A61M  DEVICES FOR INTRODUCING MEDIA INTO, OR ONTO, THE BODY (introducing media into or onto the bodies of animals A61D 7/00; means for inserting tampons A61F 13/26; devices for administering food or medicines orally A61J; containers for collecting, storing or administering blood or medical fluids A61J 1/05); DEVICES FOR TRANSDUCING BODY MEDIA OR FOR TAKING MEDIA FROM THE BODY (surgery A61B; chemical aspects of surgical articles A61L); DEVICES FOR PRODUCING OR ENDING SLEEP OR STUPOR

NOTES
1. This subclass covers suction, pumping or atomising devices for medical use (e.g. cups, breast relievers, irrigators, sprays, powder insufflators, atomisers, inhalers), apparatus for general or local anaesthetics, devices or methods for causing a change in the state of consciousness, catheters, dilators, apparatus for introducing medicines into the body other than orally
2. Void
3. When classifying in this group, classification is also made in group B01D 15/08 insofar as subject matter of general interest relating to chromatography is concerned

WARNINGS
1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:
   - A61M 1/18 covered by B01D 63/02, B01D 63/04
   - A61M 1/20 covered by B01D 63/06
   - A61M 1/22 covered by B01D 63/08
   - A61M 1/24 covered by B01D 63/10
   - A61M 3/04 covered by A61M 3/02
   - A61M 5/175 covered by A61M 5/168
   - A61M 5/303 covered by A61M 5/30
   - A61M 5/307 covered by A61M 5/30
   - A61M 25/08 covered by A61M 25/0105
   - A61M 25/082 covered by A61M 25/0116
   - A61M 25/085 covered by A61M 25/0122
   - A61M 25/088 covered by A61M 25/01
   - A61M 25/092 covered by A61M 25/0133
   - A61M 25/095 covered by A61M 25/01, A61B 5/00, A61N 1/056
   - A61M 25/098 covered by A61M 25/0108
   - A61M 25/12 covered by A61M 25/10, A61M 29/02
   - A61M 25/14 covered by A61M 25/0021
   - A61M 25/16 covered by A61M 25/0009
   - A61M 25/18 covered by A61M 25/0014
   - A61M 29/04 covered by A61M 29/02
   - A61M 36/00 covered by A61M 37/0009, A61N 5/10
   - A61M 36/02 covered by A61M 37/0009, A61N 5/10
   - A61M 36/06 covered by A61M 37/0009, A61N 5/10, A61M 15/02
   - A61M 36/08 covered by A61M 5/1785
   - A61M 36/10 covered by A61M 37/0009, A61N 5/10
   - A61M 36/12 covered by A61M 37/0009, A61N 5/10
   - A61M 36/14 covered by A61M 37/0009, A61N 5/10
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.
A61M

1/00 Suction or pumping devices for medical purposes; Devices for carrying-off, for treatment of, or for carrying-over, body-liquids;

Drainage systems (A61M 3/00 - A61M 5/00), A61M 11/00 - A61M 16/00, A61M 27/00 - A61M 35/00 (take precedence); catheters A61M 25/00; tube connectors, tube couplings, valves or branch units specially adapted for medical use A61M 39/00; devices for taking samples of blood A61B 5/14; implements for holding wounds open A61B 17/02; (saliva removers for dentists A61C 17/06); filters implantable into blood vessels A61F 2/01; pumps in general F04.

WARNING


1/0001 . . [Containers for suction drainage, e.g. rigid containers]

1/0003 . . . [Self-contained vacuum aspirators]

1/0005 . . . [with means for emptying the suction container, e.g. by interrupting suction]

1/0007 . . . [Emptying the suction container without interrupting suction]

1/0009 . . . [incorporating a movable wall to create suction, e.g. syringes (with a flexible member creating suction A61M 1/0011; cupping glasses A61M 1/08)]

1/0011 . . . [Drainage containers incorporating a flexible member creating suction, e.g. bags in a low-pressure chamber, bellows]

1/0013 . . . [Two- or three-bottle systems for underwater drainage, e.g. for chest cavity drainage]

1/0015 . . . [Mechanical means for preventing flexible containers from collapsing when vacuum is applied inside, e.g. stents]

1/0017 . . . [Bag or liner in a rigid container, with suction applied to both]

1/0019 . . . [Drainage containers not being adapted for subjection to vacuum, e.g. bags (devices worn by the patient for reception of urine A61F 5/44; emptying devices for drainage bags B65B 69/0016)]

1/0021 . . . [Gravity drainage systems (A61M 1/0019 takes precedence)]

1/0023 . . . [Suction drainage systems (containers therefor A61M 1/0001; suction-irrigation systems A61M 1/058)]
1/0025 
... [comprising sensors or indicators for physical values]

1/0027 
... [Visual indicating means for suction pressure]

1/0029 
... [Visual indicating means for flow]

1/0031 
... [Suction control (A61M 1/0013, A61M 1/0041 take precedence)]

1/0033 
... [by changing the size of a vent (A61M 1/0047 takes precedence)]

1/0035 
... [by changing the section of the line, e.g. flow regulating valves (A61M 1/0043, A61M 1/0045 take precedence)]

1/0037 
... [Intermittent or pulsating suction (A61M 1/0005, A61M 1/0062 take precedence)]

1/0039 
... [Handpieces (aspiration tips A61M 1/008)]

1/0041 
... [with means for varying suction manually (suction control A61M 1/0031)]

1/0043 
... [by changing the section of the line]

1/0045 
... [by deformation of the fluid passage]

1/0047 
... [by changing the size of a vent (in combination with changing the section of the line A61M 1/0043)]

1/0049 
... [Means preventing overflow or contamination of the pumping systems (combined with rigid drainage containers A61M 1/0001)]

1/005 
... [using valves with freely moving parts, e.g. float valves]

1/0052 
... [by filtering, sterilising or disinfecting the exhaust air, e.g. swellable filter valves]

1/0054 
... [by heat]

1/0056 
... [Filters for solid matter (similar devices for dental use A61C 17/065)]

1/0058 
... [Suction-irrigation systems (aspiration tips supplying fluids A61M 1/0084; combined with tracheal tubes A61M 16/0463)]

1/006 
... [Determination of loss or gain of body fluids due to suction-irrigation, e.g. during surgery]

1/0062 
... [operating alternately (A61M 1/0064 takes precedence)]

1/0064 
... [Handpieces therefor]

1/0066 
... [Suction pumps (A61M 1/0003, A61M 1/0011, A61M 1/0023, A61M 1/10 take precedence)]

1/0068 
... [Piston pumps, e.g. syringes]

1/007 
... [the barrel serving as aspiration container, e.g. in a breast pump]

1/0072 
... [Membrane pumps, e.g. bulbs]

1/0074 
... [by vacuum created above a liquid flowing from a closed container]

1/0076 
... [using Laval or Venturi jet pumps]

1/0078 
... [Tube strippers, i.e. for clearing the contents of the tubes (vein strippers A61B 17/00008)]

1/008 
... [Drainage tubes; Aspiration tips]

1/0082 
... [rotating]

1/0084 
... [With gas or fluid supply means, e.g. for supplying rinsing fluids, anticoagulants (for irrigation without suction A61M 3/0279; combined with tracheal tubes A61M 16/0463; dental instruments with combined rinsing and aspirating A61C 17/0208)]

1/0086 
... [Connectors therefor, e.g. detachable from hand-piece]

1/0088 
... [with a seal, e.g. to stick around a wound for isolating the treatment area]

1/009 
... [having pumping means on suction site, e.g. miniature pump on wound dressing]

1/0092 
... [having vents means on or near the tip]

1/0094 
... [having means for processing the drained fluid, e.g. an absorber]

1/0096 
... [Draining devices provided with means for releasing antimicrobial or gelation agents in the drained fluid]

1/0098 
... [Draining devices provided with means for filtering out the harmless water content before discarding the drainage container]

1/02 
... [Blood transfusion apparatus (blood infusion by syringes A61M 5/14)]

1/0204 
... [Blood stirrers, e.g. for defibrination]

1/0209 
... [Multiple bag systems for separating or storing blood components]

1/0213 
... [with isolated sections of the tube used as additive reservoirs]

1/0218 
... [with filters]

1/0222 
... [and filter bypass]

1/0227 
... [and means for securing the filter against damage, e.g. during centrifugation]

1/0231 
... [with gas separating means, e.g. air outlet through microporous membrane or gas bag]

1/0236 
... [with sampling means, e.g. sample bag or sampling port]

1/024 
... [Means for controlling the quantity of transfused blood, e.g. by weighing the container and automatic stopping of the transfusion after reaching a determined amount]

1/0245 
... [combined with blood container shaking]

1/025 
... [Means for agitation or shaking blood containers (A61M 1/0245 takes precedence; shaking in general B01F 11/00)]

1/0254 
... [with a support plate moving only in one plane, e.g. horizontal]

1/0259 
... [Apparatus for treatment of blood or blood constituents not otherwise provided for (for agitation A61M 1/025; for separating blood components present in distinct layers in a container A61M 1/029)]

1/0272 
... [Apparatus for treatment of blood or blood constituents prior to or for conservation, e.g. freezing, drying or centrifuging]

1/0277 
... [Frames constraining or supporting bags, e.g. during freezing]

1/0281 
... [Apparatus for treatment of blood or blood constituents prior to transfusion, e.g. washing, filtering or thawing]

1/0286 
... [Handling a large number of blood product units, e.g. storage cabinets, blood bank administration]

1/029 
... [Separating blood components present in distinct layers in a container, not otherwise provided for (containers for storing blood or blood components A61J 1/05; sampling or analysing blood by separating blood components G01N 33/491)]

1/0295 
... [whereby the blood container and a solution container are compressed simultaneously by the same means]

1/04 
... [Artificial] pneumothorax apparatus

1/06 
... [Milking pumps (feeding-bottles A61J 9/00)]

1/062 
... [Pump accessories]

1/064 
... [Suction cups]

1/066 
... [Inserts therefor]
A61M

1/068 . . . {having means for simultaneous feeding, e.g. with rubber nipple for feeding}
1/08 . . . Cupping glasses
1/10 . . . Blood pumps; Artificial hearts; Devices for mechanical circulatory assistance, e.g. intra-aortic balloon pumps (artificial heart valves A61F 2/24; heart stimulation A61H 31/00)
1/1001 . . . {General aspects of blood pumps irrespective of pump type}
1/1003 . . . {skeletal muscle-powered}
1/1005 . . . {with means for making a blood flow pulsatile (moving filter membranes used for pumping A61M 1/267; piston pumps A61M 1/1081)}
1/1006 . . . {Blood pumps incorporated within another functional device, e.g. an oxygenator, a dialyser or a blood chamber}
1/1008 . . . {Tubes; Connections therefor}
1/101 . . . {Non-positive displacement pumps, e.g. impeller, centrifugal, vane pumps}
1/1012 . . . {Constructional features thereof}
1/1013 . . . {Types of bearings}
1/1015 . . . {Magnetic bearings}
1/1017 . . . {Hydrodynamic bearings}
1/1018 . . . {with occluders preventing backflow}
1/102 . . . {having a purge fluid supply}
1/1022 . . . {using filtered blood as purge fluid}
1/1024 . . . {having a collapsible rotor}
1/1025 . . . {Details on blood sealings between rotational parts, e.g. sealing by axial forces}
1/1029 . . . {Drive systems therefor}
1/1031 . . . {using a motor with canned rotor, i.e. a motor enclosed within a casing along with the rotor so that the motor bearings are lubricated by the blood that is being pumped}
1/1032 . . . {with hydraulic or pneumatic driving means}
1/1034 . . . {using rotating cables for driving}
1/1036 . . . {using rotating magnets for driving}
1/1037 . . . {Pumps having flexible elements, e.g. with membranes, diaphragms, or bladder pumps (Moving membranes in blood filters used for pumping A61M 1/267)}
1/1039 . . . {Peristaltic pumps}
1/1041 . . . {Linear}
1/1043 . . . {Constructional features thereof}
1/1044 . . . {Compliance chamber containing a gas or liquid other than blood to compensate volume variations of a blood chamber}
1/1046 . . . {Drive systems therefor, e.g. mechanically, electromechanically or skeletal muscle drive means}
1/1048 . . . {characterised by way of converting the movement}
1/1049 . . . {with means converting the rotation of a motor into a translational movement of the flexible element}
1/1051 . . . {the axis of both movements being parallel, e.g. roller screw actuator, cylindrical cam transmission}
1/1053 . . . {using non-rotary electrical means}
1/1055 . . . {Electromagnetic means, e.g. solenoids or ferro-fluids, magnetostrictive means}
1/1056 . . . {Thermo-electric means, e.g. shaped memory alloys}
1/1058 . . . {Piezoelectric means}
1/106 . . . {using hydraulic or pneumatic means}
1/1062 . . . {with application of vacuum at the blood pump, e.g. to accelerate filling}
1/1063 . . . {Diastole or systole switching by stopping or reversing a hydraulic or pneumatic pump operating at a much higher cyclical speed than the heart rate}
1/1065 . . . {Diastole or systole switching by valve means between the blood pump and the hydraulic or pneumatic energy source}
1/1067 . . . {using a blood vessel as flexible element (not used, see subgroups)}
1/1068 . . . {using the heart as flexible element}
1/107 . . . {Pulsating membrane pumps without valves, e.g. for counter pulsation, extra-arterial balloon pumps}
1/1072 . . . {Intra-arterial balloon pumps, e.g. intra-aortic (intravascular pumps A61M 1/125)}
1/1074 . . . {Intra-ventricular balloon pumps}
1/1075 . . . {the pump membrane acting as inlet valve}
1/1081 . . . {Piston pumps}
1/1082 . . . {High-frequency pumps}
1/1084 . . . {Venturi or jet pumps}
1/1086 . . . {Regulating or controlling systems therefor}
1/1087 . . . {Active valves for blood pumps or artificial hearts, i.e. using an external force for actuating the valve}
1/1089 . . . {where the valve is formed by a flexible tube element which is clamped for restricting the flow}
1/1096 . . . {Passive valves for blood pumps or artificial hearts, i.e. valves actuated by the fluid}
1/1098 . . . {Valves having flexible or resilient parts, e.g. flap valve}
1/12 . . . implantable into the body {not used, see subgroups}
1/122 . . . {Heart assist devices, i.e. for assisting an ailing heart, using additional pumping means in the blood circuit}
1/125 . . . {intravascular, i.e. introduced or implanted in an existing blood vessel}
1/127 . . . {Energy supply devices, converters therefor}
1/14 . . . Dialysis systems; Artificial kidneys; Blood oxygenators; (Reciprocating systems for treatment of body fluids, e.g. single needle systems for haemofiltration, perirs (haemofiltration using non reciprocating systems A61M 1/34; extracorporeal blood circuit aspects A61M 1/36); (processes of separation using semi-permeable membranes B01D 61/00; semi-permeable membranes characterised by the material, manufacturing processes therefor B01D 71/00)}
1/16 . . . with membranes {(A61M 1/30 takes precedence; membranes per se B01D 69/00, B01D 71/00)}
1/1601 . . . {Control or regulation}
1/1603 . . . {Regulation parameters}
1/1605 . . . {Physical characteristics of the dialysate fluid}
1/1607 . . . . . . . {before use}
1/1609 . . . . . . . {after use}
1/1611 . . . . . . . {Weight of the patient}
Filtering material out of the blood by passing it through a membrane, i.e. haemofiltration, filtering blood from and returning it to the patient, e.g. single-lumen-needle dialysis or single needle blood circuits A61M 1/36

[Profiling or modelling]

{Regulation parameters}

Reciprocating systems, alternately withdrawing blood from and returning it to the patient, e.g. single-lumen-needle dialysis or single needle systems for haemofiltration, pheresis A61M 1/3643

[Details]

[both machine and membrane module, i.e. also the module blood side]

Checking the module characteristics before reuse A61M 1/168

[by heat]

[with recirculation of the sterilising fluid]

[using chemical substances]

{Detection of blood traces in dialysate (testing of the membrane modules B01D 65/10; investigating fluid-tightness of structures in general G01M 3/00)}

[with recirculating dialysing liquid]

[with dialysate regeneration]

[Blood oxygenators with or without heat-exchangers (A61M 1/1678 takes precedence; membranes therefor B01D 67/00, B01D 69/00, B01D 71/00)]

[and internal elements] which are moving

[rotating]

[inducing TAYLOR vortices]

[used for pumping]

Peritoneal dialysis; Other peritoneal treatment, e.g. oxygenation A61M 1/30

[Instillation other than by gravity]

[Operational modes]

[Continuous flow peritoneal dialysis [CFPD]]

[Catheters therefor]

[Dialysates therefor]

[Priming (priming in extracorporeal blood circuits A61M 1/3643)]

[Reciprocating systems, alternately withdrawing blood from and returning it to the patient, e.g. single-lumen-needle dialysis or single needle systems for haemofiltration, pheresis]

[Details]

[have a reservoir for withdrawn untreated blood]

[have a reservoir for treated blood to be returned]

[Treatment chamber used as reservoir, e.g. centrifuge bowl or filter with movable membrane]

[Control of inversion point between collection and re-infusion phase]

[Pressure control, e.g. using substantially rigid closed, gas buffered or elastic reservoirs]

[Time control]

[Volume control, e.g. with open or flexible containers, by counting the number of pump revolutions, weighing]

[have trans-membrane pressure [TMP] increasing substantially continuously during arterial phase]

[Oxygenators without membranes]

[Anti-foam; Defoaming]

[Surfactant coating; Improving wettability]

[using catalytic production of oxygen]

[Filtering material out of the blood by passing it through a membrane, i.e. haemofiltration, diafiltration (A61M 1/30 takes precedence; extracorporeal blood circuit aspects A61M 1/36)]

[Regulation parameters]
Other treatment of blood in a by-pass of the natural extra-corporeal circuits

{ Regulation parameters }
{ Arrangements for blood-volume reduction of Extra-corporeal circuits in which the blood fluid takes precedence; single-needle solutions (for preventing coagulation A61M 1/3672) }

{ Extra-corporeal blood circuits (single-needle circuits A61M 1/362) }
{ Level detectors; Level control }
{ Gas bubble detectors (blood leak detection by change of transparency of dialysate A61M 1/169; in infusion devices A61M 5/365; observing bubbles in a liquid pool for leak detection, in general G01M 3/06) }
{ Degassing devices; Buffer reservoirs; Drip chambers; Blood filters (priming A61M 1/3643; blood filters for infusion A61M 5/165) }

{ Constructional details }
{ Having a flexible housing }
{ With a vapour trap }
{ Blood pressure control, pressure transducers specially adapted therefor }
{ Pressure isolators }
{ Priming, rinsing before or after use }
{ Mode of operation }
{ Expelling the residual body fluid after use, e.g. back to the body }
{ Using dialysate as priming or rinsing liquid }
{ Through membranes, e.g. by inverted trans-membrane pressure [TMP] }
{ Using gas, e.g. air }
{ Interfaces between patient blood circulation and extra-corporal blood circuit }
{ Arterio-venous shunts, fistulae }
{ Monitoring patency or flow at connection sites; Detecting disconnections }
{ Indicating the amount of purified blood recirculating in the fistula or shunt }
{ Cannulae pertaining to extracorporeal circulation }
{ For haemodialysis }
{ Flow rate transducers; Flow integrators (measuring the flow in general G01F) }
{ For preparing cardioplegia solutions }
{ Cardiac or cardiopulmonary bypass, e.g. for preparing cardioplegia solutions }
{ Heart-lung machines }
{ With assisted venous return }
{ Electrical impedance measurement of body fluids; Transducers specially adapted therefor }
{ Circuit parts not covered by the preceding subgroups of group A61M 1/3621 }
A61M

3/0225 . . . [Devices on which the patient can sit, e.g. mounted on a toilet bowl (combined with bidets A61M 3/06); Devices containing liquid pumped by the patient's weight]

3/0229 . . . [Devices operating in a closed circuit, i.e. recycling the irrigating fluid]

3/0233 . . . [characterised by liquid supply means, e.g. from pressurised reservoirs]

3/0237 . . . [the pressure being generated in the reservoir, e.g. by gas generating tablets]

3/0241 . . . [the liquid being supplied by gravity]

3/0245 . . . [Containers therefor, e.g. with heating means, with storage means for cannula]

3/025 . . . [supplied directly from the pressurised water source, e.g. with medicament supply (combined with bidets A61M 3/06)]

3/0254 . . . [the liquid being pumped (by the patient's weight A61M 3/0225)]

3/0258 . . . [by means of electric pumps]

3/0262 . . . [manually, e.g. by squeezing a bulb]

3/0266 . . . [Stands, holders or storage means for irrigation devices (containers with storage means for cannula A61M 3/0245)]

3/027 . . . [Devices for holding the cannula in position, e.g. belts (cannula details A61M 3/0279)]

3/0275 . . . [Pulsating jets; Vibrating nozzles]

3/0279 . . . [Cannula; Nozzles; Tips; their connection means]

3/0283 . . . [with at least two inner passageways, a first one for irrigating and a second for evacuating]

3/0287 . . . [with an external liquid collector]

3/0291 . . . [with dilating fingers]

3/0295 . . . [with inflatable balloon]

3/06 . . . combined with bidets

5/00 Devices for bringing media into the body in a subcutaneous, intra-vascular or intramuscular way; Accessories therefor, e.g. filling or cleaning devices, arm-rests (vaccination appliances for veterinary use A61D 1/025): tube connectors, tube couplings, valves or branch units specially adapted for medical use A61M 39/00; containers specially adapted for medical or pharmaceutical purposes A61J 1/00; [combinations of vial and syringe for mixing or transferring their contents A61J 1/20; holders for containers for collecting, storing or administering blood or medical fluids A61J 1/16]

5/001 . . . [Apparatus specially adapted for cleaning or sterilising syringes or needles]

5/002 . . . [Packages specially adapted therefor, e.g. for syringes or needles, kits for diabetics (needle protection, e.g. caps, A61M 5/3202; for sharps A61B 50/3001)]

5/003 . . . [Kits for diabetics]

2005/004 . . . [Magazines with multiple needles directly inserted into an injection or infusion device, e.g. revolver-like magazines]

2005/005 . . . [Magazines with multiple ampoules directly inserted into an injection or infusion device, e.g. revolver-like magazines containing ampoules with or without needles]

2005/006 . . . [for gases, e.g. CO₂]

5/007 . . . [for contrast media]

5/008 . . . [Racks for supporting syringes or needles (A61M 5/001 takes precedence)]

Syringes; Irrigators; Baths for subaquatic intestinal cleaning (other apparatus for introducing medicines into the body A61M 29/00 - A61M 37/00)

3/00 Medical syringes, e.g. enemata; Irrigators (A61M 5/00 takes precedence; pistons A61M 5/315)

WARNING


Until reclassification is complete, groups A61M 3/02 and A61M 3/0204 - A61M 3/022 should be considered to perform a complete search.

3/005 . . . [comprising means for injection of two or more media, e.g. by mixing]

3/02 . . . Enemata; Irrigators

3/0204 . . . [Physical characteristics of the irrigation fluid, e.g. conductivity or turbidity]

3/0208 . . . [before use]

3/0212 . . . [after use]

3/0216 . . . [Pressure]

3/022 . . . [Volume: Flow rate]
Syringes; Irrigators; Baths for subaquatic intestinal cleaning

5/14 . Infusion devices, e.g. infusing by gravity; Blood infusion; Accessories therefor (suction in pumping blood transfusion A61M 1/02; [infusion containers A61J 1/05])

5/142 . . . [Manually operated pumps]
5/1424 . . . [adapted to be carried by the patient, e.g. portable on the body]
5/14248 . . . [of the skin patch type]

2005/1401 . . . [Functional features]

2005/1424 . . . [Priming]

2005/1403 . . . [Flushing or purging]

2005/1404 . . . [Keep vein-open rate [KVO], i.e. low flow rate]

2005/1405 . . . [Patient controlled analgesia [PCA]]

2005/1406 . . . [Minimizing backflow along the delivery catheter track]

5/1407 . . . [Infusion of two or more substances]
5/1408 . . . [in parallel, e.g. manifolds, sequencing valves (access sites A61M 39/02; tube connectors A61M 39/10)]
5/1409 . . . [in series, e.g. first substance passing through container holding second substance, e.g. reconstitution systems (needle sets A61M 5/162)]

5/141 . . . [with capillaries for restricting fluid flow]
5/1411 . . . [Drip chambers (A61M 5/162, A61M 5/1689, A61M 5/40 take precedence)]
5/1412 . . . [Burettes, measuring cylinders (for laboratory use B01L 3/02)]

5/1413 . . . [Modular systems comprising interconnecting elements]
5/1414 . . . [Hanging-up devices]
5/1415 . . . [Stands, brackets or the like for supporting infusion accessories]

2005/1416 . . . [placed on the body of the patient]
5/1417 . . . [Holders or handles for hanging up infusion containers]

5/1418 . . . [Clips, separators or the like for supporting tubes or leads]

5/142 . . . Pressure infusion, e.g. using pumps

NOTE
In this group, the following expression is used with the meaning indicated:
• “pressure infusion” includes powered injection working at a controlled rate

5/14204 . . . [with gas-producing electrochemical cell]
5/14208 . . . [with a programmable infusion control system, characterised by the infusion program]

5/14212 . . . [Pumping with an aspiration and an expulsion action]

5/14216 . . . [Reciprocating piston type]
5/1422 . . . [with double acting or multiple pistons]
5/14224 . . . [Diaphragm type]

5/14228 . . . [with linear peristaltic action, i.e. comprising at least three pressuring members or a helical member]

NOTE
Pumps having tubular flexible working members F04B 43/08

5/1423 . . . [Roller pumps]

NOTE
Pumps having rollers for peristaltic action F04B 43/12

5/14236 . . . [Screw, impeller or centrifugal type pumps]

5/1424 . . . [with means for compensating influence from the environment]
5/14268 . . . [with a reusable and a disposable component]

5/14272 . . . [for emergency, field or home use, e.g. self-contained kits to be carried by the doctor]
5/14276 . . . [specially adapted for implantation]
5/1428 . . . [with manual infusion action]
5/14284 . . . [with needle insertion means]

5/14288 . . . [Infusion or injection simulation (simulation of surgery in general A61B 34/10; training for or simulation of use of injection or infusion devices G09B 23/285)]

2005/14296 . . . [Pharmacokinetic models]
5/145 . . . using pressurised reservoirs, e.g. pressurised by means of pistons

5/14506 . . . [mechanically driven, e.g. spring or clockwork]
5/14513 . . . [with secondary fluid driving or regulating the infusion]

5/1452 . . . [pressurised by means of pistons]
5/14526 . . . [the piston being actuated by fluid pressure]

5/14533 . . . [cam actuated]
5/1454 . . . [spring-actuated, e.g. by a clockwork]
5/14546 . . . [Front-loading type injectors]

5/14553 . . . [comprising a pressure jacket]
5/1456 . . . [with a replaceable reservoir comprising a piston rod to be moved into the reservoir, e.g. the piston rod is part of the removable reservoir]

5/14566 . . . [with a replaceable reservoir for receiving a piston rod of the pump]
5/14573 . . . [with a replaceable reservoir for quick connection/disconnection with a driving system]

5/1458 . . . [Means for capture of the plunger flange]
5/14586 . . . [pressurised by means of a flexible diaphragm]

5/14593 . . . [the diaphragm being actuated by fluid pressure]

5/148 . . . [flexible, e.g. independent bags (A61M 5/155 takes precedence)]
5/1483 . . . [using flexible bags externally pressurised by fluid pressure]

5/1486 . . . [the bags being substantially completely surrounded by fluid]

5/152 . . . pressurised by contraction of elastic reservoirs [(containers for dispensing contents by contraction of an elastic bag provided therein, in general B65D 83/0061)]
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5/155 . . . . pressurised by gas [introduced into the reservoir]
5/158 . . . . Needles [for infusions; Accessories therefor, e.g. for inserting infusion needles, or for holding them on the body]
2005/1581 . . . . [Right-angle needle-type devices]
5/1582 . . . . [Double lumen needles]
2005/1583 . . . . [Needle extractors]
5/1585 . . . . [Needle inserters]
2005/1586 . . . . [Holding accessories for holding infusion needles on the body (holding devices for catheters A61M 25/02)]
2005/1587 . . . . [suitable for being connected to an infusion line after insertion into a patient]
2005/1588 . . . . [having means for monitoring, controlling or visual inspection, e.g. for patency check, avoiding extravasation]
5/162 . . . . Needle sets, i.e. connections by puncture between reservoir and tube (; Connections between reservoir and tube (in jet-action syringes A61M 5/30); connectors for tubes having sealed ends and a needle for piercing them A61M 39/14)]
2005/1623 . . . . [Details of air intake]
5/1626 . . . . [Needle protectors therefor (in combination with syringes A61M 5/3202; protectors for sharps A61B 50/3001)]
5/165 . . . . Filtering accessories, e.g. blood filters, filters for infusion liquids ([A61M 1/14], A61M 1/34, A61M 1/3627, A61M 1/3679, A61M 1/3687) take precedence; [needle sets with incorporated air inlet filters A61M 5/162)]
2005/1652 . . . . [Filter with duct, e.g. filtering element incorporated in a flow line, tube, duct]
2005/1655 . . . . [Filter with fibers, e.g. filtering element in form of hollow fibers]
2005/1657 . . . . [Filter with membrane, e.g. membrane, flat sheet type infusion filter]
5/168 . . . . Means for controlling media flow to the body or for metering media to the body, e.g. drip meters, counters (; Monitoring media flow to the body (flow control in general G05D 7/00))
5/16804 . . . . [Flow controllers]
5/16809 . . . . [by repeated filling and emptying of an intermediate volume (pressure infusion using positive displacement pumps A61M 5/142)]
5/16813 . . . . [by controlling the degree of opening of the flow line]
5/16818 . . . . [by changing the height of the reservoir]
5/16822 . . . . [by controlling air intake into infusion reservoir (needle sets with air inlet A61M 5/162)]
5/16827 . . . . [controlling delivery of multiple fluids, e.g. sequencing, mixing or via separate flow-paths (infusion of multiple fluids without using a controller A61M 5/1407)]
5/16831 . . . . [Monitoring, detecting, signalling or eliminating infusion flow anomalies (low-level float-valves causing cut-off A61M 5/40; indicating or recording presence, absence or direction of flow in general G01P 13/0066)]
5/16836 . . . . [by sensing tissue properties at the infusion site, e.g. for detecting infiltration (detecting tissue temperature for diagnostic purposes A61M 39/0247)]
5/1684 . . . . [by detecting the amount of infusate remaining, e.g. signalling end of infusion]
5/16845 . . . . [by weight]
5/1685 . . . . [by detection of position of a floating member]
5/16854 . . . . [by monitoring line pressure]
5/16859 . . . . [Evaluation of pressure response, e.g. to an applied pulse]
2005/16863 . . . . [Occlusion detection]
2005/16868 . . . . [Downstream occlusion sensors]
2005/16872 . . . . [Upstream occlusion sensors]
5/16877 . . . . [Adjusting flow; Devices for setting a flow rate]
5/16881 . . . . [Regulating valves (on-off valves, e.g. clamps A61M 39/28)]
5/16886 . . . . [for measuring fluid flow rate, i.e. flowmeters]
5/1689 . . . . [Drip counters]
5/16895 . . . . [by monitoring weight change, e.g. of infusion container]
5/172 . . . . [electrical or electronic ([A61M 5/16804, A61M 5/16831) take precedence)]
5/1723 . . . . [using feedback of body parameters, e.g. blood-sugar, pressure (measurement of body parameters A61B 5/00)]
2005/1726 . . . . [the body parameters being measured at, or proximate to, the infusion site]
5/178 . . . . Syringes
5/1782 . . . . [Devices aiding filling of syringes in situ (combination of a vial and a syringe for transferring or mixing their contents A61J 1/2006, filling of medical containers in general B65B 3/003)]
5/1785 . . . . [comprising radioactive shield means (syringe shields or holders for storage of radioactive sources G21F 5/018)]
2005/1787 . . . . [Syringes for sequential delivery of fluids, e.g. first medicament and then flushing liquid]
5/19 . . . . having more than one chamber (; e.g. including a manifold coupling two parallelly aligned syringes through separate channels to a common discharge assembly (surgical glue applicators A61B 17/00491)]
5/20 . . . . Automatic syringes, e.g. with automatically actuated piston rod, with automatic needle injection, filling automatically ([A61M 5/142, A61M 5/46) take precedence; [hypodermic projectiles F42B 12/54)]
2005/2006 . . . . [Having specific accessories]
2005/2013 . . . . [triggering of discharging means by contact of injector with patient body]
2005/202 . . . . [cocking means, e.g. to bias the main drive spring of an injector]
2005/2026 . . . . [Semi-automatic, e.g. user activated piston is assisted by additional source of energy]
5/2033 . . . . [Spring-loaded one-shot injectors with or without automatic needle insertion (multishot dosing syringes A61M 5/31525, needle insertion only A61M 5/3287)]
5/204 . . . . [connected to external reservoirs for multiple refilling]
5/2046 . . . . [Media being expelled from injector by gas generation, e.g. explosive charge]
Syringes; Irrigators; Baths for subaquatic intestinal cleaning

5/2053 . . . [Media being expelled from injector by pressurised fluid or vacuum (for infusion A61M 5/145, A61M 5/155)]

5/2006 . . . [With automatic needle insertion]

5/2066 . . . [comprising means for injection of two or more media, e.g. by mixing]

5/2073 . . . [preventing premature release, e.g. by making use of a safety lock]

5/208 . . . [Release is possible only when device is pushed against the skin, e.g. using a trigger which is blocked or inactive when the device is not pushed against the skin]

5/2086 . . . [having piston damping means, e.g. axially or rotationally acting retarders]

5/2093 . . . [including concentration setting means]

5/24 . . . Ampoule syringes, i.e. syringes with needle for use in combination with replaceable ampoules or carpules, e.g. automatic [(ampoules or carpules A61J 1/06)]

5/2403 . . . [Ampoule inserted into the ampoule holder]

5/2407 . . . [from the rear]

5/2411 . . . [from the front]

5/2414 . . . [from the side]

5/2418 . . . [comprising means for damping shocks on ampoule]

5/2422 . . . [using emptying means to expel or eject media, e.g. pistons, deformation of the ampoule, or telescoping of the ampoule]

5/2425 . . . [by compression of deformable ampoule or carpule wall]

5/2429 . . . [by telescoping of ampoules or carpules with the syringe body]

5/2433 . . . [Ampoule fixed to ampoule holder]

5/2437 . . . [by clamping means]

5/244 . . . [by flexible clip]

5/2444 . . . [by thread]

5/2448 . . . [comprising means for injection of two or more media, e.g. by mixing]

5/2451 . . . [preventing delivery before mixing is completed, e.g. by locking mechanisms]

5/2455 . . . [with sealing means to be broken or opened]

5/2459 . . . [upon internal pressure increase, e.g. pierced or burst (A61M 5/249 takes precedence)]

5/2462 . . . [by displacing occluding plugs]

5/2466 . . . [by piercing without internal pressure increase (A61M 5/249 takes precedence)]

5/247 . . . [with fixed or steady piercing means, e.g. piercing under movement of ampoule]

5/2474 . . . [with movable piercing means, e.g. ampoule remains fixed or steady]

5/2477 . . . [comprising means to reduce play of ampoule within ampoule holder, e.g. springs]

5/2481 . . . [comprising means for biasing the ampoule out of the ampoule holder]

5/2485 . . . [Ampoule holder connected to rest of syringe]

5/2488 . . . [via rotation, e.g. threads or bayonet]

5/2492 . . . [via snap connection]

5/2496 . . . [via pivot]

5/28 . . . Syringe ampoules or carpules, i.e. ampoules or carpules provided with a needle

5/281 . . . [using emptying means to expel or eject media, e.g. pistons, deformation of the ampoule, or telescoping of the ampoule]
Syringes; Irrigators; Baths for subaquatic intestinal cleaning

A61M

2005/3131 . . . . . . . [specially adapted for improving sealing or sliding]
2005/3132 . . . . . . . [having flow passages for injection agents at the distal end of the barrel to bypass a sealing stopper after its displacement to this end due to internal pressure increase]
5/3134 . . . . . . . [characterised by constructional features of the distal end, i.e. end closest to the tip of the needle cannula]
5/3135 . . . . . . . [characterised by constructional features of the proximal end]
5/3137 . . . . . . . [Specially designed finger grip means, e.g. for easy manipulation of the syringe rod]
5/3139 . . . . . . . {Finger grips not integrally formed with the syringe barrel, e.g. using adapter with finger grips}
5/314 . . . . . . . [Flat shaped barrel forms, e.g. credit card shaped]
5/3142 . . . . . . . [Modular constructions, e.g. supplied in separate pieces to be assembled by end-user]
5/3143 . . . . . . . [Damping means for syringe components executing relative movements, e.g. retarders or attenuators slowing down or timing syringe mechanisms]
5/3145 . . . . . . . {Filters incorporated in syringes}
5/3146 . . . . . . . [Priming, e.g. purging, reducing backlash or clearance]
5/3148 . . . . . . . [Means for causing or aiding aspiration or plunger retraction]
5/315 . . . . . . . [Pistons; Piston-rods; Guiding, blocking or restricting the movement of the rod (or piston); Appliances on the rod for facilitating dosing (including pistons; piston rod reset means, i.e. means for setting modes for dosing)]
5/3150 . . . . . . . [Means for blocking or restricting the movement of the rod or piston to internal pressure increase after its displacement to this end due to internal pressure increase]
5/31505 . . . . . . . [Integral with the syringe barrel, i.e. connected to the barrel so as to make up a single complete piece or unit]
5/3152 . . . . . . . [by reducing reflux]
5/31523 . . . . . . . {Dosing (burettes, pipettes B01L 3/02)}
5/31525 . . . . . . . [by means of stepwise axial movements, e.g. ratchet mechanisms or detents]
5/31526 . . . . . . . [by means of rotational movements, e.g. screw-thread mechanisms]
5/3153 . . . . . . . [by single stroke limiting means]
5/31531 . . . . . . . [Microsyringes, e.g. having piston bore diameter close or equal to needle shaft diameter]
5/31533 . . . . . . . [Dosing mechanisms, i.e. setting a dose (administering mechanisms A61M 5/31565)]
5/31535 . . . . . . . [Means improving security or handling thereof, e.g. blocking means, means preventing insufficient dosing, means allowing correction of overset dose]
5/31536 . . . . . . . [Blocking means to immobilize a selected dose, e.g. to administer equal doses]
5/31538 . . . . . . . [Permanent blocking, e.g. by medical personnel]
5/3154 . . . . . . . [limiting maximum permissible dose]
5/31541 . . . . . . . [Means preventing setting of a dose beyond the amount remaining in the cartridge]
5/31543 . . . . . . . [piston rod reset means, i.e. means for causing or facilitating retraction of piston rod to its starting position during cartridge change]
5/31545 . . . . . . . [Setting modes for dosing]
5/31546 . . . . . . . [Electrically operated dose setting, e.g. input via touch screen or plus/minus buttons]
5/31548 . . . . . . . [Mechanically operated dose setting member]
5/3155 . . . . . . . [by rotational movement of dose setting member, e.g. during setting or filling of a syringe]
5/31551 . . . . . . . [including axial movement of dose setting member]
5/31553 . . . . . . . [without axial movement of dose setting member]
5/31555 . . . . . . . [by purely axial movement of dose setting member, e.g. during setting or filling of a syringe]
5/31556 . . . . . . . [Accuracy improving means]
5/31558 . . . . . . . [using scaling up or down transmissions, e.g. gearbox]
5/3156 . . . . . . . [using volume steps only adjustable in discrete intervals, i.e. individually distinct intervals]
5/31561 . . . . . . . [using freely adjustable volume steps]
5/31563 . . . . . . . [interacting with a displaceable stop member]
5/31565 . . . . . . . [Administration mechanisms, i.e. constructional features, modes of administering a dose (dosing mechanisms for setting a dose A61M 5/31533)]
5/31566 . . . . . . . [Means improving security or handling thereof]
5/31568 . . . . . . . [Means keeping track of the total dose administered, e.g. since the cartridge was inserted]
5/3157 . . . . . . . [Means providing feedback signals when administration is completed (A61M 5/20 takes precedence)]
5/31571 . . . . . . . [Means preventing accidental administration (for automatic syringes A61M 5/20)]
Syringes; Irrigators; Baths for subaquatic intestinal cleaning

5/3158 . . . . . . . (performed by axially moving actuator operated by user, e.g. an injection button)
5/31581 . . . . . . . (performed by rotationally moving or pivoting actuator operated by user, e.g. an injection lever or handle)
5/31583 . . . . . . . (based on rotational translation, i.e. movement of piston rod is caused by relative rotation between the user activated actuator and the piston rod)
5/31585 . . . . . . . (performed by axially moving actuator, e.g. an injection button)
5/31586 . . . . . . . (performed by rotationally moving or pivoting actuator, e.g. an injection lever or handle)

2005/31588 . . . . . . . [electrically driven]
5/3159 . . . . . . . [Dose expelling manners]
5/31591 . . . . . . . [Single dose, i.e. individually set dose administered only once from the same medicament reservoir, e.g. including single stroke limiting means]
5/31593 . . . . . . . [Multi-dose, i.e. individually set dose repeatedly administered from the same medicament reservoir]
5/31595 . . . . . . . [Pre-defined multi-dose administration by repeated overcoming of means blocking the free advancing movement of piston rod, e.g. by tearing or de-blocking]
5/31596 . . . . . . . [comprising means for injection of two or more media, e.g. by mixing]
2005/31598 . . . . . . . (having multiple telescopically sliding coaxial pistons encompassing volumes for components to be mixed)

5/32 . . . . . . . Needles; Details of needles pertaining to their connection with syringe or hub (infusion needles A61M 5/158); Accessories for bringing the needle into, or holding the needle on, the body ((A61M 5/42, A61M 5/46 take precedence; guide needles for catheters A61M 25/065)); Devices for protection of needles [(apparatus specially adapted for cleaning or sterilising needles A61M 5/001)]
2005/3201 . . . . . . . (Coaxially assembled needle cannulas placed on top of another, e.g. needles having different diameters)
5/3202 . . . . . . . (Devices for protection of the needle before use, e.g. caps (A61M 5/50 takes precedence; for infusion spikes A61M 5/1626; protectors for sharps A61B 50/3001))
5/3204 . . . . . . . (Needle cap removers, i.e. devices to dislodge protection cover from needle or needle hub, e.g. deshielding devices)

5/3205 . . . . . . . [Apparatus for removing or disposing of used needles or syringes, e.g. containers; Means for protection against accidental injuries from used needles (for sharps A61B 50/362); disintegrating apparatus in general B02C, e.g. B02C 19/0075, B23H 9/001; disposal of medical waste in general B09B 3/0073; receptacles for refuse disposal in general B65F 1/00)
2005/3206 . . . . . . . (Needle or needle hub disconnecting devices forming part of or being attached to the hub or syringe body)
2005/3208 . . . . . . . (by application of rotational movement to the needle hub, e.g. by use of electrically driven toothed wheels)
2005/3209 . . . . . . . (comprising heat generating means, e.g. melt chamber)
5/321 . . . . . . . [Means for protection against accidental injuries by used needles]
2005/3212 . . . . . . . (Blunting means for the sharp end of the needle)
5/3213 . . . . . . . (Caps placed axially onto the needle, e.g. equipped with finger protection guards (axially-extensible protective sleeves A61M 5/3243))
2005/3215 . . . . . . . (Tools enabling the cap placement)
5/3216 . . . . . . . (Caps placed transversally onto the needle, e.g. pivotally attached to the needle base)
2005/3217 . . . . . . . (Means to impede repositioning of protection cap from needle covering to needle uncovering position, e.g. catch mechanisms)
5/3219 . . . . . . . (Semi-automatic repositioning of the cap, i.e. in which the repositioning of the cap to the needle covering position requires a deliberate action by the user to trigger the repositioning of the cap, e.g. manual release of spring-biased cap repositioning means)
5/322 . . . . . . . (Retractable needles, i.e. disconnected from and withdrawn into the syringe barrel by the piston (devices for protecting guide needles in combination with catheters A61M 25/0612))
2005/3221 . . . . . . . (Constructional features thereof, e.g. to improve manipulation or functioning)
2005/3223 . . . . . . . (Means impeding or disabling repositioning of used needles at the syringe nozzle)
2005/3224 . . . . . . . (Means to disalign the needle tip and syringe nozzle)
2005/3226 . . . . . . . (with means obstructing or blocking the needle mounting opening)
2005/3227 . . . . . . . (the needle being retracted laterally outside the syringe barrel, e.g. with separate guideway)
2005/3228 . . . . . . . (the needle being retracted by a member protruding laterally through a slot in the barrel, e.g. double-ended needles)
Syringes; Irrigators; Baths for subaquatic intestinal cleaning

2005/323 . . . . . . . [Connection between plunger distal end and needle hub proximal end, e.g. stud protruding from the plunger]

2005/3231 . . . . . . . [Proximal end of needle captured or embedded inside piston head, e.g. by friction or hooks]

5/3232 . . . . . . . [Semi-automatic needle retraction, i.e. in which triggering of the needle retraction requires a deliberate action by the user, e.g. manual release of spring-biased retraction means]

5/3234 . . . . . . . [Fully automatic needle retraction, i.e. in which triggering of the needle does not require a deliberate action by the user]

2005/3235 . . . . . . . [triggered by radial deflection of the anchoring parts between needle mount and syringe barrel or needle housing, e.g. spreading of needle mount retaining hooks having slanted surfaces by engagement with correspondingly shaped surfaces on the piston at the end of an injection stroke]

2005/3236 . . . . . . . [Trigger provided at the distal end, i.e. syringe end for mounting a needle]

2005/3238 . . . . . . . [Trigger provided at the proximal end, i.e. syringe end opposite to needle mounting end]

2005/3239 . . . . . . . [triggered by dislodgement of outer part anchoring the needle portion to the inside of the syringe barrel wall, e.g. a ring-shaped portion]

2005/3241 . . . . . . . [Needle retraction energy is accumulated inside of a hollow plunger rod]

2005/3242 . . . . . . . [Needle retraction by vacuum]

5/3243 . . . . . . . [being axially-extensible, e.g. protective sleeves coaxially slidable on the syringe barrel (devices for protecting guide needles in combination with catheters A61M 25/0612)]

5/3245 . . . . . . . [Constructional features thereof, e.g. to improve manipulation or functioning]

2005/3246 . . . . . . . [being squeezably deformable for locking or unlocking purposes, e.g. with elliptical cross-section]

2005/3247 . . . . . . . [Means to impede repositioning of protection sleeve from needle covering to needle uncovering position]

2005/3249 . . . . . . . [Means to disalign the needle tip and the distal needle passage of a needle protection sleeve]

2005/325 . . . . . . . [Means obstructing the needle passage at distal end of a needle protection sleeve]

2005/3252 . . . . . . . [being extended by a member protruding laterally through a slot in the syringe barrel]

2005/3253 . . . . . . . [disconnecting the needle hub from the syringe barrel during removal of the sleeve from the syringe barrel]

2005/3254 . . . . . . . [Shielding of proximal needles, e.g. for pen needles]

2005/3256 . . . . . . . [having folding ring sections]

5/3257 . . . . . . . [Semi-automatic sleeve extension, i.e. in which triggering of the sleeve extension requires a deliberate action by the user, e.g. manual release of spring-biased extension means]

2005/3258 . . . . . . . [being compressible or compressed along the needle]

5/326 . . . . . . . [Fully automatic sleeve extension, i.e. in which triggering of the sleeve does not require a deliberate action by the user]

2005/3261 . . . . . . . [triggered by radial deflection of the anchoring parts between sleeve and syringe barrel, e.g. spreading of sleeve retaining hooks having slanted surfaces by engagement with conically shaped collet of the piston rod during the last portion of the injection stroke of the plunger]

2005/3263 . . . . . . . [Trigger provided at the distal end, i.e. syringe end for mounting a needle]

2005/3264 . . . . . . . [Trigger provided at the proximal end, i.e. syringe end opposite to needle mounting end]

2005/3265 . . . . . . . [Degree of extension of sleeve to its needle covering position is progressively established by the degree of piston insertion into the syringe barrel]

2005/3267 . . . . . . . [Biased sleeves where the needle is uncovered by insertion of the needle into a patient’s body]

2005/3268 . . . . . . . [having cantilever elastically spreadable arms, e.g. to accumulate energy during needle uncovering movement for urging protection sleeve to return to needle covering position]

5/3269 . . . . . . . [guided by means not coaxially aligned with syringe barrel, e.g. channel-like member formed on exterior surface of syringe barrel for guiding a pushing rod connected to and displacing needle safety sheath]

5/3271 . . . . . . . [with guiding tracks for controlled sliding of needle protective sleeve from needle exposing to needle covering position]

5/3272 . . . . . . . [having projections following labyrinth paths]

5/3273 . . . . . . . [freely sliding on needle shaft without connection to syringe or needle]

5/3275 . . . . . . . [being connected to the needle hub or syringe by radially deflectable members, e.g. longitudinal slats, cords or bands]
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5/3276 . . . . [Means imparting rotational movement to the needle or needle hub in order to assist in its disconnection from syringe nozzle]

5/3278 . . . . [Apparatus for destroying used needles or syringes (needle resheathing means destroying the needle A61M 5/321)]

2005/3279 . . . . [Breaking syringe nozzles or needle hubs]

2005/328 . . . . [having needle tip encapsulating means, e.g. two-component hardenable compound or molten plastic]

2005/3282 . . . . (using mechanical means, e.g. mills]

2005/3283 . . . . (using electric current between electrodes)

2005/3284 . . . . [Deformation of needle by deflection or bending]

5/3286 . . . . [Needle tip design, e.g. for improved penetration]

5/3287 . . . . [Accessories for bringing the needle into the body; Automatic needle insertion (A61M 5/20, A61M 5/31525 take precedence)]

2005/3289 . . . . [with rotation of the needle, e.g. to ease penetration]

5/329 . . . . [characterised by features of the needle shaft]

5/3291 . . . . [Shafts with additional lateral openings]

5/3293 . . . . [characterised by features of the needle hub]

5/3294 . . . . [comprising means for injection of two or more media, e.g. by mixing]

5/3295 . . . . [Multiple needle devices, e.g. a plurality of needles arranged coaxially or in parallel]

5/3297 . . . . [Needles arranged coaxially]

5/3298 . . . . [Needles arranged in parallel]

5/34 . . . . [Constructions for connecting the needle (e.g. to syringe nozzle or needle hub (connecting catheter tubes to hubs A61M 25/0014)]

2005/341 . . . . [angularly adjustable or angled away from the axis of the injector]

2005/342 . . . . [Off-center needles, i.e. needle connections not being coaxial with the longitudinal symmetry axis of syringe barrel]

5/343 . . . . [Connection of needle cannula to needle hub, or directly to syringe nozzle without a needle hub (A61M 5/322 takes precedence)]

5/344 . . . . [using additional parts, e.g. clamping rings or collets]

5/345 . . . . [Adaptors positioned between needle hub and syringe nozzle]

5/346 . . . . [friction fit (A61M 5/344 takes precedence)]

5/347 . . . . [rotatable, e.g. bayonet or screw (A61M 5/344 takes precedence)]

5/348 . . . . [snap lock, i.e. upon axial displacement of needle assembly (A61M 5/344 takes precedence)]

5/349 . . . . [using adhesive bond or glues]
Inhaling devices

15/00 Inhalators ((drug delivery in endotracheal tubes A61M 16/04))
15/0001 . . . [Details of inhalators; Constructional features thereof]
15/0003 . . . [with means for dispensing more than one drug]
15/0005 . . . [with means for agitating the medicament]
15/0006 . . . [using rotating means]
15/0008 . . . . [rotating by airflow]
15/0001 . . . . [using ultrasonic means]
15/0011 . . . . [with microcapsules, e.g. several in one dose]

Inhaling devices

15/0003 . . . [with means for dispensing more than one drug]
15/0005 . . . [with means for agitating the medicament]
15/0006 . . . [using rotating means]
15/0008 . . . . [rotating by airflow]
15/0001 . . . . [using ultrasonic means]
15/0011 . . . . [with microcapsules, e.g. several in one dose]
Inhaling devices

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

16/003 . . . (Accessories therefor, e.g. sensors, vibrators, negative pressure)

16/006 . . . (with means for creating vibrations in patients’ airways)

16/009 . . . (with sub-atmospheric pressure, e.g. during expiration)

16/012 . . . (by Venturi means)

16/015 . . . (inhalation detectors)

16/018 . . . (electrical)

16/021 . . . . . . . (with a proportional output signal, e.g. from a thermistor)

16/024 . . . . . . . (with an on-off output signal, e.g. from a switch)

16/027 . . . (pressure meter)

16/03 . . . (with a flowmeter)

16/033 . . . . . . . (electrical)

16/036 . . . . . . . . . (in the breathing tube and used in both inspiratory and expiratory phase)

16/039 . . . . . . . . . (in the inspiratory circuit)

16/042 . . . . . . . . . (in the expiratory circuit)

16/045 . . . . . . . [Means for re-breathing exhaled gases, e.g. for hyperventilation treatment]

16/048 . . . . . . . . . (Mouth-to-mouth respiration (teaching or training models G09B 23/288))

16/051 . . . (with alarm devices)

16/054 . . . (Liquid ventilation)

16/057 . . . (Pumps therefor)

16/06 . . . (Tidal volume membrane pumps)

16/063 . . . (Compressors)

16/066 . . . (Blowers or centrifugal pumps)

16/069 . . . . . . . . . [the speed thereof being controlled by respiratory parameters, e.g. by inhalation]

16/072 . . . (Tidal volume piston pumps)

16/075 . . . (Bellows-type)

16/078 . . . (Breathing bags)

16/081 . . . (Bag or bellow in a bottle)

16/084 . . . . . . . . . (self-reinflatable by elasticity, e.g. resuscitation squeeze bags)

16/087 . . . . . . . . . (Environmental safety or protection means, e.g. preventing explosion)

16/09 . . . . . . . . . (Removing used or expired gases or anaesthetic vapours (Filtering, sterilising or disinfecting the exhaust air in drainage systems A61M 10052; Bacterial filters in the expiratory path A61M 1065))

16/093 . . . . . . . . . [by adsorption, absorption or filtration]

16/096 . . . . . . . . . [High frequency jet ventilation]

16/01 . . . . . . . . . (specially adapted for anaesthetising (A61M 1014, A61M 1018 take precedence))

16/021 . . . . . . . . . (operated by electrical means (A61M 1202 – A61M 1205 take precedence))

16/022 . . . . . . . . . [Control means therefor]

16/024 . . . . . . . . . [including calculation means, e.g. using a processor]

16/026 . . . . . . . . . [specially adapted for predicting, e.g. for determining an information representative of a flow limitation during a ventilation cycle by using a root square technique or a regression analysis]

16/04 . . . . . . . . . Tracheal tubes (catheters in general A61M 2500)

16/0402 . . . . . . . . . (Special features for tracheal tubes not otherwise provided for)

16/0404 . . . . . . . . . (with means for selective or partial lung respiration)

16/0406 . . . . . . . . . (implanted flow modifiers)

16/0409 . . . . . . . . . (with mean for closing the oesophagus)

16/0411 . . . . . . . . . (with means for differentiating between oesophageal and tracheal intubation)

16/0413 . . . . . . . . . [with detectors of CO2 in exhaled gases]

16/0415 . . . . . . . . . (with access means to the stomach)

16/0418 . . . . . . . . . (with integrated means for changing the degree of curvature, e.g. for easy intubation)

16/042 . . . . . . . . . (with separate conduits for in-and expiration gas, e.g. for limited dead volume)

16/0422 . . . . . . . . . [Laser-resistant]

16/0425 . . . . . . . . . [Metal tubes]

16/0427 . . . . . . . . . (with removable and re-insertable liner tubes, e.g. for cleaning)

16/0429 . . . . . . . . . (with non-integrated distal obturators)

16/0431 . . . . . . . . . (with a cross-sectional shape other than circular)

16/0434 . . . . . . . . . [Cuffs]

16/0436 . . . . . . . . . (Special fillings therefor)

16/0438 . . . . . . . . . [Liquid-filled]

16/044 . . . . . . . . . (External cuff pressure control or supply, e.g. synchronisation with respiration)

16/0443 . . . . . . . . . (Special cuff-wall materials (A61M 10481, A61M 10422 take precedence))

16/0445 . . . . . . . . . (Special cuff forms, e.g. undulated)

16/0447 . . . . . . . . . [Bell, canopy or umbrella shaped]

16/045 . . . . . . . . . (with cuffs partially or completely inflated by the respiratory gas)

16/0452 . . . . . . . . . (following the inspiration and expiration pressure)

16/0454 . . . . . . . . . [Redundant cuffs]

16/0456 . . . . . . . . . (one cuff within another)

16/0459 . . . . . . . . . (one cuff behind another)

16/0461 . . . . . . . . . [Nasoeotratheal tubes]
Inhaling devices

16/0463 . . . [combined with suction tubes, catheters or the like; Outside connections]
16/0465 . . . [Tracheostomy tubes; Devices for performing a tracheostomy; Accessories therefor, e.g. masks, filters]
16/0468 . . . . [with valves at the proximal end limiting exhalation, e.g. during speaking or coughing (air passages from trachea to oesophagus or to pharynx, artificial epiglottis A61F 2/203)]
16/0467 . . . [Masks, filters, surgical pads, devices for absorbing secretions, specially adapted therefor]
16/0472 . . . [Devices for performing a tracheostomy]
16/0475 . . . [having openings in the tube]
16/0477 . . . [with incorporated means for delivering or removing fluids]
16/0479 . . . . [above the cuff, e.g. giving access to the upper trachea]
16/0481 . . . . [through the cuff wall]
16/0484 . . . . [at the distal end]
16/0486 . . . [Multi-lumen tracheal tubes]
16/0488 . . . [Mouthpieces; Means for guiding, securing or introducing the tubes (guiding or introducing with laryngoscopes A61B 1/267; holding devices on the body A61M 25/02)]
16/049 . . . . [Mouthpieces]
16/0493 . . . . [with means for protecting the tube from damage caused by the patient's teeth, e.g. bite block]
16/0495 . . . . [with tongue depressors]
16/0497 . . . [Tube stabilizer]
16/06 . . . Respiratory or anaesthetic masks
16/0605 . . . [Means for improving the adaptation of the mask to the patient]
16/0611 . . . . [with a gusset portion]
16/0616 . . . . [with face sealing means comprising a flap or membrane projecting inwards, such that sealing increases with increasing inhalation gas pressure]
16/0622 . . . . [having an underlying cushion]
16/0627 . . . . [with sealing means on a part of the body other than the face, e.g. helmets, hoods or domes]
16/0633 . . . . [with forehead support]
16/0638 . . . . [in the form of a pivot]
16/0644 . . . . [having the means for adjusting its position]
16/065 . . . . . [in the form of a pivot]
16/0655 . . . . . [in the form of a linear or curvilinear slide]
2016/0661 . . . [with customised shape]
16/0666 . . . [Nasal cannulas or tubing (devices for improving normal breathing through the nose A61F 5/08; nose filters A61B 23/06; outside holding devices A61M 25/02)]
16/0672 . . . [Nasal cannula assemblies for oxygen therapy]
16/0677 . . . . [Gas-saving devices therefor]
16/0683 . . . [Holding devices therefor]
16/0688 . . . . [by means of an adhesive]
16/0694 . . . [Chin straps]
16/08 . . . Bellows; Connecting tubes {having means for taking samples G01N 1/22}; Water traps; Patient circuits
16/0808 . . . [Condensation traps]
16/0816 . . . [Joints or connectors]
Inhaling devices

Other devices for producing sleep or stupor: Devices for ending sleep or stupor

19/00 Local anaesthesia (syringes therefor A61M 5/00);

21/00 Other devices or methods to cause a change in the state of consciousness; Devices for producing or ending sleep by mechanical, optical, or acoustical means, e.g. for hypnosis

2025/0001. . . [by the use of a particular sense, or stimulus]
2025/0005. . . {by the use of a particular sense, or stimulus}
2025/0011. . . {in a subliminal way, i.e. below the threshold of sensation}
2025/0016. . . {by the smell sense}
2025/0022. . . {by the tactile sense, e.g. vibrations}
2025/0027. . . {by the hearing sense}
2025/0033. . . {subsonic}
2025/0038. . . {ultrasonic}
2025/005. . . {by the sight sense}
2025/006. . . {images, e.g. video}
2025/0014. . . {by the form of the lumen, e.g. cross-section, the edges}
2025/0015. . . {by the form of the lumen, e.g. cross-section, variable diameter}
2025/0017. . . {by the form of the tubing (A61M 25/0054 takes precedence)}
2025/0018. . . {by the form of the tubing (A61M 25/0054 takes precedence)}
2025/0019. . . {by the form of the tubing (A61M 25/0054 takes precedence)}
2025/002. . . {by the form of the tubing (A61M 25/0054 takes precedence)}
2025/0002. . . {by the form of the tubing (A61M 25/0054 takes precedence)}
2025/0002. . . {by the form of the tubing (A61M 25/0054 takes precedence)}
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2025/0002. . . {by the form of the tubing (A61M 25/0054 takes precedence)}
Probes; Catheters; Dilators; Drainage appliances for wounds

A61M

25/0029 . . . . [characterized by features relating to least one lumen located at the middle part of the catheter, e.g. slots, flaps, valves, cuffs, apertures, notches, grooves or rapid exchange ports (catheter shaft surface irregularities A61M 25/0006)]

25/003 . . . . [characterized by features relating to least one lumen located at the distal part of the catheter, e.g. filters, plugs or valves (catheter tips A61M 25/0062)]

2025/0031 . . . . [characterized by lumina for withdrawing or delivering, i.e. used for extracorporeal circuit treatment]

25/0032 . . . . [characterized by at least one unconventionally shaped lumen, e.g. polygons, ellipsoids, wedges or shapes comprising concave and convex parts]

2025/0034 . . . . [characterized by elements which are assembled, connected or fused, e.g. splittable tubes, outer sheaths creating lumina or separate cores (making of catheters A61M 25/0009)]

2025/0035 . . . . [characterized by a variable lumen cross-section by means of a resilient flexible septum or outer wall]

2025/0036 . . . . [with more than four lumina]

2025/0037 . . . . [characterized by lumina being arranged side-by-side]

2025/0039 . . . . [characterized by lumina being arranged coaxially]

2025/004 . . . . [characterized by lumina being arranged circumferentially]

25/0041 . . . . (pre-formed, e.g. specially adapted to fit with the anatomy of body channels (urethral catheters A61F 2/04))

2025/0042 . . . . [Microcatheters, cannula or the like having outside diameters around 1 mm or less]

25/0043 . . . . [characterised by structural features]

2025/0045 . . . . [multi-layered, e.g. coated (coating materials A61L 29/08)]

2025/0046 . . . . [Coatings for improving slidable]

2025/0047 . . . . [the inner layer having a higher lubricity]

2025/0048 . . . . [with an outer layer made from silicon]

25/005 . . . . [with embedded materials for reinforcement, e.g. wires, coils, braids]

25/0051 . . . . [made from fenestrated or weakened tubing layer]

25/0052 . . . . [Localized reinforcement, e.g. where only a specific part of the catheter is reinforced, for rapid exchange guidewire port]

25/0053 . . . . [having a variable stiffness along the longitudinal axis, e.g. by varying the pitch of the coil or braid]

25/0054 . . . . [with regions for increasing flexibility]

2025/0056 . . . . [provided with an antibacterial agent, e.g. by coating, residing in the polymer matrix or releasing an agent out of a reservoir]

2025/0057 . . . . [Catheters delivering medicament other than through a conventional lumen, e.g. porous walls or hydrogel coatings]

2025/0058 . . . . [having an electroactive polymer material, e.g. for steering purposes, for control of flexibility, for locking, for opening or closing]

2025/0059 . . . . [having means for preventing the catheter, sheath or lumens from collapsing due to outer forces, e.g. compressing forces, or caused by twisting or kinking]

2025/006 . . . . [having a special surface topography or special surface properties, e.g. roughened or knurled surface]

2025/0062 . . . . [having features to improve the sliding of one part within another by using lubricants or surfaces with low friction (coatings A61M 25/0046)]

2025/0063 . . . . [having means, e.g. styles, mandrils, rods or wires to reinforce or adjust temporarily the stiffness, column strength or pushability of catheters which are already inserted into the human body]

2025/0064 . . . . [which become stiffer or softer when heated]

2025/0065 . . . . [which become stiffer or softer when becoming wet or humid, e.g. immersed within a liquid]

25/0067 . . . . [characterised by the distal end, e.g. tips (A61M 25/0054, A61M 25/04 take precedence; balloon catheters A61M 25/10)]

25/0068 . . . . [Static characteristics of the catheter tip, e.g. shape, atraumatic tip, curved tip or tip structure]

25/0069 . . . . [Tip not integral with tube]

25/007 . . . . [Side holes, e.g. their profiles or arrangements; Provisions to keep side holes unblocked]

25/0071 . . . . [Multiple separate lumens (multiple separate lumens throughout the catheter A61M 25/0026)]

25/0073 . . . . [Tip designed for influencing the flow or the flow velocity of the fluid, e.g. inserts for twisted or vortex flow (general flow characteristics A61M 2206/10)]

25/0074 . . . . [Dynamic characteristics of the catheter tip, e.g. openable, closable, expandable or deformable]

25/0075 . . . . [Valve means]

2025/0076 . . . . [Unidirectional valves]

2025/0078 . . . . [for fluid inflow from the body into the catheter lumen]

2025/0079 . . . . [Separate user-activated means, e.g. guidewires, guide tubes, balloon catheters or sheaths, for sealing off an orifice, e.g. a lumen or side holes, of a catheter]

25/008 . . . . [Strength or flexibility characteristics of the catheter tip]

25/0081 . . . . [Soft tip]

25/0082 . . . . [Catheter tip comprising a tool]

25/0084 . . . . [being one or more injection needles]

2025/0085 . . . . [Multiple injection needles protruding axially, i.e. along the longitudinal axis of the catheter, from the distal tip]

2025/0086 . . . . [the needles having bent tips, i.e. the needle distal tips are angled in relation to the longitudinal axis of the catheter]

2025/0087 . . . . [Multiple injection needles protruding laterally from the distal tip]

2025/0089 . . . . [Single injection needle protruding axially, i.e. along the longitudinal axis of the catheter, from the distal tip]

2025/009 . . . . [the needle having a bent tip, i.e. the needle distal tip is angled in relation to the longitudinal axis of the catheter]

2025/0091 . . . . [the single injection needle being fixed]
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2025/0092 . . . . [Single injection needle protruding laterally from the distal tip]
2025/0093 . . . . [wherein at least one needle is a microneedle]
2025/0095 . . . . [being one or more needles protruding from the distal tip and which are not used for injection nor for electro-simulation, e.g. for fixation purposes]
2025/0096 . . . . [being laterally outward extensions or tools, e.g. hooks or fibres]
25/0097 . . . . [characterised by the hub (connectors A61M 39/101)]
2025/0098 . . . . [having a strain relief at the proximal end, e.g. sleeve]
25/01 . . . . Introducing, guiding, advancing, emplacing or holding catheters (A61M 25/10 takes precedence)
25/0102 . . . . [Insertion or introduction using an inner stiffening member, e.g. stylet or push-rod]
25/0105 . . . . [Steering means as part of the catheter or advancing means; Markers for positioning (systems for detection of markers A61B)]
25/0108 . . . . [using radio-opaque or ultrasound markers]
25/0111 . . . . [Aspetic insertion devices]
25/0113 . . . . [Mechanical advancing means, e.g. catheter dispensers]
25/0116 . . . . [self-propelled, e.g. autonomous robots (A61M 25/0122 takes precedence)]
25/0119 . . . . [Eversible catheters]
25/0122 . . . . [with fluid drive by external fluid in an open fluid circuit]
25/0125 . . . . [Catheters carried by the bloodstream, e.g. with parachutes; Balloon catheters specially designed for this purpose]
25/0127 . . . . [Magnetic means; Magnetic markers]
25/013 . . . . [One-way gripping collars]
25/0133 . . . . [Tip steering devices]
25/0136 . . . . [Handles therefor]
25/0138 . . . . [having flexible regions as a result of weakened outer material, e.g. slots, slits, cuts, joints or coils]
25/0141 . . . . [having flexible regions as a result of using materials with different mechanical properties]
25/0144 . . . . [having flexible regions as a result of inner reinforcement means, e.g. struts or rods]
25/0147 . . . . [with movable mechanical means, e.g. pull wires]
25/015 . . . . [Details of the distal fixation of the movable mechanical means]
25/0152 . . . . [with pre-shaped mechanisms, e.g. pre-shaped stylets or pre-shaped outer tubes]
25/0155 . . . . [with hydraulic or pneumatic means, e.g. balloons or inflatable compartments]
25/0158 . . . . [with magnetic or electrical means, e.g. by using piezo materials, electroactive polymers, magnetic materials or by heating of shape memory materials]
25/0161 . . . . [wherein the distal tips have two or more deflection regions]
25/0163 . . . . [Looped catheters]
25/0166 . . . . [Sensors, electrodes or the like for guiding the catheter to a target zone, e.g. image guided or magnetically guided]
25/0169 . . . . [Exchanging a catheter while keeping the guidewire in place]
25/0172 . . . . [Exchanging a guidewire while keeping the catheter in place]
25/0175 . . . . [having telescopic features, interengaging nestable members movable in relations to one another]
25/0177 . . . . [having external means for receiving guide wires, wires or stiffening members, e.g. loops, clamps or lateral tubes]
25/018 . . . . [Catheters having a lateral opening for guiding elongated means lateral to the catheter]
25/0183 . . . . [Rapid exchange or monorail catheters]
25/0186 . . . . [Catheters with fixed wires, i.e. so called "non-over-the-wire catheters"]
25/0188 . . . . [having slitted or breakaway lumens]
25/0191 . . . . [Suprapubic catheters]
25/0194 . . . . [Tunnelling catheters]
25/0197 . . . . [for creating an artificial passage within the body, e.g. in order to go around occlusions]
25/02 . . . . Holding devices, e.g. on the body
25/0206 . . . . [where the catheter is secured by using devices worn by the patient, e.g. belts or harnesses]
25/0213 . . . . [where the catheter is attached by means specifically adapted to a part of the human body]
25/022 . . . . [specifically adapted for the mouth]
25/0226 . . . . [specifically adapted for the nose]
25/0233 . . . . [specifically adapted for attaching to a body wall by means which are on both sides of the wall, e.g. for attaching to an abdominal wall]
25/024 . . . . [having a clip or clamp system]
25/0246 . . . . [fixed on the skin having a cover for covering the holding means]
25/0253 . . . . [where the catheter is attached by straps, bands or the like secured by adhesives]
25/026 . . . . [where the straps are releasably secured, e.g. by hook and loop-type fastening devices]
25/0266 . . . . [using pads, patches, tapes or the like]
25/0273 . . . . [having slits to place the pad around a catheter puncturing site]
25/028 . . . . [having a mainly rigid support structure]
25/0286 . . . . [anchored in the skin by suture or other skin penetrating devices]
25/0293 . . . . [Catheter, guide wire or the like with means for holding, centering, anchoring or frictionally engaging the device within an artificial lumen, e.g. tube (natural lumen, e.g. vessels A61M 25/04)]
25/04 . . . . [in the body, e.g. expansible (A61M 25/10, A61M 16/0488 take precedence)]
25/06 . . . . [Body-piercing guide needles or the like]
25/0606 . . . . ["Over-the-needle" catheter assemblies, e.g. I.V. catheters]
25/0612 . . . . [Devices for protecting the needle; Devices to help insertion of the needle, e.g. wings or holders]
25/0618 . . . . [having means for protecting only the distal tip of the needle, e.g. a needle guard]
25/0625 . . . . [with a permanent connection to the needle hub, e.g. a guiding rail, a locking mechanism or a guard advancement mechanism]
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25/0631 . . . . [having means for fully covering the needle after its withdrawal, e.g. needle being withdrawn inside the handle or a cover being advanced over the needle]
25/0637 . . . . [Butterfly or winged devices, e.g. for facilitating handling or for attachment to the skin]
25/0643 . . . . [Devices having a blunt needle tip, e.g. due to an additional inner component]
25/065 . . . . [Guide needles]
2025/0656 . . . . [having a tip larger than the rest of the body]
25/0662 . . . . [Guide tubes]
25/0668 . . . . [splitable, tear apart]
2025/0675 . . . . [Introducing-sheath slitters]
2025/0681 . . . . [Systems with catheter and outer tubing, e.g. sheath, sleeve or guide tube]
2025/0687 . . . . [having means for atraumatic insertion in the body or protection of the tip of the sheath during insertion, e.g. special designs of dilators, needles or sheaths]
25/0693 . . . . [Flashback chambers]
25/09 . . . . Guide wires
2025/09008 . . . . [having a balloon]
25/09016 . . . . [with mandrils]
25/09025 . . . . [with sliding mandrils]
25/09033 . . . . [with fixed mandrils, e.g. mandrils fixed to tip; Tensionable wires]
25/09041 . . . . [Mechanisms for insertion of guide wires]
25/0905 . . . . [extendable, e.g. mechanisms for extension]
2025/09058 . . . . [Basic structures of guide wires]
2025/09066 . . . . [having a coil without a core possibly combined with a sheath]
2025/09075 . . . . [having a core without a coil possibly combined with a sheath]
2025/09083 . . . . [having a coil around a core]
2025/09091 . . . . [where a sheath surrounds the coil at the distal part]
2025/091 . . . . [having a lumen for drug delivery or suction]
2025/09108 . . . . [Methods for making a guide wire]
2025/09116 . . . . [Design of handles or shafts or gripping surfaces thereof for manipulating guide wires]
2025/09125 . . . . [Device for locking a guide wire in a fixed position with respect to the catheter or the human body]
2025/09133 . . . . [having specific material compositions or coatings; Materials with specific mechanical behaviours, e.g. stiffness, strength to transmit torque]
2025/09141 . . . . [made of shape memory alloys which take a particular shape at a certain temperature]
2025/0915 . . . . [having features for changing the stiffness]
2025/09158 . . . . [when heated]
2025/09166 . . . . [having radio-opaque features]
2025/09175 . . . . [having specific characteristics at the distal tip]
2025/09183 . . . . [having tools at the distal tip]
2025/09191 . . . . [made of twisted wires]
25/10 . Balloon catheters ([A61M 25/0125 takes precedence; embolectomy A61B 17/22032; retractors A61B 17/02:] inflatable balloons for placing stents or stent-grafts A61F 2/958; stomach balloons for treatment of obesity A61F 5/0003; oesophageal tubes A61J 15/001])
25/1002 . . . . [characterised by balloon shape (A61M 25/1006, A61M 25/1009 take precedence)]

2025/1004 . . . . [Balloons with folds, e.g. folded or multifolded]
25/1006 . . . . [Balloons formed between concentric tubes]
25/1009 . . . . [Balloons anchored to a disc or plate]
25/1011 . . . . [Multiple balloon catheters]
2025/1013 . . . . [with concentrically mounted balloons, e.g. being independently inflatable]
2025/1015 . . . . [having two or more independently movable balloons where the distance between the balloons can be adjusted, e.g. two balloon catheters concentric to each other forming an adjustable multiple balloon catheter system]
25/1018 . . . . [Balloon inflated or inflation-control devices]
25/10181 . . . . [Means for forcing inflation-control devices]
25/10182 . . . . [Injector syringes]
25/10183 . . . . [Compressible bulbs]
25/10184 . . . . [Means for controlling or monitoring inflation or deflation]
25/10185 . . . . [Valves]
25/10186 . . . . [One-way valves]
25/10187 . . . . [Indicators for the level of inflation or deflation]
25/10188 . . . . [Inflation or deflation data displays]
2025/102 . . . . [driven by a solenoid-activated pump]
2025/1022 . . . . [driven by a rotary motor-activated pump]
2025/1025 . . . . [Connections between catheter tubes and inflation tubes]
25/1027 . . . . [Making of balloon catheters]
25/1029 . . . . [Production methods of the balloon members, e.g. blow-moulding, extruding, deposition or by wrapping a plurality of layers of balloon material around a mandril]
2025/1031 . . . . [Surface processing of balloon members, e.g. coating or deposition; Mounting additional parts onto the balloon member's surface]
25/1034 . . . . [Joining of shaft and balloon]
2025/1036 . . . . [Making parts for balloon catheter systems, e.g. shafts or distal ends (A61M 25/1029 takes precedence)]
25/1038 . . . . [Wrapping or folding devices for use with balloon catheters]
25/104 . . . . [used for angioplasty]
2025/1043 . . . . [with special features or adapted for special applications]
2025/1045 . . . . [for treating bifurcations, e.g. balloons in y-configuration, separate balloons or special features of the catheter for treating bifurcations]
2025/1047 . . . . [having centering means, e.g. balloons having an appropriate shape]

NOTE
This group also covers balloon catheters with centering means other than centering means using balloons

2025/105 . . . . [having a balloon suitable for drug delivery, e.g. by using holes for delivery, drug coating or membranes]
2025/1052 . . . . [for temporarily occluding a vessel for isolating a sector]
2025/1054 . . . . [having detachable or disposable balloons]
Probes; Catheters; Dilators; Drainage appliances for wounds

27/008 . . . (pre-shaped, for use in the urethral or ureteral tract)

29/00 Dilators with or without means for introducing media, e.g. remedies (instruments for performing visual medical inspections of cavities or tubes of the body A61B 1/00)

29/02 . Dilators made of swellable material (balloon catheters for angioplasty A61M 25/104)

2029/025 . . . (characterised by the guiding element)

31/00 Devices for introducing or retaining media, e.g. remedies, in cavities of the body (A61M 25/00 takes precedence ; introducing or retaining ophthalmic products into the ocular cavities A61F 9/000)

31/002 . [Devices for releasing a drug at a continuous and controlled rate for a prolonged period of time (artificial gland structures or devices A61F 2/022; intra-uterine contraceptive devices A61F 6/14; tampons for introducing into the vagina A61F 1/32, A61L 15/00; suppositories or bougies for intra-vaginal or intra-uterine application A61K 9/02; physical forms of medicinal preparations for sustained or differential drug release A61K 9/20, A61K 9/50)]

31/005 . . . (for contrast media)

31/007 . . . [Injectors for solid bodies, e.g. suppositories]

35/00 Devices for applying (e.g. spreading), media, e.g. remedies, on the human body (devices for handling toilet or cosmetic substances A45D; absorbent pads, e.g. swabs {for medical use}, A61F 13/15)

35/003 . . . (Portable hand-held applicators having means for dispensing or spreading integral media (hand-held massage devices with liquid delivery A61H 7/003)

35/006 . . . . . . (using sponges, foams, absorbent pads or swabs as spreading means)

35/10 . . . . . . (Wearable devices, e.g. garments, glasses or masks)

35/20 . . . . . . (Non-portable devices, e.g. spraying booths)

35/25 . . . . . . (specially adapted for the application of sunscreen, tanning or self-tanning lotions)

35/30 . . . . . . (Gas therapy for therapeutic treatment of the skin)

37/00 Other apparatus for introducing media into the body (for reproduction or fertilisation A61B 17/425; apparatus for iontophoresis or cataphoresis A61N 1/30; Percutany, i.e. introducing medicines into the body by diffusion through the skin (salt baths A61H 33/04)

2037/0007 . . . . . . (having means for enhancing the permeation of substances through the epidermis, e.g. using suction or depression, electric or magnetic fields, sound waves or chemical agents)

37/0007 . . . . . . (by using microneedles)

2037/0023 . . . . . . (Drug applicators using microneedles)

2037/0003 . . . . . . (having a lumen)

2037/0038 . . . . . . (having a channel at the side surface)

2037/0046 . . . . . . (Solid microneedles)

2037/0053 . . . . . . (Methods for producing microneedles)

2037/0061 . . . . . . (Methods for using microneedles)

37/0069 . . . . . . (Devices for implanting pellets, e.g. markers or solid medicaments {for introducing of radioactive sources for interstitial radiation therapy, i.e. brachytherapy A61N 5/1027})
Tubes, tube connectors, tube couplings, valves, access sites or the like, specially adapted for medical use (for respiratory devices, e.g. tracheal tubes A61M 16/00; artificial heart valves A61F 2/24)

WARNING
Not complete, see A61J 1/14

[39/00]

2039/0009 . . . [Assemblies therefor designed for particular applications, e.g. contrast or saline injection, suction or irrigation]
2039/0018 . . . [designed for flushing a line, e.g. by a by-pass]
2039/0027 . . . [for mixing several substances from different containers]
2039/0036 . . . [characterised by a septum having particular features, e.g. having venting channels or being made from antimicrobial or self-lubricating elastomer]
2039/0045 . . . [Radiopaque Indicia]
2039/0054 . . . [Multiple layers]
2039/0063 . . . [Means for alignment of the septum, e.g. septum rim with alignment holes]
2039/0072 . . . [Means for increasing tightness of the septum, e.g. compression rings, special materials, special constructions]
2039/0081 . . . [Means for facilitating introduction of a needle in the septum, e.g. guides, special construction of septum]
2039/009 . . . [Means for limiting access to the septum, e.g. shields, grids]

[39/02]

Access sites
2039/0202 . . . [for taking samples]
2039/0205 . . . [for injecting media]
39/0208 . . . [Subcutaneous access sites for injecting or removing fluids (transcutaneous access sites A61M 39/0247; implantable infusion devices A61M 5/14276)]
2039/0211 . . . [with multiple chambers in a single site]
2039/0214 . . . [some or all chambers sharing a single septum]
2039/0217 . . . [at least some chambers being stacked separated by another septum]
2039/022 . . . [being accessible from all sides, e.g. due to a cylindrically-shaped septum]
2039/0223 . . . [having means for anchoring the subcutaneous access site]
2039/0226 . . . [having means for protecting the interior of the access site from damage due to the insertion of a needle]
2039/0229 . . . [having means for facilitating assembling, e.g. snap-fit housing or modular design]
2039/0232 . . . [having means for facilitating the insertion into the body]
2039/0235 . . . [having an additional inlet, e.g. for a guidewire or a catheter tube]
A61M

2039/0666 . . . . [Flap-valve]
2039/0673 . . . . [comprising means actively pressing on the
device passing through the seal, e.g. inflatable
seals, diaphragms, clamps]

2039/068 . . . . [having a seal being made of or coated with a
special material]
2039/0686 . . . . [comprising more than one seal]
39/093 . . . . [including means for seal penetration]

39/08 . . . . [Tubes; Storage means specially adapted therefor

2039/082 . . . . [Multi-lumen tubes]
2039/085 . . . . [external enteral feeding tubes (feeding tubes
inside the stomach or intestines A61J 15/00)]

39/087 . . . . [Tools for handling tubes, e.g. crimping tool for
connecting tubes to a connector]

39/10 . . . . [Tube connectors; Tube couplings (A61M 39/02
takes precedence; connecting needles to syringes or
hubs A61M 5/162; connecting catheter tubes to hubs
A61M 25/0014)]

39/1005 . . . . [Detection of disconnection]
39/1011 . . . . [Locking means for securing connection;

39/1016 . . . . [Unlocking means providing a secure or
comfortable disconnection]

39/1022 . . . . [additionally providing electrical connection]
39/1027 . . . . [Quick-acting type connectors]
39/1033 . . . . [Swivel nut connectors, e.g. threaded connectors,

39/1038 . . . . [Union screw connectors, e.g. hollow screw or
sleeve having external threads]

39/1044 . . . . [Verifying the connection, e.g. audible feedback,
tactile feedback, visual feedback, using external
light sources]

39/105 . . . . [Multi-channel connectors or couplings, e.g. for
connecting multi-lumen tubes (multi-channel
connectors in general F16L 37/56)]

39/1055 . . . . [Rotating or swivel joints (in general
F16L 27/00)]

39/1061 . . . . [Break-apart tubing connectors or couplings]
39/1066 . . . . [having protection means, e.g. sliding sleeve
to protect connector itself, shrouds to protect
a needle present in the connector, protective
housing, isolating sheath]

39/1072 . . . . [with a septum present in the connector]
39/1077 . . . . [Adapters, e.g. couplings adapting a connector to
one or several other connectors]

39/1083 . . . . [having a plurality of female connectors, e.g.
Luer connectors]
39/1088 . . . . [having a plurality of male connectors, e.g. Luer
connectors]

39/1094 . . . . [at least partly incompatible with standard
connectors, e.g. to prevent fatal mistakes in
connection]

39/12 . . . . [for joining a flexible tube to a rigid attachment]
39/14 . . . . [for connecting tubes having sealed ends

39/143 . . . . [both tube ends being sealed by meltable
membranes pierced after connection by use of
heat, e.g. using radiant energy]
39/146 . . . . [by cutting and welding]

39/16 . . . . [having provision for disinfection or sterilisation

39/162 . . . . [with antiseptic agent incorporated within the
connector]
39/165 . . . . [Shrouds or protectors for aseptically enclosing
the connector]

39/167 . . . . [with energizing means, e.g. light, vibration,
electricity]

39/18 . . . . [Methods or apparatus for making the
connection under sterile conditions, i.e. sterile
docking]

39/20 . . . . [Closure caps or plugs for connectors or open ends of
tubes]

39/205 . . . . [comprising air venting means]
39/22 . . . . [Valves or arrangement of valves (A61M 39/02,
A61M 39/0247, A61M 39/16 take precedence;
regulating valves in infusion systems
A61M 5/16881; in devices worn by the patient for the
reception of urine, faeces, catamenial or other
discharge, or in colostomy devices A61F 5/4405)]

39/221 . . . . [Frangible or pierceable closures within tubing
(A61M 39/14 takes precedence; frangible

39/222 . . . . [Frangible within tubing or bags]
39/223 . . . . [Multiway valves]
39/224 . . . . [of the slide-valve type]
39/225 . . . . [Flush valves, i.e. bypass valves for flushing
line]
39/226 . . . . [Spindles or actuating means]
39/227 . . . . [Valves actuated by a secondary fluid, e.g.
hydraulically or pneumatically actuated valves]
39/228 . . . . [with a tubular diaphragm constrictible by
radial fluid force]

39/229 . . . . [Stopcocks]
39/24 . . . . [Check- or non-return valves]
39/2406 . . . . [designed to quickly shut upon the presence of
back-pressure]
39/2413 . . . . [designed to reduce and or shut-off the
flow when a certain maximum flow limit is
exceeded]
39/242 . . . . [designed to open when a predetermined
pressure or flow rate has been reached, e.g.
check valve actuated by fluid]
39/2426 . . . . [Slit valve]
39/2433 . . . . [Valve comprising a resilient or deformable
element, e.g. flap valve, deformable disc]
39/244 . . . . [Hinged closure member, e.g. flap valve]
39/2446 . . . . [Flexible disc]
39/2453 . . . . [not being fixed to the valve body]
39/2446 . . . . [being fixed along all or a part of its
periphery]

39/2466 . . . . [being fixed in its center]
39/2473 . . . . [Valve comprising a non-deformable, movable
element, e.g. ball-valve, valve with movable
stopper or reciprocating element]
39/248 . . . . [Ball-valve]
39/2486 . . . . [Guided stem, e.g. reciprocating stopper]
39/2493 . . . . [Check valve with complex design, e.g. several
inlets and outlets and several check valves in
one body]
Valves closing automatically on disconnecting the line and opening on reconnection thereof [(check valves A61M 29/24)]

Valves closing automatically on disconnecting the line and opening on reconnection thereof [(check valves A61M 29/24)]

Clamping means for squeezing flexible tubes, e.g. roller clamps [(tube strippers A61M 1/0)]

Clamping means for squeezing flexible tubes, e.g. roller clamps [(tube strippers A61M 1/0)]

Screw clamps

Lever clamps

Cam clamps, e.g. roller clamps with eccentric axis

Wedge clamps, e.g. roller clamps with inclined guides

Wedge formed by a slot having varying width, e.g. slide clamps

[bending or twisting the tube]

Special media to be introduced, removed or treated (applying radioactive material A61N 5/10)

NOTE

The classification symbols A61M 2202/0007 - A61M 2202/0092 are not listed first when assigned to patent documents.

They are used only when associated to other subgroups of A61M 2202/00 in combination sets

Example:

A61M 2202/0417, A61M 2202/0057

- introduced into the body

- removed from the body

- removed from and reintroduced into the body, e.g. after treatment

- fluid entering a filter

- fluid leaving the cross-flow filter without having passed through the filtering element

- filtrate, i.e. the fluid passing through the filter

- residue retained by the filter due to size

- retained by adsorption

- changed by biological action

- product to be retained or harvested, e.g. by pheresis

- changed by chemical action

- product washed out

- starting product created by centrifuging

- Gases

- Oxygen

- Carbon oxides, e.g. Carbon dioxide

- Carbon monoxide

- Anaesthetics; Analgesics

- Helium

- Krypton (KR)

- Nitrogen (N)

- Nitric oxide [NO]

- Nitrous oxide (N2O)

- Xenon

- Gases in liquid phase, e.g. cryogenic liquids

- Liquids

- Ascitics

- Gall; Bile

- Lymph

- B-Lymphocytes

- T-Lymphocytes

- Blood

- Plasma

- Immunoglobulin

- Immunoglobulin G

- Beta-2-microglobulin

- Serum; Human serous fluid, i.e. plasma without fibrinogen

- Thrombin

- Platelets; Thrombocytes

- Red blood cells; Erythrocytes

- Gerocytes

- Free haemoglobin

- Neocytes, e.g. reticulocytes

- Blood stem cells

- White blood cells; Leucocytes (lymphocytes A61M 2202/0407)

- Granulocytes, i.e. leucocytes containing many granules in their cytoplasm

- Macrophages, e.g. monocytes

- Proteins (immunoglobulin A61M 2202/0417: beta-2-microglobulin A61M 2202/0421; thrombin A61M 2202/0425; haemoglobin A61M 2202/0433)

- Glycoproteins

- Fibrinogen, also called factor I

- Fibrin

- Factor VIII

- Fibrinase, i.e. Factor XIII

- Lipoprotein

- High-density lipoprotein

- Low-density lipoprotein

- Placental blood, umbilical cord blood

- Cerebrospinal fluid

- Saliva

- non-physiological

- cardioplegic

- cryo-cardioplegic

- haemodiluting

- Oxygenated solutions

- Heparin

- Anaesthetics (see also A61M 19/00)
2202/0482 . . . Enteral feeding product
2202/0484 . . . Alcohol
2202/0486 . . . Glucose
2202/0488 . . . Surfactant, e.g. for the lung
2202/049 . . . Toxic
2202/0492 . . . Pleural
2202/0494 . . . Obstetrical, amniotic fluid
2202/0496 . . . Urine
2202/0498 . . . Urea
2202/06 . . . Solids
2202/062 . . . Desiccants
2202/064 . . . Powder
2202/066 . . . made from a compacted product by abrading
2202/068 . . . Feces; Excretions
2202/07 . . . Proteins
2202/08 . . . Lipoids
2202/09 . . . Body tissue
2202/092 . . . Sweat glands
2202/095 . . . Collagen
2202/097 . . . endothelial cells
2202/10 . . . Bone-marrow
2202/20 . . . Pathogenic agents
2202/203 . . . Bacteria
2202/206 . . . Viruses
2202/30 . . . Vaccines

2205/00 General characteristics of the apparatus
2205/02 . . . characterised by a particular materials
2205/0205 . . . Materials having antiseptic or antimicrobial properties, e.g. silver compounds, rubber with sterilising agent
2205/0211 . . . Ceramics
2205/0216 . . . Materials providing elastic properties, e.g. for facilitating deformation and avoid breaking
2205/0222 . . . Materials for reducing friction
2205/0227 . . . Materials having sensing or indicating function, e.g. indicating a pressure increase
2205/0233 . . . Conductive materials, e.g. antistatic coatings for spark prevention
2205/0238 . . . the material being a coating or protective layer
2205/0244 . . . Micromachined materials, e.g. made from silicon wafers, microelectromechanical systems [MEMS] or comprising nanotechnology
2205/025 . . . Materials providing resistance against corrosion
2205/0255 . . . in acidic environments or acidic fluids
2205/0261 . . . in alcalic environments or alcalic fluids
2205/0266 . . . Shape memory materials
2205/0272 . . . Electro-active or magneto-active materials
2205/0277 . . . Chemo-active materials
2205/0283 . . . Electro-active polymers [EAP]
2205/0288 . . . Electro-theological or magneto-theological materials
2205/0294 . . . Piezoelectric materials
2205/04 . . . implanted
2205/05 . . . combined with other kinds of therapy
2205/051 . . . with radiation therapy
2205/052 . . . infra-red
2205/053 . . . ultra-violet
2205/054 . . . with electrotherapy
2205/055 . . . with electrophoresis
2205/056 . . . with active exercise
2205/057 . . . with magnetotherapy

2205/058 . . . with ultrasound therapy
2205/07 . . . having air pumping means
2205/071 . . . hand operated
2205/073 . . . Syringe, piston type
2205/075 . . . Bulb type
2205/076 . . . mouth operated
2205/078 . . . foot operated
2205/10 . . . with powered movement mechanisms
2205/103 . . . rotating
2205/106 . . . reciprocating
2205/11 . . . with means for preventing cross-contamination when used for multiple patients
2205/12 . . . with interchangeable cassettes forming partially or totally the fluid circuit
2205/121 . . . interface between cassette and base
2205/122 . . . using evacuated interfaces to enhance contact
2205/123 . . . with incorporated reservoirs
2205/125 . . . with incorporated filters
2205/126 . . . with incorporated membrane filters
2205/127 . . . with provisions for heating or cooling
2205/128 . . . with incorporated valves
2205/13 . . . with means for the detection of operative contact with patient, e.g. lip sensor
2205/14 . . . Detection of the presence or absence of a tube, a connector or a container in an apparatus
2205/15 . . . Detection of leaks
2205/16 . . . with back-up system in case of failure
2205/17 . . . with redundant control systems
2205/18 . . . with alarm
2205/183 . . . the sound being generated pneumatically
2205/185 . . . the sound being acoustically amplified, e.g. by resonance
2205/19 . . . Constructional features of carpules, syringes or blisters
2205/192 . . . Avoiding coring, e.g. preventing formation of particles during puncture
2205/195 . . . by the needle tip shape
2205/197 . . . by the seal material
2205/21 . . . insensitive to tilting or inclination, e.g. spill-over prevention
2205/215 . . . Tilt detection, e.g. for warning or shut-off
2205/27 . . . preventing use
2205/273 . . . preventing reuse, e.g. of disposables
2205/276 . . . preventing unwanted use
2205/32 . . . with radio-opaque indicia
2205/33 . . . Controlling, regulating or measuring
2205/3303 . . . Using a biosensor
2205/3306 . . . Optical measuring means
2205/331 . . . used as turbidity change detectors, e.g. for priming-blood or plasma-hemoglobin-interface detection
2205/3313 . . . used specific wavelengths
2205/3317 . . . Electromagnetic, inductive or dielectric measuring means
2205/332 . . . Force measuring means
2205/3324 . . . PH measuring means
2205/3327 . . . Measuring
2205/3331 . . . Pressure; Flow
2205/3334 . . . Measuring or controlling the flow rate
2205/3337 . . . Controlling, regulating pressure or flow by means of a valve by-passing a pump
2205/3341 . . . stabilising pressure or flow to avoid excessive variation
2205/3344 . . . Measuring or controlling pressure at the body treatment site
2205/3348 . . . Pressure measurement using a water column
2205/3351 . . . Controlling upstream pump pressure
2205/3355 . . . Controlling downstream pump pressure
2205/3358 . . . Measuring barometric pressure, e.g. for compensation
2205/3362 . . . with minimised length of fluid lines; Taking into account the elastic expansion of fluid lines to increase accuracy
2205/3365 . . . Rotational speed
2205/3368 . . . Temperature
2205/3372 . . . Temperature compensation
2205/3375 . . . Acoustical, e.g. ultrasonic, measuring means
2205/3379 . . . Masses, volumes, levels of fluids in reservoirs, flow rates
2205/3382 . . . Upper level detectors
2205/3386 . . . Low level detectors
2205/3389 . . . Continuous level detection (A61M 2205/3393 takes precedence)
2205/3393 . . . by weighing the reservoir
2205/3396 . . . Reservoirs being alternately filled and emptied for measuring flow rate or delivered volume
2205/335 . . . Communication
2205/340 . . . with implanted devices, e.g. external control
2205/3515 . . . using magnetic means
2205/3523 . . . using telemetric means
2205/353 . . . using mechanical means, e.g. subcutaneous pushbuttons
2205/3538 . . . using electrical conduction through the body of the patient
2205/3546 . . . Range
2205/3553 . . . remote, e.g. between patient's home and doctor's office
2205/3561 . . . local, e.g. within room or hospital
2205/3569 . . . sublocal, e.g. between console and disposable
2205/3576 . . . with non implanted data transmission devices, e.g. using external transmitter or receiver
2205/3584 . . . using modem, internet or bluetooth
2205/3592 . . . using telemetric means, e.g. radio or optical transmission
2205/36 . . . related to heating or cooling
2205/3606 . . . cooled
2205/3613 . . . by body heat
2205/362 . . . by gas flow
2205/3626 . . . by controlled mixing of fluids at different temperatures
2205/3633 . . . thermally insulated
2205/364 . . . by chemical reaction
2205/3646 . . . by heat accumulators, e.g. ice, sand
2205/3653 . . . by Joule effect, i.e. electric resistance
2205/366 . . . by liquid heat exchangers
2205/3666 . . . using heat loss of a motor
2205/3673 . . . thermo-electric, e.g. Peltier effect, thermocouples, semi-conductors
2205/368 . . . by electromagnetic radiation, e.g. IR waves
2205/3686 . . . microwaves
2205/3693 . . . by mechanical waves, e.g. ultrasonic
2205/42 . . . Reducing noise
2205/43 . . . making noise when used correctly
2205/44 . . . making noise when used incorrectly
2205/50 . . . with microprocessors or computers
2205/502 . . . User interfaces, e.g. screens or keyboards
2205/505 . . . Touch-screens; Virtual keyboard or keypads;
2205/507 . . . Head Mounted Displays [HMD]
2205/52 . . . with memories providing a history of measured varying parameters of apparatus or patient
2205/58 . . . Means for facilitating use, e.g. by people with impaired vision
2205/581 . . . by audible feedback
2205/582 . . . by tactile feedback
2205/583 . . . by visual feedback
2205/584 . . . having a color code
2205/585 . . . having magnification means, e.g. magnifying glasses
2205/586 . . . Ergonomics details therefor, e.g. specific ergonomics for left or right-handed users
2205/587 . . . Lighting arrangements
2205/588 . . . by olfactory feedback, i.e. smell
2205/59 . . . Aesthetic features, e.g. distraction means to prevent fears of child patients
2205/60 . . . with identification means
2205/6009 . . . for matching patient with his treatment, e.g. to improve transfusion security
2205/6018 . . . providing set-up signals for the apparatus configuration
2205/6027 . . . Electric-conductive bridges closing detection circuits, with or without identifying elements, e.g. resistances, zener-diodes
2205/6036 . . . characterised by physical shape, e.g. array of activating switches
2205/6045 . . . having complementary physical shapes for indexing or registration purposes
2205/6054 . . . Magnetic identification systems
2205/6063 . . . Optical identification systems
2205/6072 . . . Bar codes
2205/6081 . . . Colour codes
2205/609 . . . Biometric patient identification means
2205/70 . . . with testing or calibration facilities
2205/702 . . . automatically during use
2205/705 . . . Testing of filters for leaks (blood in dialysate
2205/707 . . . Testing of filters for clogging
2205/75 . . . with filters
2205/7509 . . . for virus
2205/7518 . . . bacterial
2205/7527 . . . liophilic, hydrophilic
2205/7536 . . . allowing gas passage, but preventing liquid passage, e.g. liophilic, hydrophobic, water-repellent membranes
2205/7545 . . . for solid matter, e.g. microaggregates
2205/7554 . . . with means for unclogging or regenerating filters
2205/7563 . . . with means preventing clogging of filters
2205/7572 . . . with means for preventing contamination of the environment when replaced
2205/7581 . . . with means for switching over to a fresh filter on clogging or saturation
2205/759 . . . for removing preservatives, e.g. heavy metal compositions
2205/80 . . . voice-operated command
2205/82 . . . Internal energy supply devices
2205/8206 . . . battery-operated
2205/8212 . . . with means or measures taken for minimising energy consumption
2205/8218 . . . Gas operated
2205/8225 . . . using incorporated gas cartridges for the driving gas
2205/8231 . . . using electrochemical gas generating device for the driving gas
2205/8237 . . . Charging means
2205/8243 . . . by induction
2205/825 . . . using mechanical generation of electricity, e.g. hand cranked generators
2205/8256 . . . being integrated in the case or housing of the apparatus
2205/8262 . . . connectable to external power source, e.g. connecting to automobile battery through the cigarette lighter
2205/8268 . . . Fuel storage cells
2205/8275 . . . Mechanical
2205/8281 . . . spring operated
2205/8287 . . . operated by an external magnetic or electromagnetic field
2205/8293 . . . Solar
2205/84 . . . for treating several patients simultaneously

2206/00 Characteristic of a physical parameter; associated device therefor

2206/10 . . . Flow characteristics
2206/11 . . . Laminar flow
2206/12 . . . the flow being spirally in a plane, e.g. against a plane side of a membrane filter element
2206/14 . . . Static flow deviators in tubes disturbing laminar flow in tubes, e.g. archimedes screws
2206/16 . . . Rotating swirling helical flow, e.g. by tangential inflows
2206/18 . . . Coaxial flows, e.g. one flow within another
2206/20 . . . having means for promoting or enhancing the flow, actively or passively
2206/22 . . . eliminating pulsatile flows, e.g. by the provision of a dampening chamber

2207/00 Methods of manufacture, assembly or production
2207/10 . . . Device therefor

2209/00 Ancillary equipment
2209/01 . . . Remote controllers for specific apparatus
2209/02 . . . Equipment for testing the apparatus
2209/04 . . . Tools for specific apparatus
2209/045 . . . for filling, e.g. for filling reservoirs
2209/06 . . . Packaging for specific medical equipment
2209/08 . . . Supports for equipment
2209/082 . . . Mounting brackets, arm supports for equipment
2209/084 . . . Supporting bases, stands for equipment
2209/086 . . . Docking stations
2209/088 . . . on the body
2209/10 . . . Equipment for cleaning

2210/00 Anatomical parts of the body
2210/005 . . . used as an access side to the body
2210/02 . . . Bones
2210/04 . . . Skin
2210/06 . . . Head
2210/0606 . . . Face
2210/0612 . . . Eyes
2210/0618 . . . Nose
2210/0625 . . . Mouth
2210/0631 . . . Gums
2210/0637 . . . Teeth
2210/0643 . . . Tongue
2210/065 . . . Throat; Pharynx
2210/0656 . . . Epiglottis
2210/0662 . . . Ears
2210/0668 . . . Middle ear
2210/0675 . . . Eustachian tube
2210/0681 . . . Sinus (maxillaris)
2210/0687 . . . Skull, cranium
2210/0693 . . . Brain, cerebrum
2210/08 . . . Limbs
2210/083 . . . Arms
2210/086 . . . Legs
2210/10 . . . Trunk
2210/1003 . . . Spinal column
2210/1007 . . . Breast; mammary
2210/101 . . . Pleural cavity
2210/1014 . . . Diaphragm
2210/1017 . . . Peritoneal cavity
2210/1021 . . . Abdominal cavity
2210/1025 . . . Respiratory system (A61M 2210/0618 takes precedence)
2210/1028 . . . Larynx
2210/1032 . . . Trachea
2210/1035 . . . Bronchi
2210/1039 . . . Lungs
2210/1042 . . . Alimentary tract (A61M 2210/0618 takes precedence)
2210/1046 . . . Pharynx
2210/105 . . . Oesophagus
2210/1053 . . . Stomach
2210/1057 . . . Duodenum
2210/106 . . . Small intestine
2210/1064 . . . Large intestine
2210/1067 . . . Anus
2210/1071 . . . Liver; Hepar
2210/1075 . . . Gall bladder
2210/1078 . . . Urinary tract
2210/1082 . . . Kidney
2210/1085 . . . Bladder
2210/1089 . . . Urethra
2210/1092 . . . Female
2210/1096 . . . Male
2210/12 . . . Blood circulatory system
2210/122 . . . Pericardium
2210/125 . . . Heart
2210/127 . . . Aorta
2210/14 . . . Female reproductive, genital organs
2210/1408 . . . Ovaries
2210/1416 . . . Ova, ovum
2210/1425 . . . Uterine tubes
2210/1433 . . . Uterus
2210/1441 . . . Ovocytes
2210/145 . . . Embryo, fetus
2210/1458 . . . Placenta
2210/1466 . . . Umbilical cord
2210/1475 . . . Vagina
2210/1483 . . . Labia
2210/1491 . . . Clitoris
2210/16  Male reproductive, genital organs
  2210/161 Testis
  2210/162 Epididymis
  2210/163 Ductus deferens
  2210/164 Seminal vesicles
  2210/165 Sperm ducts
  2210/166 Prostate
  2210/167 Penis
  2210/168 Scrota, Scrotums

**Parts of the body**

2230/00  Measuring parameters of the user

**NOTE**

{ In this group, symbol A61M 2230/005 is only used as subsequent symbol in C-Sets and should not be allocated as single symbols. }

2230/005 Parameter used as control input for the apparatus
2230/04  Heartbeat characteristics, e.g. ECG, blood pressure modulation
  2230/06  Heartbeat rate only
2230/08  Other bio-electrical signals
  2230/10  Electroencephalographic signals
  2230/14  Electro-oculogram [EOG]
  2230/16  Visual evoked potential [VEP]
  2230/18  Rapid eye-movements [REM]
  2230/20  Blood composition characteristics
  2230/201 Glucose concentration
  2230/202 partial carbon oxide pressure, e.g. partial dioxide pressure (P-CO2)
  2230/204 partial carbon monoxide pressure (P-CO)
  2230/205 partial oxygen pressure (P-O2)
  2230/207 hematocrit
  2230/208 pH-value
  2230/30  Blood pressure (A61M 2230/04 takes precedence)
  2230/40  Respiratory characteristics
  2230/42  Rate
  2230/43  Composition of exhalation
  2230/432 partial CO2 pressure (P-CO2)
  2230/435 partial O2 pressure (P-O2)
  2230/437 the anaesthetic agent concentration
  2230/46  Resistance or compliance of the lungs
  2230/50  Temperature
  2230/60  Muscle strain, i.e. measured on the user
  2230/62  Posture
  2230/63  Motion, e.g. physical activity
  2230/65  Impedance, e.g. conductivity, capacity

2240/00  Specially adapted for neonatal use

2250/00  Specially adapted for animals