</u>
E05B 29/02-E05B 29/14	covered by	<u>E05B 29/0006 - E05B 29/0093</u>
E05B 35/04	covered by	<u>E05B 35/00</u>
E05B 37/06	covered by	<u>E05B 37/04 and E05B 67/00</u>
E05B 37/18	covered by	<u>E05B 37/16 and E05B 67/00</u>
E05B 37/22	covered by	<u>E05B 37/20 and E05B 67/00</u>
E05B 45/14	covered by	<u>E05B 45/06</u>
E05B 47/04	covered by	<u>E05B 47/02</u>
E05B 47/08	covered by	<u>E05B 47/06 and E05B 15/101</u>
E05B 49/02-E05B 49/04	covered by	<u>G07C 9/00</u>
E05B 55/02	covered by	<u>E05B 55/00</u>
E05B 55/04	covered by	<u>E05B 55/00 and E05B 13/00</u>
E05B 55/08	covered by	<u>E05B 55/06</u>
E05B 55/10	covered by	<u>E05B 55/06</u>
E05B 55/14-E05B 55/16	covered by	<u>E05B 55/00</u>
E05B 59/02-E05B 59/06	covered by	<u>E05B 59/00</u>
E05B 59/04		
E05B 59/06	covered by	<u>E05B 15/102</u>
E05B 65/04	covered by	<u>E05C 7/02</u>
E05B 67/12	covered by	<u>E05B 67/10</u>
E05B 67/16	covered by	<u>E05B 67/14</u>
E05B 67/20	covered by	<u>E05B 67/18</u>
E05B 67/30	covered by	<u>E05B 67/28</u>
E05B 67/34	covered by	<u>E05B 67/32</u>
E05B 71/02	covered by	<u>E05B 71/00 and E05B 37/00</u>

**Project: MP0381 (E05C)****M E05C**

**BOLTS OR FASTENING DEVICES FOR WINGS, SPECIALLY FOR DOORS OR WINDOWS** (latching means for sideboard or tailgate structures for vehicles [B62D](#), {[B62D 33/02](#)}; fastening devices for constructional or engineering elements [E04](#), [F16B](#); locks, fastening devices structurally or operatively combined or having significant cooperation with locks [E05B](#); means for operating or controlling wing fasteners in conjunction with mechanisms for moving the wing [E05F](#))

NOTES

1. In this subclass only the movement essential for securing the wing is considered, e.g. a sliding bolt which is rotated on its axis to prevent its withdrawal is classified as having only a sliding movement
2. Attention is drawn to the definition following the title of class [E05](#)
3. {In this subclass, it is desirable to add the indexing code(s) of [E05Y](#).}

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="#">E05C 3/32</a>	covered by	<a href="#">E05C 3/30</a>
<a href="#">E05C 17/06</a>	covered by	<a href="#">E05C 17/04</a>
<a href="#">E05C 17/10</a>	covered by	<a href="#">E05C 17/04</a>
<a href="#">E05C 21/02</a>	covered by	<a href="#">E05C 21/00</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.

**Project: MP0381 (E05D)****M E05D**

**HINGES OR OTHER SUSPENSION DEVICES FOR DOORS, WINDOWS OR WINGS** ({foldable tables [A47B 3/00](#); hinged panels [A47B 5/00](#); foldable chairs [A47C 4/00](#); making hinges [B21D 53/40](#), [B21K 13/02](#); making holes for taking-up fittings [B27F 5/12](#); for vehicle tailboards [B60P 1/26](#); for refuse receptacles [B65F 1/1646](#)}; pivotal connections in general [F16C 11/00](#) {; mounting of stove or range doors [F24C 15/023](#); for folding flat displays of portable computers [G06F 1/1616](#)})

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:

<del>E05D 5/16</del>	covered by	<del>E05D 5/14</del>
<del>E05D 7/081</del>	covered by	<del>E05D 7/08</del>
<del>E05D 7/083</del>	covered by	<del>E05D 7/082</del>
<del>E05D 15/04</del>	covered by	<del>E05D 15/02, E05D 15/28, E05D 15/403</del>
<del>E05D 15/522</del>	covered by	<del>E05D 15/52</del>
<del>E05D 15/523</del>	covered by	<del>E05D 15/52</del>
<del>E05D 15/524</del>	covered by	<del>E05D 15/52</del>

2. ~~1.~~ 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.

**Project: MP0381 (E21B)****M E21B**

**EARTH DRILLING, e.g. DEEP DRILLING (mining, quarrying [E21C](#); making shafts, driving galleries or tunnels [E21D](#)); OBTAINING OIL, GAS, WATER, SOLUBLE OR MELTABLE MATERIALS OR A SLURRY OF MINERALS FROM WELLS**

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="#">E21B 1/12 - E21B 1/38</a>	covered by	<a href="#">E21B 1/00</a>
<a href="#">E21B 7/08</a>	covered by	<a href="#">E21B 7/06</a>
<a href="#">E21B 11/04</a>	covered by	<a href="#">E21B 27/00</a>
<a href="#">E21B 23/12</a>	covered by	<a href="#">E21B 23/002</a>
<a href="#">E21B 31/08</a>	covered by	<a href="#">E21B 27/00</a>
<a href="#">E21B 43/22</a>	covered by	<a href="#">C09K 8/58</a>
<a href="#">E21B 43/27</a>	covered by	<a href="#">E21B 43/26</a>
<a href="#">E21B 47/001-E21B 47/009</a>	covered by	<a href="#">E21B 47/0001 - E21B 47/0005</a>
<a href="#">E21B 47/007 - E21B 47/009</a>	covered by	<a href="#">E21B 47/0006 - E21B 47/0008</a>
<a href="#">E21B 47/013-E21B 47/017</a>	covered by	<a href="#">E21B 47/01</a>
<a href="#">E21B 47/017</a>	covered by	<a href="#">E21B 47/011</a>
<a href="#">E21B 47/0224-E21B 47/0236</a>	covered by	<a href="#">E21B 47/02208 - E21B 47/02232</a>
<a href="#">E21B 47/047-E21B 47/053</a>	covered by	<a href="#">E21B 47/042 - E21B 47/044</a>
<a href="#">E21B 47/07</a>	covered by	<a href="#">E21B 47/065</a>
<a href="#">E21B 47/085</a>	covered by	<a href="#">E21B 47/082</a>
<a href="#">E21B 47/092-E21B 47/098</a>	covered by	<a href="#">E21B 47/0905 - E21B 47/0915</a>
<a href="#">E21B 47/103-E21B 47/117</a>	covered by	<a href="#">E21B 47/1005 - E21B 47/1025</a>
<a href="#">E21B 47/125-E21B 47/135</a>	covered by	<a href="#">E21B 47/121 - E21B 47/123</a>
<a href="#">E21B 47/20-E21B 47/24</a>	covered by	<a href="#">E21B 47/182 - E21B 47/187</a>
<a href="#">E21B 47/26</a>	covered by	<a href="#">E21B 47/124</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.

**Project: MP0381 (E21C)****M E21C****MINING OR QUARRYING**NOTES

1. This subclass covers methods or apparatus specific to mining or quarrying
2. This subclass does not cover, even though they may be disclosed only for mining or quarrying, drill bits, bore reamers, core taking devices, drilling pipes or rods, handling, racking or connecting arrangements for drilling pipes or rods, counterboring or enlarging drilled holes, flame drilling, or other drilling apparatus, which are covered by subclass [E21B](#)

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="#">E21B 3/02</a>	covered by	<a href="#">E21B 3/02</a>
<a href="#">E21B 3/035</a>	covered by	<a href="#">E21B 3/035</a>
<a href="#">E21B 3/025</a>	covered by	<a href="#">E21B 3/025</a>

<del>E21B-3/03</del>	covered by	E21B-3/03
<del>E21B-6/00</del>	covered by	E21B-6/00
<del>E21C3/08</del>	covered by	B25D-9/06, <b>B25D15/00</b>
<del>E21C3/10</del>	covered by	<b>B25D15/02</b>
<del>E21C3/12</del>	covered by	B25D-11/00
<del>E21C3/14</del>	covered by	B25D-11/00
<del>E21C3/20</del>	covered by	B25D-9/12
<del>E21C3/22</del>	covered by	B25D-9/125
<del>B25D11/005</del>	covered by	B25D-9/265
<del>E21C3/34</del>	covered by	B25D-17/08
<del>E21B-19/081</del>	covered by	E21B-19/081
<del>E21B-19/083</del>	covered by	E21B-19/083
<del>E21B-19/084</del>	covered by	E21B-19/084
<del>E21B-19/089</del>	covered by	E21B-19/089
<del>E21B-44/08</del>	covered by	E21B-44/08
<del>E21B-44/00</del>	covered by	E21B-44/00
<del>E21B-21/14</del>	covered by	E21B-21/14
<del>E21B-7/02</del>	covered by	E21B-7/02
<del>E21C-37/24</del>	covered by	B25D
<del>E21C-37/26</del>	covered by	B25D
<del>E21C-41/18</del>	covered by	E21C-41/16
<del>E21C-41/20</del>	covered by	E21C-41/16
<del>E21C-41/22</del>	covered by	E21C-41/16
<del>E21C-41/24</del>	covered by	E21C-41/16
<del>E21C-41/28</del>	covered by	E21C-41/26
<del>E21C-41/30</del>	covered by	E21C-41/26
<del>E21C-45/02</del>	covered by	E21C-25/60, E21C-45/00
<del>E21C-45/04</del>	covered by	E21C-25/60, E21C-45/00
<del>E21C-45/06</del>	covered by	E21C-25/60, E21C-45/00
<del>E21C-45/08</del>	covered by	E21C-25/60, E21C-45/00
<del>E21C-50/00</del>	covered by	E02F-3/88
<del>E21C-50/02</del>	covered by	E02F-3/88

~~2.~~ **1.** 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.

## Project: MP0445 (E21C)

- U** E21C 3/00 {Drilling machines with reciprocating tool that is intermittently turned when out of contact with the working face (portable percussion tools in general **B25D**)}
- M** E21C 3/06 • {Means for driving the impulse member-~~(not used, see subgroups and B25D)~~}

**Project: MP0381 (F01L)****M F01L****CYCLICALLY OPERATING VALVES FOR MACHINES OR ENGINES (valves in general [F16K](#))**NOTES

1. Groups [F01L 1/00](#) - [F01L 13/00](#) cover only valve-gear or valve arrangements without provision for variable fluid distribution.
2. Valve gear or valve arrangements specially adapted for steam engines are covered by groups [F01L 15/00](#) - [F01L 35/00](#).
3. Valve-gear arrangements specially adapted for machines or engines with variable working-fluid distribution are covered by groups [F01L 15/00](#) - [F01L 35/00](#).
4. Attention is drawn to the notes preceding class [F01](#), especially Note (3).
5. As regards the above-mentioned Note (3), attention is drawn to [F01B 3/10](#), [F01B 15/06](#), [F01C 21/18](#), [F02B 53/06](#), [F03C 1/08](#), [F04B 1/18](#), [F04B 7/00](#), [F04B 39/08](#), [F04B 39/10](#), and [F04C 15/06](#), [F04C 29/12](#).

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="#">F01L 31/20</a>	covered by	<a href="#">F01L 31/08</a> - <a href="#">F01L 31/18</a>
<a href="#">F01L 31/22</a>	covered by	<a href="#">F01L 31/08</a> - <a href="#">F01L 31/18</a>
<a href="#">F01L 31/24</a>	covered by	<a href="#">F01L 31/08</a> - <a href="#">F01L 31/18</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.

**Project: MP0381 (F03C)****M F03C****POSITIVE-DISPLACEMENT ENGINES DRIVEN BY LIQUIDS (positive-displacement engines for liquids and elastic fluids [F01](#); positive-displacement machines for liquids [F04](#); fluid-pressure actuators [F15B](#); fluid gearing [F16H](#))**NOTE

Attention is drawn to the notes preceding class [F01](#), especially as regards the meanings of "positive displacement", "rotary-piston machines", "oscillating-piston machines", "rotary-piston", "co-operating members", "movement of co-operating members", "teeth or tooth-equivalents", and "internal axis".

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="#">F03C 1/253</a>	covered by	<del>F03C</del> <a href="#">F03C 1/06</a>
<a href="#">F03C 1/28</a>	covered by	<a href="#">F03C 1/0406</a> , <a href="#">F03C 1/0605</a>
<a href="#">F03C 1/30</a>	covered by	<a href="#">F03C 1/0409</a> , <a href="#">F03C 1/0631</a> , <a href="#">F03C 1/0668</a>
<a href="#">F03C 1/32</a>	covered by	<a href="#">F03C 1/0415</a> , <a href="#">F03C 1/0626</a> , <a href="#">F03C 1/0652</a>
<a href="#">F03C 1/34</a>	covered by	<a href="#">F03C 1/0435</a> , <a href="#">F03C 1/0615</a> , <a href="#">F03C 1/0655</a>
<a href="#">F03C 1/36</a>	covered by	<a href="#">F03C 1/0435</a> , <a href="#">F03C 1/0615</a> , <a href="#">F03C 1/0655</a>
<a href="#">F03C 1/38</a>	covered by	<a href="#">F03C 1/0435</a> , <a href="#">F03C 1/0615</a> , <a href="#">F03C 1/0655</a>



F03C 1/40 covered by [F03C 1/0447](#), [F03C 1/0678](#)

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.

## Project: MP0446 (F05C)

U	F05C 2203/00	<b>Non-metallic inorganic materials</b>
U	F05C 2203/08	• Ceramics; Oxides
M	F05C 2203/0865	• <del>not used; see subgroups</del> <a href="#">Oxide ceramics</a>

## Project: MP0381 (F16B)

M	F16B	<b>DEVICES FOR FASTENING OR SECURING CONSTRUCTIONAL ELEMENTS OR MACHINE PARTS TOGETHER, e.g. NAILS, BOLTS, CIRCLIPS, CLAMPS, CLIPS, WEDGES, JOINTS OR JOINTING (couplings for transmitting rotation <a href="#">F16D</a>)</b>
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### NOTES

1. Attention is drawn to:

- a. the Note following group [E04B 1/38](#);
- b. the following places:
 

<a href="#">A44B</a>	Buckles, slide fasteners
<a href="#">A47G 3/00</a>	Ornamental heads for nails, screws, or the like
<a href="#">B42F 3/00</a>	Means, not using staples, for attaching sheets temporarily together
<a href="#">{C14B 17/08}</a>	{Fastening devices, e.g. clips for leather-stretching used in apparatus or machines for manufacturing or treating skins, hides, leathers or furs}
<a href="#">E01B 9/10</a>	Screws or bolts for railway sleepers
<a href="#">E01B 11/00</a>	Rail joints
<a href="#">E04</a>	Connections for building
<a href="#">E04D 13/08</a>	Clamping means for down pipes for roof drainage
<a href="#">E04G 5/04</a>	Fastening scaffolds against buildings
<a href="#">E04G 7/00</a>	Scaffolding couplings
<a href="#">E05C</a>	Bolts for fasteners for wings, specially for doors or windows
<a href="#">F16C 29/10</a>	Locking bearings for parts moving only linearly
<a href="#">F16G 17/00</a>	Hooks as integral parts of chains
<a href="#">F16L</a>	Pipe joints
<a href="#">F16L 3/00</a>	Supports for pipes, cables or protective tubing, e.g. hangers, holders, clamps, cleats, clips, brackets
<a href="#">F16L 33/02</a>	Clips for connecting hoses to rigid members
<a href="#">H01F 7/00</a>	Magnetic holding devices
<a href="#">H02N 13/00</a>	Electrostatic holding devices.

2. Groups [F16B 2/00](#) - [F16B 47/00](#) take precedence over group [F16B 1/00](#).

3. {In this main group, it is desirable to add the indexing codes of [F16B 2200/00](#)}

### 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:

<a href="#">F16B 7/08</a>	covered by	<a href="#">F16B 5/12</a> , <a href="#">F16B 7/04</a> , <a href="#">F16L 3/00</a>
<a href="#">F16B 7/12</a>	covered by	<a href="#">F16B 7/105</a>
<a href="#">F16B 7/16</a>	covered by	<a href="#">F16B 7/14</a> , <a href="#">F16B 2007/16</a>

F16B 13/10	covered by	<a href="#">F16B 13/08</a> , <a href="#">F16B 2013/10</a>
F16B 13/13	covered by	<a href="#">F16B 13/002</a> , <a href="#">F16B 13/12</a>
F16B 21/14	covered by	<a href="#">F16B 21/12</a> , <a href="#">F16B 21/125</a> <a href="#">F16B 2021/14</a>
F16B 25/02	covered by	<a href="#">F16B 25/00</a> , <a href="#">F16B 25/103</a>
F16B 25/04	covered by	<a href="#">F16B 25/00</a> , <a href="#">F16B 25/106</a>
F16B 25/06	covered by	<a href="#">F16B 25/00</a> , <a href="#">F16B 25/106</a>
F16B 25/08	covered by	<a href="#">F16B 25/00</a> , <a href="#">F16B 25/106</a>
F16B 33/04	covered by	<a href="#">F16B 33/02</a> , <a href="#">F16B 2033/04</a>
F16B 37/10	covered by	<a href="#">F16B 37/0842</a> , <a href="#">F16B 37/0871</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.

## Project: MP0446 (F16B)

- U F16B 5/00 Joining sheets or plates {, e.g. panels,} to one another or to strips or bars parallel to them ({[F16B 17/00](#) takes precedence;}) by sticking together [F16B 11/00](#); dowel connections [F16B 13/00](#); pins, including deformable elements [F16B 19/00](#); covering of walls [E04F 13/00](#); fastening signs, plates, panels or boards to a supporting structure, fastening readily-detachable elements, e.g. letters to signs, plates, panels, or boards, [G09F 7/00](#))
- U F16B 5/0004 • {Joining sheets, plates or panels in abutting relationship ([F16B 5/01](#) takes precedence)}
- M F16B 5/0084 • {characterised by particular locking means ~~(not used, see subgroups)~~}
- U F16B 37/00 Nuts or like thread-engaging members {(specially shaped for rotations by a tool [F16B 23/00](#))}
- M F16B 37/08 • Quickly-detachable {or mountable} nuts, e.g. consisting of two or more parts; Nuts movable along the bolt after tilting the nut ~~(not used, see subgroups)~~

## Project: MP0381 (F16K)

- M F16K VALVES; TAPS; COCKS; ACTUATING-FLOATS; DEVICES FOR VENTING OR AERATING {(devices for emptying and evacuating the excess liquid in valves or conduits [F16L 55/07](#))}
- NOTE
- Attention is drawn to the following places:
- |                                |  |
|--------------------------------|--|
| <a href="#">A47J 27/09</a>     | Safety devices for pressure cookers  |
| <a href="#">A47J 31/46</a>     | Dispensing spouts, drain valves or like beverage-making apparatus                                    |
| <a href="#">A61B 5/0235</a>    | Valves specially adapted for measuring pressure in heart or blood vessels                            |
| <a href="#">A61F 2/24</a>      | Heart valves   |
| <a href="#">A61M 16/20</a>     | Valves specially adapted for medical respiratory devices   |
| <a href="#">A61M 39/00</a>     | Tube connectors, tube couplings, valves or branch units specially adapted for medical use in general |
| <a href="#">A62B 9/02</a>      | Valves for respiratory apparatus   |
| <a href="#">A62B 18/10</a>     | Valves for breathing masks or helmets  |
| <a href="#">A62C</a>           | Fire extinguishers   |
| { <a href="#">B01D 35/04</a> } | {Plug, tap, or cock filters}   |
| <a href="#">B05B</a>           | Nozzles, spray heads or other discharge apparatus for spraying or atomising                          |

<a href="#">B60C 29/00</a>	Arrangements of tyre-inflating valves relative to tyres or wheel rims; Connection of valves to wheel rims, tyres or other inflatable elastic bodies
<a href="#">B60G 17/048</a>	Valves specially adapted for adjusting vehicle fluid-spring characteristics
<a href="#">B60T</a>	Valves specially adapted for vehicle brake control systems
<a href="#">B62D 5/08</a>	Vehicle power-assisted steering characterised by the type of valve used
<a href="#">B63B 7/00</a> , <a href="#">B63C 9/00</a>	Arrangement of inflating valves for floatable life-saving equipment
<a href="#">B65D 47/04</a>	Container closures with discharging valves
<a href="#">B65D 90/32</a>	Safety valves for large containers
<a href="#">B65D 90/54</a>	Gates or closures on large containers
<a href="#">B67C 3/28</a>	Flow control devices for bottling liquids
<a href="#">B67D</a>	Dispensing, delivering or transferring liquids
<a href="#">{C21B 9/12}</a>	{Hot-blast valves for blast furnaces}
<a href="#">E02B 8/00</a>	Details, e.g. valves, of barrages or weirs
<a href="#">E02B 13/02</a>	Closures for irrigation conduits
<a href="#">{E03C 1/04}</a>	{Water-basin installations specially adapted for wash-basins or baths}
<a href="#">{E03C 1/05}</a>	{Arrangements on wash-basins for the remote control of taps}
<a href="#">E03D</a>	Flushing valves for water-closets or urinals
<a href="#">{E03F 7/04}</a>	{Valves for preventing return flow in sewer systems}
<a href="#">E05F 3/12</a>	Valve arrangements in door closers
<a href="#">E21B 21/10</a>	Valve arrangements in drilling-fluid circulation systems
<a href="#">E21B 34/00</a>	Valve arrangements for boreholes or wells
<a href="#">{E21D 15/51}</a>	{Arrangement of relief valves in hydraulic mine props}
<a href="#">F01B 25/10</a>	Working-fluid valves for controlling machines or engines in general or of positive-displacement type
<a href="#">F01D 17/10</a>	Final actuators for controlling non-positive displacement machines or engines
<a href="#">F01L</a>	Cyclically operated valves for machines or engines
<a href="#">F02D 9/08</a>	Throttle valves for controlling combustion engines
<a href="#">F02K 9/58</a>	Propellant feed valves for rocket-engines
<a href="#">F02M</a>	Carburettors, fuel injection
<a href="#">F02M 59/46</a>	Valves for fuel injection pumps
<a href="#">F04</a>	Pumps
<a href="#">F16F 9/34</a>	Valves for shock absorbers
<a href="#">F16L 29/00</a> , <a href="#">F16L 37/28</a>	Pipe joints or quick-acting couplings with fluid cut-off means
<a href="#">F16L 55/00</a>	Arrangement of valves in pipes
<a href="#">F16L 55/055</a>	Valves specially adapted to prevent or minimise the effect of water hammer
<a href="#">F16L 55/46</a>	Launching devices for pigs or moles
<a href="#">F16N 23/00</a>	Check valves for lubrication systems
<a href="#">{F16T}</a>	{Draining-off liquids from steam traps}
<a href="#">F17C 13/04</a>	Arrangement of valves in pressure vessels
<a href="#">F22B 37/44</a>	Arrangement of safety valves on steam boilers
<a href="#">F22D 5/34</a>	Application of valves to automatic water-feed in boiler
<a href="#">F23L 13/00</a>	Valves for air supply control to burners
<a href="#">{F23Q 2/16}</a>	{Valves for lighters with gaseous fuel and adjustable flame}

<a href="#">F24C 3/12</a> , <a href="#">F24C 5/16</a> <a href="#">F24F</a> <a href="#">F25B 41/04</a>	Arrangement of valves on stoves or ranges Air conditioning; Ventilation Disposition of fluid circulation valves in refrigeration machines
<a href="#">G05D</a> <a href="#">G10B 3/06</a> <a href="#">G10D 9/04</a> { <a href="#">G21C 9/06</a> } { <a href="#">H01M 2/12</a> }	Controlling non-electric variables Valves for organs Valves for other wind-actuated musical instruments {Safety valves structurally associated with nuclear reactors} {Vent plugs in batteries or cells}

#### 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="#">F16K 31/11</a>	covered by	<a href="#">F16K 31/06</a> , <a href="#">F16K 31/08</a> , <a href="#">F16K 31/10</a>
<a href="#">F16K 31/64</a>	covered by	<del>G05D</del> <a href="#">F16K 31/002</a> , <a href="#">G05D 23/00</a>
<a href="#">F16K 31/66</a>	covered by	<a href="#">F16K 31/06</a> ; <del>H01F</del> <a href="#">G05D 23/00</a>
<a href="#">F16K 31/68</a>	covered by	<del>G05D</del> <a href="#">F16K 31/001</a> , <a href="#">G05D 23/00</a>
<a href="#">F16K 31/70</a>	covered by	<a href="#">F16K 31/002</a> , <a href="#">G05D 23/08</a>
<a href="#">F16K 31/72</a>	covered by	<a href="#">F16K 31/00</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.

#### Project: MP0381 (F16L)

M F16L

#### PIPES; JOINTS OR FITTINGS FOR PIPES; SUPPORTS FOR PIPES, CABLES OR PROTECTIVE TUBING; MEANS FOR THERMAL INSULATION IN GENERAL

##### NOTES

- In this subclass, the following terms are used with the meanings indicated:
  - "pipe" means a conduit of closed cross-section, which is specially adapted to convey fluids, materials or objects;
  - "hose" means a pipe, as defined above, which has flexibility as an essential characteristic.

2. Attention is drawn to the following places:

<a href="#">A61M 39/00</a>	Tube connectors, tube couplings or branch units, specially adapted for medical use
<a href="#">B05B 1/20</a>	Perforated pipes
{ <a href="#">B60T 17/04</a> }	{Arrangement of piping or air hoses in brake systems}
<a href="#">B63B 35/03</a>	Pipe-laying vessels
<a href="#">B64D 39/04</a>	Adaptation of hose constructions for refuelling aircraft during flight
{ <a href="#">B65G 51/00</a> }	{Conveying articles through pipes or tubes by fluid flow or pressure}
{ <a href="#">B65G 53/00</a> }	{Conveying materials in bulk through pipes or tubes}
<a href="#">B67D 7/38</a>	Arrangements of hoses in apparatus for transferring liquids, e.g. fuel, from bulk to vehicles or portable containers
<a href="#">E01D 19/10</a>	Fastening of pipes or cables to bridges
<a href="#">E03B</a>	Water supply installations

<a href="#">E03D 11/17</a>	Means for connecting water-closet bowls to the flushing pipe
<a href="#">E03D 11/18</a>	Siphons for water-closets
<a href="#">E03F 3/04</a>	Pipes or fittings specially adapted to sewers
<a href="#">E04D 13/08</a>	Down pipes for roof drainage; Clamping means therefor
<a href="#">E04F 17/00</a>	Vertical ducts, channels in buildings, e.g. chimneys
<a href="#">E21F 1/04</a>	Air ducts for ventilation of mines or tunnels; Connections therefor
<a href="#">E21F 17/02</a>	Suspension devices for tubes or the like in mines or tunnels
<a href="#">F01N</a>	Gas flow silencers or exhaust apparatus for machines or engines
<a href="#">{F16B 7/00}</a>	{Connections of rods or tubes}
<a href="#">F16N 21/00</a>	Conduits, junctions for lubrication systems
<a href="#">F17C 3/02</a>	Thermal insulation of vessels not under pressure for storing liquefied or solidified gases, e.g. Dewar flask
<a href="#">{F17D}</a>	{Pipe-line systems, pipe-lines}
<a href="#">F22B 37/10</a>	Water tubes of steam boilers
<a href="#">F23J 13/04</a>	Joints, connections for chimneys or flues
<a href="#">F24H 9/12</a>	Connecting circulation pipes to heaters
<a href="#">F28F 9/04</a>	Arrangements for sealing elements into header boxes or end plates of heat-exchangers
<a href="#">G21C 15/22</a>	Structural association of coolant tubes with headers or other pipes in nuclear reactors
<a href="#">H02G 3/04</a>	Protective tubing or conduits for electric cables
<a href="#">H02G 3/26</a>	Installations of electric cables or lines, or protective tubing on or in walls, ceilings or floors.

#### 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="#">F16L 3/21</a>	covered by	<a href="#">F16L 3/2053</a> , <a href="#">F16L 3/2056</a> ;
<a href="#">F16L 13/013</a>	covered by	<a href="#">F16L 13/007</a> ;
<a href="#">F16L 19/03</a>	covered by	<a href="#">F16L 19/0212</a> ;
<a href="#">F16L 59/05</a>	covered by	<a href="#">F16L 59/021</a> .
<a href="#">F16L 101/14</a>	covered by	<a href="#">F16L 2101/10</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.}

#### Project: RP0479 (F16L)

- U F16L 3/00** **Supports for pipes, cables or protective tubing, e.g. hangers, holders, clamps, cleats, clips, brackets (anchors for holding pipes on or under the ground [F16L 1/06](#); {sound-damping supports [F16L 55/035](#); supports for insulated pipes [F16L 59/135](#)})**
- C F16L 3/24** • with a special member for attachment to profiled girders

#### **WARNING**

*Group [F16L 3/24](#) is impacted by reclassification into groups [F16L 3/243](#), [F16L 3/2431](#), and [F16L 3/245](#).  
All groups listed in this Warning should be considered in order to perform a complete search.*

- N F16L 3/243
- {the special member being inserted in the profiled girder}
- WARNING  
Groups [F16L 3/243](#) and [F16L 3/2431](#) are incomplete pending reclassification of documents from group [F16L 3/24](#).  
All groups listed in this warning should be considered in order to perform a complete search.
- N F16L 3/2431
- • {the special member being inserted and subsequently rotated to a limited extent}
- N F16L 3/245
- {the special member embracing the entire profiled girder}
- WARNING  
Group [F16L 3/245](#) is incomplete pending reclassification of documents from group [F16L 3/24](#).  
Groups [F16L 3/245](#) and [F16L 3/24](#) should be considered in order to perform a complete search.
- U F16L 27/00
- Adjustable joints, Joints allowing movement (of the quick-acting type [F16L 37/50](#); for double-walled or multi-channel pipe assemblies [F16L 39/04](#); {connecting arrangements or other fittings specially adapted to be made of plastics or to be used with pipes made of plastics [F16L 47/00](#); connecting arrangements specially adapted for pipes of brittle material [F16L 49/00](#)})**
- C F16L 27/12
- allowing substantial longitudinal adjustment or movement (by use of screw-thread [F16L 15/02](#))
- WARNING  
Group [F16L 27/12](#) is impacted by reclassification into groups [F16L 27/127](#), [F16L 27/1273](#), [F16L 27/1274](#), [F16L 27/1275](#), and [F16L 27/12751](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- C F16L 27/125
- {having ~~axial~~[longitudinal](#) and rotary movement}
- WARNING  
Group [F16L 27/125](#) is impacted by reclassification into groups [F16L 27/127](#), [F16L 27/1273](#), [F16L 27/1274](#), [F16L 27/1275](#), and [F16L 27/12751](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- N F16L 27/127
- {with means for locking the longitudinal adjustment or movement in the final mounted position}
- WARNING  
Groups [F16L 27/127](#), [F16L 27/1273](#), [F16L 27/1274](#), [F16L 27/1275](#), and [F16L 27/12751](#) are incomplete pending reclassification of documents from groups [F16L 27/12](#) and [F16L 27/125](#).  
All groups listed in this warning should be considered in order to perform a complete search.
- N F16L 27/1273
- • {by quick-acting means}
- N F16L 27/1274
- • {by means of a swivel nut}
- N F16L 27/1275
- • {by means of at least an external threaded bolt}
- N F16L 27/12751
- • • {the threaded bolt extending longitudinally}
- U F16L 37/00
- Couplings of the quick-acting type (radially binding sleeves [F16L 17/04](#), [F16L 21/06](#); connecting hoses to rigid members [F16L 33/00](#); connections made automatically when vehicles are brought together [B60D](#), [B61G](#); specially adapted for lubricating devices [F16N 21/00](#))**

- U F16L 37/08      • in which the connection between abutting or axially overlapping ends is maintained by locking members ([F16L 37/22](#) - [F16L 37/26](#) take precedence)
- U F16L 37/084    • • combined with automatic locking
- C F16L 37/088    • • • by means of a split elastic ring

**WARNING**

Group [F16L 37/088](#) is impacted by reclassification into groups [F16L 37/0885](#) and [F16L 37/0887](#).

Groups [F16L 37/088](#), [F16L 37/0885](#), and [F16L 37/0887](#) should be considered in order to perform a complete search.

- N F16L 37/0885    • • • {with access to the split elastic ring from a radial or tangential opening in the coupling}

**WARNING**

Group [F16L 37/0885](#) is incomplete pending reclassification of documents from group [F16L 37/088](#).

Groups [F16L 37/0885](#) and [F16L 37/088](#) should be considered in order to perform a complete search.

- N F16L 37/0887    • • • {with an axially movable separate member for releasing the coupling}

**WARNING**

Group [F16L 37/0887](#) is incomplete pending reclassification of documents from group [F16L 37/088](#).

Groups [F16L 37/0887](#) and [F16L 37/088](#) should be considered in order to perform a complete search.

- C F16L 37/092    • • • by means of elements wedged between the pipe and the frusto-conical surface of the body of the connector

**WARNING**

Group [F16L 37/092](#) is impacted by reclassification into groups [F16L 37/0926](#) and [F16L 37/0927](#).

Groups [F16L 37/092](#), [F16L 37/0926](#), and [F16L 37/0927](#) should be considered in order to perform a complete search.

- C F16L 37/0925    • • • {with rings which bite into the wall of the pipe}

**WARNING**

Group [F16L 37/0925](#) is impacted by reclassification into groups [F16L 37/0926](#) and [F16L 37/0927](#).

Groups [F16L 37/0925](#), [F16L 37/0926](#), and [F16L 37/0927](#) should be considered in order to perform a complete search.

- N F16L 37/0926    • • • {with an inner support sleeve arranged within the pipe}

**WARNING**

Group [F16L 37/0926](#) is incomplete pending reclassification of documents from groups [F16L 37/092](#) and [F16L 37/0925](#).

Groups [F16L 37/0926](#), [F16L 37/092](#), and [F16L 37/0925](#) should be considered in order to perform a complete search.

- N F16L 37/0927    • • • {the wedge element being axially displaceable for releasing the coupling}

**WARNING**

Group [F16L 37/0927](#) is incomplete pending reclassification of documents from groups [F16L 37/092](#) and [F16L 37/0925](#).

Groups [F16L 37/0927](#), [F16L 37/092](#), and [F16L 37/0925](#) should be considered in order to perform a complete search.



- U F16L 47/00** Connecting arrangements or other fittings specially adapted to be made of plastics or to be used with pipes made of plastics {(connections for hoses of plastics [F16L 33/006](#))}
- C F16L 47/04** • with a swivel nut or collar engaging the pipe
- WARNING**  
*Group [F16L 47/04](#) is impacted by reclassification into group [F16L 47/041](#). Groups [F16L 47/04](#) and [F16L 47/041](#) should be considered in order to perform a complete search.*
- N F16L 47/041** • {the plastic pipe end being flared either before or during the making of the connection}
- WARNING**  
*Group [F16L 47/041](#) is incomplete pending reclassification of documents from group [F16L 47/04](#). Groups [F16L 47/041](#) and [F16L 47/04](#) should be considered in order to perform a complete search.*

**Project: MP0381 (F23C)**

- M F23C** **METHODS OR APPARATUS FOR COMBUSTION USING FLUID FUEL OR SOLID FUEL SUSPENDED IN {A CARRIER GAS OR} AIR (burners [F23D](#))**

**NOTE**

In this subclass, methods are classified in the groups that cover the apparatus used.

**WARNINGS**

- The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:  
[F23C 101/00](#) covered by [F23C 2206/101](#)
- 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.

**Project: MP0446 (F25J)**

- M F25J 1/00** **Processes or apparatus for liquefying or solidifying gases or gaseous mixtures {(for ammonia in general [C01C 1/00](#); solidification of carbonic acid [C01B 32/55](#); recovering volatile solvents by condensation [B01D 5/00](#); vapor recovery systems combined with filling nozzles [B67D 7/54](#); solidification of carbonic acid [C01B 32/55](#); for ammonia in general [C01C 1/00](#))(not used)}**
- M F25J 1/0002** • {characterised by the fluid to be liquefied (not used)}
- M F25J 1/003** • {characterised by the kind of cold generation within the liquefaction unit for compensating heat leaks and liquid production (not used)}
- M F25J 1/0032** • {using the feed stream itself or separated fractions from it, i.e. "internal refrigeration" (not used)}
- M F25J 1/0047** • {using an "external" refrigerant stream in a closed vapor compression cycle ([F25J 1/0221](#), [F25J 1/0225](#) take precedence)(not used)}
- M F25J 1/006** • {characterised by the refrigerant fluid used (refrigerants in vapor compression cycles [F25B 9/002](#), refrigerant materials per se [C09K 5/00](#))(not used)}
- M F25J 1/008** • {Hydrocarbons (not used)}
- M F25J 1/02** • requiring the use of refrigeration, e.g. of helium or hydrogen {Details and kind of the refrigeration system used; Integration with other units or processes; Controlling aspects of the process (not used)}

M	F25J 1/0203	<ul style="list-style-type: none"> <li>• {using a single-component refrigerant [SCR] fluid in a closed vapor compression cycle (<a href="#">F25J 1/0211</a> takes precedence) <del>(not used)</del>}</li> </ul>
M	F25J 1/0211	<ul style="list-style-type: none"> <li>• {using a multi-component refrigerant [MCR] fluid in a closed vapor compression cycle <del>(not used)</del>}</li> </ul>
M	F25J 1/0243	<ul style="list-style-type: none"> <li>• {Start-up or control of the process; Details of the apparatus used; Details of the refrigerant compression system used <del>(not used)</del>}</li> </ul>
<b>M</b>	<b>F25J 3/00</b>	<b>Processes or apparatus for separating the constituents of gaseous {or liquefied gaseous} mixtures involving the use of liquefaction or solidification <del>(not used)</del></b>
M	F25J 3/02	<ul style="list-style-type: none"> <li>• by rectification, i.e. by continuous interchange of heat and material between a vapour stream and a liquid stream (<a href="#">F25J 3/08</a> takes precedence {; purification of hydrocarbons in general <a href="#">C07C 7/00</a>}; <del>not used</del>)</li> </ul>
M	F25J 3/0204	<ul style="list-style-type: none"> <li>• {characterised by the feed stream (for air <a href="#">F25J 3/04</a>) <del>(not used)</del>}</li> </ul>
M	F25J 3/0228	<ul style="list-style-type: none"> <li>• {characterised by the separated product stream <del>(not used)</del>}</li> </ul>
M	F25J 3/04	<ul style="list-style-type: none"> <li>• for air <del>(not used)</del></li> </ul>
M	F25J 3/04006	<ul style="list-style-type: none"> <li>• {Providing pressurised feed air or process streams within or from the air fractionation unit <del>(not used)</del>}</li> </ul>
M	F25J 3/04151	<ul style="list-style-type: none"> <li>• {Purification and (pre-)cooling of the feed air; recuperative heat-exchange with product streams <del>(not used)</del>}</li> </ul>
M	F25J 3/04406	<ul style="list-style-type: none"> <li>• {using a dual pressure main column system (<a href="#">F25J 3/0446</a>, <a href="#">F25J 3/04624</a>, <a href="#">F25J 3/04636</a> and <a href="#">F25J 3/04715</a> take precedence) <del>(not used)</del>}</li> </ul>
M	F25J 3/04436	<ul style="list-style-type: none"> <li>• {using at least a triple pressure main column system (<a href="#">F25J 3/0446</a>, <a href="#">F25J 3/04624</a>, <a href="#">F25J 3/04636</a> and <a href="#">F25J 3/04715</a> take precedence) <del>(not used)</del>}</li> </ul>
M	F25J 3/04472	<ul style="list-style-type: none"> <li>• {using the cold from cryogenic liquids produced within the air fractionation unit and stored in internal or intermediate storages <del>(not used)</del>}</li> </ul>
M	F25J 3/04521	<ul style="list-style-type: none"> <li>• {Coupling of the air fractionation unit to an air gas-consuming unit, so-called integrated processes (combined plants, e.g. engine plant combined with an industrial process <a href="#">F01K 23/064</a>; gas-turbine plants supplying working fluid to a chemical process <a href="#">F02C 6/10</a>) <del>(not used)</del>}</li> </ul>
U	F25J 3/04642	<ul style="list-style-type: none"> <li>• {Recovering noble gases from air (from gas mixtures other than air <a href="#">F25J 3/028</a> or <a href="#">F25J 3/0685</a>)}</li> </ul>
M	F25J 3/04648	<ul style="list-style-type: none"> <li>• {argon <del>(not used)</del>}</li> </ul>
M	F25J 3/04763	<ul style="list-style-type: none"> <li>• {Start-up or control of the process; Details of the apparatus used <del>(not used)</del>}</li> </ul>
M	F25J 3/06	<ul style="list-style-type: none"> <li>• by partial condensation (<a href="#">F25J 3/08</a> takes precedence; by rectification <a href="#">F25J 3/02</a> {; purification of hydrocarbons in general <a href="#">C07C 7/00</a>}; <del>not used</del>)</li> </ul>
M	F25J 3/0605	<ul style="list-style-type: none"> <li>• {characterised by the feed stream (for air <a href="#">F25J 3/04</a>) <del>(not used)</del>}</li> </ul>
M	F25J 3/063	<ul style="list-style-type: none"> <li>• {characterised by the separated product stream <del>(not used)</del>}</li> </ul>
<b>M</b>	<b>F25J 2200/00</b>	<b>Processes or apparatus using separation by rectification <del>(not used)</del></b>
<b>M</b>	<b>F25J 2205/00</b>	<b>Processes or apparatus using other separation and/or other processing means <del>(not used)</del></b>
<b>M</b>	<b>F25J 2210/00</b>	<b>Processes characterised by the type or other details of the feed stream <del>(not used)</del></b>
<b>M</b>	<b>F25J 2215/00</b>	<b>Processes characterised by the type or other details of the product stream <del>(not used)</del></b>
<b>M</b>	<b>F25J 2220/00</b>	<b>Processes or apparatus involving steps for the removal of impurities <del>(not used)</del></b>

M	F25J 2230/00	Processes or apparatus involving steps for increasing the pressure of gaseous process streams <del>(not used)</del>
M	F25J 2235/00	Processes or apparatus involving steps for increasing the pressure or for conveying of liquid process streams <del>(not used)</del>
M	F25J 2240/00	Processes or apparatus involving steps for expanding of process streams <del>(not used)</del>
M	F25J 2245/00	Processes or apparatus involving steps for recycling of process streams <del>(not used)</del>
M	F25J 2250/00	Details related to the use of reboiler-condensers <del>(not used)</del>
M	F25J 2260/00	Coupling of processes or apparatus to other units; Integrated schemes <del>(not used)</del>
M	F25J 2270/00	Refrigeration techniques used <del>(not used)</del>
M	F25J 2280/00	Control of the process or apparatus <del>(not used)</del>
M	F25J 2290/00	Other details not covered by groups <a href="#">F25J 2200/00</a> - <a href="#">F25J 2280/00</a> <del>(not used)</del>

**Project: MP0381 (F27B)**

M	F27B	<b>FURNACES, KILNS, OVENS, OR RETORTS IN GENERAL; OPEN SINTERING OR LIKE APPARATUS</b>
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NOTE

Attention is drawn to the references and notes following the title of class [F27](#) and the note (par. III) following the Contents of Section [H](#).

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="#">F27B 1/09</a>	covered by	<a href="#">F27B 1/08</a>
<a href="#">F27B 5/05</a>	covered by	<a href="#">F27B 5/04</a>
<a href="#">F27B 14/16</a> , <a href="#">F27B 14/18</a>	covered by	<a href="#">F27B 14/0806</a>
<a href="#">F27B 21/08</a> - <a href="#">F27B 21/14</a>	covered by	<del>F27D</del> <a href="#">F27D 3/00</a> , <a href="#">F27D 21/00</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.

**Project: MP0446 (F28D)**

U	F28D 9/00	<b>Heat-exchange apparatus having stationary plate-like or laminated conduit assemblies for both heat-exchange media, the media being in contact with different sides of a conduit wall {(<a href="#">F28F 3/083</a>, <a href="#">F28F 3/086</a> take precedence)}</b>
M	F28D 9/02	· the heat-exchange media travelling at an angle to one another ( <a href="#">F28D 9/04</a> takes precedence <del>(not used, see F28D 9/00 and other subgroups)</del> )

**Project: MP0447 (G01C)****M G01C**

**MEASURING DISTANCES, LEVELS OR BEARINGS; SURVEYING; NAVIGATION; GYROSCOPIC INSTRUMENTS; PHOTOGRAMMETRY OR VIDEOGRAMMETRY** (~~measuring dimensions or angles of objects G01B; measuring liquid level G01F; measuring intensity or direction of magnetic fields, other than the earth's field, in general G01R; radio navigation, determining distance or velocity by use of propagation effects, e.g. Doppler effects, propagation time, of radio waves, analogous arrangements using other waves G01S; optical systems therefor G02B; maps, globes G09B~~)

NOTES

1. In this subclass, the following term is used with the meaning indicated:  
"navigation" means determining the position and course of land vehicles, ships, aircraft, and space vehicles.
2. Attention is drawn to the Notes following the title of class [G01](#).

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:  
[G01C 11/36](#) covered by [G01C 11/00-G01C 11/34](#)
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 G01C 1/00****Measuring angles** (~~in compasses G01C 17/00~~)**U G01C 1/02**

- Theodolites

**M G01C 1/06**

- • Arrangements for reading scales (~~in general G01D~~)

**U G01C 1/08**

- Sextants

**M G01C 1/10**

- • including an artificial horizon ([G01C 1/14](#) takes precedence; ~~artificial horizons per se G01C 15/14~~)

**M G01C 1/12**

- • with a stabilised mirror (~~tilt compensation in general G12B~~)

**M G01C 1/14**

- • Periscopic sextants (~~periscopes in general G02B 23/08~~)

**M G01C 3/00**

**Measuring distances in line of sight; Optical rangefinders (tapes, chains or wheels for measuring length G01B G01B 3/00; coupling rangefinders with operating parts of photographic apparatus G03B; active triangulation systems, i.e. using the transmission and reflection of electromagnetic waves other than radio waves, G01S 17/48)**

**U G01C 3/02**

- Details

**M G01C 3/04**

- • Adaptation of rangefinders for combination with telescopes or binoculars (~~rangefinders coupled with focussing arrangements of cameras G03B 13/20~~)

**M G01C 3/10**

- using a parallactic triangle with variable angles and a base of fixed length in the observation station, e.g. in the instrument (~~active triangulation systems, i.e. using the transmission and reflection of electromagnetic waves other than radio waves, G01S 17/48~~)

**M G01C 3/22**

- using a parallactic triangle with variable angles and a base of fixed length at, near, or formed by the object (~~active triangulation systems, i.e. using the transmission and reflection of electromagnetic waves other than radio waves, G01S 17/48~~)

**Project: N/A (G01C)**

G01C 3/24	<ul style="list-style-type: none"> <li>using a parallactic triangle with fixed angles and a base of variable length in the observation station, e.g. in the instrument <del>(active triangulation systems, i.e. using the transmission and reflection of electromagnetic waves other than radio waves, G01S 17/48)</del></li> </ul>
G01C 3/26	<ul style="list-style-type: none"> <li>using a parallactic triangle with fixed angles and a base of variable length, at, near, or formed by the object <del>(active triangulation systems, i.e. using the transmission and reflection of electromagnetic waves other than radio waves, G01S 17/48)</del></li> </ul>
<b>G01C 5/00</b>	<b>Measuring height; Measuring distances transverse to line of sight; Levelling between separated points; Surveyors' levels (G01C 3/20, G01C 3/30 take precedence; tracing profiles G01C 7/00; levels indicating inclination at a single point G01C 9/00)</b>
G01C 5/02	<ul style="list-style-type: none"> <li>involving automatic stabilisation of the line of sight; <del>(tilt compensation in general G12B; regulation of direction in general G05D 3/00)</del></li> </ul>
G01C 5/06	<ul style="list-style-type: none"> <li>by using barometric means <del>(barometers per se G01L)</del></li> </ul>
<b>G01C 7/00</b>	<b>Tracing profiles (by photogrammetry G01C 11/00 by photogrammetry or videogrammetry G01C 11/00)</b>
G01C 7/06	<ul style="list-style-type: none"> <li>of cavities, e.g. tunnels <del>(survey of wells E21B 47/00)</del></li> </ul>
<b>G01C 9/00</b>	<b>Measuring inclination, e.g. by clinometers, by levels <del>((switches operated by inclination or orientation H01H 35/02))</del></b>
G01C 9/10	<ul style="list-style-type: none"> <li>by using rolling bodies {, e.g. spheres, cylinders, mercury droplets <del>(tilting mercury container switches H01H 29/20)</del>}</li> </ul>
G01C 9/12	<ul style="list-style-type: none"> <li>by using a single pendulum <del>{plumb lines G01C 15/10}(plumb lines G01C 15/10)</del></li> </ul>
<b>G01C 11/00</b>	<b>Photogrammetry or videogrammetry, e.g. stereogrammetry; Photographic surveying <del>(cameras combined with surveying instruments, e.g. with theodolites, G01C 1/00, G01C 3/00, G01C 5/00, G01C 9/00; surveying cameras G03B 37/00)</del></b>
U G01C 11/04	<ul style="list-style-type: none"> <li>Interpretation of pictures</li> </ul>
U G01C 11/06	<ul style="list-style-type: none"> <li>by comparison of two or more pictures of the same area</li> </ul>
U G01C 11/08	<ul style="list-style-type: none"> <li>the pictures not being supported in the same relative position as when they were taken</li> </ul>
G01C 11/10	<ul style="list-style-type: none"> <li>using computers to control the position of the pictures <del>(computers per se G06)</del></li> </ul>
U G01C 11/12	<ul style="list-style-type: none"> <li>the pictures being supported in the same relative position as when they were taken</li> </ul>
G01C 11/26	<ul style="list-style-type: none"> <li>using computers to control the position of the pictures <del>(computers per se G06)</del></li> </ul>
<b>G01C 13/00</b>	<b>Surveying specially adapted to open water, e.g. sea, lake, river, or canal (liquid level metering G01F; measuring liquid velocity G01P; determining existence of flow of underground water G01V)</b>
U <b>G01C 15/00</b>	<b>Surveying instruments or accessories not provided for in groups G01C 1/00 - G01C 13/00</b>
G01C 15/14	<ul style="list-style-type: none"> <li>Artificial horizons <del>(tilt compensation in general G02B)</del></li> </ul>
<b>G01C 17/00</b>	<b>Compasses; Devices for ascertaining true or magnetic north for navigation or surveying purposes (using gyroscopic effect G01C 19/00; for geophysical or prospecting purposes G01V 3/00)</b>
G01C 17/34	<ul style="list-style-type: none"> <li>Sun- and/or astro-compasses</li> </ul>

- U G01C 19/00 Gyroscopes; Turn-sensitive devices using vibrating masses; Turn-sensitive devices without moving masses; Measuring angular rate using gyroscopic effects**
- U G01C 19/02 · Rotary gyroscopes
  - U G01C 19/04 · · Details
  - U G01C 19/06 · · · Rotors
  - G01C 19/065 · · · · {Measurement or control of angular velocity, specifically adapted to gyrorotors (~~measuring angular speed in general G01P; controlling angular speed G05D 13/00; controlling electrical motors H02P~~)}
  - G01C 19/08 · · · · electrically driven ([G01C 19/14](#) takes precedence; ~~dynamoelectric machines H02K~~)
  - G01C 19/16 · · · Suspensions; Bearings (~~bearings in general F16C; balancing rotors G01M~~)
  - G01C 19/18 · · · · providing movement of rotor with respect to its rotational axes ([G01C 19/20](#), [G01C 19/24](#) ~~takes~~**take** precedence)
  - G01C 19/26 · · · Caging, i.e. immobilising moving parts, e.g. for transport (~~applicable to instruments in general G01D 11/20~~)
  - G01C 19/32 · · · Indicating or recording means specially adapted for rotary gyroscopes (~~in general G01D~~)

**Project: MP0447 (G01C)**

- M G01C 19/56 · Turn-sensitive devices using vibrating masses, e.g. vibratory angular rate sensors based on Coriolis forces

**NOTE**

Attention is drawn to the Notes following the titles of class B81 and subclass B81B relating to "microstructural devices" and "microstructural systems"

**Project: N/A (G01C)**

- U G01C 19/58 · Turn-sensitive devices without moving masses
- G01C 19/60 · · Electronic or nuclear magnetic resonance gyrometers (~~magnetic resonance arrangements in general G01R 33/20~~)
- U G01C 19/64 · · Gyrometers using the Sagnac effect, i.e. rotation-induced shifts between counter-rotating electromagnetic beams
- G01C 19/66 · · · Ring laser gyrometers (~~ring lasers in general H01S 3/083~~)
- U G01C 19/661 · · · · {details}
- G01C 19/665 · · · · · {control of the cavity (~~of lasers in general H01S 3/10~~)}
- G01C 21/00 Navigation; Navigational instruments not provided for in preceding groups [G01C 1/00-G01C 19/00](#) (measuring distance traversed on the ground by a vehicle [G01C 22/00](#); ~~measuring linear or angular speed or acceleration G01P~~; control of position, course, altitude or attitude of vehicles [G05D 1/00](#); traffic control systems [G08G for road vehicles involving transmission of navigation instructions to the vehicle G08G 1/0968](#))**
- G01C 21/02 · by astronomical means ([G01C 21/24](#), [G01C 21/26](#) take precedence; ~~measuring time by using position of the sun, moon, or stars G04B 49/00~~)
- G01C 21/04 · by terrestrial means ([G01C 21/24](#), [G01C 21/26](#) take precedence; ~~marking of navigation route for ships B63B 51/00~~)

**Project: RP0349 (G01C)**

- U G01C 21/10 · by using measurements of speed or acceleration ([G01C 21/24](#), [G01C 21/26](#) take precedence)



- |   |             |  |
|---|-------------|--|
| U | G01C 21/12  | • • executed aboard the object being navigated; Dead reckoning       |
| U | G01C 21/16  | • • • by integrating acceleration or speed, i.e. inertial navigation |
| M | G01C 21/165 | • • • • {combined with non-inertial navigation instruments}          |

NOTE

*This group does not adequately cover all aspects of this subject; see also G01S 19/49; G01S 19/47.*

**Project: N/A (G01C)**

- |   |                   |  |
|---|-------------------|--|
| U | G01C 21/20        | <ul style="list-style-type: none"> <li>• Instruments for performing navigational calculations (<a href="#">G01C 21/24</a>, <a href="#">G01C 21/26</a> take precedence)</li> </ul>  |
|   | G01C 21/22        | <ul style="list-style-type: none"> <li>• • Plotting boards (<del>in general B43L</del>)</li> </ul>   |
| U | G01C 21/26        | <ul style="list-style-type: none"> <li>• specially adapted for navigation in a road network</li> </ul>   |
| U | G01C 21/34        | <ul style="list-style-type: none"> <li>• • Route searching; Route guidance</li> </ul>  |
|   | G01C 21/36        | <ul style="list-style-type: none"> <li>• • • Input/output arrangements <del>of navigation systems</del> <b>for on-board computers</b>; <del>{(input arrangements for transferring data to be processed into a form capable of being handled by the computer, and output arrangements for transferring data from processing unit to output unit, e.g. interface arrangements G06F 3/00; pointing devices displaced or positioned by the user, e.g. mice, trackballs, pens or joysticks, and accessories therefor G06F 3/033; interaction techniques for graphical user interfaces, e.g. interaction with windows, icons or menus G06F 3/048; manipulating 3D models or images for computer graphics G06T 19/00)}</del></li> </ul> |
|   | G01C 21/3602      | <ul style="list-style-type: none"> <li>• • • • {Input other than that of destination using image analysis, e.g. detection of road signs, lanes, buildings, real preceding vehicles using a camera <del>(image data processing per se G06T)</del>}</li> </ul>   |
| U | G01C 21/3605      | <ul style="list-style-type: none"> <li>• • • • {Destination input or retrieval}</li> </ul>   |
|   | G01C 21/3608      | <ul style="list-style-type: none"> <li>• • • • • {using speech input, e.g. using speech recognition <del>(speech recognition per se G10L 15/00)</del>}</li> </ul>  |
|   | <b>G01C 22/00</b> | <b>Measuring distance traversed on the ground by vehicles, persons, animals, or other moving solid bodies, e.g. using odometers, using pedometers <del>(counting mechanisms per se G06M)</del></b>   |
|   | G01C 22/004       | <ul style="list-style-type: none"> <li>• {for golf carts <del>(wheeled carriers for golf bags A63B 55/60)</del>}</li> </ul>  |
| U | <b>G01C 23/00</b> | <b>Combined instruments indicating more than one navigational value, e.g. for aircraft; Combined measuring devices for measuring two or more variables of movement, e.g. distance, speed, acceleration</b>   |
|   | G01C 23/005       | <ul style="list-style-type: none"> <li>• {Flight directors (indicating arrangements specially adapted for rotary gyroscopes <a href="#">G01C 19/32</a>; <del>indicating or recording in connection with measuring; in general G01D; control of course of land or air vehicles by controlling or regulating non-electric variables G05D 1/00; arrangements or adaptations of instruments for aircraft B64D 43/00)</del>}</li> </ul>   |
|   | <b>G01C 25/00</b> | <b>Manufacturing, calibrating, cleaning, or repairing instruments <b>and/or</b> devices referred to in the <b>preceding other</b> groups <del>of this subclass</del> (testing, calibrating <b>and/or</b> compensating compasses <a href="#">G01C 17/38</a>)</b>  |



## Project: RP0349 (G01S)

## M G01S

RADIO DIRECTION-FINDING; RADIO NAVIGATION; DETERMINING DISTANCE OR VELOCITY BY USE OF RADIO WAVES; LOCATING OR PRESENCE-DETECTING BY USE OF THE REFLECTION OR RERADIATION OF RADIO WAVES; ANALOGOUS ARRANGEMENTS USING OTHER WAVES (~~for special applications, see the relevant subclasses, e.g. A61B, G01F, G01N, G02B; measuring dimensions or angles of objects G01B; navigation in general G01C; measuring infrasonic, sonic or ultrasonic vibrations in general G01H; measuring infra-red, visible, or ultra-violet radiation in general G01J; transducers per se, see the relevant subclasses, e.g. G01L, H01L, H04R; measuring direction or velocity of flowing fluids by reception or emission of radiowaves or other waves and based on propagation effects caused in the fluid itself G01P; measuring electric or magnetic variables in general G01R; detecting masses or objects by methods not involving reflection or radiation of radio, acoustic or other waves G01V; {time-interval measuring G04F}; aerials H01Q)~~

## NOTES

1. In this subclass, the following term is used with the meaning indicated:
  - "transponder" means an arrangement which reacts to an incoming interrogating or detecting wave by emitting a specific answering or identifying wave.
2. Attention is drawn to the Notes following the title of class [G01](#) and to Note (1) following the title of subclass [G09B](#).

## 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:  
[G01S 7/26](#) covered by [G01S 7/06](#)
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 G01S 1/00

**Beacons or beacon systems transmitting signals having a characteristic or characteristics capable of being detected by non-directional receivers and defining directions, positions, or position lines fixed relatively to the beacon transmitters; Receivers co-operating therewith (position fixing by co-ordinating a plurality of determinations of direction or position lines [G01S 5/00](#))**

## U G01S 1/02

- using radio waves ([G01S 19/00](#) takes precedence)

## U G01S 1/04

- Details

## C G01S 1/042

- {Transmitters}

**WARNING**

*Group [G01S 1/042](#) is impacted by reclassification into groups [G01S 1/0423](#), [G01S 1/0426](#), [G01S 1/0428](#), [G01S 2201/00](#), [G01S 2201/01](#), [G01S 2201/02](#), [G01S 2201/025](#), [G01S 2201/03](#), [G01S 2201/04](#), [G01S 2201/05](#), [G01S 2201/06](#), [G01S 2201/07](#), and [G01S 2201/08](#). All groups listed in this Warning should be considered in order to perform a complete search.*

## N G01S 1/0423

- {Mounting or deployment thereof}

**WARNING**

*Group [G01S 1/0423](#) is incomplete pending reclassification of documents from group [G01S 1/042](#). Groups [G01S 1/042](#) and [G01S 1/0423](#) should be considered in order to perform a complete search.*

- N G01S 1/0426
- • • • {Collocated with electrical equipment other than beacons }
- WARNING  
Group [G01S 1/0426](#) is incomplete pending reclassification of documents from group [G01S 1/042](#).  
Groups [G01S 1/042](#) and [G01S 1/0426](#) should be considered in order to perform a complete search.
- N G01S 1/0428
- • • • {Signal details}
- WARNING  
Group [G01S 1/0428](#) is incomplete pending reclassification of documents from group [G01S 1/042](#).  
Groups [G01S 1/042](#) and [G01S 1/0428](#) should be considered in order to perform a complete search.
- U G01S 1/045
- • • {Receivers}
- U G01S 1/047
- • • {Displays or indicators ([G01S 1/06](#) takes precedence)}
- M G01S 1/08
- • Systems for determining direction or position line ~~{{aerial arrangements for changing or varying the orientation or the shape of the directional pattern H01Q 3/00; combinations of different interacting units for giving a desired directional characteristic H01Q 21/29; aerials or aerial systems providing at least two radiation patterns H01Q 25/00}}~~
- C G01S 1/70
- using electromagnetic waves other than radio waves
- WARNING  
Group [G01S 1/70](#) is impacted by reclassification into groups [G01S 1/703](#), [G01S 1/7032](#), [G01S 1/7034](#), [G01S 1/7036](#), [G01S 1/7038](#), [G01S 2201/00](#), [G01S 2201/01](#), [G01S 2201/02](#), [G01S 2201/025](#), [G01S 2201/03](#), [G01S 2201/04](#), [G01S 2201/05](#), [G01S 2201/06](#), [G01S 2201/07](#), and [G01S 2201/08](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- N G01S 1/703
- • {Details}
- WARNING  
Group [G01S 1/703](#) is incomplete pending reclassification of documents from group [G01S 1/70](#).  
Groups [G01S 1/70](#) and [G01S 1/703](#) should be considered in order to perform a complete search.
- N G01S 1/7032
- • • {Transmitters}
- WARNING  
Group [G01S 1/7032](#) is incomplete pending reclassification of documents from group [G01S 1/70](#).  
Groups [G01S 1/70](#) and [G01S 1/7032](#) should be considered in order to perform a complete search.
- N G01S 1/7034
- • • • {Mounting or deployment thereof}
- WARNING  
Group [G01S 1/7034](#) is incomplete pending reclassification of documents from group [G01S 1/70](#).  
Groups [G01S 1/70](#) and [G01S 1/7034](#) should be considered in order to perform a complete search.

- N G01S 1/7036 . . . . {Collocated with electrical equipment other than beacons}  
WARNING  
 Group [G01S 1/7036](#) is incomplete pending reclassification of documents from group [G01S 1/70](#).  
 Groups [G01S 1/70](#) and [G01S 1/7036](#) should be considered in order to perform a complete search.
- N G01S 1/7038 . . . . {Signal details}  
WARNING  
 Group [G01S 1/7038](#) is incomplete pending reclassification of documents from group [G01S 1/70](#).  
 Groups [G01S 1/70](#) and [G01S 1/7038](#) should be considered in order to perform a complete search.
- U G01S 1/705 . . {using gamma or X-rays}
- M G01S 1/72 . using ultrasonic, sonic or infrasonic waves ~~(signalling devices G08B)~~
- C G01S 1/74 . . Details  
WARNING  
 Group [G01S 1/74](#) is impacted by reclassification into groups [G01S 1/75](#), [G01S 1/751](#), [G01S 1/752](#), [G01S 1/753](#), [G01S 2201/00](#), [G01S 2201/01](#), [G01S 2201/02](#), [G01S 2201/025](#), [G01S 2201/03](#), [G01S 2201/04](#), [G01S 2201/05](#), [G01S 2201/06](#), [G01S 2201/07](#), and [G01S 2201/08](#).  
 All groups listed in this Warning should be considered in order to perform a complete search.
- N G01S 1/75 . . . {Transmitters}  
WARNING  
 Group [G01S 1/75](#) is incomplete pending reclassification of documents from group [G01S 1/74](#).  
 Groups [G01S 1/74](#) and [G01S 1/75](#) should be considered in order to perform a complete search.
- N G01S 1/751 . . . . {Mounting or deployment thereof}  
WARNING  
 Group [G01S 1/751](#) is incomplete pending reclassification of documents from group [G01S 1/74](#).  
 Groups [G01S 1/74](#) and [G01S 1/751](#) should be considered in order to perform a complete search.
- N G01S 1/752 . . . . {Collocated with electrical equipment other than beacons }  
WARNING  
 Group [G01S 1/752](#) is incomplete pending reclassification of documents from group [G01S 1/74](#).  
 Groups [G01S 1/74](#) and [G01S 1/752](#) should be considered in order to perform a complete search.
- N G01S 1/753 . . . . {Signal details}  
WARNING  
 Group [G01S 1/753](#) is incomplete pending reclassification of documents from group [G01S 1/74](#).  
 Groups [G01S 1/74](#) and [G01S 1/753](#) should be considered in order to perform a complete search.

- M G01S 1/76
- Systems for determining direction or position line ~~(sound focusing or directing using electrical steering of transducer arrays, e.g. beam steering, in general G10K 11/34)~~
- M G01S 19/00
- Satellite radio beacon positioning systems; Determining position, velocity or attitude using signals transmitted by such systems**
- NOTE
- In this group, or in the patent documents classified in this group, the following abbreviations are often used:
- **PDOP = Position Dilution of Precision**
  - **DGPS = Differential GPS**
  - **Pseudolite = Pseudolite is a contraction of the term "pseudo-satellite," used to refer to the mimicing of GPS satellites (or of other navigation satellites) by other transceivers.**
  - **RAIM = Receiver Autonomous Integrity Monitoring**
  - **WAAS = Wide Area Augmentation System**
- U G01S 19/01
- Satellite radio beacon positioning systems transmitting time-stamped messages, e.g. GPS [Global Positioning System], GLONASS [Global Orbiting Navigation Satellite System] or GALILEO
- U G01S 19/03
- Cooperating elements; Interaction or communication between different cooperating elements or between cooperating elements and receivers
- NOTE
- The term "cooperating elements" designates additional elements or subsystems, including receivers of other users, which interact or communicate with the receiver or the satellite positioning system.
- C G01S 19/07
- providing data for correcting measured positioning data, ~~e.g. DGPS [differential GPS] or ionosphere corrections~~
- WARNING
- Group [G01S 19/07](#) is impacted by reclassification into groups [G01S 19/071](#), [G01S 19/072](#), [G01S 19/073](#), and [G01S 19/074](#).  
All groups listed in this Warning should be considered in order to perform a complete search.
- N G01S 19/071
- {DGPS corrections}
- WARNING
- Group [G01S 19/071](#) is incomplete pending reclassification of documents from group [G01S 19/07](#).  
Groups [G01S 19/07](#) and [G01S 19/071](#) should be considered in order to perform a complete search.
- N G01S 19/072
- {Ionosphere corrections}
- WARNING
- Group [G01S 19/072](#) is incomplete pending reclassification of documents from group [G01S 19/07](#).  
Groups [G01S 19/07](#) and [G01S 19/072](#) should be considered in order to perform a complete search.
- N G01S 19/073
- {involving a network of fixed stations}
- WARNING
- Group [G01S 19/073](#) is incomplete pending reclassification of documents from group [G01S 19/07](#).  
Groups [G01S 19/07](#) and [G01S 19/073](#) should be considered in order to perform a complete search.

- N G01S 19/074 . . . . {providing integrity data, e.g. WAAS}
- WARNING  
Group [G01S 19/074](#) is incomplete pending reclassification of documents from group [G01S 19/07](#).  
Groups [G01S 19/07](#) and [G01S 19/074](#) should be considered in order to perform a complete search.
- U G01S 19/10 . . . providing dedicated supplementary positioning signals
- C G01S 19/11 . . . . wherein the cooperating elements are pseudolites or satellite radio beacon positioning system signal repeaters
- WARNING  
Group [G01S 19/11](#) is impacted by reclassification into group [G01S 19/115](#).  
Groups [G01S 19/11](#) and [G01S 19/115](#) should be considered in order to perform a complete search.
- N G01S 19/115 . . . . {Airborne or satellite based pseudolites or repeaters}
- WARNING  
Group [G01S 19/115](#) is incomplete pending reclassification of documents from group [G01S 19/11](#).  
Groups [G01S 19/11](#) and [G01S 19/115](#) should be considered in order to perform a complete search.
- U G01S 19/38 . Determining a navigation solution using signals transmitted by a satellite radio beacon positioning system
- C G01S 19/39 . . the satellite radio beacon positioning system transmitting time-stamped messages, e.g. GPS [Global Positioning System], GLONASS [Global Orbiting Navigation Satellite System] or GALILEO
- WARNING  
Group [G01S 19/39](#) is impacted by reclassification into groups [G01S 19/393](#) and [G01S 19/396](#).  
Groups [G01S 19/39](#), [G01S 19/393](#), and [G01S 19/396](#) should be considered in order to perform a complete search.
- N G01S 19/393 . . . {Trajectory determination or predictive tracking, e.g. Kalman filtering}
- WARNING  
Group [G01S 19/393](#) is incomplete pending reclassification of documents from group [G01S 19/39](#).  
Groups [G01S 19/39](#) and [G01S 19/393](#) should be considered in order to perform a complete search.
- N G01S 19/396 . . . {Determining accuracy or reliability of position or pseudorange measurements}
- WARNING  
Group [G01S 19/396](#) is incomplete pending reclassification of documents from group [G01S 19/39](#).  
Groups [G01S 19/39](#) and [G01S 19/396](#) should be considered in order to perform a complete search.
- U G01S 19/42 . . . Determining position
- U G01S 19/45 . . . . by combining measurements of signals from the satellite radio beacon positioning system with a supplementary measurement

- M G01S 19/47
- • • • the supplementary measurement being an inertial measurement, e.g. tightly coupled inertial
- NOTE  
*This group does not adequately cover combining inertial navigation measurements with a non-inertial navigation instrument; also see G01C 21/165.*
- U G01S 19/48
- • • • by combining or switching between position solutions derived from the satellite radio beacon positioning system and position solutions derived from a further system
- M G01S 19/49
- • • • whereby the further system is an inertial position system, e.g. loosely-coupled
- NOTE  
*This group does not adequately cover combining inertial navigation measurements with a non-inertial navigation instrument; also see G01C 21/165.*
- M G01S 19/50
- • • • whereby the position solution is constrained to lie upon a particular curve or surface, e.g. for locomotives on railway tracks
- NOTE  
*This group does not adequately cover regarding map or contour matching also; see G01C 21/005 and G01C 21/30.*
- U G01S 19/53
- • • Determining attitude
- U G01S 19/54
- • • • using carrier phase measurements; using long or short baseline interferometry
- U G01S 19/55
- • • • Carrier phase ambiguity resolution; Floating ambiguity; LAMBDA [Least-squares AMBIGuity Decorrelation Adjustment] method
- N G01S 2201/00**
- Indexing scheme relating to beacons or beacon systems transmitting signals capable of being detected by non-directional receivers and defining directions, positions, or position lines fixed relatively to the beacon transmitters***
- WARNING  
 Group [G01S 2201/00](#) is incomplete pending reclassification of documents from groups [G01S 1/042](#), [G01S 1/70](#), and [G01S 1/74](#).  
 All groups listed in this Warning should be considered in order to perform a complete search.
- N G01S 2201/01
- adapted for specific applications or environments
- WARNING  
 Group [G01S 2201/01](#) is incomplete pending reclassification of documents from groups [G01S 1/042](#), [G01S 1/70](#), and [G01S 1/74](#).  
 All groups listed in this Warning should be considered in order to perform a complete search.
- N G01S 2201/02
- Indoor positioning, e.g. in covered car-parks, mining facilities, warehouses
- WARNING  
 Group [G01S 2201/02](#) is incomplete pending reclassification of documents from groups [G01S 1/042](#), [G01S 1/70](#), and [G01S 1/74](#).  
 All groups listed in this Warning should be considered in order to perform a complete search.

- N G01S 2201/025      • • • Indoor pedestrian positioning  
WARNING  
 Group [G01S 2201/025](#) is incomplete pending reclassification of documents from groups [G01S 1/042](#), [G01S 1/70](#), and [G01S 1/74](#).  
 All groups listed in this Warning should be considered in order to perform a complete search.
- N G01S 2201/03      • • Construction sites  
WARNING  
 Group [G01S 2201/03](#) is incomplete pending reclassification of documents from groups [G01S 1/042](#), [G01S 1/70](#), and [G01S 1/74](#).  
 All groups listed in this Warning should be considered in order to perform a complete search.
- N G01S 2201/04      • • Emergencies  
WARNING  
 Group [G01S 2201/04](#) is incomplete pending reclassification of documents from groups [G01S 1/042](#), [G01S 1/70](#), and [G01S 1/74](#).  
 All groups listed in this Warning should be considered in order to perform a complete search.
- N G01S 2201/05      • • Sport  
WARNING  
 Group [G01S 2201/05](#) is incomplete pending reclassification of documents from groups [G01S 1/042](#), [G01S 1/70](#), and [G01S 1/74](#).  
 All groups listed in this Warning should be considered in order to perform a complete search.
- N G01S 2201/06      • • Aircraft navigation  
WARNING  
 Group [G01S 2201/06](#) is incomplete pending reclassification of documents from groups [G01S 1/042](#), [G01S 1/70](#), and [G01S 1/74](#).  
 All groups listed in this Warning should be considered in order to perform a complete search.
- N G01S 2201/07      • • Under water  
WARNING  
 Group [G01S 2201/07](#) is incomplete pending reclassification of documents from groups [G01S 1/042](#), [G01S 1/70](#), and [G01S 1/74](#).  
 All groups listed in this Warning should be considered in order to perform a complete search.
- N G01S 2201/08      • • Marine or water borne applications  
WARNING  
 Group [G01S 2201/08](#) is incomplete pending reclassification of documents from groups [G01S 1/042](#), [G01S 1/70](#), and [G01S 1/74](#).  
 All groups listed in this Warning should be considered in order to perform a complete search.

## Project: RP0211 (G02B)

- U G02B 15/00      Optical objectives with means for varying the magnification (anamorphic objectives [G02B 13/08](#))



C G02B 15/14

- by axial movement of one or more lenses or groups of lenses relative to the image plane for continuously varying the equivalent focal length of the objective

WARNING

Group [G02B 15/14](#) is impacted by reclassification into groups [G02B 15/142](#), [G02B 15/1421](#), [G02B 15/1425](#), [G02B 15/143](#), [G02B 15/1431](#), [G02B 15/143101](#), [G02B 15/143103](#), [G02B 15/143105](#), [G02B 15/143107](#), [G02B 15/1435](#), [G02B 15/143501](#), [G02B 15/143503](#), [G02B 15/143505](#), [G02B 15/143507](#), [G02B 15/144](#), [G02B 15/1441](#), [G02B 15/144101](#), [G02B 15/144103](#), [G02B 15/144105](#), [G02B 15/144107](#), [G02B 15/144109](#), [G02B 15/144111](#), [G02B 15/144113](#), [G02B 15/144115](#), [G02B 15/1445](#), [G02B 15/144501](#), [G02B 15/144503](#), [G02B 15/144505](#), [G02B 15/144507](#), [G02B 15/144509](#), [G02B 15/144511](#), [G02B 15/144513](#), [G02B 15/144515](#), [G02B 15/145](#), [G02B 15/1451](#), [G02B 15/145101](#), [G02B 15/145103](#), [G02B 15/145105](#), [G02B 15/145107](#), [G02B 15/145109](#), [G02B 15/145111](#), [G02B 15/145113](#), [G02B 15/145115](#), [G02B 15/145117](#), [G02B 15/145119](#), [G02B 15/145121](#), [G02B 15/145123](#), [G02B 15/145125](#), [G02B 15/145127](#), [G02B 15/145129](#), [G02B 15/145131](#), [G02B 15/1455](#), [G02B 15/145501](#), [G02B 15/145503](#), [G02B 15/145505](#), [G02B 15/145507](#), [G02B 15/145509](#), [G02B 15/145511](#), [G02B 15/145513](#), [G02B 15/145515](#), [G02B 15/145517](#), [G02B 15/145519](#), [G02B 15/145521](#), [G02B 15/145523](#), [G02B 15/145525](#), [G02B 15/145527](#), [G02B 15/145529](#), [G02B 15/145531](#), [G02B 15/146](#), [G02B 15/1461](#), and [G02B 15/1465](#).

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

Q G02B 15/142

- {having two groups only}

WARNING

Group [G02B 15/142](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), and [G02B 15/16](#).

Group [G02B 15/142](#) is also impacted by reclassification into groups [G02B 15/1421](#) and [G02B 15/1425](#).

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

N G02B 15/1421

- • {the first group being positive}

WARNING

Group [G02B 15/1421](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/142](#), [G02B 15/15](#), [G02B 15/155](#), and [G02B 15/16](#).

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

N G02B 15/1425

- • {the first group being negative}

WARNING

Group [G02B 15/1425](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/142](#), [G02B 15/15](#), [G02B 15/155](#), and [G02B 15/16](#).

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

N G02B 15/143

- {having three groups only}

WARNING

Group [G02B 15/143](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/1431 . . . {the first group being positive}

WARNING

Groups [G02B 15/1431](#), [G02B 15/143101](#), [G02B 15/143103](#), [G02B 15/143105](#), and [G02B 15/143107](#) are incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), and [G02B 15/20](#).

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

N G02B 15/143101 . . . {arranged +--}

N G02B 15/143103 . . . {arranged ++-}

N G02B 15/143105 . . . {arranged ++-}

N G02B 15/143107 . . . {arranged +++}

N G02B 15/1435 . . . {the first group being negative}

WARNING

Groups [G02B 15/1435](#), [G02B 15/143501](#), [G02B 15/143503](#), [G02B 15/143505](#), and [G02B 15/143507](#) are incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/143501 . . . {arranged ---}

N G02B 15/143503 . . . {arranged -+-}

N G02B 15/143505 . . . {arranged ---}

N G02B 15/143507 . . . {arranged -+-}

N G02B 15/144 . . {having four groups only}

WARNING

Groups [G02B 15/144](#) and [G02B 15/1441](#) are incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/17](#), [G02B 15/173](#), and [G02B 15/20](#).

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

N G02B 15/1441 . . . {the first group being positive}

N G02B 15/144101 . . . {arranged +---}

WARNING

Group [G02B 15/144101](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/17](#), and [G02B 15/20](#).

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

N G02B 15/144103 . . . {arranged +-+}

WARNING

Group [G02B 15/144103](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#),

[G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/17](#), and [G02B 15/20](#).

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

N G02B 15/144105 . . . {arranged +-+}

WARNING

Group [G02B 15/144105](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/173](#), and [G02B 15/20](#).

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

N G02B 15/144107 . . . {arranged +++}

WARNING

Group [G02B 15/144107](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), and [G02B 15/20](#).

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

N G02B 15/144109 . . . {arranged +++}

WARNING

Group [G02B 15/144109](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/17](#), and [G02B 15/20](#).

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

N G02B 15/144111 . . . {arranged +++}

WARNING

Group [G02B 15/144111](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/173](#), and [G02B 15/20](#).

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

N G02B 15/144113 . . . {arranged +++}

WARNING

Group [G02B 15/144113](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/173](#), and [G02B 15/20](#).

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

N G02B 15/144115 . . . {arranged ++++}

WARNING

Group [G02B 15/144115](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), and [G02B 15/20](#).

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

N G02B 15/1445 . . . {the first group being negative}

WARNING

Group [G02B 15/1445](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/173](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/144501 . . . {arranged ----}

WARNING

Group [G02B 15/144501](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/144503 . . . {arranged -+-}

WARNING

Group [G02B 15/144503](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/17](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/144505 . . . {arranged -+-}

WARNING

Group [G02B 15/144505](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/144507 . . . {arranged -+-}

WARNING

Group [G02B 15/144507](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/144509 . . . {arranged ----}

WARNING

Group [G02B 15/144509](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/144511 . . . {arranged -++}

WARNING

Group [G02B 15/144511](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/173](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/144513 . . . {arranged ---}

WARNING

Group [G02B 15/144513](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/144515 . . . {arranged -+++}

WARNING

Group [G02B 15/144515](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/145 . . {having five groups only}

WARNING

Group [G02B 15/145](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/17](#), [G02B 15/173](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/1451 . . {the first group being positive}

WARNING

Group [G02B 15/1451](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/17](#), [G02B 15/173](#), and [G02B 15/20](#).

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

N G02B 15/145101 . . . {arranged +----}

WARNING

Group [G02B 15/145101](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/17](#), and [G02B 15/20](#).

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

N G02B 15/145103 . . . {arranged +---}

WARNING

Group [G02B 15/145103](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/17](#), and [G02B 15/20](#).

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

N G02B 15/145105 . . . {arranged +---}

WARNING

Group [G02B 15/145105](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/17](#), [G02B 15/173](#), and [G02B 15/20](#).

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

N G02B 15/145107 . . . {arranged +++-}

WARNING

Group [G02B 15/145107](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/17](#), and [G02B 15/20](#).

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

N G02B 15/145109 . . . {arranged +---}

WARNING

Group [G02B 15/145109](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/17](#), and [G02B 15/20](#).

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

N G02B 15/145111 . . . {arranged +-+-}

WARNING

Group [G02B 15/145111](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/173](#), and [G02B 15/20](#).

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

N G02B 15/145113 . . . {arranged +-+-}

WARNING

Group [G02B 15/145113](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/173](#), and [G02B 15/20](#).



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

N G02B 15/145115 . . . {arranged ++++}

WARNING

Group [G02B 15/145115](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), and [G02B 15/20](#).

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

N G02B 15/145117 . . . {arranged +---}

WARNING

Group [G02B 15/145117](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/17](#), and [G02B 15/20](#).

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

N G02B 15/145119 . . . {arranged ++--}

WARNING

Group [G02B 15/145119](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/17](#), and [G02B 15/20](#).

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

N G02B 15/145121 . . . {arranged +-+-}

WARNING

Group [G02B 15/145121](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/173](#), and [G02B 15/20](#).

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

N G02B 15/145123 . . . {arranged +++-}

WARNING

Group [G02B 15/145123](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/173](#), and [G02B 15/20](#).

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

N G02B 15/145125 . . . {arranged +---}

WARNING

Group [G02B 15/145125](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/17](#), and [G02B 15/20](#).

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



N G02B 15/145127 . . . {arranged ++++}

WARNING

Group [G02B 15/145127](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/173](#), and [G02B 15/20](#).

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

N G02B 15/145129 . . . {arranged ++++}

WARNING

Group [G02B 15/145129](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/173](#), and [G02B 15/20](#).

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

N G02B 15/145131 . . . {arranged +++++}

WARNING

Group [G02B 15/145131](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), and [G02B 15/20](#).

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

N G02B 15/1455 . . . {the first group being negative}

WARNING

Group [G02B 15/1455](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/17](#), [G02B 15/173](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/145501 . . . {arranged -----}

WARNING

Group [G02B 15/145501](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/145503 . . . {arranged -+----}

WARNING

Group [G02B 15/145503](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/17](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/145505 . . . {arranged ---+--}

WARNING

Group [G02B 15/145505](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/17](#), and [G02B 15/20](#).

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

N G02B 15/145507 . . . {arranged -++--}

WARNING

Group [G02B 15/145507](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/17](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/145509 . . . {arranged ---+-}

WARNING

Group [G02B 15/145509](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/145511 . . . {arranged -+++-}

WARNING

Group [G02B 15/145511](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/173](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/145513 . . . {arranged -+++-}

WARNING

Group [G02B 15/145513](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/145515 . . . {arranged -++++}

WARNING

Group [G02B 15/145515](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/145517 . . . {arranged ----+}

WARNING

Group [G02B 15/145517](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/145519 . . . {arranged -+++}

WARNING

Group [G02B 15/145519](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/17](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/145521 . . . {arranged --++}

WARNING

Group [G02B 15/145521](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/173](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/145523 . . . {arranged -+++}

WARNING

Group [G02B 15/145523](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/173](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/145525 . . . {arranged ----++}

WARNING

Group [G02B 15/145525](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/145527 . . . {arranged -++++}

WARNING

Group [G02B 15/145527](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/173](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/145529 . . . {arranged ---++}

WARNING

Group [G02B 15/145529](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/145531 . . . {arranged -++++}

WARNING

Group [G02B 15/145531](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/146 . . {having more than five groups}

WARNING

Groups [G02B 15/146](#) and [G02B 15/1465](#) are incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/17](#), [G02B 15/173](#), [G02B 15/177](#), and [G02B 15/20](#).

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

N G02B 15/1461 . . . {the first group being positive}

WARNING

Group [G02B 15/1461](#) is incomplete pending reclassification of documents from groups [G02B 15/14](#), [G02B 15/15](#), [G02B 15/155](#), [G02B 15/16](#), [G02B 15/163](#), [G02B 15/167](#), [G02B 15/17](#), [G02B 15/173](#), and [G02B 15/20](#).

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

N G02B 15/1465 . . . {the first group being negative}

C G02B 15/15 . . compensation by means of only one movement or by means of only linearly related movements, e.g. optical compensation

WARNING

Group [G02B 15/15](#) is impacted by reclassification into groups [G02B 15/142](#), [G02B 15/1421](#), [G02B 15/1425](#), [G02B 15/143](#), [G02B 15/1431](#), [G02B 15/143101](#), [G02B 15/143103](#), [G02B 15/143105](#), [G02B 15/143107](#), [G02B 15/1435](#), [G02B 15/143501](#), [G02B 15/143503](#), [G02B 15/143505](#), [G02B 15/143507](#), [G02B 15/144](#), [G02B 15/1441](#), [G02B 15/144101](#), [G02B 15/144103](#), [G02B 15/144105](#), [G02B 15/144107](#), [G02B 15/144109](#), [G02B 15/144111](#), [G02B 15/144113](#), [G02B 15/144115](#), [G02B 15/1445](#), [G02B 15/144501](#), [G02B 15/144503](#), [G02B 15/144505](#), [G02B 15/144507](#), [G02B 15/144509](#), [G02B 15/144511](#), [G02B 15/144513](#), [G02B 15/144515](#), [G02B 15/145](#), [G02B 15/1451](#), [G02B 15/145101](#), [G02B 15/145103](#), [G02B 15/145105](#), [G02B 15/145107](#), [G02B 15/145109](#), [G02B 15/145111](#), [G02B 15/145113](#), [G02B 15/145115](#), [G02B 15/145117](#), [G02B 15/145119](#), [G02B 15/145121](#), [G02B 15/145123](#), [G02B 15/145125](#), [G02B 15/145127](#), [G02B 15/145129](#), [G02B 15/145131](#), [G02B 15/1455](#), [G02B 15/145501](#), [G02B 15/145503](#), [G02B 15/145505](#), [G02B 15/145507](#), [G02B 15/145509](#), [G02B 15/145511](#), [G02B 15/145513](#), [G02B 15/145515](#), [G02B 15/145517](#),

G02B 15/145519, G02B 15/145521, G02B 15/145523, G02B 15/145525, G02B 15/145527, G02B 15/145529, G02B 15/145531, G02B 15/146, G02B 15/1461, and G02B 15/1465.

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

F G02B 15/155  
(Frozen)

- • {Zoom lenses arranged symmetrically around a central plane, e.g. a diaphragm-containing plane}

**WARNING**

*Group G02B 15/155 is no longer used for the classification of documents as of August 1, 2019.*

*The content of this group is being reclassified into groups G02B 15/142, G02B 15/1421, G02B 15/1425, G02B 15/143, G02B 15/1431, G02B 15/143101, G02B 15/143103, G02B 15/143105, G02B 15/143107, G02B 15/1435, G02B 15/143501, G02B 15/143503, G02B 15/143505, G02B 15/143507, G02B 15/144, G02B 15/1441, G02B 15/144101, G02B 15/144103, G02B 15/144105, G02B 15/144107, G02B 15/144109, G02B 15/144111, G02B 15/144113, G02B 15/144115, G02B 15/1445, G02B 15/144501, G02B 15/144503, G02B 15/144505, G02B 15/144507, G02B 15/144509, G02B 15/144511, G02B 15/144513, G02B 15/144515, G02B 15/145, G02B 15/1451, G02B 15/145101, G02B 15/145103, G02B 15/145105, G02B 15/145107, G02B 15/145109, G02B 15/145111, G02B 15/145113, G02B 15/145115, G02B 15/145117, G02B 15/145119, G02B 15/145121, G02B 15/145123, G02B 15/145125, G02B 15/145127, G02B 15/145129, G02B 15/145131, G02B 15/1455, G02B 15/145501, G02B 15/145503, G02B 15/145505, G02B 15/145507, G02B 15/145509, G02B 15/145511, G02B 15/145513, G02B 15/145515, G02B 15/145517, G02B 15/145519, G02B 15/145521, G02B 15/145523, G02B 15/145525, G02B 15/145527, G02B 15/145529, G02B 15/145531, G02B 15/146, G02B 15/1461, and G02B 15/1465.*

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

C G02B 15/16

- • with interdependent non-linearly related movements between one lens or lens group, and another lens or lens group ([G02B 15/22](#) takes precedence)

**WARNING**

*Group G02B 15/16 is impacted by reclassification into groups G02B 15/142, G02B 15/1421, G02B 15/1425, G02B 15/143, G02B 15/1431, G02B 15/143101, G02B 15/143103, G02B 15/143105, G02B 15/143107, G02B 15/1435, G02B 15/143501, G02B 15/143503, G02B 15/143505, G02B 15/143507, G02B 15/144, G02B 15/1441, G02B 15/144101, G02B 15/144103, G02B 15/144105, G02B 15/144107, G02B 15/144109, G02B 15/144111, G02B 15/144113, G02B 15/144115, G02B 15/1445, G02B 15/144501, G02B 15/144503, G02B 15/144505, G02B 15/144507, G02B 15/144509, G02B 15/144511, G02B 15/144513, G02B 15/144515, G02B 15/145, G02B 15/1451, G02B 15/145101, G02B 15/145103, G02B 15/145105, G02B 15/145107, G02B 15/145109, G02B 15/145111, G02B 15/145113, G02B 15/145115, G02B 15/145117, G02B 15/145119, G02B 15/145121, G02B 15/145123, G02B 15/145125, G02B 15/145127, G02B 15/145129, G02B 15/145131, G02B 15/1455, G02B 15/145501, G02B 15/145503, G02B 15/145505, G02B 15/145507, G02B 15/145509, G02B 15/145511, G02B 15/145513, G02B 15/145515, G02B 15/145517, G02B 15/145519, G02B 15/145521, G02B 15/145523, G02B 15/145525, G02B 15/145527, G02B 15/145529, G02B 15/145531, G02B 15/146, G02B 15/1461, and G02B 15/1465.*

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

- D G02B 15/161      • • • {Zoom lenses having only two lenses or lens groups}  
    <administratively transferred to [G02B 15/142](#)>
- C G02B 15/163      • • • having a first movable lens or lens group and a second movable lens or lens group, both in front of a fixed lens or lens group ([G02B 15/177](#) takes precedence)

**WARNING**

Group [G02B 15/163](#) is impacted by reclassification into groups [G02B 15/143](#), [G02B 15/1431](#), [G02B 15/143101](#), [G02B 15/143103](#), [G02B 15/143105](#), [G02B 15/143107](#), [G02B 15/1435](#), [G02B 15/143501](#), [G02B 15/143503](#), [G02B 15/143505](#), [G02B 15/143507](#), [G02B 15/144](#), [G02B 15/1441](#), [G02B 15/144101](#), [G02B 15/144103](#), [G02B 15/144105](#), [G02B 15/144107](#), [G02B 15/144109](#), [G02B 15/144111](#), [G02B 15/144113](#), [G02B 15/144115](#), [G02B 15/1445](#), [G02B 15/144501](#), [G02B 15/144503](#), [G02B 15/144505](#), [G02B 15/144507](#), [G02B 15/144509](#), [G02B 15/144511](#), [G02B 15/144513](#), [G02B 15/144515](#), [G02B 15/145](#), [G02B 15/1451](#), [G02B 15/145101](#), [G02B 15/145103](#), [G02B 15/145105](#), [G02B 15/145107](#), [G02B 15/145109](#), [G02B 15/145111](#), [G02B 15/145113](#), [G02B 15/145115](#), [G02B 15/145117](#), [G02B 15/145119](#), [G02B 15/145121](#), [G02B 15/145123](#), [G02B 15/145125](#), [G02B 15/145127](#), [G02B 15/145129](#), [G02B 15/145131](#), [G02B 15/1455](#), [G02B 15/145501](#), [G02B 15/145503](#), [G02B 15/145505](#), [G02B 15/145507](#), [G02B 15/145509](#), [G02B 15/145511](#), [G02B 15/145513](#), [G02B 15/145515](#), [G02B 15/145517](#), [G02B 15/145519](#), [G02B 15/145521](#), [G02B 15/145523](#), [G02B 15/145525](#), [G02B 15/145527](#), [G02B 15/145529](#), [G02B 15/145531](#), [G02B 15/146](#), [G02B 15/1461](#), and [G02B 15/1465](#).  
 All groups listed in this Warning should be considered in order to perform a complete search.

- C G02B 15/167      • • • • having an additional fixed front lens or group of lenses

**WARNING**

Group [G02B 15/167](#) is impacted by reclassification into groups [G02B 15/143](#), [G02B 15/1431](#), [G02B 15/143101](#), [G02B 15/143103](#), [G02B 15/143105](#), [G02B 15/143107](#), [G02B 15/1435](#), [G02B 15/143501](#), [G02B 15/143503](#), [G02B 15/143505](#), [G02B 15/143507](#), [G02B 15/144](#), [G02B 15/1441](#), [G02B 15/144101](#), [G02B 15/144103](#), [G02B 15/144105](#), [G02B 15/144107](#), [G02B 15/144109](#), [G02B 15/144111](#), [G02B 15/144113](#), [G02B 15/144115](#), [G02B 15/1445](#), [G02B 15/144501](#), [G02B 15/144503](#), [G02B 15/144505](#), [G02B 15/144507](#), [G02B 15/144509](#), [G02B 15/144511](#), [G02B 15/144513](#), [G02B 15/144515](#), [G02B 15/145](#), [G02B 15/1451](#), [G02B 15/145101](#), [G02B 15/145103](#), [G02B 15/145105](#), [G02B 15/145107](#), [G02B 15/145109](#), [G02B 15/145111](#), [G02B 15/145113](#), [G02B 15/145115](#), [G02B 15/145117](#), [G02B 15/145119](#), [G02B 15/145121](#), [G02B 15/145123](#), [G02B 15/145125](#), [G02B 15/145127](#), [G02B 15/145129](#), [G02B 15/145131](#), [G02B 15/1455](#), [G02B 15/145501](#), [G02B 15/145503](#), [G02B 15/145505](#), [G02B 15/145507](#), [G02B 15/145509](#), [G02B 15/145511](#), [G02B 15/145513](#), [G02B 15/145515](#), [G02B 15/145517](#), [G02B 15/145519](#), [G02B 15/145521](#), [G02B 15/145523](#), [G02B 15/145525](#), [G02B 15/145527](#), [G02B 15/145529](#), [G02B 15/145531](#), [G02B 15/146](#), [G02B 15/1461](#), and [G02B 15/1465](#).  
 All groups listed in this Warning should be considered in order to perform a complete search.

- C G02B 15/17      • • • • • arranged +--

**WARNING**

Group [G02B 15/17](#) is impacted by reclassification into groups [G02B 15/144](#), [G02B 15/1441](#), [G02B 15/144101](#), [G02B 15/144103](#), [G02B 15/144109](#), [G02B 15/144503](#), [G02B 15/145](#), [G02B 15/1451](#), [G02B 15/145101](#), [G02B 15/145103](#), [G02B 15/145105](#), [G02B 15/145107](#), [G02B 15/145109](#), [G02B 15/145117](#),



G02B 15/145119, G02B 15/145125, G02B 15/1455, G02B 15/145503, G02B 15/145505, G02B 15/145507, G02B 15/145519, G02B 15/146, G02B 15/1461, and G02B 15/1465.

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

- C G02B 15/173 . . . . arranged ++

**WARNING**

*Group G02B 15/173 is impacted by reclassification into groups G02B 15/144, G02B 15/1441, G02B 15/144105, G02B 15/144111, G02B 15/144113, G02B 15/1445, G02B 15/144511, G02B 15/145, G02B 15/1451, G02B 15/145105, G02B 15/145111, G02B 15/145113, G02B 15/145121, G02B 15/145123, G02B 15/145127, G02B 15/145129, G02B 15/1455, G02B 15/145511, G02B 15/145521, G02B 15/145523, G02B 15/145527, G02B 15/146, G02B 15/1461, and G02B 15/1465.*

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

- C G02B 15/177 . . . having a negative front lens or group of lenses

**WARNING**

*Group G02B 15/177 is impacted by reclassification into groups G02B 15/143, G02B 15/1435, G02B 15/143501, G02B 15/143503, G02B 15/143505, G02B 15/143507, G02B 15/1445, G02B 15/144501, G02B 15/144503, G02B 15/144505, G02B 15/144507, G02B 15/144509, G02B 15/144511, G02B 15/144513, G02B 15/144515, G02B 15/145, G02B 15/1455, G02B 15/145501, G02B 15/145503, G02B 15/145507, G02B 15/145509, G02B 15/145511, G02B 15/145513, G02B 15/145515, G02B 15/145517, G02B 15/145519, G02B 15/145521, G02B 15/145523, G02B 15/145525, G02B 15/145527, G02B 15/145529, G02B 15/145531, G02B 15/146, and G02B 15/1465.*

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

- C G02B 15/20 . . . having an additional movable lens or lens group for varying the objective focal length

**WARNING**

*Group G02B 15/20 is impacted by reclassification into groups G02B 15/143, G02B 15/1431, G02B 15/143101, G02B 15/143103, G02B 15/143105, G02B 15/143107, G02B 15/1435, G02B 15/143501, G02B 15/143503, G02B 15/143505, G02B 15/143507, G02B 15/144, G02B 15/1441, G02B 15/144101, G02B 15/144103, G02B 15/144105, G02B 15/144107, G02B 15/144109, G02B 15/144111, G02B 15/144113, G02B 15/144115, G02B 15/1445, G02B 15/144501, G02B 15/144503, G02B 15/144505, G02B 15/144507, G02B 15/144509, G02B 15/144511, G02B 15/144513, G02B 15/144515, G02B 15/145, G02B 15/1451, G02B 15/145101, G02B 15/145103, G02B 15/145105, G02B 15/145107, G02B 15/145109, G02B 15/145111, G02B 15/145113, G02B 15/145115, G02B 15/145117, G02B 15/145119, G02B 15/145121, G02B 15/145123, G02B 15/145125, G02B 15/145127, G02B 15/145129, G02B 15/145131, G02B 15/1455, G02B 15/145501, G02B 15/145503, G02B 15/145505, G02B 15/145507, G02B 15/145509, G02B 15/145511, G02B 15/145513, G02B 15/145515, G02B 15/145517, G02B 15/145519, G02B 15/145521, G02B 15/145523, G02B 15/145525, G02B 15/145527, G02B 15/145529, G02B 15/145531, G02B 15/146, G02B 15/1461, and G02B 15/1465.*

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



**Project: MP0381 (G03C)****M G03C**

**PHOTOSENSITIVE MATERIALS FOR PHOTOGRAPHIC PURPOSES (for photomechanical purposes [G03F](#)); PHOTOGRAPHIC PROCESSES, e.g. CINE, X-RAY, COLOUR, STEREO-PHOTOGRAPHIC PROCESSES; AUXILIARY PROCESSES IN PHOTOGRAPHY (photographic processes characterised by the use or manipulation of apparatus classifiable per se in subclass [G03B](#), see [G03B](#); photomechanical production of textured or patterned surfaces [G03F](#); electrophotography, magnetography [G03G](#))**

NOTE

In this subclass, the following expressions are used with the meanings indicated :

- "photosensitive compositions" covers photosensitive substances, e.g. silverhalides, and, if applicable, binders or additives;
- "photosensitive materials" covers the photosensitive compositions, e.g. emulsions, the bases carrying them, and, if applicable, auxiliary layers.

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:

Subject matter covered by this group is classified in the following CPC group:  
[G03C 9/08](#) covered by [G03F 7/0037](#) [G03C 9/00](#),  
[G03C 2009/08](#)

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.

**Project: MP0403 (G03G)****U G03G**

**ELECTROGRAPHY; ELECTROPHOTOGRAPHY; MAGNETOGRAPHY (information storage based on relative movement between record carrier and transducer [G11B](#); static stores with means for writing-in or reading-out information [G11C](#); recording of television signals [H04N 5/76](#))**

NOTES

1. This subclass covers:

- the production of permanent directly-visible pictures in conformity with an original picture or document, using an intermediate imagewise distribution of an electric or magnetic quantity, such as a charge pattern, an electric conductivity pattern, or a magnetic pattern;
- the production of permanent directly-visible pictures using an intermediate imagewise distribution of an electric or magnetic quantity, when the origin and the way of generating said intermediate distribution are not relevant.

2. This subclass does not cover:

- use of electric signals for the transmission of the picture information from the original to the reproduction, i.e. pictorial communication, which is covered by subclass [H04N](#);
- production of pictures by heat patterns exclusively, not using an electrostatic or magnetic pattern, which is covered by group [B41M 5/00](#);
- production of prints by transferring ink from a printing form to a printing surface, without physical contact and using the force of an electrostatic field, which is covered by subclass [B41M](#);
- selective printing mechanisms characterised by the selective supply of electric current, or the selective application of magnetism or radiation, to

a printing material or impression-transfer material, which are covered by groups [B41J 2/385](#), [B41J 2/435](#).

#### 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.

### **U G03G 2215/00 Apparatus for electrophotographic processes**

U G03G 2215/06      • Developing structures, details

M G03G 2215/0602      • • Developer

#### NOTE

Indexing codes of group G03G 2215/0602 and subgroups can be followed by additional symbols preceded by a "," sign and relating to additional characteristics.

M G03G 2215/0634      • • Developing device

#### NOTE

Indexing codes of group G03G 2215/0634 and subgroups can be followed by additional symbols preceded by a "," sign and relating to additional characteristics.

M G03G 2215/20      • Details of the fixing device or process

#### NOTE

Indexing codes of group G03G 2215/20 can be followed by additional symbols preceded by a "+" sign and relating to additional characteristics. The indexing codes have the meaning as indicated below.

~~+H Using heat to fix~~  
~~+P Using pressure to fix~~  
~~+P1 where the pressure is changed~~  
~~+P1A being adapted to the current toner-carrying medium treated (e.g. duplex copy, colour copy, OHP sheet, envelope)~~  
~~+P1B compensating for temperature or other technical condition variations (e.g. sheet skewing) occurring~~  
~~+P1C when being in a non-fixing or waiting mode~~  
~~+P1M for maintenance purpose or abnormal situations (e.g. power cut-off)~~

### **Project: MP0200 (G04B)**

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](#))

M G04B 19/24      • Clocks or watches with date {or week-day} indicators {, i.e. calendar clocks or watches}; Clockwork calendars ~~{{combination of the clockwork with an independently settable calendar G04B 47/00}}~~

**Project: MP0303 (G06F)**

U	G06F 9/00	<b>Arrangements for program control, e.g. control units (program control for peripheral devices <a href="#">G06F 13/10</a>)</b>
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 9/445	• • • Program loading or initiating (bootstrapping <a href="#">G06F 9/4401</a> ; security arrangements for program loading or initiating <a href="#">G06F 21/57</a> )
<b>WARNING</b> Group <a href="#">G06F 9/445</a> is impacted by reclassification into groups <a href="#">G06F 21/57</a> - <a href="#">G06F 21/577</a> . All groups listed in this Warning should be considered in order to perform a complete search.		
U	G06F 9/44505	• • • • {Configuring for program initiating, e.g. using registry, configuration files}
M	G06F 9/4451	• • • • {User profiles; <del>roaming (user profiles for network-specific applications H04L 67/306);</del> <a href="#">Roaming</a> }
U	G06F 9/455	• • • Emulation; Interpretation; Software simulation, e.g. virtualisation or emulation of application or operating system execution engines
U	G06F 9/45533	• • • • {Hypervisors; Virtual machine monitors}
U	G06F 9/45558	• • • • • {Hypervisor-specific management and integration aspects}
M	G06F 2009/4557	• • • • • {Distribution of virtual machine instances; Migration and load balancing <del>aspects (load distribution or balancing G06F 9/505; G06F 9/5083; task migration G06F 9/4856)</del> }
M	G06F 2009/45575	• • • • • {Starting, stopping, suspending; <a href="#">or</a> resuming virtual machine instances <del>(program initiating G06F 9/445; task life-cycle in general G06F 9/485)</del> }
M	G06F 2009/45579	• • • • • {I/O management <del>(, e.g. providing access to device drivers; or storage access) (internal functioning of device drivers G06F 13/102; loading of device drivers G06F 9/4411)</del> }
M	G06F 2009/45583	• • • • • {Memory management, e.g. access; <a href="#">or</a> allocation <del>(memory management in general G06F 12/00; allocation of memory to service a request G06F 9/5016)</del> }
M	G06F 2009/45587	• • • • • {Isolation or security of virtual machine instances <del>(security arrangements G06F 21/00)</del> }
M	G06F 2009/45591	• • • • • {Monitoring or debugging support <del>(monitoring and debugging in general in G06F 11/30; G06F 11/36)</del> }
M	G06F 2009/45595	• • • • • {Network integration; <a href="#">enabling</a> <a href="#">Enabling</a> network access in virtual machine instances <del>(network-specific arrangements for supporting networked applications H04L 67/00)</del> }

**Project: MP0381 (G06M)**

M	G06M	<b>COUNTING MECHANISMS; COUNTING OF OBJECTS NOT OTHERWISE PROVIDED FOR (counting by measuring volume or weight of articles to be counted <a href="#">G01F</a>, <a href="#">G01G</a>; computers <a href="#">G06C</a> - <a href="#">G06J</a>; counting electric pulses <a href="#">H03K</a>; counting characters, words or messages in switching networks for transmission of digital information <a href="#">H04L 12/08</a>)</b>
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**NOTE**

This subclass covers:

- stepping or continuously-moving mechanical counters operated through one or more inputs applied to the lowest order mechanically or electrically;

- counting systems involving applications of either mechanical, electrical, or electronic counters.

#### 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:

[G06M 15/00](#) covered by [G06M 1/00 - G06M 11/00](#)

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.

#### Project: MP0381 (G09G)

M G09G

**ARRANGEMENTS OR CIRCUITS FOR CONTROL OF INDICATING DEVICES USING STATIC MEANS TO PRESENT VARIABLE INFORMATION** (lighting in general [F21](#); arrangements for displaying electric variables or waveforms [G01R 3/00](#); devices or arrangements for the control of light beams [G02F 1/00](#); indicating of time by visual means [G04B 19/00](#), [G04C 17/00](#), [G04G 9/00](#); arrangements for transferring data between computers and peripheral equipment [G06F 3/00](#); visible signalling arrangements or devices [G08B 5/00](#); traffic control systems [G08G](#); display, advertising, signs [G09F](#), e.g. static indicating arrangements comprising an association of a number of separate sources or light control cells [G09F 9/00](#); static indicating arrangements comprising integral associations of a number of light sources [H01J](#), [H01K](#), [H01L](#), [H05B 33/12](#); circuits in pulse counters for indicating the result [H03K 21/18](#); coding, decoding or code conversion, in general [H03M](#); reproducing a picture or pattern using electric signals representing parts thereof and produced by scanning an original [H04N](#))

#### NOTES

1. This subclass covers indicator consoles, i.e. arrangements or circuits for processing control signals to achieve the display, e.g. for the calling up, reception, storage, regeneration, coding, decoding, addressing of control signals.
2. This subclass does not cover the structural details of the indicating devices, such as panels or tubes per se, or assemblies of individual light sources, which are covered by the relevant subclasses, e.g. [H01J](#), [H01K](#), [H01L](#), [G02F](#), [G09F](#), [H05B](#).
3. Contrary to subclass [H04N](#), in which are classified display devices capable of representing continuous brightness value scales, this subclass is limited to devices using only a discrete number of brightness values, e.g. visible/non-visible.
4. The visual effect may be produced by a luminescent screen scanned by an electron beam, directly by controlled light sources, by projection of light, from controlled light sources onto characters, symbols, or elements thereof drawn on a support, or by electric, magnetic, or acoustic control of the parameters of light rays from an independent source.

#### 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="#">G09G 5/32</a>	covered by	<a href="#">G09G 5/42</a>
<a href="#">G09G 5/37</a>	covered by	<a href="#">G09G 5/39</a>
<a href="#">G09G 5/373</a>	covered by	<a href="#">G09G 5/39</a>
<a href="#">G09G 5/377</a>	covered by	<a href="#">G09G 5/39</a>
<a href="#">G09G 5/38</a>	covered by	<a href="#">G09G 5/42</a>

G09G-5/397

covered by

G09G-5/395, G09G-5/399

~~2.~~ **1.** 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.

## Project: MP0381 (H01H)

M H01H

**ELECTRIC SWITCHES; RELAYS; SELECTORS; EMERGENCY PROTECTIVE DEVICES** (contact cables [H01B 7/10](#); overvoltage protection resistors, resistive arresters [H01C 7/12](#), [H01C 8/04](#); electrolytic self-interrupters [H01G 9/18](#); switching devices of the waveguide type [H01P](#); devices for interrupted current collection [H01R 39/00](#); overvoltage arresters using spark gaps [H01T 4/00](#); emergency protective circuit arrangements [H02H](#); switching by electronic means without contact-making [H03K 17/00](#))

### NOTES

1.

Attention is drawn to the Notes following the titles of class [B81](#) and subclass [B81B](#) relating to "microstructural devices" and microstructural systems"

2. This subclass covers (in groups [H01H 69/00](#) - [H01H 87/00](#)) devices for the protection of electric lines or electric machines or apparatus in the event of undesired change from normal electric working conditions, the electrical condition serving directly as the input to the device.

3. This subclass does not cover bases, casings, or covers accommodating two or more switching devices or for accommodating a switching device as well as another electric component, e.g. bus-bar, line connector. Those bases, casings or covers are covered by group [H02B 1/26](#).

4. In this subclass, the following terms or expressions are used with the meanings indicated :

- "relay" means a switching device having contacts which are operated from electric inputs which supply, directly or indirectly, all the mechanical energy necessary to cause both the closure and the opening of the contacts;
- "driving mechanism" refers to the means by which an operating force applied to the switch is transmitted to the moving contact or contacts;
- "operating" is used in a broader sense than "actuating" which is reserved for those parts not touched by hand to effect switching;
- "acting" or "action" means a self-induced movement of parts at one stage of the switching.

These connotations apply to all parts of the verbs "to operate", "to actuate" and "to act" and to words derived therefrom, e.g. to "actuation".

5. In this subclass, details are classified as follows :

- details of an unspecified type of switching device, or disclosed as applicable to two or more kinds of switching devices designated by the terms or expressions "switches", "relays", "selector switches", and "emergency protective devices", are classified in groups [H01H 1/00](#) - [H01H 9/00](#);
- details of an unspecified type of switch, or disclosed as applicable to two or more types of switches as defined by groups [H01H 13/00](#) - [H01H 43/00](#) and sub-groups [H01H 35/02](#), [H01H 35/06](#), [H01H 35/14](#), [H01H 35/18](#), [H01H 35/24](#) and [H01H 35/42](#), all hereinafter called basic types, are classified in groups [H01H 1/00](#) - [H01H 9/00](#);
- details of an unspecified type of relay, or disclosed as applicable to two or more types of relays as defined by groups [H01H 51/00](#) - [H01H 61/00](#), hereinafter called basic types are classified in [H01H 45/00](#);
- details of an unspecified protective device, or applicable to two or more types of protective devices as defined by groups [H01H 73/00](#) - [H01H 83/00](#), hereinafter called basic types, are classified in [H01H 71/00](#).
- However, details only described with reference to, or clearly only applicable to, switching devices of a single basic type, are classified in the group

appropriate to switching devices of that basic type, e.g. [H01H 19/02](#), [H01H 75/04](#);

- mechanical structural details of control members of switches or of keyboards such as keys, push-buttons, levers or other mechanisms for transferring the force to the activated elements are classified in this subclass, even when they are used for controlling electronic switches.

However, mechanical details directly producing electronic effects are classified in group [H03K 17/94](#).

#### 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="#">H01H 13/708-H01H 13/718</a>	covered by	<a href="#">H01H 13/702</a>
<a href="#">H01H 33/575</a>	covered by	<a href="#">H01H 33/56</a>
<a href="#">H01H 33/65</a>	covered by	<a href="#">H01H 33/64</a>
<a href="#">H01H 33/825</a>	covered by	<a href="#">H01H 33/82</a>
<a href="#">H01H 33/835</a>	covered by	<a href="#">H01H 33/83</a>
<a href="#">H01H 33/867</a>	covered by	<a href="#">H01H 33/86</a>
<a href="#">H01H 33/873</a>	covered by	<a href="#">H01H 33/86</a>
<a href="#">H01H 33/915</a>	covered by	<a href="#">H01H 33/91</a>
<a href="#">H01H 33/985</a>	covered by	<a href="#">H01H 33/98</a>
<a href="#">H01H 33/99</a>	covered by	<a href="#">H01H 33/98</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.

## Project: MP0381 (H01L)

M H01L

**SEMICONDUCTOR DEVICES; ELECTRIC SOLID STATE DEVICES NOT OTHERWISE PROVIDED FOR** (use of semiconductor devices for measuring [G01](#); resistors in general [H01C](#); magnets, inductors, transformers [H01F](#); capacitors in general [H01G](#); electrolytic devices [H01G 9/00](#); batteries, accumulators [H01M](#); waveguides, resonators, or lines of the waveguide type [H01P](#); line connectors, current collectors [H01R](#); stimulated-emission devices [H01S](#); electromechanical resonators [H03H](#); loudspeakers, microphones, gramophone pick-ups or like acoustic electromechanical transducers [H04R](#); electric light sources in general [H05B](#); printed circuits, hybrid circuits, casings or constructional details of electrical apparatus, manufacture of assemblages of electrical components [H05K](#); use of semiconductor devices in circuits having a particular application, see the subclass for the application)

#### NOTES

1. This subclass covers:

- electric solid state devices which are not covered by any other subclass and details thereof, and includes: semiconductor devices adapted for rectifying, amplifying, oscillating or switching; semiconductor devices sensitive to radiation; electric solid state devices using thermoelectric, superconductive, piezo-electric, electrostrictive, magnetostrictive, galvanomagnetic or bulk negative resistance effects and integrated circuit devices;
- photoresistors, magnetic field dependent resistors, field effect resistors, capacitors with potential-jump barrier, resistors with potential-jump barrier or surface barrier, incoherent light emitting diodes and thin-film or thick-film circuits;



- processes and apparatus adapted for the manufacture or treatment of such devices, except where such processes relate to single-step processes for which provision exists elsewhere.

2. In this subclass, the following terms or expressions are used with the meaning indicated:

- "wafer" means a slice of semiconductor or crystalline substrate material, which can be modified by impurity diffusion (doping), ion implantation or epitaxy, and whose active surface can be processed into arrays of discrete components or integrated circuits;
- "solid state body" means the body of material within which, or at the surface of which, the physical effects characteristic of the device occur. In thermoelectric devices, it includes all materials in the current path. Regions in or on the body of the device (other than the solid state body itself), which exert an influence on the solid state body electrically, are considered to be "electrodes" whether or not an external electrical connection is made thereto. An electrode may include several portions and the term includes metallic regions which exert influence on the solid state body through an insulating region (e.g. capacitive coupling) and inductive coupling arrangements to the body. The dielectric region in a capacitive arrangement is regarded as part of the electrode. In arrangements including several portions, only those portions which exert an influence on the solid state body by virtue of their shape, size, or disposition or the material of which they are formed are considered to be part of the electrode. The other portions are considered to be "arrangements for conducting electric current to or from the solid state body" or "interconnections between solid state components formed in or on a common substrate", i.e. leads;
- "device" means an electric circuit element; where an electric circuit element is one of a plurality of elements formed in or on a common substrate it is referred to as a "component";
- "complete device" is a device in its fully assembled state which may or may not require further treatment, e.g. electroforming, before it is ready for use but which does not require the addition of further structural units;
- "parts" includes all structural units which are included in a complete device;
- "container" is an enclosure forming part of the complete device and is essentially a solid construction in which the body of the device is placed, or which is formed around the body without forming an intimate layer thereon. An enclosure which consists of one or more layers formed on the body and in intimate contact therewith is referred to as an "encapsulation";
- "integrated circuit" is a device where all components, e.g. diodes, resistors, are built up on a common substrate and form the device including interconnections between the components;
- "assembly" of a device is the building up of the device from its component constructional units and includes the provision of fillings in containers.

3. In this subclass, both the process or apparatus for the manufacture or treatment of a device and the device itself are classified, whenever both of these are described sufficiently to be of interest.

4. Attention is drawn to Note (3) after the title of section C, which Note indicates to which version of the periodic table of chemical elements the IPC refers. In this subclass, the Periodic System used is the 8 group system indicated by Roman numerals in the Periodic Table thereunder.

#### 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="#">H01L 21/301</a>	covered by	<a href="#">H01L 21/30</a>
<a href="#">H01L 21/328</a>	covered by	<a href="#">H01L 29/66075</a>
<a href="#">H01L 21/329</a>	covered by	<a href="#">H01L 29/66083</a>

H01L 21/33	covered by	<a href="#">H01L 29/66227</a>
H01L 21/331	covered by	<a href="#">H01L 29/66234</a>
H01L 21/332	covered by	<a href="#">H01L 29/66363</a>
H01L 21/334	covered by	<a href="#">H01L 29/66075</a>
H01L 21/335	covered by	<a href="#">H01L 29/66409</a>
H01L 21/336	covered by	<a href="#">H01L 29/66477</a>
H01L 21/337	covered by	<a href="#">H01L 29/66893</a>
H01L 21/338	covered by	<a href="#">H01L 29/66848</a>
H01L 21/339	covered by	<a href="#">H01L 29/66946</a>
H01L 21/36-H01L 21/368	covered by	<a href="#">H01L 21/02107</a>
H01L 21/58	covered by	<a href="#">H01L 24/80</a>
H01L 21/60	covered by	<a href="#">H01L 24/80</a> <a href="#">H01L 21/50</a> , <a href="#">H01L 2021/60</a>
H01L 21/66	covered by	<a href="#">H01L 22/00</a>
H01L 21/603	covered by	<a href="#">H01L 24/80</a> <a href="#">H01L 21/50</a> , <a href="#">H01L 2021/603</a>
H01L 21/607	covered by	<a href="#">H01L 24/80</a> <a href="#">H01L 21/50</a> , <a href="#">H01L 2021/607</a>
H01L 21/8242	covered by	<a href="#">H01L 27/10844</a> <a href="#">H01L 27/108</a>
H01L 21/8244	covered by	<a href="#">H01L 27/11</a>
H01L 21/8246	covered by	<a href="#">H01L 27/112</a>
H01L 21/98	covered by	<a href="#">H01L 25/50</a>
H01L 29/38	covered by	<a href="#">H01L 29/04-H01L 29/365</a>
H01L 29/96	covered by	<a href="#">H01L 29/68-H01L 29/945</a>
H01L 51/30	covered by	<a href="#">H01L 51/0032</a>
H01L 51/40	covered by	<a href="#">H01L 51/0001</a>
H01L 51/46	covered by	<a href="#">H01L 51/0032</a>
H01L 51/48	covered by	<a href="#">H01L 51/0001</a>
H01L 51/54	covered by	<a href="#">H01L 51/0032</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.

## Project: RP0151 (H01L)

- U H01L 21/00 Processes or apparatus adapted for the manufacture or treatment of semiconductor or solid state devices or of parts thereof ({testing or measuring during manufacture or treatment, or reliability measurements [H01L 22/00](#); multistep manufacturing processes for passive two-terminal components without a potential-jump or surface barrier for integrated circuits [H01L 28/00](#); } processes or apparatus peculiar to the manufacture or treatment of devices provided for in groups [H01L 31/00](#) - [H01L 51/00](#) or of parts thereof, see these groups; single-step processes covered by other subclasses, see the relevant subclasses, e.g. [C23C](#), [C30B](#); photomechanical production of textured or patterned surfaces, materials or originals therefor, apparatus specially adapted therefor, in general [G03F](#))
- U H01L 21/02 · Manufacture or treatment of semiconductor devices or of parts thereof

- M H01L 21/04
- the devices having at least one potential-jump barrier or surface barrier, e.g. PN junction, depletion layer; ~~or~~ carrier concentration layer ~~{(multistep processes specially adapted for the manufacture of said devices H01L 29/66007, H01L 29/401; details of semiconductor bodies H01L 29/02 multistep manufacturing processes for semiconductor bodies of said devices H01L 29/02; multistep manufacturing processes for electrodes of said devices H01L 29/401; multistep manufacturing processes for said devices H01L 29/66007)}~~
- U H01L 21/18
- the devices having semiconductor bodies comprising elements of Group IV of the Periodic System or  $A_{III}B_V$  compounds with or without impurities, e.g. doping materials ~~{(H01L 21/041 - H01L 21/0425, H01L 21/045 - H01L 21/048 take precedence)}~~
- NOTE
- This group covers also processes and apparatus which, by using the appropriate technology, are clearly suitable for manufacture or treatment of devices whose bodies comprise elements of Group IV of the Periodic System or  $A_{III}B_V$  compounds, even if the material used is not explicitly specified.
- M H01L 21/28
- Manufacture of electrodes on semiconductor bodies using processes or apparatus not provided for in groups H01L 21/20 - H01L 21/268 ~~{(etching for patterning the electrodes H01L 21/311, H01L 21/3213; multistep manufacturing processes for data storage electrodes H01L 29/4011)}~~; ~~{(etching for patterning the electrodes H01L 21/311 and H01L 21/3213)}~~
- D H01L 21/28273
- {~~Making conductor-insulator-conductor-insulator-semiconductor electrodes (H01L 21/28291 takes precedence)~~
  - <administratively transferred to [H01L 29/40114](#)>
- D H01L 21/28282
- {~~comprising a charge trapping insulator~~
  - <administratively transferred to [H01L 29/40117](#)>
- D H01L 21/28291
- {~~comprising a layer which is used for its ferroelectric properties~~
  - <administratively transferred to [H01L 29/40111](#)>
- U H01L 29/00
- Semiconductor devices adapted for rectifying, amplifying, oscillating or switching, or capacitors or resistors with at least one potential-jump barrier or surface barrier, e.g. PN junction depletion layer or carrier concentration layer; Details of semiconductor bodies or of electrodes thereof; {Multistep manufacturing processes therefor}(H01L 31/00 - H01L 47/00, H01L 51/05 take precedence; processes or apparatus adapted for the manufacture or treatment thereof or of parts thereof [H01L 21/00](#); details other than of semiconductor bodies or of electrodes thereof [H01L 23/00](#); devices consisting of a plurality of solid state components formed in or on a common substrate [H01L 27/00](#); {passive two-terminal components without a potential-jump or surface barrier for integrated circuits, details thereof and multistep manufacturing processes therefor [H01L 28/00](#); } resistors in general [H01C](#); capacitors in general [H01G](#), {e.g. ceramic barrier-layer capacitors [H01G 4/1272](#)})**
- NOTE
- In this main group, classification is made both in groups [H01L 29/02 - H01L 29/51](#) and in groups [H01L 29/66 - H01L 29/94](#) if both of these sets of groups are relevant.
- U H01L 29/40
- Electrodes {; Multistep manufacturing processes therefor}

- C H01L 29/401 • • {Multistep manufacturing processes}
- WARNING**  
 Group [H01L 29/401](#) is impacted by reclassification into groups [H01L 29/4011](#), [H01L 29/40111](#), [H01L 29/40114](#) and [H01L 29/40117](#).  
 Groups [H01L 29/401](#), [H01L 29/4011](#), [H01L 29/40111](#), [H01L 29/40114](#) and [H01L 29/40117](#) should be considered in order to perform a complete search.
- N H01L 29/4011 • • • {for data storage electrodes}
- WARNING**  
 Group [H01L 29/4011](#) is incomplete pending reclassification of documents from group [H01L 29/401](#).  
 Group [H01L 29/401](#) and [H01L 29/4011](#) should be considered in order to perform a complete search.
- N H01L 29/40111 • • • {the electrodes comprising a layer which is used for its ferroelectric properties}
- WARNING**  
 Group [H01L 29/40111](#) is incomplete pending reclassification of documents from group [H01L 29/401](#).  
 Group [H01L 29/401](#) and [H01L 29/40111](#) should be considered in order to perform a complete search.
- N H01L 29/40114 • • • {the electrodes comprising a conductor-insulator-conductor-insulator-semiconductor structure}
- WARNING**  
 Group [H01L 29/40114](#) is incomplete pending reclassification of documents from group [H01L 29/401](#).  
 Group [H01L 29/401](#) and [H01L 29/40114](#) should be considered in order to perform a complete search.
- N H01L 29/40117 • • • {the electrodes comprising a charge-trapping insulator}
- WARNING**  
 Group [H01L 29/40117](#) is incomplete pending reclassification of documents from group [H01L 29/401](#).  
 Group [H01L 29/401](#) and [H01L 29/40117](#) should be considered in order to perform a complete search.

## Project: RP0474 (H01S)

- U H01S 3/00 **Lasers, i.e. devices using stimulated emission of electromagnetic radiation in the infrared, visible or ultraviolet wave range (semiconductors lasers [H01S 5/00](#))**
- U H01S 3/09 • Processes or apparatus for excitation, e.g. pumping
- U H01S 3/097 • • by gas discharge of a gas laser
- U H01S 3/0979 • • • Gas dynamic lasers, i.e. with expansion of the laser gas medium to supersonic flow speeds
- U H01S 3/10 • Controlling the intensity, frequency, phase, polarisation or direction of the emitted radiation, e.g. switching, gating, modulating or demodulating
- NOTE**  
 Group [H01S 3/10007](#) takes precedence over groups [H01S 3/102](#) - [H01S 3/104](#)

- C H01S 3/10007
- • {in optical amplifiers}
- WARNING**  
 Group [H01S 3/10007](#) is impacted by reclassification into groups [H01S 3/1001](#) and [H01S 3/10013](#).  
 Groups [H01S 3/10007](#), [H01S 3/1001](#), and [H01S 3/10013](#) should be considered in order to perform a complete search.
- N H01S 3/1001
- • • {by controlling the optical pumping}
- WARNING**  
 Group [H01S 3/1001](#) is incomplete pending reclassification of documents from group [H01S 3/10007](#).  
 Groups [H01S 3/10007](#) and [H01S 3/1001](#) should be considered in order to perform a complete search.
- N H01S 3/10013
- • • {by controlling the temperature of the active medium}
- WARNING**  
 Group [H01S 3/10013](#) is incomplete pending reclassification of documents from group [H01S 3/10007](#).  
 Groups [H01S 3/10007](#) and [H01S 3/10013](#) should be considered in order to perform a complete search.
- U H01S 3/10023
- • • {by functional association of additional optical elements, e.g. filters, gratings, reflectors}
- M H01S 3/1003
- • • • {~~turnable~~[tunable](#) optical elements, e.g. acousto-optic filters, tunable gratings}
- U H01S 3/13
- • Stabilisation of laser output parameters, e.g. frequency, amplitude
- NOTE**  
 Group [H01S 3/1301](#) takes precedence over groups [H01S 3/131](#) - [H01S 3/134](#)
- C H01S 3/1301
- • • {in optical amplifiers}
- WARNING**  
 Group [H01S 3/1301](#) is impacted by reclassification into groups [H01S 3/13013](#) and [H01S 3/13017](#).  
 Groups [H01S 3/1301](#), [H01S 3/13013](#), and [H01S 3/13017](#) should be considered in order to perform a complete search.
- N H01S 3/13013
- • • • {by controlling the optical pumping}
- WARNING**  
 Group [H01S 3/13013](#) is incomplete pending reclassification of documents from group [H01S 3/1301](#).  
 Groups [H01S 3/1301](#) and [H01S 3/13013](#) should be considered in order to perform a complete search.
- N H01S 3/13017
- • • • {by controlling the temperature of the active medium}
- WARNING**  
 Group [H01S 3/13017](#) is incomplete pending reclassification of documents from group [H01S 3/1301](#).  
 Groups [H01S 3/1301](#) and [H01S 3/13017](#) should be considered in order to perform a complete search.
- U H01S 5/00
- Semiconductor lasers (superluminescent diodes {[H01L 33/0045](#)})**
- NOTE**  
 Attention is drawn to Special Rules of classification at [C07F](#), which Special Rules indicate to which version of the periodic table of chemical elements CPC

refers. In this group, the Periodic System used is the 8 group system indicated by Roman numerals in the Periodic Table thereunder.

- U H01S 5/04      · Processes or apparatus for excitation, e.g. pumping, {e.g. by electron beams} ([H01S 5/06](#) takes precedence)
- U H01S 5/042    · · Electrical excitation {; Circuits therefor (discrete or monolithically integrated laser drive components on mountings [H01S 5/0261](#))}
- U H01S 5/0421   · · · {characterised by the semiconducting contacting layers (electrodes [H01S 5/0425](#))}
- U H01S 5/0422   · · · · {with n- and p-contacts on the same side of the active layer}
- U H01S 5/0424   · · · · · {lateral current injection}
- C H01S 5/0425   · · · {Electrodes, e.g. ~~materials, shape, configuration;~~ *characterised by the structure*}

**WARNING**

*Group [H01S 5/0425](#) is impacted by reclassification into groups [H01S 5/04252](#), [H01S 5/04253](#), [H01S 5/04254](#), [H01S 5/04256](#), and [H01S 5/04257](#).*

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

- N H01S 5/04252   · · · · {characterised by the material}

**WARNING**

*Group [H01S 5/04252](#) is incomplete pending reclassification of documents from group [H01S 5/0425](#).*

*Groups [H01S 5/0425](#) and [H01S 5/04252](#) should be considered in order to perform a complete search.*

- N H01S 5/04253   · · · · · {having specific optical properties, e.g. transparent electrodes}

**WARNING**

*Group [H01S 5/04253](#) is incomplete pending reclassification of documents from group [H01S 5/0425](#).*

*Groups [H01S 5/0425](#) and [H01S 5/04253](#) should be considered in order to perform a complete search.*

- N H01S 5/04254   · · · · · {characterised by the shape}

**WARNING**

*Group [H01S 5/04254](#) is incomplete pending reclassification of documents from group [H01S 5/0425](#).*

*Groups [H01S 5/0425](#) and [H01S 5/04254](#) should be considered in order to perform a complete search.*

- N H01S 5/04256   · · · · · {characterised by the configuration}

**WARNING**

*Group [H01S 5/04256](#) is incomplete pending reclassification of documents from group [H01S 5/0425](#).*

*Groups [H01S 5/0425](#) and [H01S 5/04256](#) should be considered in order to perform a complete search.*

- N H01S 5/04257   · · · · · {having positive and negative electrodes on the same side of the substrate}

**WARNING**

*Group [H01S 5/04257](#) is incomplete pending reclassification of documents from group [H01S 5/0425](#).*



Groups [H01S 5/0425](#) and [H01S 5/04257](#) should be considered in order to perform a complete search.

- U H01S 5/10
  - Construction or shape of the optical resonator {, e.g. extended or external cavity, coupled cavities, bent-guide, varying width, thickness or composition of the active region ([H01S 5/20](#) takes precedence)}
- U H01S 5/18
  - • Surface-emitting [SE] lasers
- U H01S 5/187
  - • • using a distributed Bragg reflector [SE-DBR-lasers] ([H01S 5/183](#) takes precedence)
- M H01S 5/20
  - Structure or shape of the semiconductor body to guide the optical wave {; {Confining structures perpendicular to the optical axis, e.g. index- or gain-guiding, stripe geometry, broad area lasers, gain tailoring, transverse or lateral reflectors, special cladding structures, MQW barrier reflection layers}
- U H01S 5/2004
  - • {Confining in the direction perpendicular to the layer structure}
- M H01S 5/2009
  - • • {*by using* electron barrier layers}
- U H01S 5/2018
  - • • {Optical confinement, e.g. absorbing-, reflecting- or waveguide-layers}
- U H01S 5/2031
  - • • • {characterized by special waveguide layers, e.g. asymmetric waveguide layers or defined bandgap discontinuities}
- M H01S 5/2036
  - • {Broad area ~~laserse~~/lasers}
- U H01S 5/30
  - Structure or shape of the active region; Materials used for the active region
- U H01S 5/32
  - • comprising PN junctions, e.g. hetero- or double- heterostructures ([H01S 5/34](#), [H01S 5/36](#) take precedence)
- U H01S 5/3201
  - • • {incorporating bulkstrain effects, e.g. strain compensation, strain related to polarisation}
- C H01S 5/3202
  - • • {grown on specifically orientated substrates, or using orientation dependent growth}

**WARNING**

Group [H01S 5/3202](#) is impacted by reclassification into groups [H01S 5/320225](#), [H01S 5/32025](#) and [H01S 5/320275](#).

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

- N H01S 5/320225
  - • • • {polar orientation}

**WARNING**  
Group [H01S 5/320225](#) is incomplete pending reclassification of documents from group [H01S 5/3202](#).  
Groups [H01S 5/3202](#) and [H01S 5/320225](#) should be considered in order to perform a complete search.
- N H01S 5/32025
  - • • • {non-polar orientation}

**WARNING**  
Group [H01S 5/32025](#) is incomplete pending reclassification of documents from group [H01S 5/3202](#).  
Groups [H01S 5/3202](#) and [H01S 5/32025](#) should be considered in order to perform a complete search.
- N H01S 5/320275
  - • • • {semi-polar orientation}

**WARNING**  
Group [H01S 5/320275](#) is incomplete pending reclassification of documents from group [H01S 5/3202](#).  
Groups [H01S 5/3202](#) and [H01S 5/320275](#) should be considered in order to perform a complete search.

**Project: MP0381 (H02J)****M H02J****CIRCUIT ARRANGEMENTS OR SYSTEMS FOR SUPPLYING OR DISTRIBUTING ELECTRIC POWER; SYSTEMS FOR STORING ELECTRIC ENERGY**NOTES1. This subclass covers:

- ac or dc mains or distribution networks;
- circuit arrangements for battery supplies, including charging or control thereof, or coordinated supply from two or more sources of any kind;
- circuit arrangements or systems for wireless supply or distribution of electric power.

2. This subclass does not cover:

- control of a single motor, generator or dynamo-electric converter, of the types covered by subclass [H01F](#) or [H02K](#), which is covered by subclass [H02P](#);
- control of a single motor or generator, of the types covered by subclass [H02N](#), which is covered by that subclass.

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:~~

~~H02J 7/10 covered by H02J 7/0072~~

~~2. 1.~~ 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.

**Project: MP0381 (H04L)****M H04L**

**TRANSMISSION OF DIGITAL INFORMATION, e.g. TELEGRAPHIC COMMUNICATION (typewriters [B41J](#); order telegraphs, fire or police telegraphs [G08B](#); visual telegraphy [G08B](#), [G08C](#); teleautographic systems [G08C](#); ciphering or deciphering apparatus per se [G09C](#); coding, decoding or code conversion, in general [H03M](#); arrangements common to telegraphic and telephonic communication [H04M](#); selecting [H04Q](#))**

NOTE

This subclass covers transmission of signals having been supplied in digital form and includes data transmission, telegraphic communication and methods or arrangements for monitoring.

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="#">H04L 9/18</a>	covered by	<a href="#">H04L 9/065</a>
<a href="#">H04L 9/20</a>	covered by	<a href="#">H04L 9/0656</a>
<a href="#">H04L 9/22</a>	covered by	<a href="#">H04L 9/0662</a>
<a href="#">H04L 9/24</a>	covered by	<a href="#">H04L 9/0662</a>
<a href="#">H04L 9/26</a>	covered by	<a href="#">H04L 9/0668</a>
<a href="#">H04L 9/28</a>	covered by	<a href="#">H04L 9/002</a> , <a href="#">H04L 9/008</a> , <a href="#">H04L 9/06</a> , <a href="#">H04L 9/08</a> , <a href="#">H04L 9/30</a> , <a href="#">H04L 9/32</a>
<a href="#">H04L 12/20</a>	covered by	<a href="#">H04L 29/00</a>
<a href="#">H04L 12/24</a>	covered by	<a href="#">H04L 41/00</a>
<a href="#">H04L 12/26</a>	covered by	<a href="#">H04L 43/00</a>
<a href="#">H04L 12/58</a>	covered by	<a href="#">H04L 51/00</a>
<a href="#">H04L 12/60-H04L 12/62</a>	covered by	<a href="#">H04L 12/54</a>
<a href="#">H04L 12/70</a>	covered by	<a href="#">H04L 47/00</a>

<a href="#">H04L 12/701</a>	covered by	<a href="#">H04L 45/00</a>
<a href="#">H04L 12/703</a>	covered by	<a href="#">H04L 45/28</a>
<a href="#">H04L 12/705</a>	covered by	<a href="#">H04L 45/18</a>
<a href="#">H04L 12/707</a>	covered by	<a href="#">H04L 45/22</a> , <a href="#">H04L 45/24</a>
<a href="#">H04L 12/709</a>	covered by	<a href="#">H04L 45/245</a>
<a href="#">H04L 12/711</a>	covered by	<a href="#">H04L 45/22</a> , <a href="#">H04L 45/24</a>
<a href="#">H04L 12/713</a>	covered by	<a href="#">H04L 45/586</a>
<a href="#">H04L 12/715</a>	covered by	<a href="#">H04L 45/04</a> , <a href="#">H04L 45/46</a> , <a href="#">H04L 45/64</a>
<a href="#">H04L 12/717</a>	covered by	<a href="#">H04L 45/42</a>
<a href="#">H04L 12/721</a>	covered by	<a href="#">H04L 45/06</a> , <a href="#">H04L 45/12</a> , <a href="#">H04L 45/123</a> , <a href="#">H04L 45/124</a> , <a href="#">H04L 45/127</a> , <a href="#">H04L 45/14</a> , <a href="#">H04L 45/26</a> , <a href="#">H04L 45/32</a> , <a href="#">H04L 45/34</a> , <a href="#">H04L 45/36</a> , <a href="#">H04L 45/38</a> , <a href="#">H04L 45/40</a> , <a href="#">H04L 45/44</a> , <a href="#">H04L 45/566</a> , <a href="#">H04L 45/62</a> , <a href="#">H04L 45/66</a> , <a href="#">H04L 45/68</a> , <a href="#">H04L 45/70</a> , <a href="#">H04L 45/72</a>
<a href="#">H04L 12/723</a>	covered by	<a href="#">H04L 45/50</a> - <a href="#">H04L 45/507</a>
<a href="#">H04L 12/725</a>	covered by	<a href="#">H04L 45/30</a> - <a href="#">H04L 45/308</a>
<a href="#">H04L 12/727</a>	covered by	<a href="#">H04L 45/121</a>
<a href="#">H04L 12/729</a>	covered by	<a href="#">H04L 45/125</a>
<a href="#">H04L 12/733</a>	covered by	<a href="#">H04L 45/122</a> , <a href="#">H04L 45/126</a> , <a href="#">H04L 45/20</a>
<a href="#">H04L 12/735</a>	covered by	<a href="#">H04L 45/128</a> - <a href="#">H04L 45/1287</a>
<a href="#">H04L 12/741</a>	covered by	<a href="#">H04L 45/54</a> , <a href="#">H04L 45/74</a> , <a href="#">H04L 45/745</a>
<a href="#">H04L 12/743</a>	covered by	<a href="#">H04L 45/7453</a> , <a href="#">H04L 45/7457</a>
<a href="#">H04L 12/745</a>	covered by	<a href="#">H04L 45/748</a>
<a href="#">H04L 12/747</a>	covered by	<a href="#">H04L 45/742</a>
<a href="#">H04L 12/749</a>	covered by	<a href="#">H04L 45/741</a>
<a href="#">H04L 12/751</a>	covered by	<a href="#">H04L 45/02</a> , <a href="#">H04L 45/025</a> , <a href="#">H04L 45/026</a> , <a href="#">H04L 45/08</a> , <a href="#">H04L 45/10</a>
<a href="#">H04L 12/753</a>	covered by	<a href="#">H04L 45/48</a>
<a href="#">H04L 12/755</a>	covered by	<a href="#">H04L 45/021</a>
<a href="#">H04L 12/757</a>	covered by	<a href="#">H04L 45/023</a>
<a href="#">H04L 12/759</a>	covered by	<a href="#">H04L 45/023</a>
<a href="#">H04L 12/761</a>	covered by	<a href="#">H04L 45/16</a>
<a href="#">H04L 12/763</a>	covered by	<a href="#">H04L 45/00</a>
<a href="#">H04L 12/771</a>	covered by	<a href="#">H04L 45/56</a> , <a href="#">H04L 45/563</a>
<a href="#">H04L 12/773</a>	covered by	<a href="#">H04L 45/60</a>
<a href="#">H04L 12/775</a>	covered by	<a href="#">H04L 45/58</a> , <a href="#">H04L 45/583</a>
<a href="#">H04L 12/781</a>	covered by	<a href="#">H04L 45/52</a>
<a href="#">H04L 12/801</a>	covered by	<a href="#">H04L 47/10</a> , <a href="#">H04L 47/11</a> , <a href="#">H04L 47/115</a> , <a href="#">H04L 47/12</a> , <a href="#">H04L 47/127</a> , <a href="#">H04L 47/13</a> - <a href="#">H04L 47/196</a> , <a href="#">H04L 47/29</a> , <a href="#">H04L 47/33</a> , <a href="#">H04L 47/34</a> , <a href="#">H04L 47/35</a> , <a href="#">H04L 47/37</a> , <a href="#">H04L 47/39</a>

H04L 12/803	covered by	<a href="#">H04L 47/122</a> , <a href="#">H04L 47/125</a>
H04L 12/805	covered by	<a href="#">H04L 47/36</a> , <a href="#">H04L 47/365</a>
H04L 12/807	covered by	<a href="#">H04L 47/27</a>
H04L 12/811	covered by	<a href="#">H04L 47/38</a>
H04L 12/813	covered by	<a href="#">H04L 47/20</a>
H04L 12/815	covered by	<a href="#">H04L 47/22</a> , <a href="#">H04L 47/225</a> , <a href="#">H04L 47/23</a>
H04L 12/819	covered by	<a href="#">H04L 47/21</a> , <a href="#">H04L 47/215</a>
H04L 12/823	covered by	<a href="#">H04L 47/32</a> - <a href="#">H04L 47/326</a>
H04L 12/825	covered by	<a href="#">H04L 47/25</a> - <a href="#">H04L 47/266</a>
H04L 12/827	covered by	<a href="#">H04L 47/25</a> - <a href="#">H04L 47/266</a>
H04L 12/829	covered by	<a href="#">H04L 47/25</a> - <a href="#">H04L 47/266</a>
H04L 12/833	covered by	<a href="#">H04L 47/2458</a> , <a href="#">H04L 47/31</a>
H04L 12/835	covered by	<a href="#">H04L 47/30</a>
H04L 12/841	covered by	<a href="#">H04L 47/28</a> - <a href="#">H04L 47/286</a>
H04L 12/851	covered by	<a href="#">H04L 47/24</a> , <a href="#">H04L 47/2408</a> , <a href="#">H04L 47/2425</a> , <a href="#">H04L 47/2433</a> , <a href="#">H04L 47/245</a> , <a href="#">H04L 47/2483</a>
H04L 12/853	covered by	<a href="#">H04L 47/2416</a>
H04L 12/855	covered by	<a href="#">H04L 47/2466</a>
H04L 12/857	covered by	<a href="#">H04L 47/2491</a>
H04L 12/859	covered by	<a href="#">H04L 47/2475</a>
H04L 12/861	covered by	<a href="#">H04L 49/90</a> , <a href="#">H04L 49/9005</a> , <a href="#">H04L 49/9031</a> - <a href="#">H04L 49/9094</a>
H04L 12/863	covered by	<a href="#">H04L 47/50</a> , <a href="#">H04L 47/54</a> , <a href="#">H04L 47/62</a> - <a href="#">H04L 47/627</a> , <a href="#">H04L 47/628</a> , <a href="#">H04L 47/6285</a> , <a href="#">H04L 47/6295</a>
H04L 12/865	covered by	<a href="#">H04L 47/6275</a>
H04L 12/867	covered by	<a href="#">H04L 47/629</a>
H04L 12/869	covered by	<a href="#">H04L 47/58</a> , <a href="#">H04L 47/60</a>
H04L 12/873	covered by	<a href="#">H04L 47/52</a> , <a href="#">H04L 47/521</a> , <a href="#">H04L 47/522</a> , <a href="#">H04L 47/524</a> , <a href="#">H04L 47/527</a> , <a href="#">H04L 47/528</a>
H04L 12/875	covered by	<a href="#">H04L 47/56</a> - <a href="#">H04L 47/568</a>
H04L 12/877	covered by	<a href="#">H04L 47/525</a>
H04L 12/879	covered by	<a href="#">H04L 49/901</a> , <a href="#">H04L 49/9026</a>
H04L 12/883	covered by	<a href="#">H04L 49/9015</a> , <a href="#">H04L 49/9021</a>
H04L 12/885	covered by	<a href="#">H04L 49/90</a> , <a href="#">H04L 49/9005</a> , <a href="#">H04L 49/9031</a> - <a href="#">H04L 49/9094</a>
H04L 12/891	covered by	<a href="#">H04L 47/41</a>
H04L 12/893	covered by	<a href="#">H04L 47/40</a>
H04L 12/901	covered by	<a href="#">H04L 2012/5603</a> - <a href="#">H04L 2012/5687</a>
H04L 12/903	covered by	<a href="#">H04L 2012/5603</a> - <a href="#">H04L 2012/5687</a>
H04L 12/905	covered by	<a href="#">H04L 2012/5603</a> - <a href="#">H04L 2012/5687</a>

H04L 12/911	covered by	<a href="#">H04L 47/70-H04L 47/748</a> , <a href="#">H04L 47/78</a> , <a href="#">H04L 47/781</a> , <a href="#">H04L 47/782</a> , <a href="#">H04L 47/783</a> , <a href="#">H04L 47/788</a> , <a href="#">H04L 47/82</a> - <a href="#">H04L 47/829</a>
H04L 12/913	covered by	<a href="#">H04L 47/724</a>
H04L 12/915	covered by	<a href="#">H04L 47/785</a> , <a href="#">H04L 47/787</a> , <a href="#">H04L 47/787</a>
H04L 12/917	covered by	<a href="#">H04L 47/76</a>
H04L 12/919	covered by	<a href="#">H04L 47/765</a> , <a href="#">H04L 47/767</a>
H04L 12/923	covered by	<a href="#">H04L 47/762</a>
H04L 12/925	covered by	<a href="#">H04L 47/722</a>
H04L 12/927	covered by	<a href="#">H04L 47/80-H04L 47/808</a>
H04L 12/931	covered by	<a href="#">H04L 49/00</a> , <a href="#">H04L 49/20</a> - <a href="#">H04L 49/208</a> , <a href="#">H04L 49/35</a> - <a href="#">H04L 49/508</a> , <a href="#">H04L 49/60</a> - <a href="#">H04L 49/70</a>
H04L 12/933	covered by	<a href="#">H04L 49/10-H04L 49/1592</a>
H04L 12/935	covered by	<a href="#">H04L 49/30-H04L 49/3009</a>
H04L 12/937	covered by	<a href="#">H04L 49/253-H04L 49/255</a>
H04L 12/939	covered by	<a href="#">H04L 49/55-H04L 49/557</a>
H04L 12/943	covered by	<a href="#">H04L 49/55</a> - <a href="#">H04L 49/557</a>
H04L 12/945	covered by	<a href="#">H04L 49/55</a> - <a href="#">H04L 49/557</a>
H04L 12/947	covered by	<a href="#">H04L 49/25</a> , <a href="#">H04L 49/251</a> , <a href="#">H04L 49/252</a> , <a href="#">H04L 49/256</a> , <a href="#">H04L 49/257</a> , <a href="#">H04L 49/258</a>
H04L 12/951	covered by	<a href="#">H04L 2012/5603</a> - <a href="#">H04L 2012/5687</a>
H04L 12/953	covered by	<a href="#">H04L 2012/5603</a> - <a href="#">H04L 2012/5687</a>
<a href="#">H04L 12/955</a>	covered by	<a href="#">H04L 2012/5603</a> - <a href="#">H04L 2012/5687</a>
H04L 25/04	covered by	<a href="#">H04L 25/03</a>
H04L 25/17	covered by	<del>H03H</del> <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.

**Project: MP0446 (Y02C)**

- M Y02C 10/00 CO<sub>2</sub> capture or storage ~~(not used, see subgroups)~~
- M Y02C 20/00 Capture or disposal of greenhouse gases [GHG] other than CO<sub>2</sub> ~~(not used, see subgroups)~~