### 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

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

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

### 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 A61L; 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} | 2/022 | . {Filtration} |
| 2/0011 | . . {using physical methods} | 2/025 | . Ultrasonics |
| 2/0017 | . . . {Filtration} | 2/03 | . Electric current |
| 2/0023 | . . . {Heat} | 2/035 | . . {Electrolysis} |
| 2/0029 | . . . {Radiation} | 2/04 | . . Heat (A61L 2/08 takes precedence) |
| 2/0035 | . . . . {Gamma radiation} | 2/06 | . . Hot gas |
| 2/0041 | . . . . {X-rays} | 2/07 | . . . Steam |
| 2/0047 | . . . . {Ultraviolet radiation} | 2/08 | . . Radiation |
| 2/0052 | . . . . {Visible light} | 2/081 | . . . {Gamma radiation} |
| 2/0058 | . . . . {Infrared radiation} | 2/082 | . . . {X-rays} |
| 2/0064 | . . . . {Microwaves} | 2/084 | . . . {Visible light} |
| 2/0076 | . . . . {using a photocatalyst or photosensitiser} | 2/085 | . . . {Infrared radiation} |
| 2/0082 | . . . {using chemical substances} | 2/087 | . . . {Particle radiation, e.g. electron-beam, alpha or beta radiation} |
| 2/0088 | . . . {Liquid substances} | 2/088 | . . . {using a photocatalyst or photosensitiser} |
| 2/0094 | . . . {Gaseous substances} | 2/10 | . . Ultra-violet radiation |
| 2/02 | . using physical phenomena | 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. smoke, aerosols {or sprayed or atomised substances} |
Disinfection or sterilising

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
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 . . . [Ultrasonics]
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 . . . [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)]

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
Chemical aspects of, or use of materials for, bandages, dressings or absorbent pads comprising a solid support or...

A61L 15/00 (continued) characterised by their function or physical properties is of interest.

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)]

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 17/145, the last 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]
Chemical aspects of, or use of materials for, bandages, dressings or absorbent pads comprising a solid support or...

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 24/006, 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 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 26/00 - 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 27/00 - 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

27/02 . . . 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)]
27/366 . . . . . . . . . . [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...

27/3856 . . . . . . {Intervertebral discs (mechanical aspects and structures of intervertebral discs A61F 2/422)}
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]
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 2/062)}
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 polyvinylchloride 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}

CPC - 2021.01
Chemical aspects of, or use of materials for, bandages, dressings or absorbent pads comprising a solid support or...

31/049 . . [Mixtures of macromolecular compounds] 31/043 . . [Proteins; Polypeptides; Degradation products thereof]
29/06 . . obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds 31/044 . . [Collagen]
29/08 . Materials for coatings 31/045 . . [Gelatin]
29/085 . . [Macromolecular materials] 31/046 . . [Fibrin; Fibrinogen]
29/10 . . Inorganic materials 31/047 . . [Other specific proteins or polypeptides not covered by A61L 31/044 - A61L 31/046]
29/103 . . [Carbon] 31/048 . . [obtained by reactions only involving carbon-to-carbon unsaturated bonds (A61L 31/041 takes precedence)]
29/106 . . [Inorganic materials other than carbon] 31/049 . . [Rubbers]
29/12 . Composite materials, i.e. containing one material dispersed in a matrix of the same or different material 31/06 . . obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds ((A61L 31/041 takes precedence))
29/123 . . [having an inorganic matrix] 31/08 . Materials for coatings
29/126 . . [having a macromolecular matrix] 31/082 . . [Inorganic materials]
29/14 . Materials characterised by their function or physical properties {, e.g. lubricating compositions} 31/084 . . [Carbon; Graphite]
29/141 . . [Plasticizers] 31/086 . . [Phosphorus-containing materials, e.g. apatite]
29/143 . . [Stabilizers] 31/088 . . [Other specific inorganic materials not covered by A61L 31/084 or A61L 31/086]
29/145 . . [Hydrogels or hydrocolloids] 31/10 . . Macromolecular materials
29/146 . . [Porous materials, e.g. foams or sponges] 31/12 . Composite materials, i.e. containing one material dispersed in a matrix of the same or different material
29/148 . . [Materials at least partially resorbable by the body] 31/121 . . [having an inorganic matrix]
29/16 . Biologically active materials, e.g. therapeutic substances ((A61L 29/048 takes precedence)) 31/122 . . [of carbon]
31/08 . [Macromolecular materials] 31/123 . . [of phosphorus-containing materials, e.g. apatite]
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)} 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}
31/04 . Macromolecular materials 31/141 . . [Plasticizers]
31/041 . . [Mixtures of macromolecular compounds] 31/143 . . [Stabilizers]
31/042 . . [Polysaccharides] 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 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
Indexing scheme associated with groups A61L 2000 - A61L 1200, 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
2202/12 Apparatus for generating biocidal substances, e.g. vapourisers, UV lamps
2202/14 Apparatus for isolating biocidal substances from the environment
2202/16 Sealings, e.g. doors, covers, valves, sluices
2202/18 Chambers for sterilisation
2202/19 Connecting means
2202/20 Biocide decomposition means, e.g. catalysts, sorbents
2202/22 Means for controlling sterilisation processes, data processing, presentation and storage means, e.g. sensors, controllers, programs
2202/24 Biodegradable materials, e.g. nozzles, pumps, manifolds, fans, baffles, sprayers
2202/26 Mobile applications, e.g. portable devices, trailers, devices mounted on vehicles
2202/28 Aseptic storing means
2202/30 Combination with washing or cleaning means
2202/32 Rigid packaging means
2202/34 Medical instruments, e.g. endoscopes, catheters, sharps

A61L 33/00
(continued)

2. When classifying in groups A61L 33/02 - A61L 33/122, classification is also made in group A61L 33/008 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

33/005 [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 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 33/008)
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 Poly saccharides
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
A61L

2209/00 Aspects relating to disinfection, sterilisation or deodorisation of air

2209/10 Apparatus features
2209/11 Apparatus for controlling air treatment
2209/111 Sensor means, e.g. motion, brightness, scent, contaminant sensors
2209/12 Lighting means
2209/13 Dispensing or storing means for active compounds
2209/131 Semi-permeable membranes
2209/132 Piezo or ultrasonic elements for dispensing
2209/133 Replaceable cartridges, refills
2209/134 Distributing means, e.g. baffles, valves, manifolds, nozzles
2209/135 Vaporisers for active components
2209/14 Filtering means
2209/15 Supporting means, e.g. stands, hooks, holes for hanging
2209/16 Connections to a HVAC unit
2209/20 Method-related aspects
2209/21 Use of chemical compounds for treating air or the like
2209/211 Use of hydrogen peroxide, liquid and vaporous
2209/212 Use of ozone, e.g. generated by UV radiation or electrical discharge
2209/213 Use of electrochemically treated water, e.g. electrolysed water or water treated by electrical discharge
2209/22 Treatment by sorption, e.g. absorption, adsorption, chemisorption, scrubbing, wet cleaning

2300/00 Biologically active materials used in bandages, wound dressings, absorbent pads or medical devices

2300/10 containing or releasing inorganic materials
2300/102 Metals or metal compounds, e.g. salts such as bicarbonates, carbonates, oxides, zeolites, silicates
2300/104 Silver, e.g. silver sulfadiazine
2300/106 Halogens or compounds thereof, e.g. iodine, chloride
2300/108 Elemental carbon, e.g. charcoal
2300/11 Peroxy compounds, peroxides, e.g. hydrogen peroxide
2300/112 Phosphorus-containing compounds, e.g. phosphates, phosphonates
2300/114 Nitric oxide, i.e. NO
2300/20 containing or releasing organic materials
2300/202 with halogen atoms, e.g. triclosan, povidone-iodine
2300/204 with nitrogen-containing functional groups, e.g. aminoxides, nitrites, guanidines
2300/206 Biguanides, e.g. chlorohexidine
2300/208 Quaternary ammonium compounds
2300/21 Acids
2300/212 Peroxy acids, peracids
2300/214 Amino acids
2300/216 with other specific functional groups, e.g. aldehydes, ketones, phenols, quaternary phosphonium groups

2300/402 Anaesthetics, analgesics, e.g. lidocaine
2300/404 Biocides, antimicrobial agents, antiseptic agents
2300/406 Antibiotics
2300/408 Virucides, spermicides
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

2300/434 of enzymes
2300/436 of receptors
2300/438 Antigens
2300/44 Radiisotopes, radionuclides
2300/442 Colorants, dyes
2300/445 Mixtures of two or more drugs, e.g. synergistic mixtures
2300/452 Lubricants
2300/460 characterised by a special physical form
2300/462 Type of release, e.g. controlled, sustained, slow
2300/464 Biodegradation
2300/60 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