COOPERATIVE PATENT CLASSIFICATION

HUMAN NECESSITIES

MEDICAL OR VETERINARY SCIENCE; HYGIENE

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 used in the CPC system. Subject matter covered by these 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
   - A61L 101/00 - A61L 101/56 covered by

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

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 . . . Ultrasons

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
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)

3. When classifying in groups A61L 15/08, classification is also made in the last appropriate place.

4. In the absence of an indication to the contrary, classification is made in a gaseous state.

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 . . . [Mercy 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)

1/500 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
1. In each set of groups A61L 15/08 - A61L 15/12 and A61L 15/18 - A61L 15/40, in the absence of an indication to the contrary, classification is made in the last appropriate place.

2. When classifying in groups A61L 15/08 - A61L 15/12, classification is also made in group A61L 15/14 if the use of materials characterised by their function or physical properties is of interest.

3. When classifying in groups A61L 15/18 - A61L 15/40, classification is also made in groups A61L 15/42 - A61L 15/64 if the use of materials characterised by their function or physical properties is of interest.
Chemical aspects of, or use of materials for, bandages, dressings or absorbent pads comprising a solid support or...

15/07 . . . Stiffening bandages
15/08 . . . containing inorganic materials, e.g. plaster of Paris
15/10 . . . containing organic materials
15/12 . . . containing macromolecular materials

NOTE
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

15/125 . . . {Mixtures of macromolecular compounds}
15/14 . . . Use of materials characterised by their function or physical properties
15/16 . . . Bandages, dressings or absorbent pads for physiological fluids such as urine or blood, e.g. sanitary towels, tampons
15/18 . . . containing inorganic materials
15/20 . . . containing organic materials
15/22 . . . containing macromolecular materials

NOTE
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

15/225 . . . {Mixtures of macromolecular compounds}
15/24 . . . Macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds; Derivatives thereof {A61L 15/225 takes precedence}
15/26 . . . Macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds; Derivatives thereof {A61L 15/225 takes precedence}
15/28 . . . Polysaccharides or their derivatives {A61L 15/225 takes precedence}
15/30 . . . Rubbers or their derivatives {A61L 15/225 takes precedence}
15/32 . . . Proteins, polypeptides; Degradation products or derivatives thereof, e.g. albumin, collagen, fibrin, gelatin {A61L 15/225 takes precedence}
15/325 . . . {Collagen}
15/34 . . . Oils, fats, waxes or natural resins {A61L 15/225 takes precedence}
15/36 . . . containing microorganisms
15/38 . . . containing enzymes
15/40 . . . containing ingredients of undetermined constitution or reaction products thereof, e.g. plant or animal extracts
15/42 . . . Use of materials characterised by their function or physical properties (liquid bandages A61L 26/00)
15/425 . . . {Porous materials, e.g. foams or sponges}
15/44 . . . Medicaments
15/46 . . . Deodorants or malodour counteractants, e.g. to inhibit the formation of ammonia or bacteria
15/48 . . . Surfactants
15/50 . . . Lubricants; Anti-adhesive agents
15/52 . . . Water-repellants
15/54 . . . Radio- opaque materials
15/56 . . . Wetness-indicators or colourants
15/58 . . . Adhesives
15/585 . . . {Mixtures of macromolecular compounds}
15/60 . . . Liquid-swellable gel-forming materials, e.g. super-absorbents
15/62 . . . {Compostable} hydrosoluble or hydrodegradable materials
15/64 . . . specially adapted to be resorbable inside the body

17/00 Materials for surgical sutures or for ligaturing blood vessels; 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)}

NOTES
1. In groups A61L 17/04 - A61L 17/145, in the absence of an indication to the contrary, classification is made in the last appropriate place.
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 . . . {Polymers 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 24/02 - A61L 24/12, 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}
Chemical aspects of, or use of materials for, bandages, dressings or absorbent pads comprising a solid support or...

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 amatrix 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 A61P 2/00; use of preparations for artificial teeth A61K 6/02; artificial kidneys A61M 1/14)

NOTES
1. In groups A61L 27/02 - A61L 27/48, 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
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 polivynilchloride A61L 27/16, C08L 27/06

27/02 . . . Inorganic materials
27/025 . . . {Other specific inorganic materials not covered by A61L 27/04 - A61L 27/12}
27/04 . . . Metals or alloys
27/042 . . . {Iron or iron alloys}
27/045 . . . {Cobalt or cobalt alloys}
27/047 . . . {Other specific metals or alloys not covered by A61L 27/042 - A61L 27/045 or A61L 27/06}
27/06 . . . Titanium or titanium alloys
27/08 . . . Carbon; {Graphite}
27/10 . . . Ceramics or glasses
27/105 . . . {containing Al(OH)3}
27/12 . . . Phosphorus-containing materials, e.g. apatite
27/14 . . . Macromolecular materials
27/16 . . . obtained by reactions only involving carbon-to-carbon unsaturated bonds
27/165 . . . {Rubbers}
Chemical aspects of, or use of materials for, bandages, dressings or absorbent pads comprising a solid support or...

27/18 ... obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds
27/20 ... Polysaccharides
27/22 ... Polypeptides or derivatives thereof {e.g. degradation products}
27/222 ... [Gelatin]
27/225 ... [Fibrin; Fibrinogen]
27/227 ... [Other specific proteins or polypeptides not covered by A61L 27/222, A61L 27/225 or A61L 27/24]
27/24 ... Collagen
27/26 ... Mixtures of macromolecular compounds
27/28 ... Materials for coating prostheses
27/30 ... Inorganic materials
27/303 ... [Carbon]
27/306 ... [Other specific inorganic materials not covered by A61L 27/30 - A61L 27/32]
27/32 ... Phosphorus-containing materials, e.g. apatite
27/34 ... Macromolecular materials
27/36 ... containing ingredients of undetermined constitution or reaction products thereof {isolated natural compounds, e.g. collagen A61L 27/24}
27/3604 ... [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 papilae]
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]
27/3641 ... [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)]
27/3645 ... [Connective tissue]
27/365 ... [Bones]
27/3654 ... [Cartilage, e.g. meniscus]
27/3658 ... [Intervertebral discs (mechanical aspects and structures of intervertebral discs A61F 2/442)]
27/3662 ... [Ligaments, tendons]
27/3666 ... [Epithelial tissues other than skin]
27/367 ... [Muscle tissue, e.g. sphincter]
27/3675 ... [Nerve tissue, e.g. brain, spinal cord, nerves, dura mater]
27/3679 ... [Hollow organs, e.g. bladder, esophagus, urether, uterus, intestine]
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]
27/3687 ... [characterised by the use of chemical agents in the treatment, e.g. speciﬁc enzymes, detergents, capping agents, crosslinkers, anticalciﬁcation agents]
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]
27/3695 ... [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)]
27/38 ... [containing added animal cells (organs or tissue containing native cells A61L 27/36)]
27/3804 ... [characterised by specific cells or progenitors thereof, e.g. ﬁbroblasts, connective tissue cells, kidney cells]
27/3808 ... [Endothelial cells]
27/3813 ... [Epithelial cells, e.g. keratinocytes, urothelial cells]
27/3817 ... [Cartilage-forming cells, e.g. prechondrocytes]
27/3821 ... [Bone-forming cells, e.g. osteoblasts, osteocytes, osteoprogenitor cells]
27/3826 ... [Muscle cells, e.g. smooth muscle cells]
27/383 ... [Nerve cells, e.g. dendritic cells, Schwann cells]
27/3834 ... [Cells able to produce different cell types, e.g. hematopoietic stem cells, mesenchymal stem cells, marrow stromal cells, embryonic stem cells]
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)]
27/3843 ... [Connective tissue]
27/3847 ... [Bones]
27/3852 ... [Cartilage, e.g. meniscus]
27/3856 ... [Intervertebral discs (mechanical aspects and structures of intervertebral discs A61F 2/442)]
27/386 ... [Ligaments, tendons]
27/3865 ... [Dental/periodontal tissues]
27/3869 ... [Epithelial tissues other than skin]
27/3873 ... [Muscle tissue, e.g. sphincter]
27/3878 ... [Nerve tissue, brain, spinal cord, nerves, dura mater]
27/3882 ... [Hollow organs, e.g. bladder, esophagus, urether, uterus]
27/3886 ... [comprising two or more cell types]
27/3891 ... [as distinct cell layers]
27/3895 ... [using speciﬁc culture conditions, e.g. stimulating differentiation of stem cells, pulsatile ﬂow conditions]
27/40 ... [Composite materials, i.e. containing one material dispersed in a matrix of the same or different material]
27/42 ... [having an inorganic matrix]
27/422 ... [of carbon]
27/425 ... [of phosphorus containing material, e.g. apatite]
Chemical aspects of, or use of materials for, bandages, dressings or absorbent pads comprising a solid support or...

27/427... [of other specific inorganic materials not covered by A61L 27/422 or A61L 27/425]
27/44... having a macromolecular matrix
27/443... [with carbon fillers]
27/446... [with other specific inorganic fillers other than those covered by A61L 27/443 or A61L 27/446]
27/46... with phosphorus-containing inorganic fillers
27/48... with macromolecular fillers
27/50... Materials characterised by their function or physical properties [, e.g. injectable or lubricating compositions, shape-memory materials, surface modified materials]
27/502... [Plasticizers]
27/505... [Stabilizers]
27/507... [for artificial blood vessels (apparatus for applying cells on a blood vessel prosthesis A61F 2062)]
27/52... Hydrogels or hydrocolloids
27/54... Biologically active materials, e.g. therapeutic substances (A61L 27/227 takes precedence)
27/56... Porous materials, [e.g. foams or sponges]
27/58... Materials at least partially resorbable by the body
27/60... Materials for use in artificial skin

28/00 Materials for colostomy devices (adhesives for colostomy devices A61L 24/000)

NOTE
When classifying in group A61L 28/00, classification is also made in A61L 33/000 if the materials used are antithrombogenic.

28/0003... [containing inorganic materials]
28/0007... [containing macromolecular materials]
28/0011... [obtained by reactions only involving carbon-to-carbon unsaturated bonds]
28/0015... [obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds]
28/0019... [Polysaccharides]
28/0023... [Polypeptides; Proteins; Degradation products thereof]
28/0026... [Mixtures of macromolecular compounds]
28/003... [Ingredients of undetermined constitution or reaction products thereof]
28/0034... [Use of materials characterised by their function or physical properties]
28/0038... [Medicaments; Biocides]
28/0042... [Plasticisers]
28/0046... [Sprayable compositions]
28/0049... [Hydrogels or hydrocolloids]
28/0053... [Porous materials, e.g. foams or sponges]
28/0057... [Materials resorbable by the body]
28/0061... [Materials for coating]
28/0065... [Inorganic materials]
28/0069... [Macromolecular materials]
28/007... [Composite materials, i.e. containing one material dispersed in a matrix of the same or different material]
28/0076... [with an inorganic matrix]
28/008... [with a macromolecular matrix]
28/0084... [containing fillers of carbon]
28/0088... [containing fillers of phosphorus-containing inorganic compounds]

28/0092... [containing inorganic fillers not covered by groups A61L 28/0084 or A61L 28/0088]
28/0096... [containing macromolecular fillers]

29/00 Materials for catheters, [medical tubing, cannulae, or endoscopes] or for coating catheters (shape or structure of catheters A61M 25/00)

NOTES
1. In groups A61L 29/02 - {A61L 29/126}, in the absence of an indication to the contrary, classification is made in the last appropriate place
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
3. When classifying in group A61L 29/00, classification is also made in A61L 33/00 if the materials used are antithrombogenic
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

29/005... [Ingredients of undetermined constitution or reaction products thereof]
29/02... Inorganic materials
29/04... Macromolecular materials
29/041... [obtained by reactions only involving carbon-to-carbon unsaturated bonds]
29/042... [Rubbers]
29/043... [Polysaccharides]
29/044... [Proteins; Polypeptides; Degradation products thereof]
29/045... [Collagen]
29/046... [Gelatin]
29/047... [Fibrin; Fibrinogen]
29/048... [Other specific proteins or polypeptides not covered by A61L 29/045 - A61L 29/047]
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)
Chemical aspects of, or use of materials for, bandages, dressings or absorbent pads comprising a solid support or...

Material for other surgical articles, e.g. stents, stent-grafts, shunts, surgical drains, 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 17/122)

NOTES

1. In groups A61L 31/02 - (A61L 31/129), 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.

### 31/00 Materials for other surgical articles

#### 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

#### 33/005 [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 antithrombomatic agent other than heparin (heparinoïd 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]
Aspects relating to disinfection, sterilisation or deodorisation of air

- Apparatus features
- Apparatus for controlling air treatment
- Sensor means, e.g. motion, brightness, scent, contaminant sensors
- Lighting means
- Dispensing or storing means for active compounds
- Semi-permeable membranes
- Piezo or ultrasonic elements for dispensing
- Replaceable cartridges, refills
- Distributing means, e.g. baffles, valves, manifolds, nozzles
- Vapourisers for active components
- Filtering means
- Supporting means, e.g. stands, hooks, holes for hanging
- Connections to a HVAC unit
- Method-related aspects
- Use of chemical compounds for treating air or the like
- Use of hydrogen peroxide, liquid and vaporous
- Use of ozone, e.g. generated by UV radiation or electrical discharge
- Use of electrochemically treated water, e.g. electrolysed water or water treated by electrical discharge
- Treatment by sorption, e.g. absorption, adsorption, chemisorption, scrubbing, wet cleaning

Biologically active materials used in bandages, wound dressings, absorbent pads or medical devices

- Containing or releasing inorganic materials
- Metals or metal compounds, e.g. salts such as bicarbonates, carbonates, oxides, zeolites, silicates
- Silver, e.g. silver sulfadiazine
- Halogens or compounds thereof, e.g. iodine, chlorite
- Elemental carbon, e.g. charcoal
- Peroxy compounds, peroxides, e.g. hydrogen peroxide
- Phosphorus-containing compounds, e.g. phosphates, phosphonates
- Nitric oxide, i.e. NO
- Containing or releasing organic materials
- with halogen atoms, e.g. trichlosan, povidone-iodine
- with nitrogen-containing functional groups, e.g. aminoxides, nitriles, guanidines
- Biguanides, e.g. chlorhexidine
- Quaternary ammonium compounds
- Acids
- Peroxy acids, peracids
- Amino acids
A61L

2300/216 . . . with other specific functional groups, e.g. aldehydes, ketones, phenols, quaternary phosphonium groups
2300/22 . . . Lipids, fatty acids, e.g. prostaglandins, oils, fats, waxes
2300/222 . . . Steroids, e.g. corticosteroids
2300/224 . . . containing metals, e.g. porphyrins, vitamin B12
2300/23 . . . Carbohydrates
2300/232 . . . Monosaccharides, disaccharides, polysaccharides, lipopolysaccharides
2300/236 . . . Glycosaminoglycans, e.g. heparin, hyaluronic acid, chondroitin
2300/25 . . . Peptides having up to 20 amino acids in a defined sequence
2300/252 . . . Polypeptides, proteins, e.g. glycoproteins, lipoproteins, cytokines
2300/254 . . . Enzymes, proenzymes
2300/256 . . . Antibodies, e.g. immunoglobulins, vaccines
2300/258 . . . Genetic materials, DNA, RNA, genes, vectors, e.g. plasmids
2300/30 . . . Compounds of undetermined constitution extracted from natural sources, e.g. Aloe Vera
2300/40 . . . characterised by a specific therapeutic activity or mode of action
2300/402 . . . Anaesthetics, analgesics, e.g. lidocaine
2300/404 . . . Biocides, antimicrobial agents, antiseptic agents
2300/406 . . . Antibiotics
2300/408 . . . Virucides, sporicides
2300/41 . . . Anti-inflammatory agents, e.g. NSAIDs
2300/412 . . . Tissue-regenerating or healing or proliferative agents
2300/414 . . . Growth factors
2300/416 . . . Anti-neoplastic or anti-proliferative or anti-restenosis or anti-angiogenic agents, e.g. paclitaxel, sirolimus
2300/418 . . . Agents promoting blood coagulation, blood-clotting agents, embolising agents
2300/42 . . . Anti-thrombotic agents, anticoagulants, anti-platelet agents
2300/422 . . . Anti-atherosclerotic agents
2300/424 . . . Anti-adhesion agents
2300/426 . . . Immunomodulating agents, i.e. cytokines, interleukins, interferons
2300/428 . . . Vitamins, e.g. tocopherol, riboflavin
2300/43 . . . Hormones, e.g. dexamethasone
2300/432 . . . Inhibitors, antagonists (A61L 2300/402 - A61L 2300/43 take precedence)
2300/434 . . . of enzymes
2300/436 . . . of receptors
2300/438 . . . Antigens
2300/44 . . . Radioisotopes, radionuclides
2300/442 . . . Colorants, dyes
2300/45 . . . Mixtures of two or more drugs, e.g. synergistic mixtures
2300/452 . . . Lubricants
2300/60 . . . characterised by a special physical form
2300/602 . . . Type of release, e.g. controlled, sustained, slow
2300/604 . . . Biodegradation
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
Preparation and treatment of biological tissue for implantation, e.g. decellularisation, cross-linking