

CPC COOPERATIVE PATENT CLASSIFICATION

A HUMAN NECESSITIES

HEALTH; AMUSEMENT

A61 MEDICAL OR VETERINARY SCIENCE; HYGIENE

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](#))

NOTE

In groups [A61L 2/00](#) - [A61L 12/00](#), it is desirable to add the indexing codes of groups [A61L 2101/00](#) - [A61L 2101/50](#).

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:

A61L 33/10	covered by	A61L 33/0011
A61L 33/14	covered by	A61L 33/0011
A61L 33/16	covered by	A61L 33/0047
- {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.}

Disinfection or sterilising

2/00 Methods or apparatus for disinfecting or sterilising materials or objects other than foodstuffs or contact lenses; Accessories therefor (for contact lenses [A61L 12/00](#); atomisers for disinfecting agents [A61M](#); sterilisation of packages or package contents in association with packaging [B65B 55/00](#); treatment of water, waste water, sewage or sludge [C02F](#); disinfecting paper [D21H 21/36](#); disinfecting devices for water closets [E03D](#); articles having provision for disinfection, *see* the relevant subclasses for these articles, e.g. [H04R 1/12](#))

2/0005 . {for pharmaceuticals, biologicals or living parts}

2/0011 . . {using physical methods}

2/0017 . . . {Filtration}

2/0023 . . . {Heat}

2/0029 . . . {Radiation}

2/0035 {Gamma radiation}

2/0041 {X-rays}

2/0047 {Ultraviolet radiation}

2/0052 {Visible light}

2/0058 {Infrared radiation}

2/0064 {Microwaves}

2/007 {Particle radiation, e.g. electron-beam, alpha or beta radiation}

2/0076 {using a photocatalyst or photosensitiser}

2/0082 . . {using chemical substances}

2/0088 . . . {Liquid substances}

2/0094 . . . {Gaseous substances}

2/02 . using physical phenomena

2/022 . . {Filtration}

2/025 . . Ultrasonics

2/03 . . Electric current

2/035 . . . {Electrolysis}

2/04 . . Heat ([A61L 2/08](#) takes precedence)

2/06 . . . Hot gas

2/07 Steam

2/08 . . Radiation

2/081 . . . {Gamma radiation}

2/082 . . . {X-rays}

2/084 . . . {Visible light}

2/085 . . . {Infrared radiation}

2/087 . . . {Particle radiation, e.g. electron-beam, alpha or beta radiation}

2/088 . . . {using a photocatalyst or photosensitiser}

2/10 . . . Ultra-violet radiation

2/12 . . . Microwaves

2/14 . . Plasma, i.e. ionised gases

2/16 . using chemical substances

2/18 . . Liquid substances {or solutions comprising solids or dissolved gases}

2/183 . . . {Ozone dissolved in a liquid}

2/186 . . . {Peroxide solutions}

2/20 . . Gaseous substances, e.g. vapours

2/202 . . . {Ozone}

2/204 . . . {Formaldehyde}

2/206 . . . {Ethylene oxide}

2/208 . . . {Hydrogen peroxide}

2/22 . . Phase substances, e.g. smokes, aerosols {or sprayed or atomised substances}

- 2/23 . . Solid substances, e.g. granules, powders, blocks, tablets
- 2/232 . . . layered or coated
- 2/235 . . . cellular, porous or foamed
- 2/238 . . . Metals or alloys, e.g. oligodynamic metals
- 2/24 . Apparatus using programmed or automatic operation
- 2/26 . Accessories {or devices or components used for biocidal treatment}
- 2/28 . . Devices for testing the effectiveness or completeness of sterilisation, e.g. indicators which change colour (apparatus involving enzymes or microorganisms C12M 1/34; methods involving enzymes or microorganisms C12Q 1/00)
- 9/00 Disinfection, sterilisation or deodorisation of air** (body deodorants A61Q 15/00; purifying air by respirators A62B, A62D 9/00; separating dispersed particles from gases or vapours B01D 45/00 - B01D 51/00, B03C 3/00; chemical or biological purification of waste gases B01D 53/34; production of ozone C01B 13/10; air-conditioning systems incorporating sterilisation F24F 3/16, F24F 8/20)
 - 9/01 . Deodorant compositions {(compositions released by contact with a liquid A61L 9/05)}
 - 9/012 . . characterised by being in a special form, e.g. gels, emulsions {(A61L 9/048 takes precedence)}
 - 9/013 . . containing animal or plant extracts, or vegetable material
 - 9/014 . . containing sorbent material, e.g. activated carbon
 - 9/015 . using gaseous or vaporous substances, e.g. ozone (A61L 9/20 takes precedence ; evaporation in general B01B 1/005)}
 - 9/02 . . using substances evaporated in the air by heating or combustion
 - 9/03 . . . Apparatus therefor
 - 9/032 {comprising a fan}
 - 9/035 {emanating multiple odours}
 - 9/037 {comprising a wick}
 - 9/04 . . using substances evaporated in the air without heating
 - 9/042 . . . {with the help of a macromolecular compound as a carrier or diluent (A61L 9/048 takes precedence)}
 - 9/044 . . . {with the help of an organic compound other than a macromolecular compound}
 - 9/046 . . . {with the help of a non-organic compound}
 - 9/048 . . . {air treating gels}
 - 9/05 . . . specially adapted to be released by contact with a liquid, e.g. for toilets
 - 9/12 . . . Apparatus, e.g. holders, therefor
 - 9/122 {comprising a fan}
 - 9/125 {emanating multiple odours}
 - 9/127 {comprising a wick}
 - 9/14 . using sprayed or atomised substances {including air-liquid contact processes}
 - 9/145 . . {air-liquid contact processes, e.g. scrubbing}
 - 9/16 . using physical phenomena
 - 9/18 . . Radiation (A61L 9/22 takes precedence)
 - 9/20 . . . Ultra-violet radiation
 - 9/205 {using a photocatalyst or photosensitiser}

- 9/22 . . Ionisation
- 11/00 Methods specially adapted for refuse** {(disintegrating medical waste B02C 19/0075; disposal of medical waste B09B 3/00)}
- 12/00 Methods or apparatus for disinfecting or sterilising contact lenses; Accessories therefor**
- 12/02 . using physical phenomena, e.g. electricity, ultrasonics or ultrafiltration
- 12/023 . . {Electrolysis}
- 12/026 . . {Ultrasounds}
- 12/04 . . Heat (A61L 12/06 takes precedence)
- 12/06 . . Radiation, e.g. ultraviolet or microwaves
- 12/063 . . . {Ultraviolet radiation}
- 12/066 . . . {Microwaves}
- 12/08 . using chemical substances
- 12/082 . . {in combination with specific enzymes}
- 12/084 . . {in a gaseous state}
- 12/086 . . {Container, accessories or devices therefor}
- 12/088 . . {Heavy metals}
- 12/10 . . Halogens or compounds thereof
- 12/102 . . . {Chlorine dioxide (ClO₂)}
- 12/105 . . . {Iodine, iodides or iodophores}
- 12/107 . . . {Hypohalites; Active halogens}
- 12/12 . . Non-macromolecular oxygen-containing compounds, e.g. hydrogen peroxide or ozone (A61L 12/10 takes precedence)
 - 12/122 . . . {Ozone}
 - 12/124 . . . {Hydrogen peroxide; Peroxy compounds}
 - 12/126 {neutralised with catalase or peroxidase}
 - 12/128 {neutralised with catalysts}
- 12/14 . . Organic compounds not covered by groups A61L 12/10 or A61L 12/12
 - 12/141 . . . {Biguanides, e.g. chlorhexidine}
 - 12/142 {Polymeric biguanides}
 - 12/143 . . . {Quaternary ammonium compounds}
 - 12/145 {Polymeric quaternary ammonium compounds}
 - 12/146 . . . {Aldehydes}
 - 12/147 . . . {Alcohols or derivatives thereof (aldehydes A61L 12/146)}
 - 12/148 . . . {Mercury containing compounds, e.g. thimerosal}

Chemical aspects of, or use of materials for, bandages, dressings or absorbent pads {comprising a solid support or backing} (for liquid bandages A61L 26/00; radioactive dressings {A61N 5/1029 } {transdermal delivery devices A61K 9/7023})

- 15/00 Chemical aspects of, or use of materials for, bandages, dressings or absorbent pads (for liquid bandages A61L 26/00; radioactive dressings {A61N 5/1029})**

NOTES

- In groups A61L 15/08 - A61L 15/12, 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.
- When classifying in groups A61L 15/08 - A61L 15/12, classification is also made in group A61L 15/14 if the use of materials

A61L 15/00 (continued)	characterised by their function or physical properties is of interest.	15/325	. . . . {Collagen}
	3. In groups A61L 15/18 - A61L 15/40 , 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. {This Note corresponds to IPC Note (1) relating to A61L 15/18 - A61L 15/40 .}	15/34	. . . Oils, fats, waxes or natural resins { A61L 15/225 takes precedence}
	4. When classifying in groups A61L 15/18 - A61L 15/40 , classification is also made in group A61L 15/42 if the use of materials characterised by their function or physical properties is of interest.	15/36	. . containing microorganisms
15/07	. Stiffening bandages	15/38	. . containing enzymes
15/08	. . containing inorganic materials, e.g. plaster of Paris	15/40	. . containing ingredients of undetermined constitution or reaction products thereof {, e.g. plant or animal extracts}
15/10	. . containing organic materials	15/42	. . Use of materials characterised by their function or physical properties (liquid bandages A61L 26/00)
15/12	. . containing macromolecular materials	15/425	. . . {Porous materials, e.g. foams or sponges}
	NOTE	15/44	. . . Medicaments
	In group A61L 15/12 and subgroups, the use of specific polymers is indicated using the relevant combination set symbol, adding, after the A61L 15/12 symbol, the correspondent symbol of the polymer composition in subclass C08L , e.g. stiffening bandage based on polyurethane A61L 15/12 , C08L 75/04	15/46	. . . Deodorants or malodour counteractants, e.g. to inhibit the formation of ammonia or bacteria
15/125	. . . {Mixtures of macromolecular compounds}	15/48	. . . Surfactants
15/14	. . Use of materials characterised by their function or physical properties	15/50	. . . Lubricants; Anti-adhesive agents
15/16	. Bandages, dressings or absorbent pads for physiological fluids such as urine or blood, e.g. sanitary towels, tampons	15/52	. . . Water-repellants
15/18	. . containing inorganic materials	15/54	. . . Radio-opaque materials
15/20	. . containing organic materials	15/56	. . . Wetness-indicators or colourants
15/22	. . containing macromolecular materials	15/58	. . . Adhesives
	NOTE	15/585	. . . . {Mixtures of macromolecular compounds}
	In groups A61L 15/22 - A61L 15/30 , the use of specific polymers is indicated using the relevant combination set symbol, adding, after the symbol in A61L , the correspondent symbol of the polymer in subclass C08L , e.g. absorbent pad containing starch A61L 15/22 , C08L 3/02	15/60	. . . Liquid-swelling gel-forming materials, e.g. super-absorbents
15/225	. . . {Mixtures of macromolecular compounds}	15/62	. . . {Compostable,} hydrosoluble or hydrodegradable materials
15/24	. . . Macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds; Derivatives thereof { A61L 15/225 takes precedence}	15/64	. . . specially adapted to be resorbable inside the body
15/26	. . . Macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds; Derivatives thereof { A61L 15/225 takes precedence}	17/00	Materials for surgical sutures or for ligaturing blood vessels (surgical adhesives A61L 24/00 ; surgical instruments, devices or methods for suturing or ligaturing A61B 17/04 , A61B 17/12 ; supports or packages for suture materials A61B 17/04); { Materials for prostheses or catheters (bone cements or surgical adhesives for soft body tissues A61L 24/00 ; shape or structure of prostheses A61F 2/00 ; shape or structure of catheters A61M 5/00)}
15/28	. . . Polysaccharides or their derivatives { A61L 15/225 takes precedence}		NOTES
15/30	. . . Rubbers or their derivatives { A61L 15/225 takes precedence}		1. In groups A61L 17/04 - A61L 17/145 , 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.
15/32	. . . Proteins, polypeptides; Degradation products or derivatives thereof, e.g. albumin, collagen, fibrin, gelatin { A61L 15/225 takes precedence}		2. When classifying in group A61L 17/00 , classification is also made in A61L 33/00 if the materials used are antithrombogenic.
		17/005	. {containing a biologically active substance, e.g. a medicament or a biocide}
		17/04	. Non-resorbable materials
		17/06	. At least partially resorbable materials
		17/08	. . of animal origin, e.g. catgut, collagen
		17/10	. . containing macromolecular materials
		17/105	. . . {Polyesters not covered by A61L 17/12 }
		17/12	. . . Homopolymers or copolymers of glycolic acid or lactic acid
		17/14	. Post-treatment to improve physical properties
		17/145	. . {Coating}

24/00 Surgical adhesives or cements; Adhesives for colostomy devices

NOTES

1. In groups [A61L 24/00](#) - [A61L 24/12](#), the use of specific polymers is indicated using the relevant combination set symbol, adding, after the symbol in [A61L](#), the correspondent symbol of the polymer in subclass [C08L](#), e.g. surgical adhesives based on polymethylmethacrylate: [A61L 24/06](#), [C08L 33/12](#)
2. In groups [A61L 24/00](#) - [A61L 24/12](#), 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.
3. When classifying in group [A61L 24/00](#), classification is also made in [A61L 33/00](#) if the materials used are antithrombogenic.

- 24/0005 . {Ingredients of undetermined constitution or reaction products thereof}
- 24/001 . {Use of materials characterised by their function or physical properties}
- 24/0015 . . {Medicaments; Biocides}
- 24/0021 . . {Plasticisers}
- 24/0026 . . {Sprayable compositions}
- 24/0031 . . {Hydrogels or hydrocolloids}
- 24/0036 . . {Porous materials, e.g. foams or sponges}
- 24/0042 . . {Materials resorbable by the body}
- 24/0047 . {Composite materials, i.e. containing one material dispersed in a matrix of the same or different material}
- 24/0052 . . {with an inorganic matrix}
- 24/0057 . . . {Carbon}
- 24/0063 . . . {Phosphorus containing materials, e.g. apatite}
- 24/0068 . . . {Inorganic materials not covered by groups [A61L 24/0057](#) or [A61L 24/0063](#)}
- 24/0073 . . {with a macromolecular matrix}
- 24/0078 . . . {containing fillers of carbon}
- 24/0084 . . . {containing fillers of phosphorus-containing inorganic compounds, e.g. apatite}
- 24/0089 . . . {containing inorganic fillers not covered by groups [A61L 24/0078](#) or [A61L 24/0084](#)}
- 24/0094 . . . {containing macromolecular fillers}
- 24/02 . containing inorganic materials
- 24/04 . containing macromolecular materials
- 24/043 . . {Mixtures of macromolecular materials}
- 24/046 . . {obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds ([A61L 24/043](#) takes precedence)}
- 24/06 . . obtained by reactions only involving carbon-to-carbon unsaturated bonds ([A61L 24/043](#), [A61L 24/046](#) take precedence)}
- 24/08 . . Polysaccharides {([A61L 24/043](#) takes precedence)}
- 24/10 . . Polypeptides; Proteins {([A61L 24/043](#) takes precedence)}
- 24/102 . . . {Collagen}
- 24/104 . . . {Gelatin}
- 24/106 . . . {Fibrin; Fibrinogen}
- 24/108 . . . {Specific proteins or polypeptides not covered by groups [A61L 24/102](#) - [A61L 24/106](#)}
- 24/12 . . Ionomer cements, e.g. glass-ionomer cements {([A61L 24/043](#) takes precedence)}

26/00 Chemical aspects of, or use of materials for, {wound dressings or} bandages {in liquid, gel or powder form}

NOTES

1. When classifying in group [A61L 26/00](#), classification is also made in [A61L 33/00](#) if the materials used are antithrombogenic.
2. In groups [A61L 26/00](#) - [A61L 26/0095](#), the use of specific polymers is indicated using the relevant combination set symbol, adding, after the symbol in [A61L](#), the correspondent symbol of the polymer in subclass [C08L](#), e.g. liquid bandages on alginates: [A61L 26/0023](#), [C08L 5/04](#)

- 26/0004 . {containing inorganic materials}
- 26/0009 . {containing macromolecular materials}
- 26/0014 . . {obtained by reactions only involving carbon-to-carbon unsaturated bonds}
- 26/0019 . . {obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds}
- 26/0023 . . {Polysaccharides}
- 26/0028 . . {Polypeptides; Proteins; Degradation products thereof}
- 26/0033 . . . {Collagen}
- 26/0038 . . . {Gelatin}
- 26/0042 . . . {Fibrin; Fibrinogen}
- 26/0047 . . . {Specific proteins or polypeptides not covered by groups [A61L 26/0033](#) - [A61L 26/0042](#)}
- 26/0052 . . {Mixtures of macromolecular compounds}
- 26/0057 . {Ingredients of undetermined constitution or reaction products thereof}
- 26/0061 . {Use of materials characterised by their function or physical properties}
- 26/0066 . . {Medicaments; Biocides}
- 26/0071 . . {Plasticisers}
- 26/0076 . . {Sprayable compositions}
- 26/008 . . {Hydrogels or hydrocolloids}
- 26/0085 . . {Porous materials, e.g. foams or sponges}
- 26/009 . . {Materials resorbable by the body}
- 26/0095 . {Composite materials, i.e. containing one material dispersed in a matrix of the same or different material}

27/00 Materials for {grafts or} prostheses or for coating {grafts or} prostheses (dental prostheses [A61C 13/00](#); shape or structure of prostheses [A61F 2/00](#); use of preparations for artificial teeth [A61K 6/80](#); artificial kidneys [A61M 1/14](#))

NOTES

1. In groups [A61L 27/02](#) - [A61L 27/48](#), the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the last appropriate place.
2. When classifying in groups [A61L 27/02](#) - [A61L 27/48](#), classification is also made in groups [A61L 27/50](#) - [A61L 27/60](#) if the use of materials characterised by their function or physical properties is of interest.
3. When classifying in group [A61L 27/00](#), classification is also made in [A61L 33/00](#) if the materials used are antithrombogenic

A61L 27/00 (continued)	4. In group A61L 27/00 , the use of specific polymers is indicated using the relevant classification symbols of subclass C08L in the second position of the combination set, e.g. prosthesis based on polyvinylchloride A61L 27/16 , C08L 27/06	27/3641	. . {characterised by the site of application in the body (materials for artificial blood vessels A61L 27/507 ; materials for use in artificial skin A61L 27/60)}
27/02	. Inorganic materials	27/3645	. . . {Connective tissue}
27/025	. . {Other specific inorganic materials not covered by A61L 27/04 - A61L 27/12 }	27/365	. . . . {Bones}
27/04	. . Metals or alloys	27/3654	. . . . {Cartilage, e.g. meniscus}
27/042	. . . {Iron or iron alloys}	27/3658	. . . . . {Intervertebral discs (mechanical aspects and structures of intervertebral discs A61F 2/442)}
27/045	. . . {Cobalt or cobalt alloys}	27/3662	. . . . . {Ligaments, tendons}
27/047	. . . {Other specific metals or alloys not covered by A61L 27/042 - A61L 27/045 or A61L 27/06 }	27/3666	. . . {Epithelial tissues other than skin}
27/06	. . . Titanium or titanium alloys	27/367	. . . {Muscle tissue, e.g. sphincter}
27/08	. . Carbon {; Graphite}	27/3675	. . . {Nerve tissue, e.g. brain, spinal cord, nerves, dura mater}
27/10	. . Ceramics or glasses	27/3679	. . . {Hollow organs, e.g. bladder, esophagus, urether, uterus, intestine}
27/105	. . . {containing Al ₂ O ₃ }	27/3683	. . {subjected to a specific treatment prior to implantation, e.g. decellularising, demineralising, grinding, cellular disruption/non-collagenous protein removal, anti-calcification, crosslinking, supercritical fluid extraction, enzyme treatment}
27/12	. . Phosphorus-containing materials, e.g. apatite	27/3687	. . . {characterised by the use of chemical agents in the treatment, e.g. specific enzymes, detergents, capping agents, crosslinkers, anticalcification agents}
27/14	. Macromolecular materials	27/3691	. . . {characterised by physical conditions of the treatment, e.g. applying a compressive force to the composition, pressure cycles, ultrasonic/sonication or microwave treatment, lyophilisation}
27/16	. . obtained by reactions only involving carbon-to-carbon unsaturated bonds	27/3695	. . . {characterised by the function or physical properties of the final product, where no specific conditions are defined to achieve this (A61L 27/3687 , A61L 27/3691 take precedence)}
27/165	. . . {Rubbers}	27/38	. . {containing added animal cells (organs or tissue containing native cells A61L 27/36)}
27/18	. . obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds	27/3804	. . . {characterised by specific cells or progenitors thereof, e.g. fibroblasts, connective tissue cells, kidney cells}
27/20	. . Polysaccharides	27/3808	. . . . {Endothelial cells}
27/22	. . Polypeptides or derivatives thereof {, e.g. degradation products}	27/3813	. . . . {Epithelial cells, e.g. keratinocytes, urothelial cells}
27/222	. . . {Gelatin}	27/3817	. . . . {Cartilage-forming cells, e.g. pre-chondrocytes}
27/225	. . . {Fibrin; Fibrinogen}	27/3821	. . . . {Bone-forming cells, e.g. osteoblasts, osteocytes, osteoprogenitor cells}
27/227	. . . {Other specific proteins or polypeptides not covered by A61L 27/222 , A61L 27/225 or A61L 27/24 }	27/3826	. . . . {Muscle cells, e.g. smooth muscle cells}
27/24	. . . Collagen	27/383	. . . . {Nerve cells, e.g. dendritic cells, Schwann cells}
27/26	. . Mixtures of macromolecular compounds	27/3834	. . . . {Cells able to produce different cell types, e.g. hematopoietic stem cells, mesenchymal stem cells, marrow stromal cells, embryonic stem cells}
27/28	. Materials for coating prostheses	27/3839	. . . {characterised by the site of application in the body (materials for artificial blood vessels A61L 27/507 ; materials for use in artificial skin A61L 27/60)}
27/30	. . Inorganic materials	27/3843	. . . . {Connective tissue}
27/303	. . . {Carbon}	27/3847	. . . . . {Bones}
27/306	. . . {Other specific inorganic materials not covered by A61L 27/303 - A61L 27/32 }	27/3852	. . . . . {Cartilage, e.g. meniscus}
27/32	. . . Phosphorus-containing materials, e.g. apatite		
27/34	. . Macromolecular materials		
27/36	. containing ingredients of undetermined constitution or reaction products thereof {, e.g. transplant tissue , natural bone , extracellular matrix (isolated natural compounds, e.g. collagen A61L 27/24) }		
27/3604	. . {characterised by the human or animal origin of the biological material, e.g. hair, fascia, fish scales, silk, shellac, pericardium, pleura, renal tissue, amniotic membrane, parenchymal tissue, fetal tissue, muscle tissue, fat tissue, enamel}		
27/3608	. . . {Bone, e.g. demineralised bone matrix [DBM], bone powder}		
27/3612	. . . {Cartilage, synovial fluid}		
27/3616	. . . {Blood, e.g. platelet-rich plasma}		
27/362	. . . {Skin, e.g. dermal papillae}		
27/3625	. . . {Vascular tissue, e.g. heart valves}		
27/3629	. . . {Intestinal tissue, e.g. small intestinal submucosa}		
27/3633	. . . {Extracellular matrix [ECM]}		
27/3637	. . {characterised by the origin of the biological material other than human or animal, e.g. plant extracts, algae}		

27/3856	. . . . . {Intervertebral discs (mechanical aspects and structures of intervertebral discs A61F 2/442)}	28/0026	. . {Mixtures of macromolecular compounds}
27/386	. . . . . {Ligaments, tendons}	28/003	. {Ingredients of undetermined constitution or reaction products thereof}
27/3865	. . . . . {Dental/periodontal tissues}	28/0034	. {Use of materials characterised by their function or physical properties}
27/3869	. . . . . {Epithelial tissues other than skin}	28/0038	. . {Medicaments; Biocides}
27/3873	. . . . . {Muscle tissue, e.g. sphincter}	28/0042	. . {Plasticisers}
27/3878	. . . . . {Nerve tissue, brain, spinal cord, nerves, dura mater}	28/0046	. . {Sprayable compositions}
27/3882	. . . . . {Hollow organs, e.g. bladder, esophagus, urether, uterus}	28/0049	. . {Hydrogels or hydrocolloids}
27/3886	. . . {comprising two or more cell types}	28/0053	. . {Porous materials, e.g. foams or sponges}
27/3891	. . . {as distinct cell layers}	28/0057	. . {Materials resorbable by the body}
27/3895	. . . {using specific culture conditions, e.g. stimulating differentiation of stem cells, pulsatile flow conditions}	28/0061	. {Materials for coating}
27/40	. Composite materials, i.e. containing one material dispersed in a matrix of the same or different material	28/0065	. . {Inorganic materials}
27/42	. . having an inorganic matrix	28/0069	. . {Macromolecular materials}
27/422	. . . {of carbon}	28/0073	. {Composite materials, i.e. containing one material dispersed in a matrix of the same or different material}
27/425	. . . {of phosphorus containing material, e.g. apatite}	28/0076	. . {with an inorganic matrix}
27/427	. . . {of other specific inorganic materials not covered by A61L 27/422 or A61L 27/425 }	28/008	. . {with a macromolecular matrix}
27/44	. . having a macromolecular matrix	28/0084	. . . {containing fillers of carbon}
27/443	. . . {with carbon fillers}	28/0088	. . . {containing fillers of phosphorus-containing inorganic compounds}
27/446	. . . {with other specific inorganic fillers other than those covered by A61L 27/443 or A61L 27/46 }	28/0092	. . . {containing inorganic fillers not covered by groups A61L 28/0084 or A61L 28/0088 }
27/46	. . . with phosphorus-containing inorganic fillers	28/0096	. . . {containing macromolecular fillers}
27/48	. . . with macromolecular fillers	29/00	Materials for catheters, {medical tubing, cannulae, or endoscopes} or for coating catheters (shape or structure of catheters A61M 25/00)
27/50	. Materials characterised by their function or physical properties {, e.g. injectable or lubricating compositions, shape-memory materials, surface modified materials}		NOTES
27/502	. . {Plasticizers}		1. In groups A61L 29/02 - { A61L 29/126 }, 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.
27/505	. . {Stabilizers}		2. When classifying in groups A61L 29/02 - { A61L 29/126 }, classification is also made in groups A61L 29/14 - A61L 29/18 if the use of materials characterised by their function or physical properties is of interest.
27/507	. . {for artificial blood vessels (apparatus for applying cells on a blood vessel prosthesis A61F 2/062)}		3. When classifying in group A61L 29/00 , classification is also made in A61L 33/00 if the materials used are antithrombogenic
27/52	. . Hydrogels or hydrocolloids		4. In group A61L 29/00 , the use of specific polymers is indicated using the relevant classification symbols of subclass C08L in the combination set, e.g. a catheter based on polyvinylchloride A61L 29/041 , C08L 27/06
27/54	. . Biologically active materials, e.g. therapeutic substances {(A61L 27/227 takes precedence)}	29/005	. {Ingredients of undetermined constitution or reaction products thereof}
27/56	. . Porous materials, {e.g. foams or sponges}	29/02	. Inorganic materials
27/58	. . Materials at least partially resorbable by the body	29/04	. Macromolecular materials
27/60	. . Materials for use in artificial skin	29/041	. . {obtained by reactions only involving carbon-to-carbon unsaturated bonds}
28/00	Materials for colostomy devices (adhesives for colostomy devices A61L 24/00)	29/042	. . . {Rubbers}
NOTE		29/043	. . {Polysaccharides}
	When classifying in group A61L 28/00 , classification is also made in A61L 33/00 if the materials used are antithrombogenic.	29/044	. . {Proteins; Polypeptides; Degradation products thereof}
28/0003	. {containing inorganic materials}	29/045	. . . {Collagen}
28/0007	. {containing macromolecular materials}	29/046	. . . {Gelatin}
28/0011	. . {obtained by reactions only involving carbon-to-carbon unsaturated bonds}	29/047	. . . {Fibrin; Fibrinogen}
28/0015	. . {obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds}	29/048	. . . {Other specific proteins or polypeptides not covered by A61L 29/045 - A61L 29/047 }
28/0019	. . {Polysaccharides}		
28/0023	. . {Polypeptides; Proteins; Degradation products thereof}		

- 29/049 . . {Mixtures of macromolecular compounds}
- 29/06 . . obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds
- 29/08 . Materials for coatings
- 29/085 . . {Macromolecular materials}
- 29/10 . . Inorganic materials
- 29/103 . . . {Carbon}
- 29/106 . . . {Inorganic materials other than carbon}
- 29/12 . Composite materials, i.e. containing one material dispersed in a matrix of the same or different material
- 29/123 . . {having an inorganic matrix}
- 29/126 . . {having a macromolecular matrix}
- 29/14 . Materials characterised by their function or physical properties {, e.g. lubricating compositions}
- 29/141 . . {Plasticizers}
- 29/143 . . {Stabilizers}
- 29/145 . . {Hydrogels or hydrocolloids}
- 29/146 . . {Porous materials, e.g. foams or sponges}
- 29/148 . . {Materials at least partially resorbable by the body}
- 29/16 . . Biologically active materials, e.g. therapeutic substances {(A61L 29/048 takes precedence)}
- 29/18 . . Materials at least partially X-ray or laser opaque
- 31/00 Materials for other surgical articles {, e.g. stents, stent-grafts, shunts, surgical drapes, guide wires, materials for adhesion prevention, occluding devices, surgical gloves, tissue fixation devices (shape or structure of stent-grafts A61F 2/07, of stents A61F 2/82, of surgical gloves A61B 42/00, of surgical drapes A61B 46/00, of occluding devices A61B 17/12022)}**
- NOTES**
1. In groups [A61L 31/02](#) - {[A61L 31/129](#)}, the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the last appropriate place.
 2. When classifying in groups [A61L 31/02](#) - {[A61L 31/129](#)}, classification is also made in groups [A61L 31/14](#) - [A61L 31/18](#) if the use of materials characterised by their function or physical properties is of interest.
 3. When classifying in group [A61L 31/00](#), classification is also made in [A61L 33/00](#) if the materials used are antithrombogenic
 4. In group [A61L 31/00](#), the use of specific polymers is indicated using the relevant classification symbols of subclass [C08L](#) in the second position of the combination set, e.g. surgical clamp based on polyvinylchloride [A61L 31/048](#), [C08L 27/06](#)
- 31/005 . {Ingredients of undetermined constitution or reaction products thereof}
- 31/02 . Inorganic materials
- 31/022 . . {Metals or alloys}
- 31/024 . . {Carbon; Graphite}
- 31/026 . . {Ceramic or ceramic-like structures, e.g. glasses}
- 31/028 . . {Other inorganic materials not covered by [A61L 31/022](#) - [A61L 31/026](#)}
- 31/04 . Macromolecular materials
- 31/041 . . {Mixtures of macromolecular compounds}
- 31/042 . . {Polysaccharides}
- 31/043 . . {Proteins; Polypeptides; Degradation products thereof}
- 31/044 . . . {Collagen}
- 31/045 . . . {Gelatin}
- 31/046 . . . {Fibrin; Fibrinogen}
- 31/047 . . . {Other specific proteins or polypeptides not covered by [A61L 31/044](#) - [A61L 31/046](#)}
- 31/048 . . {obtained by reactions only involving carbon-to-carbon unsaturated bonds ([A61L 31/041](#) takes precedence)}
- 31/049 . . . {Rubbers}
- 31/06 . . obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds {(A61L 31/041 takes precedence)}
- 31/08 . Materials for coatings
- 31/082 . . {Inorganic materials}
- 31/084 . . . {Carbon; Graphite}
- 31/086 . . . {Phosphorus-containing materials, e.g. apatite}
- 31/088 . . . {Other specific inorganic materials not covered by [A61L 31/084](#) or [A61L 31/086](#)}
- 31/10 . . Macromolecular materials
- 31/12 . Composite materials, i.e. containing one material dispersed in a matrix of the same or different material
- 31/121 . . {having an inorganic matrix}
- 31/122 . . . {of carbon}
- 31/123 . . . {of phosphorus-containing materials, e.g. apatite}
- 31/124 . . . {of other specific inorganic materials not covered by [A61L 31/122](#) or [A61L 31/123](#)}
- 31/125 . . {having a macromolecular matrix}
- 31/126 . . . {containing carbon fillers}
- 31/127 . . . {containing fillers of phosphorus-containing inorganic materials}
- 31/128 . . . {containing other specific inorganic fillers not covered by [A61L 31/126](#) or [A61L 31/127](#)}
- 31/129 . . . {containing macromolecular fillers}
- 31/14 . Materials characterised by their function or physical properties {, e.g. injectable or lubricating compositions, shape-memory materials, surface modified materials}
- 31/141 . . {Plasticizers}
- 31/143 . . {Stabilizers}
- 31/145 . . {Hydrogels or hydrocolloids}
- 31/146 . . {Porous materials, e.g. foams or sponges}
- 31/148 . . {Materials at least partially resorbable by the body}
- 31/16 . . Biologically active materials, e.g. therapeutic substances {(A61L 31/047 takes precedence)}
- 31/18 . . Materials at least partially X-ray or laser opaque
- 33/00 Antithrombogenic treatment of surgical articles, e.g. sutures, catheters, prostheses, or of articles for the manipulation or conditioning of blood; Materials for such treatment**
- NOTES**
1. In groups [A61L 33/0076](#) - [A61L 33/0094](#) and [A61L 33/02](#) - [A61L 33/122](#), 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.

- A61L 33/00 (continued)
2. When classifying in groups [A61L 33/02](#) - [A61L 33/122](#), classification is also made in group [A61L 33/0005](#) if of interest
 3. In group [A61L 33/00](#), the use of specific polymers is indicated using the relevant classification symbols of subclass [C08L](#) in the second position of the combination set, e.g. antithrombogenic treatment with the help of polyvinylchloride [A61L 33/064](#), [C08L 27/06](#)
- 33/0005 . {Use of materials characterised by their function or physical properties}
 - 33/0011 . . {Anticoagulant, e.g. heparin, platelet aggregation inhibitor, fibrinolytic agent, other than enzymes, attached to the substrate}
 - 33/0017 . . . {using a surface active agent}
 - 33/0023 . . . {using a quaternized group or a protonated amine group of the substrate}
 - 33/0029 . . . {using an intermediate layer of polymer}
 - 33/0035 . . . {using a polymer with positively charged atoms in the polymeric backbone, e.g. ionenes}
 - 33/0041 . . . {characterised by the choice of an antithrombotic agent other than heparin ([heparinoid A61L 33/08](#); [polypeptides A61L 33/12](#))}
 - 33/0047 . . {Enzymes, e.g. urokinase, streptokinase}
 - 33/0052 . . {Plasticizers}
 - 33/0058 . . {Stabilizers}
 - 33/0064 . . {Hydrogels or hydrocolloids}
 - 33/007 . . {Porous materials, e.g. foams or sponges}
 - 33/0076 . {Chemical modification of the substrate}
 - 33/0082 . . {by reacting with an organic compound other than heparin}
 - 33/0088 . . {by grafting of a monomer onto the substrate}
 - 33/0094 . {Physical treatment, e.g. plasma treatment}
 - 33/02 . Use of inorganic materials
 - 33/022 . . {Metal or alloys}
 - 33/025 . . {Carbon; Graphite}
 - 33/027 . . {Other specific inorganic materials not covered by [A61L 33/022](#) or [A61L 33/025](#)}
 - 33/04 . Use of organic materials, e.g. acetylsalicylic acid
 - 33/06 . Use of macromolecular materials ([grafting of a monomer onto the substrate A61L 33/0088](#))
 - 33/062 . . {Mixtures of macromolecular compounds}
 - 33/064 . . {obtained by reactions only involving carbon-to-carbon unsaturated bonds ([A61L 33/062](#) takes precedence)}
 - 33/066 . . . {Rubbers}
 - 33/068 . . {obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds ([A61L 33/062](#) takes precedence)}
 - 33/08 . . Polysaccharides
 - 33/12 . . Polypeptides, proteins or derivatives thereof {, e.g. degradation products thereof}
 - 33/122 . . . {Collagen}
 - 33/124 . . . {Gelatin}
 - 33/126 . . . {Fibrin}
 - 33/128 . . . {Other specific proteins or polypeptides not covered by [A61L 33/122](#) - [A61L 33/126](#)}
 - 33/18 . Use of ingredients of undetermined constitution or reaction products thereof

Indexing scheme associated with groups [A61L 2/00](#) - [A61L 12/00](#), relating to the chemical composition of the materials used in disinfecting, sterilizing or deodorizing.

- | | |
|----------------|---|
| 2101/00 | Chemical composition of materials used in disinfecting, sterilising or deodorising |
| 2101/02 | . Inorganic materials |
| 2101/06 | . . containing halogen |
| 2101/08 | . . . Elemental halogen |
| 2101/12 | . . containing silicon |
| 2101/14 | . . containing sulfur |
| 2101/16 | . . containing phosphorus |
| 2101/18 | . . Ammonia |
| 2101/20 | . . Acids |
| 2101/24 | . . containing aluminium |
| 2101/26 | . . containing copper |
| 2101/28 | . . containing iron |
| 2101/30 | . . containing zinc |
| 2101/32 | . Organic compounds |
| 2101/34 | . . Hydroxy compounds |
| 2101/36 | . . Carboxylic acids or derivatives thereof |
| 2101/38 | . . Ethers |
| 2101/40 | . . containing sulfur |
| 2101/42 | . . Organo-metallic compounds or complexes |
| 2101/44 | . . Heterocyclic compounds |
| 2101/46 | . . Macromolecular compounds |
| 2101/48 | . . . obtained by reactions only involving carbon-to-carbon unsaturated bonds |
| 2101/50 | . . . Polysaccharides or derivatives thereof |
-
- | | |
|----------------|---|
| 2202/00 | Aspects relating to methods or apparatus for disinfecting or sterilising materials or objects |
| 2202/10 | . Apparatus features |
| 2202/11 | . . Apparatus for generating biocidal substances, e.g. vaporisers, UV lamps |
| 2202/12 | . . Apparatus for isolating biocidal substances from the environment |
| 2202/121 | . . . Sealings, e.g. doors, covers, valves, sluices |
| 2202/122 | . . . Chambers for sterilisation |
| 2202/123 | . . . Connecting means |
| 2202/13 | . . Biocide decomposition means, e.g. catalysts, sorbents |
| 2202/14 | . . Means for controlling sterilisation processes, data processing, presentation and storage means, e.g. sensors, controllers, programs |
| 2202/15 | . . Biocide distribution means, e.g. nozzles, pumps, manifolds, fans, baffles, sprayers |
| 2202/16 | . . Mobile applications, e.g. portable devices, trailers, devices mounted on vehicles |
| 2202/17 | . . Combination with washing or cleaning means |
| 2202/18 | . . Aseptic storing means |
| 2202/181 | . . . Flexible packaging means, e.g. permeable membranes, paper |
| 2202/182 | . . . Rigid packaging means |
| 2202/20 | . Targets to be treated |
| 2202/21 | . . Pharmaceuticals, e.g. medicaments, artificial body parts |
| 2202/22 | . . Blood or products thereof |
| 2202/23 | . . Containers, e.g. vials, bottles, syringes, mail |
| 2202/24 | . . Medical instruments, e.g. endoscopes, catheters, sharps |

2202/25	. . Rooms in buildings, passenger compartments	2300/22	. . Lipids, fatty acids, e.g. prostaglandins, oils, fats, waxes
2202/26	. . Textiles, e.g. towels, beds, cloths	2300/222	. . . Steroids, e.g. corticosteroids
2209/00	Aspects relating to disinfection, sterilisation or deodorisation of air	2300/224	. . containing metals, e.g. porphyrins, vitamin B12
2209/10	. Apparatus features	2300/23	. . Carbohydrates
2209/11	. . Apparatus for controlling air treatment	2300/232	. . . Monosaccharides, disaccharides, polysaccharides, lipopolysaccharides
2209/111	. . . Sensor means, e.g. motion, brightness, scent, contaminant sensors	2300/236	. . . Glycosaminoglycans, e.g. heparin, hyaluronic acid, chondroitin
2209/12	. . Lighting means	2300/25	. . Peptides having up to 20 amino acids in a defined sequence
2209/13	. . Dispensing or storing means for active compounds	2300/252	. . Polypeptides, proteins, e.g. glycoproteins, lipoproteins, cytokines
2209/131	. . . Semi-permeable membranes	2300/254	. . . Enzymes, proenzymes
2209/132	. . . Piezo or ultrasonic elements for dispensing	2300/256	. . . Antibodies, e.g. immunoglobulins, vaccines
2209/133	. . . Replaceable cartridges, refills	2300/258	. . Genetic materials, DNA, RNA, genes, vectors, e.g. plasmids
2209/134	. . . Distributing means, e.g. baffles, valves, manifolds, nozzles	2300/30	. . Compounds of undetermined constitution extracted from natural sources, e.g. Aloe Vera
2209/135	. . . Vaporisers for active components	2300/40	. characterised by a specific therapeutic activity or mode of action
2209/14	. . Filtering means	2300/402	. . Anaesthetics, analgesics, e.g. lidocaine
2209/15	. . Supporting means, e.g. stands, hooks, holes for hanging	2300/404	. . Biocides, antimicrobial agents, antiseptic agents
2209/16	. . Connections to a HVAC unit	2300/406	. . . Antibiotics
2209/20	. Method-related aspects	2300/408	. . . Virucides, spermicides
2209/21	. . Use of chemical compounds for treating air or the like	2300/41	. . Anti-inflammatory agents, e.g. NSAIDs
2209/211	. . . Use of hydrogen peroxide, liquid and vaporous	2300/412	. . Tissue-regenerating or healing or proliferative agents
2209/212	. . . Use of ozone, e.g. generated by UV radiation or electrical discharge	2300/414	. . . Growth factors
2209/213	. . . Use of electrochemically treated water, e.g. electrolysed water or water treated by electrical discharge	2300/416	. . Anti-neoplastic or anti-proliferative or anti-restenosis or anti-angiogenic agents, e.g. paclitaxel, sirolimus
2209/22	. . Treatment by sorption, e.g. absorption, adsorption, chemisorption, scrubbing, wet cleaning	2300/418	. . Agents promoting blood coagulation, blood-clotting agents, embolising agents
2300/00	Biologically active materials used in bandages, wound dressings, absorbent pads or medical devices	2300/42	. . Anti-thrombotic agents, anticoagulants, anti-platelet agents
2300/10	. containing or releasing inorganic materials	2300/422	. . Anti-atherosclerotic agents
2300/102	. . Metals or metal compounds, e.g. salts such as bicarbonates, carbonates, oxides, zeolites, silicates	2300/424	. . Anti-adhesion agents
2300/104	. . . Silver, e.g. silver sulfadiazine	2300/426	. . Immunomodulating agents, i.e. cytokines, interleukins, interferons
2300/106	. . Halogens or compounds thereof, e.g. iodine, chlorite	2300/428	. . Vitamins, e.g. tocopherol, riboflavin
2300/108	. . Elemental carbon, e.g. charcoal	2300/43	. . Hormones, e.g. dexamethasone
2300/11	. . Peroxy compounds, peroxides, e.g. hydrogen peroxide	2300/432	. . Inhibitors, antagonists (A61L 2300/402 - A61L 2300/43 take precedence)
2300/112	. . Phosphorus-containing compounds, e.g. phosphates, phosphonates	2300/434	. . . of enzymes
2300/114	. . Nitric oxide, i.e. NO	2300/436	. . . of receptors
2300/20	. containing or releasing organic materials	2300/438	. . Antigens
2300/202	. . with halogen atoms, e.g. triclosan, povidone-iodine	2300/44	. . Radioisotopes, radionuclides
2300/204	. . with nitrogen-containing functional groups, e.g. aminoxides, nitriles, guanidines	2300/442	. . Colorants, dyes
2300/206	. . . Biguanides, e.g. chlorohexidine	2300/45	. . Mixtures of two or more drugs, e.g. synergistic mixtures
2300/208	. . . Quaternary ammonium compounds	2300/452	. . Lubricants
2300/21	. . Acids	2300/60	. characterised by a special physical form
2300/212	. . . Peroxy acids, peracids	2300/602	. . Type of release, e.g. controlled, sustained, slow
2300/214	. . . Amino acids	2300/604	. . . Biodegradation
2300/216	. . with other specific functional groups, e.g. aldehydes, ketones, phenols, quaternary phosphonium groups	2300/606	. . Coatings
		2300/608	. . . having two or more layers
		2300/61	. . . . containing two or more active agents in different layers
		2300/62	. . Encapsulated active agents, e.g. emulsified droplets
		2300/622	. . . Microcapsules

- 2300/624 . . . Nanocapsules
- 2300/626 . . . Liposomes, micelles, vesicles
- 2300/63 . . Crystals
- 2300/64 . . Animal cells
- 2300/80 . characterised by a special chemical form
- 2300/802 . . Additives, excipients, e.g. cyclodextrins, fatty acids, surfactants

- 2400/00 Materials characterised by their function or physical properties**
- 2400/02 . Treatment of implants to prevent calcification or mineralisation *in vivo*
- 2400/04 . Materials for stopping bleeding
- 2400/06 . Flowable or injectable implant compositions
- 2400/08 . Methods for forming porous structures using a negative form which is filled and then removed by pyrolysis or dissolution
- 2400/10 . Materials for lubricating medical devices
- 2400/12 . Nanosized materials, e.g. nanofibres, nanoparticles, nanowires, nanotubes; Nanostructured surfaces
- 2400/14 . Adhesives for ostomy devices
- 2400/16 . Materials with shape-memory or superelastic properties
- 2400/18 . Modification of implant surfaces in order to improve biocompatibility, cell growth, fixation of biomolecules, e.g. plasma treatment

- 2420/00 Materials or methods for coatings medical devices**
- 2420/02 . Methods for coating medical devices
- 2420/04 . Coatings containing a composite material such as inorganic/organic, i.e. material comprising different phases
- 2420/06 . Coatings containing a mixture of two or more compounds
- 2420/08 . Coatings comprising two or more layers

- 2430/00 Materials or treatment for tissue regeneration**
- 2430/02 . for reconstruction of bones; weight-bearing implants
- 2430/04 . for mammary reconstruction
- 2430/06 . for cartilage reconstruction, e.g. meniscus
- 2430/10 . for reconstruction of tendons or ligaments
- 2430/12 . for dental implants or prostheses
- 2430/14 . for ear reconstruction or ear implants, e.g. implantable hearing aids
- 2430/16 . for reconstruction of eye parts, e.g. intraocular lens, cornea
- 2430/18 . for hair reconstruction
- 2430/20 . for reconstruction of the heart, e.g. heart valves
- 2430/22 . for reconstruction of hollow organs, e.g. bladder, esophagus, urether, uterus
- 2430/24 . for joint reconstruction
- 2430/26 . for kidney reconstruction
- 2430/28 . for liver reconstruction
- 2430/30 . for muscle reconstruction
- 2430/32 . for nerve reconstruction
- 2430/34 . for soft tissue reconstruction
- 2430/36 . for embolization or occlusion, e.g. vaso-occlusive compositions or devices ([artificial blood vessels A61L 27/507](#))
- 2430/38 . for reconstruction of the spine, vertebrae or intervertebral discs
- 2430/40 . Preparation and treatment of biological tissue for implantation, e.g. decellularisation, cross-linking