CPC - COOPERATIVE PATENT CLASSIFICATION

A61 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 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
- A61L 101/00-A61L 101/56

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.

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}
Disinfection or sterilising

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)

9/01 Deodorant compositions [(compositions released by contact with a liquid A61L 9/05)]

9/02 . . . using substances evaporated in the air by heating or combustion

9/03 . . . Apparatus therefor

9/04 . . . using substances evaporated in the air without heating

9/05 . . . specially adapted to be released by contact with a liquid, e.g. for toilets

9/12 . . . Apparatus, e.g. holders, therefor

9/14 . . . using sprayed or atomised substances (including air-liquid contact processes)

9/16 . . . using physical phenomena

9/18 . . . Radiation (A61L 9/22 takes precedence)

9/20 . . . Ultra-violet radiation

9/22 . . . Ionisation

11/00 Methods specially adapted for refuse

12/00 Methods or apparatus for disinfecting or sterilising contact lenses; Accessories therefor

12/02 . . . using physical phenomena, e.g. electricity, ultrasonics or ultrafiltration

12/03 . . . [Electrolysis]

12/06 . . . Radiation, e.g. ultraviolet or microwaves

12/08 . . . using chemical substances

12/09 . . . [in combination with specific enzymes]

12/08 . . . [in a gaseous state]

12/09 . . . [Container, accessories or devices therefor]

12/09 . . . [Heavy metals]

12/09 . . . Halogens or compounds thereof

12/09 . . . [Chlorine dioxide (ClO₂)]

12/09 . . . [Iodine, iodides or iodophores]

12/09 . . . [Hypohalites; Active halogens]

12/09 . . . Non-macromolecular oxygen-containing compounds, e.g. hydrogen peroxide or ozone (A61L 12/10 takes precedence)

12/12 . . . [Ozone]

12/14 . . . [Organic compounds not covered by groups A61L 12/10 or A61L 12/12]

12/14 . . . [Biguanides, e.g. chlorhexidine]

12/14 . . . [Polymeric biguanides]

12/14 . . . [Quaternary ammonium compounds]

12/14 . . . [Polymeric quaternary ammonium compounds]

12/14 . . . [Aldehydes]

12/14 . . . [Alcohols or derivatives thereof (aldehydes A61L 12/146)]

12/14 . . . [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 9/0223)

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

1. 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.

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.
A61L 15/00

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.)

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.

15/07 . 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 12/25 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 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))

**NOTES**

1. In groups A61L 17/04 - A61L 17/15, 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 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 polypyrrolidone: A61L 24/01 C08L 24/12
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 takes 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 26/0004 - A61L 26/0005, 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 A61E 22/00; use of preparations for artificial teeth A61K 6/02; artificial kidneys A61M 1/14)

NOTES

1. In groups A61L 27/02 - A61L 27/48, 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.
Chemical aspects of, or use of materials for, bandages, dressings or absorbent pads comprising a solid support or...

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

27/02 . . 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 Al2O3}
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}
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 27/303 - 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 [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}
27/3641 . . {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. pre-chondrocytes}
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}
Chemical aspects of, or use of materials for, bandages, dressings or absorbent pads comprising a solid support or...

27/2856 . . . . . . {Intervertebral discs (mechanical aspects and structures of intervertebral discs A61F 27/422)}
27/286 . . . . . . {Ligaments, tendons}
27/2865 . . . . . . {Dental/periodontal tissues}
27/2869 . . . . . . {Epithelial tissues other than skin}
27/2873 . . . . . . [Muscle tissue, e.g. sphincter]
27/2878 . . . . . . {Nerve tissue, brain, spinal cord, nerves, dura mater}
27/2882 . . . . . . {Hollow organs, e.g. bladder, esophagus, urethra, uterus}
27/2886 . . . . . . {comprising two or more cell types}
27/2891 . . . . . . [as distinct cell layers]
27/2895 . . . . . . {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]
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 20/02)]
27/52 . . . . . . Hydrogels or hydrocolloids
27/54 . . . . . . Biologically active materials, e.g. therapeutic substances (A61L 27/22 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 24/00)

NOTE
When classifying in group A61L 28/00, classification is also made in A61L 33/00 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]
28/0073 . . . . . . [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], 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 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 polyvinyl chloride A61L 29/041, C08L 27/06

29/005 . . . . . . [Ingredients of undetermined constitution or reaction products thereof]
29/002 . . . . . . Inorganic materials
29/004 . . . . . . 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]
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, 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, 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 [Inorganic materials not covered by A61L 31/084 or A61L 31/086]
31/09 [Macromolecular materials]
31/10 [Inorganic materials other than carbon]
31/12 [Carbon; Graphite]
31/14 [Inorganic materials]
31/16 [Inorganic materials]
31/18 [Inorganic materials]
31/19 [Inorganic materials]
31/20 [Inorganic materials]
31/21 [Inorganic materials]
31/22 [Inorganic materials]
31/23 [Inorganic materials]
31/24 [Inorganic materials]
31/25 [Inorganic materials]
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31/90 [Inorganic materials]
31/91 [Inorganic materials]
31/92 [Inorganic materials]
31/93 [Inorganic materials]
31/94 [Inorganic materials]
31/95 [Inorganic materials]
31/96 [Inorganic materials]
31/97 [Inorganic materials]
31/98 [Inorganic materials]
31/99 [Inorganic materials]
31/005 [Ingredients of undetermined constitution or reaction products thereof]
2. When classifying in groups A61L 33/00 - 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 antithrombatic 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}

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. acetylcellulosic acid

33/06 . . . Use of macromolecular materials (grafting of a monomer onto the substrate A61L 33/008)

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

2020/00 Aspects relating to methods or apparatus for disinfecting or sterilising materials or objects

2020/10 . . . Apparatus features

2020/11 . . . Apparatus for generating biocidal substances, e.g. vapourisers, UV lamps

2020/12 . . . Apparatus for isolating biocidal substances from the environment

2020/121 . . . Sealings, e.g. doors, covers, valves, sluces

2020/122 . . . Chambers for sterilisation

2020/123 . . . Connecting means

2020/13 . . . Biocide decomposition means, e.g. catalysts, sorbents

2020/14 . . . Means for controlling sterilisation processes, data processing, presentation and storage means, e.g. sensors, controllers, programs

2020/15 . . . Biocide distribution means, e.g. nozzles, pumps, manifolds, fans, baffles, sprayers

2020/16 . . . Mobile applications, e.g. portable devices, trailers, devices mounted on vehicles

2020/17 . . . Combination with washing or cleaning means

2020/18 . . . Aseptic storing means

2020/181 . . . Flexible packaging means, e.g. permeable membranes, paper

2020/182 . . . Rigid packaging means

2020/20 . . . Targets to be treated

2020/21 . . . Pharmaceuticals, e.g. medicaments, artificial body parts

2020/22 . . . Blood or products thereof

2020/23 . . . Containers, e.g. vials, bottles, syringes, mail

2020/24 . . . Medical instruments, e.g. endoscopes, catheters, sharps

2020/25 . . . Rooms in buildings, passenger compartments

2020/26 . . . Textiles, e.g. towels, beds, cloths

2009/00 Aspects relating to disinfection, sterilisation or deodorisation of air

2009/10 . . . Apparatus features

2009/11 . . . Apparatus for controlling air treatment

2009/111 . . . Sensor means, e.g. motion, brightness, scent, contaminant sensors

2009/12 . . . Lighting means

2009/13 . . . Dispensing or storing means for active compounds

2009/131 . . . Semi-permeable membranes

2009/132 . . . Piezo or ultrasonic elements for dispensing

2009/133 . . . Replaceable cartridges, refills

2009/134 . . . Distributing means, e.g. baffles, valves, manifolds, nozzles

2009/135 . . . Vapourisers for active components

2009/14 . . . Filtering means

2009/15 . . . Supporting means, e.g. stands, hooks, holes for hanging

2009/16 . . . Connections to a HVAC unit

2009/20 . . . Method-related aspects

2009/21 . . . Use of chemical compounds for treating air or the like

2009/211 . . . Use of hydrogen peroxide, liquid and vaporous

2009/212 . . . Use of ozone, e.g. generated by UV radiation or electrical discharge

2009/213 . . . Use of electrochemically treated water, e.g. electrolysed water or water treated by electrical discharge
Biologically active materials used in bandages, wound dressings, absorbent pads or medical devices

- 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, chloride
  - Elemental carbon, e.g. charcoal

- Peroxy compounds, peroxides, e.g. hydrogen peroxide
  - Phosphorus-containing compounds, e.g. phosphates, phosphonates
  - Nitric oxide, i.e. NO

- with halogen atoms, e.g. triclosan, povidone-iodine
- with nitrogen-containing functional groups, e.g. aminoxides, nitrides, guanidines
  - Biguanides, e.g. chlorobhexidine
- Quaternary ammonium compounds
  - Acids

- Peroxy acids, peracids
- Amino acids

- with other specific functional groups, e.g. aldehydes, ketones, phenols, quaternary phosphonium groups
  - Lipids, fatty acids, e.g. prostaglandins, oils, fats, waxes

- Steroids, e.g. corticosteroids
- containing metals, e.g. porphyrins, vitamin B12
  - Carbohydrates

- Monosaccharides, disaccharides, polysaccharides, lipopolysaccharides
- Glycosaminoglycans, e.g. heparin, hyaluronic acid, chondroitin

- Peptides having up to 20 amino acids in a defined sequence
  - Polypeptides, proteins, e.g. glycoproteins, lipoproteins, cytokines
  - Enzymes, proenzymes

- Antibodies, e.g. immunoglobulins, vaccines

- Genetic materials, DNA, RNA, genes, vectors, e.g. plasmids

- Compounds of undetermined constitution extracted from natural sources, e.g. Aloe Vera

- characterised by a specific therapeutic activity or mode of action
  - Anaesthetics, analgesics, e.g. lidocaine
  - Biocides, antimicrobial agents, antiseptic agents
  - Antibiotics
  - Virucides, sporicides

- Anti-inflammatory agents, e.g. NSAIDs
- Tissue-regenerating or healing or proliferative agents

- Growth factors

- Anti-neoplastic or anti-proliferative or anti-restenosis or anti-angiogenic agents, e.g. paclitaxel, sirolimus

- Agents promoting blood coagulation, blood-clotting agents, embolising agents

- Anti-thrombotic agents, anticoagulants, anti-platelet agents

- Anti-atherosclerotic agents

- Anti-adhesion agents

- Immunomodulating agents, i.e. cytokines, interleukins, interferons

- Vitamins, e.g. tocopherol, riboflavin

- Hormones, e.g. dexamethasone

- Inhibitors, antagonists

- of enzymes

- of receptors

- Antigens

- Radioisotopes, radionuclides

- Colorants, dyes

- Mixtures of two or more drugs, e.g. synergistic mixtures

- Lubricants

- characterised by a special physical form

- Type of release, e.g. controlled, sustained, slow

- Biodegradation

- Coatings

- having two or more layers

- containing two or more active agents in different layers

- Encapsulated active agents, e.g. emulsified droplets

- Microcapsules

- Nanocapsules

- Liposomes, micelles, vesicles

- Crystals

- Animal cells

- characterised by a special chemical form

- Additives, excipients, e.g. cyclodextrins, fatty acids, surfactants

Materials characterised by their function or physical properties

- Treatment of implants to prevent calcification or mineralisation in vivo

- Materials for stopping bleeding

- Flowable or injectable implant compositions

- Methods for forming porous structures using a negative form which is filled and then removed by pyrolysis or dissolution

- Materials for lubricating medical devices

- Nanosized materials, e.g. nanofibres, nanoparticles, nanowires, nanotubes; Nanostructured surfaces

- Adhesives for ostomy devices

- Materials with shape-memory or superelastic properties

- Modification of implant surfaces in order to improve biocompatibility, cell growth, fixation of biomolecules, e.g. plasma treatment

Materials or methods for coatings medical devices

- Methods for coating medical devices
Coatings containing a composite material such as inorganic/organic, i.e. material comprising different phases

Coatings containing a mixture of two or more compounds

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