CPC  COOPERATIVE PATENT CLASSIFICATION

A  HUMAN NECESSITIES

HEALTH; AMUSEMENT

A61  MEDICAL OR VETERINARY SCIENCE; HYGIENE

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 ((Electrotherapy, e.g. producing anaesthesia by the use of alternating or intermittent currents A61N 1/36021))

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 37/0069, A61N 5/10
   - A61M 36/02 covered by A61M 37/0069, A61N 5/10
   - A61M 36/04 covered by A61M 37/0069, A61N 5/10
   - A61M 36/06 covered by A61M 37/0069, A61N 5/10, A61M 15/02
   - A61M 36/08 covered by A61M 5/1785
   - A61M 36/10 covered by A61M 37/0069, A61N 5/10
   - A61M 36/12 covered by A61M 37/0069, A61N 5/10
   - A61M 36/14 covered by A61M 37/0069, 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.
Suction or pumping devices for medical purposes; Devices for carrying-off, for treatment of, or for carrying-over, body-liquids; Drainage systems (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 5/15; filters implantable into blood vessels A61F 2/01)

Blood transfusion apparatus (blood infusion by syringes A61M 9/14)

Blood stirrers, e.g. for defibrination

Multiple bag systems for separating or storing blood components

(with isolated sections of the tube used as additive reservoirs)

(with filters)

(and filter bypass)

(and means for securing the filter against damage, e.g. during centrifugation)

(with gas separating means, e.g. air outlet through microporous membrane or gas bag)

(with sampling means, e.g. sample bag or sampling port)

(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)

(combined with blood container shaking means)

(Means for agitating or shaking blood containers (A61M 1/0245 takes precedence; shaking in general B01F 31/00))

(with a support plate moving only in one plane, e.g. horizontal)

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

(Apparatus for treatment of blood or blood constituents prior to or for conservation, e.g. freezing, drying or centrifuging)

(Frames constraining or supporting bags, e.g. during freezing)

(Apparatus for treatment of blood or blood constituents prior to transfusion, e.g. washing, filtering or thawing)

(Handling a large number of blood product units, e.g. storage cabinets, blood bank administration)

(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))

(whereby the blood container and a solution container are compressed simultaneously by the same means)

(Artificial) pneumothorax apparatus

Milking pumps

(Pump accessories)

(Suction cups)

(Inserts therefor)

(with means for hands-free operation)

WARNING

Group A61M 1/14 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/16 - A61M 1/3401 and A61M 1/3622 - A61M 1/3623

All groups listed in this Warning should be considered in order to perform a complete search.

(with a cassette forming partially or totally the flow circuit for the treating fluid, e.g. the dialysate fluid circuit or the treating gas circuit)

WARNING


All groups listed in this Warning should be considered in order to perform a complete search.

(Details related to the interface between cassette and machine)

(the interface being evacuated interfaces to enhance contact)

(the interface providing means for actuating on functional elements of the cassette, e.g. plungers)

(the cassette being adapted for heating or cooling the treating fluid, e.g. the dialysate or the treating gas)

(with sensing means or components thereof)

(with treatment-fluid pumping means or components thereof)

(Constructional details of the cassette, e.g. specific details on material or shape)
{ at least one cassette surface or portion thereof being flexible, e.g. the cassette having a rigid base portion with preformed channels and being covered with a foil}

**WARNING**

Group A61M 1/1561 is incomplete pending reclassification of documents from group A61M 1/14.

Groups A61M 1/14 and A61M 1/1561 should be considered in order to perform a complete search.

{ Details of incorporated reservoirs}

**WARNING**

Group A61M 1/1562 is incomplete pending reclassification of documents from group A61M 1/14.

Groups A61M 1/14 and A61M 1/1562 should be considered in order to perform a complete search.

{ the reservoirs acting as balance chambers}

**WARNING**

Group A61M 1/15625 is incomplete pending reclassification of documents from group A61M 1/14.

Groups A61M 1/14 and A61M 1/15625 should be considered in order to perform a complete search.

{ the filter being a dialyser}

**WARNING**

Group A61M 1/1563 is incomplete pending reclassification of documents from group A61M 1/14.

Groups A61M 1/14 and A61M 1/1563 should be considered in order to perform a complete search.

{ Means for adding solutions or substances to the treating fluid}

**WARNING**

Group A61M 1/159 is incomplete pending reclassification of documents from groups A61M 1/14, A61M 1/16 - A61M 1/362.

All groups listed in this Warning should be considered in order to perform a complete search.

{ specially adapted for peritoneal dialysis}

**WARNING**


All groups listed in this Warning should be considered in order to perform a complete search.

{ Weight of the patient}

**WARNING**


All groups listed in this Warning should be considered in order to perform a complete search.
I/1613 . . . { Profiling or modelling of patient or predicted treatment evolution or outcome }

**WARNING**


All groups listed in this Warning should be considered in order to perform a complete search.

I/1615 . . . { using measurements made at different flow rates }

**WARNING**


All groups listed in this Warning should be considered in order to perform a complete search.

I/1617 . . . { using measurements made during a temporary variation of a characteristic of the fresh dialysis fluid }

**WARNING**


All groups listed in this Warning should be considered in order to perform a complete search.

I/1619 . . . { Sampled collection of used dialysate, i.e. obviating the need for recovery of whole dialysate quantity for post-dialysis analysis }

**WARNING**


All groups listed in this Warning should be considered in order to perform a complete search.

I/1621 . . . { Constructional aspects thereof (semi-permeable membranes for separation processes characterised by their properties B01D 69/00; semi permeable membranes characterised by their material B01D 71/00) }

**WARNING**


All groups listed in this Warning should be considered in order to perform a complete search.

I/1623 . . . { Disposition or location of membranes relative to fluids }

**WARNING**


All groups listed in this Warning should be considered in order to perform a complete search.

I/1625 . . . { Dialyser of the outside perfusion type, i.e. blood flow outside hollow membrane fibres or tubes }

**WARNING**


All groups listed in this Warning should be considered in order to perform a complete search.

I/1627 . . . { Dialyser of the inside perfusion type, i.e. blood flow inside hollow membrane fibres or tubes }

**WARNING**


All groups listed in this Warning should be considered in order to perform a complete search.
WARNING


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WARNING


All groups listed in this Warning should be considered in order to perform a complete search.
A61M

1/166 . . . . {by dissolving solids}

WARNING


All groups listed in this Warning should be considered in order to perform a complete search.

1/168 . . . . {Details of containers}

WARNING


All groups listed in this Warning should be considered in order to perform a complete search.

1/167 . . . . {Flexible packaging for solid concentrates}

WARNING


All groups listed in this Warning should be considered in order to perform a complete search.

1/1672 . . . . {using membrane filters, e.g. for sterilising the dialysate}

WARNING


All groups listed in this Warning should be considered in order to perform a complete search.

1/1674 . . . . {using UV radiation sources for sterilising the dialysate}

WARNING


All groups listed in this Warning should be considered in order to perform a complete search.

1/1676 . . . . {containing proteins, e.g. albumin}

WARNING


All groups listed in this Warning should be considered in order to perform a complete search.

1/1678 . . . . {intracorporal (peritoneal dialysis}

WARNING


All groups listed in this Warning should be considered in order to perform a complete search.

1/168 . . . . {Sterilisation or cleaning before or after use}

WARNING


All groups listed in this Warning should be considered in order to perform a complete search.

1/1682 . . . . {both machine and membrane module, i.e. also the module blood side}

WARNING


All groups listed in this Warning should be considered in order to perform a complete search.

1/1684 . . . . {Checking the module characteristics before reuse}

WARNING


All groups listed in this Warning should be considered in order to perform a complete search.
WARNING

Group A61M 1/1686 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.

WARNING

Group A61M 1/1688 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.

WARNING

Group A61M 1/169 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.

WARNING

Group A61M 1/1692 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.

[by heat]

WARNING

Group A61M 1/1686 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.

[with recirculation of the sterilising fluid]

WARNING

Group A61M 1/1688 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.

[using chemical substances]

WARNING

Group A61M 1/169 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.

[Detection of blood traces in dialysate]

WARNING

Group A61M 1/1692 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.

[with recirculating dialysing liquid]

WARNING

Group A61M 1/1694 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.

[Blood oxygenators with or without heat-exchangers (intracorporal A61M 1/1678; manufacturing of membranes thereof B01D 67/00; semi-permeable membranes for separation processes characterised by their properties B01D 69/00; semi-permeable membranes characterised by their material B01D 71/00)]

WARNING

Group A61M 1/1698 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.

[and internal elements] which are moving

WARNING

Group A61M 1/26 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.

[rotating]

WARNING

Group A61M 1/262 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.

[inducing Taylor vortices]

WARNING

Group A61M 1/265 is impacted by reclassification into groups A61M 1/15 - A61M 1/159, A61M 1/1657, A61M 1/3401 and A61M 1/3622 - A61M 1/3623. All groups listed in this Warning should be considered in order to perform a complete search.
WARNING


All groups listed in this Warning should be considered in order to perform a complete search.

1/28

Peritoneal dialysis {; Other peritoneal treatment, e.g. oxygenation}

WARNING


Group A61M 1/28 is also impacted by reclassification into group A61M 1/159.

All groups listed in this Warning should be considered in order to perform a complete search.

1/281

{Instillation other than by gravity}

WARNING

Group A61M 1/281 is impacted by reclassification into groups A61M 1/28 and A61M 1/159.

Groups A61M 1/281, A61M 1/28 and A61M 1/159 should be considered in order to perform a complete search.

1/282

{Operational modes}

WARNING

Group A61M 1/282 is impacted by reclassification into groups A61M 1/28 and A61M 1/159.

Groups A61M 1/282, A61M 1/28 and A61M 1/159 should be considered in order to perform a complete search.

1/284

{Continuous flow peritoneal dialysis [CFPD]}

WARNING

Group A61M 1/284 is impacted by reclassification into groups A61M 1/28 and A61M 1/159.

Groups A61M 1/284, A61M 1/28 and A61M 1/159 should be considered in order to perform a complete search.

1/285

{Catheters therefor}

WARNING

Group A61M 1/285 is impacted by reclassification into groups A61M 1/28 and A61M 1/159.

Groups A61M 1/285, A61M 1/28 and A61M 1/159 should be considered in order to perform a complete search.

1/287

{Dialysates therefor}

WARNING

Group A61M 1/287 is impacted by reclassification into groups A61M 1/28 and A61M 1/159.

Groups A61M 1/287, A61M 1/28 and A61M 1/159 should be considered in order to perform a complete search.

1/288

{Priming (priming in extracorporeal blood circuits A61M 1/3643)}

WARNING

Group A61M 1/288 is impacted by reclassification into groups A61M 1/28 and A61M 1/159.

Groups A61M 1/288, A61M 1/28 and A61M 1/159 should be considered in order to perform a complete search.

1/30

Single needle dialysis {; Reciprocating systems, alternately withdrawing blood from and returning it to the patient, e.g. single-lumen-needle dialysis or single needle systems for hemofiltration or pheresis}

WARNING


All groups listed in this Warning should be considered in order to perform a complete search.

1/301

{Details}

WARNING


All groups listed in this Warning should be considered in order to perform a complete search.

1/302

{having a reservoir for withdrawn untreated blood}

WARNING


All groups listed in this Warning should be considered in order to perform a complete search.
A61M

1/303 . . . . [having a reservoir for treated blood to be returned]

**WARNING**

Group **A61M 1/303** is impacted by reclassification into groups

A61M 1/15 - A61M 1/159,
A61M 1/1657, A61M 1/3401 and
A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

1/304 . . . . [Treatment chamber used as reservoir, e.g. centrifuge bowl or filter with moveable membrane]

**WARNING**

Group **A61M 1/304** is impacted by reclassification into groups

A61M 1/15 - A61M 1/159,
A61M 1/1657, A61M 1/3401 and
A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

1/305 . . . . [Control of inversion point between collection and re-infusion phase]

**WARNING**

Group **A61M 1/305** is impacted by reclassification into groups

A61M 1/15 - A61M 1/159,
A61M 1/1657, A61M 1/3401 and
A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

1/306 . . . . [Pressure control, e.g. using substantially rigid closed or gas buffered or elastic reservoirs]

**WARNING**

Group **A61M 1/306** is impacted by reclassification into groups

A61M 1/15 - A61M 1/159,
A61M 1/1657, A61M 1/3401 and
A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

1/307 . . . . [Time control]

**WARNING**

Group **A61M 1/307** is impacted by reclassification into groups

A61M 1/15 - A61M 1/159,
A61M 1/1657, A61M 1/3401 and
A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

1/308 . . . . [Volume control, e.g. with open or flexible containers, by counting the number of pump revolutions, weighing]

**WARNING**

Group **A61M 1/308** is impacted by reclassification into groups

A61M 1/15 - A61M 1/159,
A61M 1/1657, A61M 1/3401 and
A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

1/309 . . . . [with trans-membrane pressure [TMP] increasing substantially continuously during arterial phase]

**WARNING**

Group **A61M 1/309** is impacted by reclassification into groups

A61M 1/15 - A61M 1/159,
A61M 1/1657, A61M 1/3401 and
A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

1/32 . . . . [Oxygenators without membranes]

**WARNING**

Group **A61M 1/32** is impacted by reclassification into groups

A61M 1/15 - A61M 1/159.
A61M 1/1657, A61M 1/3401 and
A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

1/322 . . . . [Antifoam; Defoaming]

**WARNING**

Group **A61M 1/322** is impacted by reclassification into groups

A61M 1/15 - A61M 1/159,
A61M 1/1657, A61M 1/3401 and
A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

1/325 . . . . [Surfactant coating; Improving wettability]

**WARNING**

Group **A61M 1/325** is impacted by reclassification into groups

A61M 1/15 - A61M 1/159,
A61M 1/1657, A61M 1/3401 and
A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.
Filtering material out of the blood by passing it through a membrane, i.e. hemofiltration or diafiltration

WARNING


All groups listed in this Warning should be considered in order to perform a complete search.

WARNING

Group A61M 1/3401 is incomplete pending reclassification of documents from groups A61M 1/14, A61M 1/16 - A61M 1/267, A61M 1/30 - A61M 1/362.

All groups listed in this Warning should be considered in order to perform a complete search.

WARNING


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WARNING

Group A61M 1/3462 is impacted by reclassification into groups
A61M 1/15 - A61M 1/159,
A61M 1/1657, A61M 1/3401 and
A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

WARNING

Group A61M 1/3465 is impacted by reclassification into groups
A61M 1/15 - A61M 1/159,
A61M 1/1657, A61M 1/3401 and
A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

WARNING

Group A61M 1/3468 is impacted by reclassification into groups
A61M 1/15 - A61M 1/159,
A61M 1/1657, A61M 1/3401 and
A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

WARNING

Group A61M 1/3472 is impacted by reclassification into groups
A61M 1/15 - A61M 1/159,
A61M 1/1657, A61M 1/3401 and
A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

WARNING

Group A61M 1/3475 is impacted by reclassification into groups
A61M 1/15 - A61M 1/159,
A61M 1/1657, A61M 1/3401 and
A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

WARNING

Group A61M 1/3479 is impacted by reclassification into groups
A61M 1/15 - A61M 1/159,
A61M 1/1657, A61M 1/3401 and
A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

WARNING

Group A61M 1/3482 is impacted by reclassification into groups
A61M 1/15 - A61M 1/159,
A61M 1/1657, A61M 1/3401 and
A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

WARNING

Group A61M 1/3486 is impacted by reclassification into groups
A61M 1/15 - A61M 1/159,
A61M 1/1657, A61M 1/3401 and
A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

WARNING

Group A61M 1/3489 is impacted by reclassification into groups
A61M 1/15 - A61M 1/159,
A61M 1/1657, A61M 1/3401 and
A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

WARNING

Group A61M 1/3493 is impacted by reclassification into groups
A61M 1/15 - A61M 1/159,
A61M 1/1657, A61M 1/3401 and
A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.
1/3496  . . . [Plasmapheresis; Leucopheresis; Lymphopheresis (A61M 1/3472 takes precedence)]

**WARNING**
Group A61M 1/3496 is impacted by reclassification into groups
All groups listed in this Warning should be considered in order to perform a complete search.

1/36  . . . Other treatment of blood in a by-pass of the natural circulatory system, e.g. temperature adaptation, irradiation (Extra-corporeal blood circuits)

**WARNING**
All groups listed in this Warning should be considered in order to perform a complete search.

1/3601  . . . [Extra-corporeal circuits in which the blood fluid passes more than once through the treatment unit]

**WARNING**
All groups listed in this Warning should be considered in order to perform a complete search.

1/3603  . . . [in the same direction]

**WARNING**
All groups listed in this Warning should be considered in order to perform a complete search.

1/3604  . . . [in opposite directions]

**WARNING**
All groups listed in this Warning should be considered in order to perform a complete search.

1/3606  . . . [Arrangements for blood-volume reduction of extra-corporeal circuits]

**WARNING**
All groups listed in this Warning should be considered in order to perform a complete search.

1/3607  . . . [Regulation parameters]

**WARNING**
All groups listed in this Warning should be considered in order to perform a complete search.

1/3609  . . . [Physical characteristics of the blood, e.g. haematocrit, urea]

**WARNING**
All groups listed in this Warning should be considered in order to perform a complete search.

1/361  . . . [before treatment]

**WARNING**
All groups listed in this Warning should be considered in order to perform a complete search.

1/3612  . . . [after treatment]

**WARNING**
All groups listed in this Warning should be considered in order to perform a complete search.
A61M

1/3613 . . [Reperfusion, e.g. of the coronary vessels, e.g. retroperfusion]

**WARNING**


All groups listed in this Warning should be considered in order to perform a complete search.

1/3615 . . [Cleaning blood contaminated by local chemotherapy of a body part temporarily isolated from the blood circuit]

**WARNING**


All groups listed in this Warning should be considered in order to perform a complete search.

1/3616 . . [Batch-type treatment]

**WARNING**


All groups listed in this Warning should be considered in order to perform a complete search.

1/3618 . . [Magnetic separation]

**WARNING**


All groups listed in this Warning should be considered in order to perform a complete search.

1/362 . . [changing physical properties of target cells by binding them to added particles to facilitate their subsequent separation from other cells, e.g. immunoaffinity]

**WARNING**


All groups listed in this Warning should be considered in order to perform a complete search.

1/3621 . . [Extra-corporeal blood circuits (single-needle circuits A61M 1/30)]

**WARNING**

Group A61M 1/3621 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

1/3622 . . . [with a cassette forming partially or totally the blood circuit]

**WARNING**


All groups listed in this Warning should be considered in order to perform a complete search.

1/36222 . . . . [Details related to the interface between cassette and machine]

1/362223 . . . . . [the interface being evacuated interfaces to enhance contact]

1/362227 . . . . . [the interface providing means for acting up on functional elements of the cassette, e.g. plungers]

1/362223 . . . . . [the cassette being adapted for heating or cooling the blood]

1/362224 . . . . . [with sensing means or components thereof]

1/362225 . . . . . [with blood pumping means or components thereof]

1/362226 . . . . . [Constructional details of cassettes, e.g. specific details on material or shape]

1/3622261 . . . . . [at least one cassette surface or portion thereof being flexible, e.g. the cassette having a rigid base portion with preformed channels and being covered with a foil]

1/3622262 . . . . . [Details of incorporated reservoirs]

1/362263 . . . . . [Details of incorporated filters]

1/362264 . . . . . . [the filter being a blood filter]

1/362265 . . . . . . [Details of valves]

1/362266 . . . . . [Means for adding solutions or substances to the blood]

1/3623 . . . . . . [Means for actively controlling temperature of blood]

**WARNING**

Group A61M 1/3623 is incomplete pending reclassification of documents from groups A61M 1/14, A61M 1/16 - A61M 1/267, A61M 1/30 - A61M 1/387.

All groups listed in this Warning should be considered in order to perform a complete search.
WARNING
Group A61M 1/3624 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

WARNING
Group A61M 1/3626 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

WARNING
Group A61M 1/3627 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

WARNING
Group A61M 1/3629 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

WARNING
Group A61M 1/363 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

WARNING
Group A61M 1/3632 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

WARNING
Group A61M 1/3633 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

WARNING
Group A61M 1/3635 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

WARNING
Group A61M 1/3636 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

WARNING
Group A61M 1/3638 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

WARNING
Group A61M 1/3639 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

WARNING
Group A61M 1/3641 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.
A61M

I/3643 . . . [Priming, rinsing before or after use]

**WARNING**

Group A61M 1/3643 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

I/3646 . . . . [Expelling the residual body fluid after use, e.g. back to the body]

**WARNING**

Group A61M 1/3646 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

I/3648 . . . . [through membranes, e.g. by inverted trans-membrane pressure [TMP]]

**WARNING**

Group A61M 1/3648 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

I/365 . . . . [Canulæ pertaining to extracorporal circulation]

**WARNING**

Group A61M 1/365 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

I/3644 . . . . [Mode of operation]

**WARNING**

Group A61M 1/3644 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

I/3647 . . . . [with recirculation of the priming solution]

**WARNING**

Group A61M 1/3647 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

I/3649 . . . . [using dialysate as priming or rinsing liquid]

**WARNING**

Group A61M 1/3649 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

I/3652 . . . . [using gas, e.g. air]

**WARNING**

Group A61M 1/3652 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

I/3653 . . . . [Interfaces between patient blood circulation and extra-corporal blood circuit]

**WARNING**

Group A61M 1/3653 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

I/3655 . . . . [Arterio-venous shunts or fistulae]

**WARNING**

Group A61M 1/3655 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

I/3656 . . . . [Monitoring patency or flow at connection sites; Detecting disconnections]

**WARNING**

Group A61M 1/3656 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

I/3658 . . . . [Indicating the amount of purified blood recirculating in the fistula or shunt]

**WARNING**

Group A61M 1/3658 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.
A61M

1/3661 . . . . {for haemodialysis}

WARNING
Group A61M 1/3661 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

1/3663 . . . {Flow rate transducers; Flow integrators}

WARNING
Group A61M 1/3663 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

1/3664 . . . {for preparing cardioplegia solutions}

WARNING
Group A61M 1/3664 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

1/3666 . . . {Cardiac or cardiopulmonary bypass, e.g. heart-lung machines}

WARNING
Group A61M 1/3666 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

1/3667 . . . {with assisted venous return}

WARNING
Group A61M 1/3667 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

1/3669 . . . {Electrical impedance measurement of body fluids; transducers specially adapted therefor}

WARNING
Group A61M 1/3669 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

1/367 . . . {Circuit parts not covered by the preceding subgroups of group A61M 1/3621}

WARNING
Group A61M 1/367 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

1/3672 . . . {Means preventing coagulation}

WARNING
Group A61M 1/3672 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

1/3673 . . . {Anticoagulant coating, e.g. Heparin coating}

WARNING
Group A61M 1/3673 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

1/3675 . . . {Deactivation}

WARNING
Group A61M 1/3675 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

1/3676 . . . {by interposing a liquid layer between blood and air}

WARNING
Group A61M 1/3676 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.

1/3678 . . . {Separation of cells using wave pressure; Manipulation of individual corpuscles}

WARNING
Group A61M 1/3678 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.
All groups listed in this Warning should be considered in order to perform a complete search.
A61M

1/3679 . . [by absorption (A61M 1/3675 takes precedence)]

**WARNING**

Group A61M 1/3679 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

1/3671 . . [by irradiation]

**WARNING**

Group A61M 1/3671 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

1/3683 . . [using photoactive agents]

**WARNING**

Group A61M 1/3683 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

1/3686 . . . [by removing photoactive agents after irradiation]

**WARNING**

Group A61M 1/3686 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

1/3687 . . (Chemical treatment (A61M 1/3675 takes precedence))

**WARNING**

Group A61M 1/3687 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

1/3689 . . . [by biological cells]

**WARNING**

Group A61M 1/3689 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

1/369 . . [Temperature treatment]

**WARNING**

Group A61M 1/369 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

1/3692 . . . [Washing or rinsing blood or blood constituents]

**WARNING**


All groups listed in this Warning should be considered in order to perform a complete search.

1/3693 . . . [using separation based on different densities of components, e.g. centrifuging]

**WARNING**

Group A61M 1/3693 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

1/3695 . . . [with sedimentation by gravity]

**WARNING**

Group A61M 1/3695 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

1/3696 . . . [with means for adding or withdrawing liquid substances during the centrifugation, e.g. continuous centrifugation]

**WARNING**

Group A61M 1/3696 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.
A61M

1/3698 . . . [Expressing processed fluid out from the turning rotor using another fluid compressing the treatment chamber; Variable volume rotors]

**WARNING**

Group A61M 1/3698 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

1/38 . . . Removing constituents from donor blood and [storing or] returning remainder to body [. e.g. for transfusion]

**WARNING**

Group A61M 1/38 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

1/382 . . . [Optimisation of blood component yield]

**WARNING**

Group A61M 1/382 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

1/385 . . . . . [taking into account of the patient characteristics]

**WARNING**

Group A61M 1/385 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

1/387 . . . . . [taking into account of the needs or inventory]

**WARNING**

Group A61M 1/387 is impacted by reclassification into groups A61M 1/3622 - A61M 1/3623.

All groups listed in this Warning should be considered in order to perform a complete search.

1/60 . . . [Containers for suction drainage, adapted to be used with an external suction source (containers not adapted for subjection to vacuum A61M 1/69)]

1/602 . . . [Mechanical means for preventing flexible containers from collapsing when vacuum is applied inside, e.g. stents]

1/604 . . . [Bag or liner in a rigid container, with suction applied to both]

1/61 . . . [Two- or three-bottle systems for underwater drainage, e.g. for chest cavity drainage]

1/62 . . . [Containers comprising a bag in a rigid low-pressure chamber, with suction applied to the outside surface of the bag (liners A61M 1/604)]

1/63 . . . [with means for emptying the suction container, e.g. by interrupting suction]

1/631 . . . [Emptying the suction container without interrupting suction]

1/64 . . . [Containers with integrated suction means (containers not adapted for subjection to vacuum A61M 1/69)]

1/65 . . . [the suction means being electrically actuated]

1/66 . . . [Pre-evacuated rigid containers, e.g. Redon bottles]

1/67 . . . [Containers incorporating a piston-type member to create suction, e.g. syringes (cupping glasses A61M 1/08; with a flexible member creating suction A61M 1/68)]

1/68 . . . [Containers incorporating a flexible member creating suction]

1/682 . . . [bulb-type, e.g. nasal mucus aspirators]

1/684 . . . [bellows-type]

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

1/70 . . . [Gravity drainage systems (drainage containers not being adapted for subjection to vacuum A61M 1/69)]

1/71 . . . [Suction drainage systems (containers therefor A61M 1/60; A61M 1/64; negative pressure wound therapy systems A61M 1/60)]

1/72 . . . [Cassettes forming partially or totally the fluid circuit]

1/73 . . . [comprising sensors or indicators for physical values]

1/732 . . . [Visual indicating means for vacuum pressure]

1/734 . . . [Visual indicating means for flow]

1/74 . . . [Suction control (underwater drainage A61M 1/61)]

1/741 . . . [with means for varying suction manually]

1/7411 . . . [by changing the size of a vent (in combination with changing the cross-section of the line A61M 1/7413)]

1/7413 . . . [by changing the cross-section of the line]

1/7415 . . . [by deformation of the fluid passage]

1/742 . . . [by changing the size of a vent (A61M 1/7411 takes precedence)]

1/743 . . . [by changing the cross-section of the line, e.g. flow regulating valves (A61M 1/7413 takes precedence)]

1/75 . . . [Intermittent or pulsating suction (A61M 1/63, A61M 1/72 take precedence)]

1/76 . . . [Handpieces (specially for suction-irrigation A61M 1/72; aspiration tips A61M 1/84)]

1/77 . . . [Suction-irrigation systems (aspiration tips supplying fluids A61M 1/85; specific for negative pressure wound therapy A61M 1/82; combined with tracheal tubes A61M 1/0463)]

1/772 . . . [operating alternately]

1/774 . . . [Handpieces specially adapted for providing suction as well as irrigation, either simultaneously or independently]

1/777 . . . [Determination of loss or gain of body fluids due to suction-irrigation, e.g. during surgery]
devices for applying suction to a wound to promote negative pressure wound therapy devices, i.e. in instruments A61B 17/32)

- [A61M 1/89] for draining the drained fluid, e.g. an absorber (for liposuction draining devices having means for processing cutting instruments A61B 17/32)

- [A61M 1/90] for surgical tubes (tube strippers, i.e. for clearing the contents of the surgical tubes)

- [A61M 1/91] for suction pumps (A61M 60/00, A61M 1/71, A61M 60/00 take precedence; pistons A61M 5/315)

- [A61M 1/92] for negative pressure wound therapy A61M 1/90 for surgical cutting instruments A61B 17/32)

- [A61M 1/93] for suction pumps (A61M 1/64, A61M 1/71, A61M 60/00 take precedence))

- [A61M 1/94] for combined rinsing and aspirating A61C 17/0208

- [A61M 1/95] for combined with tracheal tubes

- [A61M 1/96] for suction control thereof

- [A61M 1/97] for having pumping means on the suction site, e.g. miniature pump on dressing or dressing capable of exerting suction)

- [A61M 1/98] for having venting means on or near the dressing

- [A61M 1/99] for having a pressure sensor on or near the dressing

- [A61M 1/100] for containers specifically adapted for negative pressure wound therapy

- [A61M 1/101] for with means for detecting level of collected exudate

- [A61M 1/102] for portable on the body

- [A61M 1/103] for the dressing itself forming the collection container

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

- [A61M 29/00] for medical syringes, e.g. enemata; Irrigators (A61M 5/00 takes precedence; pistons A61M 5/315)

- [A61M 3/00] for comprising means for injection of two or more media, e.g. by mixing)

- [A61M 3/01] for Enemata; Irrigators

- [A61M 3/02] for [Cassettes therefor]

- [A61M 3/03] for [with electronic control means or interfaces]

- [A61M 3/04] for [Physical characteristics of the irrigation fluid, e.g. conductivity or turbidity]

- [A61M 3/05] for [before use]

- [A61M 3/06] for [after use]

- [A61M 3/07] for [Pressure]

- [A61M 3/08] for [Volume; Flow rate]

- [A61M 3/09] for 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

- [A61M 3/10] for [Devices operating in a closed circuit, i.e. recycling the irrigating fluid]

- [A61M 3/11] for [characterised by liquid supply means, e.g. from pressurised reservoirs]

- [A61M 3/12] for [the pressure being generated in the reservoir, e.g. by gas generating tablets]

- [A61M 3/13] for [the liquid being supplied by gravity]

- [A61M 3/14] for [Containers therefor, e.g. with heating means or with storage means for cannula]

- [A61M 3/15] for [supplied directly from the pressurised water source, e.g. with medicament supply (combined with bidets A61M 3/06)]

- [A61M 3/16] for [the liquid being pumped (by the patient's weight A61M 3/0225)]

- [A61M 3/17] for [by means of electric pumps]

- [A61M 3/18] for [manually, e.g. by squeezing a bulb]

- [A61M 3/19] for [Stands, holders or storage means for irrigation devices (containers with storage means for cannula A61M 3/0245)]

- [A61M 3/20] for [Devices for holding the cannula in position, e.g. belts (cannula details A61M 3/0279)]

- [A61M 3/21] for [Pulsating jets; Vibrating nozzles]
Syringes; Irrigators; Baths for subaquatic intestinal cleaning

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)]

5/14 Infusion devices, e.g. infusing by gravity; Blood infusion; Accessories therefor

2005/1401 [Functional features]

2005/1402 [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]

2005/1417 [Holders or handles for hanging up infusion containers]

2005/1418 [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

2005/1420 [with gas-producing electrochemical cell]

2005/14208 [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]

5/1424 [Diaphragm type]

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

NOTE

Pumps having tubular flexible working members F04B 43/08

5/14232 [Roller pumps]

NOTE

Pumps having rollers for peristaltic action F04B 43/12

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

5/1424 [Manually operated pumps]

5/14244 [adapted to be carried by the patient, e.g. portable on the body]

5/14248 [of the skin patch type]

2005/14252 [with needle insertion means]

2005/14256 [with means for preventing access to the needle after use]

2005/1426 [with means for preventing access to the needle after use]

2005/14264 [with means for compensating influence from the environment]

2005/14268 [with a reusable and a disposable component]

2005/14272 [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 pumping action]

2005/14284 [with needle insertion means]

2005/14288 [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)]

CPC - 2023.08
Syringes; Irrigators; Baths for subaquatic intestinal cleaning

Syringes; Irrigators; Baths for subaquatic intestinal cleaning  

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 1/2096, 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 5/14246 (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]  
5/2053 . . . . [Media being expelled from injector by pressurised fluid or vacuum (for infusion A61M 5/145, A61M 5/155)]  
2005/206 . . . . [With automatic needle insertion]  
5/2066 . . . . [comprising means for injection of two or more media, e.g. by mixing]  
2005/2073 . . . . [preventing premature release, e.g. by making use of a safety lock]  
2005/208 . . . . [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]  
2005/2086 . . . . [having piston damping means, e.g. axially or rotationally acting retarders]  
2005/2093 . . . . [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 1/061]}  
2005/2403 . . . . [Ampoule inserted into the ampoule holder]  
2005/2407 . . . . [from the rear]  
2005/2411 . . . . [from the front]  
2005/2414 . . . . [from the side]  
2005/2418 . . . . [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]  
2005/2433 . . . . [Ampoule fixed to ampoule holder]  
2005/2437 . . . . [by clamping means]  
2005/244 . . . . . . . . . . . . . . by flexible clip]  
2005/2444 . . . . [by thread]  
5/2448 . . . . [comprising means for injection of two or more media, e.g. by mixing]  
2005/2451 . . . . [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 5/2429 takes precedence)]  
2005/2462 . . . . [by displacing occluding plugs]  
5/2466 . . . . [by piercing without internal pressure increase (A61M 5/2429 takes precedence)]  
2005/247 . . . . [with fixed or steady piercing means, e.g. piercing under movement of ampoule]  
2005/2474 . . . . [with movable piercing means, e.g. ampoule remains fixed or steady]  
2005/2477 . . . . [comprising means to reduce play of ampoule within ampoule holder, e.g. springs]  
2005/2481 . . . . [comprising means for biasing the ampoule out of the ampoule holder]  
2005/2485 . . . . [Ampoule holder connected to rest of syringe]  
2005/2488 . . . . [via rotation, e.g. threads or bayonet]  
2005/2492 . . . . [via snap connection]  
2005/2496 . . . . [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]  
5/282 . . . . [by compression of deformable ampoule or carpule wall]  
5/283 . . . . [by telescoping of ampoules or carpules with the syringe body]  
5/284 . . . . [comprising means for injection of two or more media, e.g. by mixing]  
5/285 . . . . [with sealing means to be broken or opened]  
5/286 . . . . [upon internal pressure increase, e.g. pierced or burst (A61M 5/283 takes precedence)]  
2005/287 . . . . [by displacing occluding plugs]  
5/288 . . . . [by piercing without internal pressure increase (A61M 5/283 takes precedence)]  
5/30 . . . . Syringes for injection by jet action, without needle, e.g. for use with replaceable ampoules or carpules  
5/3007 . . . . [with specially designed jet passages at the injector's distal end]
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5/315 . . . [for injecting a dose of particles in form of powdered drug, e.g. mounted on a rupturable membrane and accelerated by a gaseous shock wave or supersonic gas flow (cell injection devices C12M 3/006)]

2005/3022 . . . [Worn on the body, e.g. as patches (pressure infusion of the skin patch type A61M 5/14248)]

5/31 . . . Details

2005/3101 . . . [Leak prevention means for proximal end of syringes, i.e. syringe end opposite to needle mounting end]

2005/3103 . . . [Leak prevention means for distal end of syringes, i.e. syringe end for mounting a needle]

2005/3104 . . . [Caps for syringes without needle]

2005/3106 . . . [Plugs for syringes without needle]

2005/3107 . . . [Caps sealing the needle bore by use of, e.g. air-hardening adhesive, elastomer or epoxy resin]

2005/311 . . . [Caps sealing the needle bore by use of, e.g. air-hardening adhesive, elastomer or epoxy resin]

2005/3112 . . . [Incorporating self-aspiring means, e.g. to provide flashback]

2005/3114 . . . [Filling or refilling]

2005/3115 . . . [Spring-assisted]

2005/3117 . . . [Means preventing contamination of the medicament compartment of a syringe]

2005/3118 . . . [(via the distal end of a syringe, i.e. syringe end for mounting a needle cannula)]

2005/312 . . . [(comprising sealing means, e.g. severable caps, to be removed prior to injection by, e.g. tearing or twisting)]

2005/3121 . . . [(via the proximal end of a syringe, i.e. syringe end opposite to needle cannula mounting end)]

2005/3123 . . . [having air entrapping or venting means, e.g. purging channels in pistons]

2005/3125 . . . [Specific display means, e.g. to indicate dose setting]

2005/3126 . . . [(Specific display means related to dosing)]

2005/3128 . . . [(Incorporating one-way valves, e.g. pressure-relief or non-return valves)]

5/3129 . . . [(Syringe barrels (A61M 5/3205 and A61M 5/50 take precedence)]

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)]

2005/3139 . . . [Finger grips not integrally formed with the syringe barrel, e.g. using adapter with finger grips]

2005/314 . . . [Flat shaped barrel forms, e.g. credit card shaped]

2005/3142 . . . [(Modular constructions, e.g. supplied in separate pieces to be assembled by end-user)]

2005/3143 . . . [(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 backflash 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 (A61M 5/5013 takes precedence)

5/31501 . . . [(Means for blocking or restricting the movement of the rod or piston)]

5/31505 . . . [(Integral with the syringe barrel, i.e. connected to the barrel so as to make up a single complete piece or unit)]

2005/31506 . . . [(formed as a single piece, e.g. moulded)]

2005/31508 . . . [(provided on the piston-rod)]

2005/3151 . . . [(by friction)]

5/31511 . . . [(Piston or piston-rod constructions, e.g. connection of piston with piston-rod (A61M 5/5066 takes precedence)]

5/31513 . . . [(Piston constructions to improve sealing or sliding)]

5/31515 . . . [(Connection of piston with piston rod)]

2005/31516 . . . [(Reducing dead-space in the syringe barrel after delivery)]

2005/31518 . . . [(Designed to reduce the overall size of an injection device, e.g. using flexible or pivotally connected chain-like rod members)]

2005/3152 . . . [(Including gearings to multiply or attenuate the piston displacing force)]

2005/31521 . . . [(Pistons with a forward extending skirt at their front end)]

2005/31523 . . . [(For reducing reflux)]

5/31525 . . . [(Dosing (burettes, pipettes B01L 3/02)]

5/31526 . . . [(By means of stepwise axial movements, e.g. ratchet mechanisms or detents)]

5/31528 . . . [(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)]

2005/3154 . . . [(Limiting maximum permissible dose)]
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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)}
5/31573 . . . . . . {Accuracy improving means}
5/31575 . . . . . . {using scaling up or down transmissions, e.g. gearbox}
5/31576 . . . . . . {Constructional features or modes of drive mechanisms for piston rods}
5/31578 . . . . . . {based on axial translation, i.e. components directly operatively associated and axially moved with plunger rod}
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 piston rod and the piston rod}
5/31585 . . . . . . {performed by axially moving actuator, e.g. an injection button}
5/31586 . . . . . . {performed by rotationally moving or pivoted 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 remover, 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 B02B 30/00; 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}
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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)}
5/3221 . . . . . . {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}
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}
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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)]

5/3289 . . . . [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 [. . . to syringe nozzle or needle hub (connecting catheter tubes to hubs (A61M 25/0014)]

5/341 . . . . [angularly adjustable or angled away from the axis of the injector]

5/342 . . . . [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]

5/36 . . . . [with means for eliminating or preventing injection or infusion of air into body (dialysis systems, blood oxygenators A61M 1/14; haemofiltration equipment A61M 1/34; automatic tube cut-off A61M 39/281)]

5/365 . . . . [Air detectors (A61M 5/1684 takes precedence; in extracorporeal blood circuits A61M 1/3626)]

5/38 . . . . [using hydrophilic or hydrophobic filters]

5/385 . . . . [using hydrophobic filters]

5/40 . . . . [using low-level float-valve to cut off media flow from reservoir (position detection of a floating member A61M 5/1685)]

5/42 . . . . [having means for desensitising skin, for protruding skin to facilitate piercing, or for locating point where body is to be pierced]

5/422 . . . . [Desensitising skin]

5/425 . . . . [Protruding skin to facilitate piercing, e.g. vacuum cylinders, vein immobilising means]

5/427 . . . . [Locating point where body is to be pierced, e.g. vein location means using ultrasonic waves, injection site templates]
Sprayers; Irrigators; Baths for subaquatic intestinal cleaning

5/44 . having means for cooling or heating the devices or media
5/445 . . [the media being heated in the reservoir, e.g. warming bloodbags]
5/46 . having means for controlling depth of insertion
5/48 . having means for varying, regulating, indicating or limiting injection pressure (A61M 5/142 takes precedence; monitoring pressure in infusion systems A61M 5/16854)
5/482 . . [Varying injection pressure, e.g. by varying speed of injection]
5/484 . . [Regulating injection pressure]
5/486 . . [Indicating injection pressure]
5/488 . . [Limiting injection pressure]
5/50 . having means for preventing re-use, or for indicating if defective, used, tampered with or unsterile (retractable needles or needle protectors with means for preventing re-use A61M 5/321)
2005/5006 . . . [Having means for destroying the syringe barrel, e.g. by cutting or piercing]
5/5013 . . . [Means for blocking the piston or the fluid passageway to prevent illegal refilling of a syringe]
5/502 . . . [for blocking the piston]
2005/5026 . . . . [allowing single filling of syringe]
2005/5033 . . . . . . [by use of an intermediate blocking member positioned between the syringe barrel and the piston rod to prevent retraction of the latter, e.g. toothed clip placed on the piston rod]
5/504 . . . . [for blocking the fluid passageway]
2005/5046 . . . . . . [automatically, e.g. plug actuated by the piston head, one-way valve]
2005/5053 . . . . . . [Valve or plug actuated by fluid flow or fluid pressure allowing initial filling of the syringe]
2005/506 . . . . . . . [Plug actuated by contact with fluid, e.g. hydrophilic expansion plug]
5/5066 . . . [Means for preventing re-use by disconnection of piston and piston-rod]
2005/5073 . . . . . . [by breaking or rupturing the connection parts]
5/508 . . . . . [Means for preventing re-use by disrupting the piston seal, e.g. by puncturing]
5/5086 . . . . . [for indicating if defective, used, tampered with or unsterile]
2005/5093 . . . . . . [including soluble mechanical parts]
5/52 . . Arm-rests

9/00 Baths for subaquatic intestinal cleaning

Sprayers; Atomisers; Insufflators

11/00 Sprayers or atomisers specially adapted for therapeutic purposes (in general B05B; aerosol containers B65D 83/14/4)
11/001 . . [Particle size control]
11/002 . . [by flow deviation causing inertial separation of transported particles]
11/003 . . [by passing the aerosol through sieves or filters]
11/005 . . [using ultrasonics (spraying or atomising liquids using ultrasonic vibrations in general B05B 17/006)]
11/006 . . [operated by applying mechanical pressure to the liquid to be sprayed or atomised]
11/007 . . [Syringe-type or piston-type sprayers or atomisers]
11/008 . . . [by squeezing, e.g. using a flexible bottle or a bulb]
11/009 . . . [by air or other gas] operated by air (or other gas)
11/010 . . . . pressure applied to the liquid (or other product) to be sprayed or atomised (sprayers for horticulture A01G, A01H; killing insects A01M; air humidifying by nozzles F24F 6/14, F24F 6/18; cooling by spraying F28B, F28C)
11/011 . . . . operated by the vapour pressure of the liquid to be sprayed or atomised (air-humidification, e.g. "room humidifiers" F24F 6/09)
11/013 . . . [using heaters]
11/015 . . . . [electrical]
11/016 . . . . [with electrodes immersed in the liquid]
11/017 . . . . [using another liquid as heat exchanger, e.g. bain-marie]
11/018 . . . . [by exothermic chemical reaction]
11/019 . . . . [with a flame, e.g. using a burner]
11/020 . . . . of the injector type
11/021 . . . . [using steam as driving gas]
11/022 . . . . [Pocket atomisers of the injector type (aerosol cans A61M 15/009)]

13/00 Insufflators for therapeutic or disinfectant purposes, i.e. devices for blowing a gas, powder or vapour into the body (hand-held units in which gas flow is produced by muscular energy at the moment of use B05S 11/062)
13/001 . . . . . . Blowing gases other than for carrying powders, e.g. for inflating, dilating or rinsing
13/002 . . . . . . with gas recirculation

Inhaling devices

15/00 Inhalators (drugs delivery in endotracheal tubes A61M 16/04)
15/001 . . . . [Details of inhalators; Constructional features thereof]
15/002 . . . . [with means for dispensing more than one drug]
15/003 . . . . [with means for agitating the medicament]
15/004 . . . . [using rotatory means]
15/005 . . . . . [rotating by airflow]
15/006 . . . . . [using rotatory means]
15/007 . . . . . [using ultrasonic means]
15/008 . . . . . [with microcapsules, e.g. several in one dose]
15/009 . . . . . [with inhalation check valves]
15/010 . . . . . [located upstream of the dispenser, i.e. not traversed by the product]
15/011 . . . . . [located downstream of the dispenser, i.e. traversed by the product]
15/012 . . . . [with exhalation check valves]
15/013 . . . . [with air flow regulating means]
15/014 . . . . [Mouthpieces therefor]
15/015 . . . . . [retractable]
15/016 . . . . . [with caps]
15/017 . . . . . [Hinged caps]
15/018 . . . . . [using prepacked dosages, one for each application, e.g. capsules to be perforated or broken-up]
15/019 . . . . . . [using capsules, e.g. to be perforated or broken-up]
15/020 . . . . . [by bursting or breaking the package, i.e. without cutting or piercing]
15/021 . . . . . [Details of the piercing or cutting means]
15/022 . . . . . [Piercing means]
15/023 . . . . . [Piercing means]
15/024 . . . . . [Hollow piercing means]
Inhaling devices

Inhaling devices inserted into the nose

Inhaling appliances shaped like cigars, cigarettes or pipes

Inhaling devices inserted into the nose
Inhaling devices

A61M

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 25/00)
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]

2016/0413 . . . . [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 16/0481,
A61M 16/0422 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 . . . . [Nasalotracheal tubes]
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)]
16/047 . . . . [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
blocks]
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]
16/0661 . . . . [with customised shape]
16/0666 . . . . [Nasal cannulas or tubing (devices for improving
normal breathing through the nose A61F 5/08;
nose filters A62B 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]
16/0825 . . . . [with ball-sockets]
16/0833 . . . . [T- or Y-type connectors, e.g. Y-piece]
16/0841 . . . . [for sampling]
16/085 . . . . . . . . . . . . . . . . [Gas sampling]
16/0858 . . . . [Pressure sampling ports]
16/0866 . . . . [Passive resistors therefor]
16/0875 . . . . [Connecting tubes]
16/0883 . . . . [Circuit type]
16/0891 . . . . [Closed circuit, e.g. for anaesthesia]
16/10 . . . Preparation of respiratory gases or vapours
16/1005 . . . . [with O₂ features or with parameter
measurement]
16/101 . . . . . . . . . . . . . . . . [using an oxygen concentrator]
16/1015 . . . . [using a gas flush valve, e.g. oxygen flush
valve]
2016/0102 . . . . [Measuring a parameter of the content of the
delivered gas]
2016/01025 . . . . [the O₂ concentration]
2016/0103 . . . . [the CO₂ concentration]
Inhaling devices

16/22 . Carbon dioxide-absorbing devices ; Other means for removing carbon dioxide (cartridges with absorbing substances for respiratory apparatus A62B 19/00)

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

19/00 Local anaesthesia (syringes therefor A61M 5/00); Hypothermia (A61M 5/42 takes precedence; cooling blood in a bypass of the arterial system A61M 1/36)

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

2021/0005 . [by the use of a particular sense, or stimulus]
2021/0011 . [in a subliminal way, i.e. below the threshold of sensation]
2021/0016 . [by the smell sense]
2021/0022 . [by the tactile sense, e.g. vibrations]
2021/0027 . [by the hearing sense]
2021/0033 . [subsonic]
2021/0038 . [ultrasonic]
2021/0044 . [by the sight sense]
2021/005 . [images, e.g. video]
2021/0055 . [with electric or electro-magnetic fields]
2021/0061 . [Simulated heartbeat pulsed or modulated]
2021/0066 . [with heating or cooling]
2021/0072 . [with application of electrical currents]
2021/0077 . [with application of chemical or pharmacological stimulus]
2021/0083 . [especially for waking up]
2021/0088 . [modulated by a simulated respiratory frequency]
21/0094 . [Isolation chambers used therewith, i.e. for isolating individuals from external stimuli (other treatment rooms or enclosures A61G 10/00)]

21/02 . for inducing sleep or relaxation, e.g. by direct nerve stimulation, hypnosis, analgesia (for massage A61H; electrotherapy A61N, e.g. applying alternating or intermittent electric currents for producing anaesthesia A61N 1/36021)

Probes; Catheters; Dilators; Drainage appliances for wounds

25/00 Catheters; Hollow probes (dilators A61M 29/00); (peritoneal catheters A61M 1/285; tracheal tubes A61M 16/04; for drainage A61M 27/00; for uterus, vagina or rectum A61M 31/00) ; for measuring or testing A61B; (materials for catheters A61L 29/00))

2025/0001 . [for pressure measurement]
2025/0002 . [with a pressure sensor at the distal end]
2025/0003 . [having an additional lumen transmitting fluid pressure to the outside for measurement]
2025/0004 . [having two or more concentrically arranged tubes for forming a concentric catheter system]
2025/0006 . [which can be secured against axial movement, e.g. by using a locking cuff]
2025/0007 . [Epidural catheters]
2025/0008 . [having visible markings on its surface, i.e. visible to the naked eye, for any purpose, e.g. insertion depth markers, rotational markers or identification of type]
25/0009 . [Making of catheters or other medical or surgical tubes]
Probes; Catheters; Dilators; Drainage appliances for wounds

A61M

25/001 . . . (Forming the tip of a catheter, e.g. bevelling process, join or taper)
25/0012 . . . [with embedded structures, e.g. coils, braids, meshes, strands or radioopaque coils]
25/0013 . . . [Weakening parts of a catheter tubing, e.g. by making cuts in the tube or reducing thickness of a layer at one point to adjust the flexibility]
25/0014 . . . [Connecting a tube to a hub]
25/0015 . . . [Making lateral openings in a catheter tube, e.g. holes, slits, ports, piercings of guidewire ports; Methods for processing the holes, e.g. smoothing the edges]
25/0017 . . . [specially adapted for long-term hygiene care, e.g. urethral or indwelling catheters to prevent infections]
2025/0018 . . . [having a plug, e.g. an inflatable plug for closing catheter lumens]
2025/0019 . . . [Cleaning catheters or the like, e.g. for reuse of the device, for avoiding replacement]
25/002 . . . [Packages specially adapted therefor (combined with means for introducing catheters, e.g. dispensers, A61M 25/0113); catheter kit packages (for surgical articles A61B 50/30)]
25/0021 . . . [characterised by the form of the tubing (A61M 25/0054 takes precedence)]
25/0023 . . . [by the form of the lumen, e.g. cross-section, variable diameter]
2025/0024 . . . [Expandable catheters or sheaths]
2025/0025 . . . [having a collapsible lumen]
25/0026 . . . [Multi-lumen catheters with stationary elements (catheter assemblies comprising a catheter in combination with a guide tube, sheath or sleeve A61M 2025/0681; catheters comprising telescoping coaxial elements A61M 25/0175)]
25/0028 . . . [characterized by features relating to at least one lumen located at the proximal part of the catheter, e.g. alterations in lumen shape or valves (catheter hubs A61M 25/0097)]
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 2025/006)]
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 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 20/04)]
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 slildability]
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]
2025/0052 . . . [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]
2025/0054 . . . [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 2025/0046)]
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]
2025/0067 . . . [characterised by the distal end, e.g. tips (A61M 25/0054, A61M 25/04 take precedence; balloon catheters A61M 25/10)]
2025/0068 . . . [Static characteristics of the catheter tip, e.g. shape, atraumatic tip, curved tip or tip structure]
2025/0069 . . . [Tip not integral with tube]
25/007 . . . [Side holes, e.g. their profiles or arrangements; Provisions to keep side holes unblocked]
Probes; Catheters; Dilators; Drainage appliances for wounds

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]

25/0076 . . . [Unidirectional valves]

25/0078 . . . . . [for fluid inflow from the body into the catheter lumen]

25/0079 . . . [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]

25/0085 . . . . [Multiple injection needles protruding axially, i.e. along the longitudinal axis of the catheter, from the distal tip]

25/0086 . . . . . [the needles having bent tips, i.e. the needle distal tips are angled in relation to the longitudinal axis of the catheter]

25/0087 . . . . [Multiple injection needles protruding laterally from the distal tip]

25/0089 . . . . [Single injection needle protruding axially, i.e. along the longitudinal axis of the catheter, from the distal tip]

25/009 . . . . [the needle having a bent tip, i.e. the needle distal tip is angled in relation to the longitudinal axis of the catheter]

25/0091 . . . . [the single injection needle being fixed]

25/0092 . . . . [Single injection needle protruding laterally from the distal tip]

25/0093 . . . . [wherein at least one needle is a microneedle]

25/0095 . . . . [being one or more needles protruding from the distal tip and which are not used for injection nor for electro-stimulation, e.g. for fixation purposes]

25/0096 . . . [being laterally outward extensions or tools, e.g. hooks or fibres]

25/0097 . . . [characterised by the hub (connectors A61M 39/10)]

25/0098 . . . [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 . . . [Aseptic 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 stilets 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]
Probes; Catheters; Dilators; Drainage appliances for wounds

2025/0233 . . . . [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]
2025/024 . . . . [having a clip or clamp system]
2025/0246 . . . . [fixed on the skin having a cover for covering the holding means]
2025/0253 . . . . [where the catheter is attached by straps, bands or the like secured by adhesives]
2025/026 . . . . [where the straps are releasably secured, e.g. by hook and loop-type fastening devices]
2025/0266 . . . . [using pads, patches, tapes or the like]
2025/0273 . . . . [having slits to place the pad around a catheter puncturing site]
2025/028 . . . . [having a mainly rigid support structure]
2025/0286 . . . . [anchored in the skin by suture or other skin penetrating devices]
2025/0293 . . . . [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. expandable ({A61M 25/10, A61M 16/0485 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]
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]
25/0656 . . . . [having a tip larger than the rest of the body]
25/0662 . . . . [Guide tubes]
25/0668 . . . . [splittable, tear apart]
25/0675 . . . . [Introducing-sheath slitters]
25/0681 . . . . [Systems with catheter and outer tubing, e.g. sheath, sleeve or guide tube]
25/0687 . . . . [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]
2025/0909 . . . . [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 17/2202; 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)]
25/1004 . . . . [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]
25/1013 . . . . [with concentrically mounted balloons, e.g. being independently inflatable]
25/1015 . . . . [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 inflating or inflation-control devices]
25/10181 . . . . [Means for forcing inflation fluid into the balloon]
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]
25/1020 . . . . [driven by a solenoid-activated pump]
25/1022 . . . . [driven by a rotary motor-activated pump]
25/1025 . . . . [Connections between catheter tubes and inflation tubes]
Probes; Catheters; Dilators; Drainage appliances for wounds

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)
25/1036 . . . (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)
2025/1056 . . . (having guide wire lumens outside the main shaft, i.e. the guide wire lumen is within or on the surface of the balloon)
2025/1059 . . . (having different inflatable sections mainly depending on the response to the inflation pressure, e.g. due to different material properties (with different compartments A61M 2025/1072))
2025/1061 . . . (having separate inflations tubes, e.g. coaxial tubes or tubes otherwise arranged apart from the catheter tube)
2025/1063 . . . (having only one lumen used for guide wire and inflation, e.g. to minimise the diameter)
2025/1065 . . . (having a balloon which is inversely attached to the shaft at the distal or proximal end)
2025/1068 . . . (having means for varying the length or diameter of the deployed balloon, this variations could be caused by excess pressure)
2025/107 . . . (having a longitudinal slit in the balloon)
2025/1072 . . . (having balloons with two or more compartments)
2025/1075 . . . (having a balloon composed of several layers, e.g. by coating or embedding)
2025/1077 . . . (having a system for expelling the air out of the balloon before inflation and use)
2025/1079 . . . (having radio-opaque markers in the region of the balloon)

2025/1081 . . . (having sheaths or the like for covering the balloon but not forming a permanent part of the balloon, e.g. retractable, dissolvable or tearable sheaths)
2025/1084 . . . (having features for increasing the shape stability, the reproducibility or for limiting expansion, e.g. containments, wrapped around fibres, yarns or strands)
2025/1086 . . . (having a special balloon surface topography, e.g. pores, protuberances, spikes or grooves)
2025/1088 . . . (having special surface characteristics depending on material properties or added substances, e.g. for reducing friction)
2025/109 . . . (having balloons for removing solid matters, e.g. by grasping or scraping plaque, thrombus or other matters that obstruct the flow)
2025/1093 . . . (having particular tip characteristics)
2025/1095 . . . ([with perfusion means for enabling blood circulation while the balloon is in an inflated state or in a deflated state, e.g. permanent bypass within catheter shaft])
2025/1097 . . . ([with perfusion means for enabling blood circulation only while the balloon is in an inflated state, e.g. temporary by-pass within balloon)]

27/00 Drainage appliance for wounds or the like (, i.e. wound drains, implanted drains) ([negative pressure wound therapy devices A61M 1/00-; indicates implements for holding wound open A61B 17/02 (; middle ear drainage A61F 1/11/202)])
27/002 . . . (Implant devices for drainage of body fluids from one part of the body to another (intraocular A61F 9/0071; middle ear A61F 1/11/202))
2027/004 . . . (with at least a part of the circuit outside the body)
27/006 . . . (Cerebrospinal drainage; Accessories thereto, e.g. valves)
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 9/0008])
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 2/00; intra-uterine contraceptive devices A61F 6/14; tampons for introducing into the vagina A61F 13/20, A61L 15/000: 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 9/90))
31/005 . . . ([for contrast media])
31/007 . . . ([Injectors for solid bodies, e.g. suppositories])
Devices for applying media, e.g. remedies, on the human body (devices for handling toiletry or cosmetic substances A45D; absorbent pads, e.g. swabs, A61F 13/15)

- (Portable hand-held applicators having means for dispensing or spreading integral media (hand-held massage devices with liquid delivery A61H 7/003))
- [using sponges, foams, absorbent pads or swabs as spreading means]
- [wearable devices, e.g. garments, glasses or masks]
- [Non-portable devices, e.g. spraying booths]
- [specially adapted for the application of sunscreen, tanning or self-tanning lotions]
- [Gas therapy for therapeutic treatment of the skin]

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))

- [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]
- [by using microneedles]
- (Drug applicators using microneedles A61F 5/445; pressure within the body A61B 5/03)
- (having a lumen)
- (having a channel at the side surface)
- (Solid microneedles)
- [Methods for producing microneedles]
- [Methods for using microneedles]
- (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))
- (Tattooing apparatus (apparatus for marking animals A01K 11/00; vaccine applicators having needles or other puncturing means A61B 17/205))
- (Tattooing apparatus with incorporated liquid feeding device)
- (using ultrasonic, sonic or infrasonic vibrations, e.g. phonophoresis)

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

- (Assemblies therefor designed for particular applications, e.g. contrast or saline injection, suction or irrigation)
- [designed for flushing a line, e.g. by a by-pass]
- [for mixing several substances from different containers]
- [characterised by a septum having particular features, e.g. having venting channels or being made from antimicrobial or self-lubricating elastomer]
- [Radiopaque indica]
- [Multiple layers]

Means for alignment of the septum, e.g. septum rim with alignment holes)

Means for increasing tightness of the septum, e.g. compression rings, special materials, special constructions)

Means for facilitating introduction of a needle in the septum, e.g. guides, special construction of septum)

Means for limiting access to the septum, e.g. shields, grids)

Access sites

- [for taking samples]
- [for injecting media]
- [Subcutaneous access sites for injecting or removing fluids (transcutaneous access sites A61M 39/0247; implantable infusion devices A61M 5/14276)]

- [with multiple chambers in a single site]
- [some or all chambers sharing a single septum]
- [at least some chambers being stacked separated by another septum]
- [being accessible from all sides, e.g. due to a cylindrically-shaped septum]
- [having means for anchoring the subcutaneous access site]
- [having means for protecting the interior of the access site from damage due to the insertion of a needle]
- [having means for facilitating assembling, e.g. snap-fit housing or modular design]
- [having means for facilitating the insertion into the body]
- [having an additional inlet, e.g. for a guidewire or a catheter tube]
- [having means for locating the implanted device to insure proper injection, e.g. radio-emitter, protuberances, radio-opaque markers]
- [having means for filtering]
- [having means for detecting an inserted needle]
- [Semi-permanent or permanent transcutaneous or percutaneous access sites to the inside of the body (peritoneal dialysis catheters A61M 1/285; tracheostomy devices A61M 16/0465; measuring pressure within the body A61B 503; colostomy devices A61F 5/445; gastrotomy feeding tubes A61J 15/0015; means for fixing a feeding tube outside of the body A61J 15/0053)]

- [through bones or teeth, e.g. through the skull]
- [for access to the lungs]
- [for access to the gastric or digestive system]
- [for vascular access, e.g. blood stream access]
- [Means for anchoring port to the body, or ports having a special shape or being made of a specific material to allow easy implantation/ integration in the body]

- [with multiple inlets or multiple outlets]
- [comprising sensors or electrical contacts]
- [having a particular valve, seal or septum (septum A61M 2039/036)]

- [for introducing catheters into the body]
- [for introducing or removing fluids into or out of the body]
A61M

2039/0279 . . . [for introducing medical instruments into the body, e.g. endoscope, surgical tools]
2039/0282 . . . [with implanted tubes connected to the port]
2039/0285 . . . [with sterilisation means, e.g. antibacterial coatings, disinfecting pads, UV radiation LEDs or heating means in the port]
2039/0288 . . . [protectors, caps or covers therefor]
2039/0291 . . . [method or device for implanting it in the body]
2039/0294 . . . [having a specific shape matching the shape of a tool to be inserted therein, e.g. for easy introduction, for sealing purposes, guide]
2039/0297 . . . [at least part of it being inflatable, e.g. for anchoring, sealing or removing]
39/04 . . . having pierceable self-sealing members
2039/042 . . . [Shrouds encircling the access needle preventing accidental needle-stick]
39/045 . . . [pre-slit to be pierced by blunt instrument]
2039/047 . . . [the self-sealing member being a viscous fluid]
39/06 . . . Haemostasis valves, i.e. gaskets sealing around a needle, catheter or the like, closing on removal thereof
39/0606 . . . [without means for adjusting the seal opening or pressure (A61M 39/0693 takes precedence)]
39/0613 . . . [with means for adjusting the seal opening or pressure (A61M 39/0693 takes precedence)]
2039/062 . . . [used with a catheter]
2039/0626 . . . [used with other surgical instruments, e.g. endoscope, trocar]
39/0633 . . . [the seal being a passive seal made of a resilient material with or without an opening]
39/064 . . . [Slit-valve]
39/0646 . . . [Duckbill-valve]
39/0653 . . . [Perforated disc]
39/066 . . . [Septum-like element]
39/0666 . . . [Flap-valve]
39/0673 . . . [comprising means actively pressing on the device passing through the seal, e.g. inflatable seals, diaphragms, clamps]
39/068 . . . [having a seal being made of or coated with a special material]
39/0686 . . . [comprising more than one seal]
39/0693 . . . [including means for seal penetration]
39/08 . . . Tubular; 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)]
2039/087 . . . [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 5/34; connecting catheter tubes to hubs A61M 25/0014))
2039/1005 . . . [Detection of disconnection]
39/1011 . . . [Locking means for securing connection; Additional tamper safeties (A61M 39/16 takes precedence)]
2039/1016 . . . [Unlocking means providing a secure or comfortable disconnection]
2039/1022 . . . [additional providing electrical connection]
2039/1027 . . . [Quick-acting type connectors]
2039/1033 . . . [Swivel nut connectors, e.g. threaded connectors, bayonet-connectors]
2039/1038 . . . [Union screw connectors, e.g. hollow screw or sleeve having external threads]
2039/1044 . . . [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)]
2039/1061 . . . [Break-apart tubing connectors or couplings]
2039/1066 . . . [having protection means, e.g. sliding sleeve to protect connector itself, shrouds to protect a needle present in the connector, protective housing, isolating sheath]
2039/1072 . . . [with a septum present in the connector]
2039/1077 . . . [Adapters, e.g. couplings adapting a connector to one or several other connectors]
2039/1083 . . . [having a plurality of female connectors, e.g. Luer connectors]
2039/1088 . . . [having a plurality of male connectors, e.g. Luer connectors]
2039/1094 . . . [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 ((needle sets A61M 5/162; having valves closing automatically on disconnection of line A61M 30/20))
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 ((A61M 39/143 takes precedence; methods or apparatus for disinfection or sterilisation A61L 2/00))
39/162 . . . [with antiseptic agent incorporated within the connector]
39/165 . . . [Shrouds or protectors for aseptically enclosing the connector]
2039/167 . . . [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
2039/205 . . . [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 5/440)]
39/221 . . . [Frangible or pierceable closures within tubing (A61M 39/14 takes precedence; frangible closures for containers A61L 1/14)]
2039/222 . . . [frangible within tubing or bags]
39/223 . . . [Multiway valves]
2039/224 . . . [of the slide-valve type]
39/225 . . . [Flush valves, i.e. bypass valves for flushing line]
A61M

2039/226 ... [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 constrictable 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]
39/246 ... [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]
39/26 ... Valves closing automatically on disconnecting the line and opening on reconnection thereof ([check valves A61M 39/24])
39/261 ... [where the fluid space within the valve is increasing upon disconnection]
39/262 ... [having a fluid space within the valve remaining the same upon connection and disconnection, i.e. neutral-drawback valve]
39/263 ... [where the fluid space within the valve is decreasing upon disconnection]
39/265 ... [electrically operated, e.g. a male connector closing an electrical circuit upon connection to a female valve portion]
39/266 ... [where the valve comprises venting channels, e.g. to insure better connection, to help decreasing the fluid space upon disconnection, or to help the fluid space to remain the same during disconnection]
39/267 ... [having a sealing sleeve around a tubular or solid stem portion of the connector]
39/268 ... [wherein the stem portion is moved for opening and closing the valve, e.g. by translation, rotation]
39/28 ... Clamping means for squeezing flexible tubes, e.g. roller clamps ([tube strippers A61M 1/83])
39/281 ... [Automatic tube cut-off devices, e.g. squeezing tube on detection of air]
39/282 ... [including severing of the tube]
39/283 ... [Screw clamps]
39/284 ... [Lever clamps]
39/285 ... [Cam clamps, e.g. roller clamps with eccentric axis]
39/286 ... [Wedge clamps, e.g. roller clamps with inclined guides]
39/287 ... [Wedge formed by a slot having varying width, e.g. slide clamps]
39/288 ... [by bending or twisting the tube]

60/00 Blood pumps; Devices for mechanical circulatory actuation; Balloon pumps for circulatory assistance (heart stimulation A61H 31/00; heart stimulators for electrotherapy A61N 1/362)

NOTE

In this main group, it is obligatory to classify all aspects of location, type, medical purpose, driving details, control details, and constructional details other than driving details that are represented in groups A61M 60/10, A61M 60/20, A61M 60/30, A61M 60/40, A61M 60/50 and A61M 60/80. This obligation extends to information that would normally only be considered as additional information.

60/10 ... Location thereof with respect to the patient's body
60/104 ... Extracorporeal pumps, i.e. the blood being pumped outside the patient's body
60/109 ... incorporated within extracorporeal blood circuits or systems
60/113 ... in other functional devices, e.g. dialysers or heart-lung machines
60/117 ... for assisting the heart, e.g. transcutaneous or external ventricular assist devices
60/122 ... Implantable pumps or pumping devices, i.e. the blood being pumped inside the patient's body
60/126 ... implantable via, into, inside, in line, branching on, or around a blood vessel
60/13 ... by means of a catheter allowing explantation, e.g. catheter pumps temporarily introduced via the vascular system
60/135 ... inside a blood vessel, e.g. using grafting
60/139 ... inside the aorta, e.g. intra-aortic balloon pumps
60/143 ... inside the coronary sinus, e.g. for pressure-controlled intermittent coronary sinus occlusion
60/148 ... in line with a blood vessel using resection or like techniques, e.g. permanent endovascular heart assist devices
60/152 ... branching on and drawing blood from a blood vessel
60/157 ... mechanically acting upon the inside of the patient's blood vessel structure, e.g. contractile structures placed inside a vessel
60/161 ... mechanically acting upon the outside of the patient's blood vessel structure, e.g. compressive structures placed around a vessel
60/165 ... implantable in, on, or around the heart
60/17 ... inside a ventricle, e.g. intraventricular balloon pumps
60/174 ... discharging the blood to the ventricle or arterial system via a cannula internal to the ventricle or arterial system
60/178 ... drawing blood from a ventricle and returning the blood to the arterial system via a cannula external to the ventricle, e.g. left or right ventricular assist devices
60/183 . . . . drawing blood from both ventricles, e.g. bi-ventricular assist devices [BiVAD]
60/187 . . . . mechanically acting upon the inside of the patient's native heart, e.g. contractile structures placed inside the heart
60/191 . . . . mechanically acting upon the outside of the patient's native heart, e.g. compressive structures placed around the heart
60/196 . . . . replacing the entire heart, e.g. total artificial hearts [TAH]
60/20 . . . . Type thereof
60/205 . . . . Non-positive displacement blood pumps
60/211 . . . . using a jet, venturi or entrainment effect for pumping the blood
60/216 . . . . including a rotating member acting on the blood, e.g. impeller
60/221 . . . . the blood flow through the rotating member having both radial and axial components, e.g. mixed flow pumps
60/226 . . . . the blood flow through the rotating member having mainly radial components
60/232 . . . . Centrifugal pumps
60/237 . . . . the blood flow through the rotating member having mainly axial components, e.g. axial flow pumps
60/242 . . . . with the outlet substantially perpendicular to the axis of rotation
60/247 . . . . Positive displacement blood pumps
60/253 . . . . including a displacement member directly acting on the blood
60/258 . . . . Piston pumps
60/263 . . . . having a spherical housing, e.g. cardan pumps
60/268 . . . . the displacement member being flexible, e.g. membranes, diaphragms or bladders
60/274 . . . . the inlet and outlet being the same, e.g. para-aortic counter-pulsation blood pumps
60/279 . . . . Peristaltic pumps, e.g. roller pumps
60/284 . . . . Linear peristaltic pumps
60/289 . . . . Devices for mechanical circulatory actuation assisting the residual heart function by means mechanically acting upon the patient's native heart or blood vessel structure, e.g. direct cardiac compression [DCC] devices
60/295 . . . . Balloon pumps for circulatory assistance
60/30 . . . . Medical purposes thereof other than the enhancement of the cardiac output
60/31 . . . . for enhancement of in vivo organ perfusion, e.g. retroperfusion
60/32 . . . . of heart muscle tissues, e.g. using coronary sinus occlusion
60/33 . . . . of kidneys
60/34 . . . . for enhancement of circulation to the extremities, e.g. the feet
60/35 . . . . for specific surgeries, e.g. for Fontan procedure
60/36 . . . . for specific blood treatment; for specific therapy
60/37 . . . . Haemodialysis, haemofiltration or diafiltration
60/38 . . . . Blood oxygenation
60/39 . . . . for blood transfusion
60/40 . . . . Details relating to driving
60/403 . . . . for non-positive displacement blood pumps
60/405 . . . . the force acting on the blood contacting member being hydraulic or pneumatic
60/408 . . . . the force acting on the blood contacting member being mechanical, e.g. transmitted by a shaft or cable
60/411 . . . . generated by an electromotor
60/414 . . . . transmitted by a rotating motor, e.g. for blood pumps mounted on a catheter
60/416 . . . . transmitted directly by the motor rotor drive shaft
60/419 . . . . the force acting on the blood contacting member being permanent magnetic, e.g. from a rotating magnetic coupling between driving and driven magnets
60/422 . . . . the force acting on the blood contacting member being electromagnetic, e.g. using canned motor pumps
60/424 . . . . for positive displacement blood pumps
60/427 . . . . the force acting on the blood contacting member being hydraulic or pneumatic
60/43 . . . . using vacuum at the blood pump, e.g. to accelerate filling
60/432 . . . . with diastole or systole switching by stopping or reversing the blood pump operating at a much higher cyclical speed than the heart beat
60/435 . . . . with diastole or systole switching by valve means located between the blood pump and the hydraulic or pneumatic energy source
60/438 . . . . the force acting on the blood contacting member being mechanical
60/441 . . . . generated by an electromotor
60/443 . . . . with means converting the rotation into a translational movement of the displacement member
60/446 . . . . the axis of both movements being parallel, e.g. roller screw actuators or cylindrical cam transmissions
60/449 . . . . generated by a solenoid
60/451 . . . . generated by electro-thermomechanical actuators, e.g. shape memory alloy actuators
60/454 . . . . generated by electro-active actuators, e.g. using electro-active polymers or piezoelectric elements
60/457 . . . . the force acting on the blood contacting member being magnetic
60/459 . . . . generated by permanent magnets
60/462 . . . . Electromagnetic force
60/465 . . . . for devices for mechanical circulatory actuation
60/468 . . . . the force acting on the actuation means being hydraulic or pneumatic
60/47 . . . . the force acting on the actuation means being mechanical, e.g. mechanically driven members clamping a blood vessel
60/473 . . . . generated by an electromotor
60/476 . . . . with means converting the rotation into a translational movement of the displacement member
60/478 . . . . the axis of both movements being parallel, e.g. roller screw actuators or cylindrical cam transmissions
60/481 . . . . generated by a solenoid
60/484 . . . . generated by electro-thermomechanical actuators, e.g. shape memory alloy actuators
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60/846 . . . . generated by electro-active actuators, e.g. using electro-active polymers or piezoelectric elements
60/849 . . . . the force acting on the actuating means being magnetic
60/492 . . . . generated by permanent magnets
60/495 . . . . Electromagnetic force
60/497 . . . . for balloon pumps for circulatory assistance
60/50 . . . . Details relating to control
60/508 . . . . Electronic control means, e.g. for feedback regulation
60/515 . . . . Regulation using real-time patient data
60/523 . . . . using blood flow data, e.g. from blood flow transducers
60/531 . . . . using blood pressure data, e.g. from blood pressure sensors
60/538 . . . . Regulation using real-time blood pump operational parameter data, e.g. motor current
60/546 . . . . of blood flow, e.g. by adapting rotor speed
60/554 . . . . of blood pressure
60/562 . . . . for making blood flow pulsatile in blood pumps that do not intrinsically create pulsatile flow
60/569 . . . . synchronous with the native heart beat
60/577 . . . . High-frequency driving
60/585 . . . . User interfaces
60/592 . . . . Communication of patient or blood pump data to distant operators for treatment purposes
60/80 . . . . Constructional details other than related to driving
60/802 . . . . of non-positive displacement blood pumps
60/804 . . . . Impellers
60/806 . . . . Vanes or blades
60/808 . . . . specially adapted for deformable impellers, e.g. expandable impellers
60/81 . . . . Pump housings
60/812 . . . . Vanes or blades, e.g. static flow guides
60/814 . . . . Volutes
60/816 . . . . Sensors arranged on or in the housing, e.g. ultrasound flow sensors
60/818 . . . . Bearings
60/82 . . . . Magnetic bearings
60/822 . . . . specially adapted for being actively controlled
60/824 . . . . Hydrodynamic or fluid film bearings
60/825 . . . . Contact bearings, e.g. ball-and-cup or pivot bearings
60/827 . . . . Sealings between moving parts
60/829 . . . . having a purge fluid supply
60/831 . . . . using filtered blood as purge fluid
60/833 . . . . Occluders for preventing backflow
60/835 . . . . of positive displacement blood pumps
60/837 . . . . Aspects of flexible displacement members, e.g. shapes or materials
60/839 . . . . of devices for mechanical circulatory actuation
60/841 . . . . of balloon pumps for circulatory assistance
60/843 . . . . Balloon aspects, e.g. shapes or materials
60/845 . . . . of extracorporeal blood pumps
60/847 . . . . arranged in a cassette
60/849 . . . . Disposable parts
60/851 . . . . Valves
60/853 . . . . the valve being formed by a flexible tube element which is clamped for restricting the flow
60/855 . . . . of implantable pumps or pumping devices
60/857 . . . . Implantable blood tubes
60/859 . . . . Connections therefor
60/861 . . . . Connections or anchorings for connecting or anchoring pumps or pumping devices to parts of the patient's body
60/863 . . . . Apex rings
60/865 . . . . Devices for guiding or inserting pumps or pumping devices into the patient's body
60/867 . . . . using position detection during deployment, e.g. for blood pumps mounted on and driven through a catheter
60/869 . . . . Compliance chambers containing a gas or liquid other than blood to compensate volume variations of a blood chamber
60/871 . . . . Energy supply devices; Converters therefor
60/873 . . . . specially adapted for wireless or transcutaneous energy transfer [TET], e.g. inductive charging
60/875 . . . . specially adapted for optimising alignment of external and implantable coils
60/876 . . . . Implantable batteries
60/878 . . . . Electrical connections within the patient's body
60/88 . . . . Percutaneous cables
60/882 . . . . Devices powered by the patient, e.g. skeletal muscle powered devices
60/884 . . . . being associated to additional implantable blood treating devices
60/886 . . . . Blood oxygenators
60/888 . . . . Blood filters
60/89 . . . . Valves
60/892 . . . . Active valves, i.e. actuated by an external force
60/894 . . . . Passive valves, i.e. valves actuated by the blood
60/896 . . . . having flexible or resilient parts, e.g. flap valves
60/898 . . . . the blood pump being a membrane blood pump and the membrane acting as inlet valve
60/90 . . . . Details not provided for in other groups of this subclass

99/00 Subject matter not provided for in other groups of this subclass

2202/00 Special media to be introduced, removed or treated (applying radioactive material A61N 5/1028)

NOTE

The classification symbols A61M 2202/0007 - A61M 2202/0097 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

2202/0007 . . . introduced into the body
2202/0014 . . . removed from the body
2202/0021 . . . removed and reintroduced into the body, e.g. after treatment
2202/0028 . . . fluid entering a filter
2202/0035 . . . fluid leaving the cross-flow filter without having passed through the filtering element
Gases

Oxygen

Ozone

Carbon oxides, e.g. Carbon dioxide

Carbon monoxide

Anaesthetics; Analgesics

Helium

Krypton (K)

Nitrogen (N)

Nitric oxide [NO]

Nitrous oxide (N$_2$O)

Xenon

Gases in liquid phase, e.g. cryogenic liquids

Liquids

Ascutics

Gall; Bile

Lymph

Lymphocytes

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

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

General characteristics of the apparatus

characterised by a particular materials

Materials having antiseptic or antimicrobial properties, e.g. silver compounds, rubber with sterilising agent

Ceramics

Materials providing elastic properties, e.g. for facilitating deformation and avoid breaking

Materials for reducing friction

Materials having sensing or indicating function, e.g. indicating a pressure increase

Conductive materials, e.g. antistatic coatings for spark prevention

the material being a coating or protective layer

Micromachined materials, e.g. made from silicon wafers, microelectromechanical systems [MEMS] or comprising nanotechnology

Materials providing resistance against corrosion

in acidic environments or acidic fluids

in alcalic environments or alcalic fluids

Shape memory materials

Electro-active or magneto-active materials

Chemo-active materials

Electro-active polymers [EAP]

Electro-rheological or magneto-rheological materials

Piezoelectric materials

implanted

combined with other kinds of therapy
Controlling, regulating or measuring with radio-opaque indicia prevention insensitive to tilting or inclination, e.g. spill-over blisters
Constructional features of carpules, syringes or with alarm Detection of leaks
Connector or a container in an apparatus Detection of the presence or absence of a tube, a with means for preventing cross-contamination when used for multiple patients
with interchangeable cassettes forming partially or totally the fluid circuit interface between cassette and base
using evacuated interfaces to enhance contact
with incorporated reservoirs
with incorporated filters
with incorporated membrane filters
with provisions for heating or cooling
with incorporated valves
with means for the detection of operative contact with patient, e.g. lip sensor
Detection of the presence or absence of a tube, a connector or a container in an apparatus
Detection of leaks
with back-up system in case of failure
with redundant control systems
with alarm
the sound being generated pneumatically
the sound being acoustically amplified, e.g. by resonance
Constructional features of carpules, syringes or blisters
Avoiding coring, e.g. preventing formation of particles during puncture
by the needle tip shape
by the seal material
insensitive to tilting or inclination, e.g. spill-over prevention
Tilt detection, e.g. for warning or shut-off
preventing use
preventing reuse, e.g. of disposables
preventing unwanted use
with radio-opaque indicia
Controlling, regulating or measuring using a biosensor
Optical measuring means
used as turbidity change detectors, e.g. for priming-blood or plasma-hemoglobin-interface detection
used specific wavelengths
Electromagnetic, inductive or dielectric measuring means
Force measuring means
PH measuring means
Measuring
Pressure; Flow
Measuring or controlling the flow rate
Controlling, regulating pressure or flow by means of a valve by-passing a pump
stabilising pressure or flow to avoid excessive variation
Measuring or controlling pressure at the body treatment site
Pressure measurement using a water column
Controlling upstream pump pressure
Controlling downstream pump pressure
Measuring barometric pressure, e.g. for compensation
with minimised length of fluid lines; Taking into account the elastic expansion of fluid lines to increase accuracy
Rotational speed
Temperature
Temperature compensation
Acoustical, e.g. ultrasonic, measuring means
Masses, volumes, levels of fluids in reservoirs, flow rates
Upper level detectors
Low level detectors
Continuous level detection (A61M 2205/3393 takes precedence)
by weighing the reservoir
Reservoirs being alternately filled and emptied for measuring flow rate or delivered volume
Communication
with implanted devices, e.g. external control
using magnetic means
using telemetric means
using mechanical means, e.g. subcutaneous pushbuttons
using electrical conduction through the body of the patient
Range
remote, e.g. between patient's home and doctor's office
local, e.g. within room or hospital
sublocal, e.g. between console and disposable
with non implanted data transmission devices, e.g. using external transmitter or receiver
using modem, internet or bluetooth
using telemetric means, e.g. radio or optical transmission
related to heating or cooling
cooled
by body heat
by gas flow
by controlled mixing of fluids at different temperatures
thermally insulated
by chemical reaction
by heat accumulators, e.g. ice, sand
by Joule effect, i.e. electric resistance
by liquid heat exchangers
using heat loss of a motor
thermo-electric, e.g. Peltier effect, thermocouples, semi-conductors
A61M

- by electromagnetic radiation, e.g. IR waves
- microwaves
- by mechanical waves, e.g. ultrasonic
- reducing noise
- making noise when used correctly
- making noise when used incorrectly
- with microprocessors or computers
- User interfaces, e.g. screens or keyboards
- Touch-screens; Virtual keyboard or keyboards; Virtual buttons; Soft keys; Mouse touches
- Head Mounted Displays [HMD]
- with memories providing a history of measured varying parameters of apparatus or patient
- Means for facilitating use, e.g. by people with impaired vision
- by audible feedback
- by tactile feedback
- by visual feedback
- having a color code
- having magnification means, e.g. magnifying glasses
- Ergonomic details therefor, e.g. specific ergonomics for left or right-handed users
- Lighting arrangements
- by olfactory feedback, i.e. smell
- Aesthetic features, e.g. distraction means to prevent fears of child patients
- with identification means
- for matching patient with his treatment, e.g. to improve transfusion security
- providing set-up signals for the apparatus configuration
- Electric-conductive bridges closing detection circuits, with or without identifying elements, e.g. resistances, zener-diodes
- characterised by physical shape, e.g. array of activating switches
- having complementary physical shapes for indexing or registration purposes
- Magnetic identification systems
- Optical identification systems
- Bar codes
- Colour codes
- Biometric patient identification means
- with testing or calibration facilities
- automatically during use
- Testing of filters for leaks (blood in dialysate)
- Testing of filters for clogging
- with filters
- for virus
- bacterial
- liquophobic, hydrophilic
- allowing gas passage, but preventing liquid passage, e.g. liquophobic, hydrophobic, water-repellent membranes
- for solid matter, e.g. microaggregates
- with means for unclogging or regenerating filters
- with means preventing clogging of filters
- with means for preventing contamination of the environment when replaced
- with means for switching over to a fresh filter on clogging or saturation
- for removing preservatives, e.g. heavy metal compositions
- voice-operated command
- Internal energy supply devices
- battery-operated
- with means or measures taken for minimising energy consumption
- Gas operated
- using incorporated gas cartridges for the driving gas
- using electrochemical gas generating device for the driving gas
- Charging means
- by induction
- using mechanical generation of electricity, e.g. hand cranked generators
- being integrated in the case or housing of the apparatus
- connectable to external power source, e.g. connecting to automobile battery through the cigarette lighter
- Solar
- for treating several patients simultaneously

Characteristics of a physical parameter; associated device therefor

- Flow characteristics
- Laminar flow
- the flow being spirally in a plane, e.g. against a plane side of a membrane filter element
- Static flow deviators in tubes disturbing laminar flow in tubes, e.g. archimedes screws
- Rotating swirling helical flow, e.g. by tangential inflows
- Coaxial flows, e.g. one flow within another
- having means for promoting or enhancing the flow, actively or passively
- eliminating pulsatile flows, e.g. by the provision of a dampering chamber

Methods of manufacture, assembly or production

- Device therefor

Ancillary equipment

- Remote controllers for specific apparatus
- Equipment for testing the apparatus
- Tools for specific apparatus
- for filling, e.g. for filling reservoirs
- Packaging for specific medical equipment
- Supports for equipment
- Mounting brackets, arm supports for equipment
- Supporting bases, stands for equipment
- Docking stations
- on the body
- Equipment for cleaning

Anatomical parts of the body

- used as an access side to the body
- Bones
A61M

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 take 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
2230/004 . 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 dioxide 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