

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](#))}

Definition statement

This place covers:

Devices or processes specially adapted to be used to insert or place media into human bodies (e.g., pumps, syringes, atomisers, insufflators, inhalers) and that do so either

- by an artificial method (i.e., a human created or contrived method that cannot occur naturally such as hypodermic-syringe injections) or
- by enhancing a naturally occurring method (e.g., inhalers used in conjunction with normal breathing) other than oral..

Devices or processes specially adapted to be used to place media upon human bodies (e.g., percutaneous devices, radioactive dressings) and that do so either

- by an artificial method or
- by enhancing a naturally occurring method (e.g., standard absorption, rubbing substances onto skin).

Devices or processes which are specially adapted to be used to direct, lead, convey, or carry media up to, away from, or within human bodies (e.g., tubes for carrying oxygen, medical pumps, artificial hearts, mechanical blood circulatory assistors, blood oxygenation devices, devices for artificial respiration by treatment with gas or air) and that do so either

- by an artificial method (e.g., dialysis systems) or
- by enhancing a naturally occurring method (e.g., standard circulation of blood, standard discharging of bodily waste).

Devices or processes specially adapted to be used to remove, eject, or expel media from human bodies (e.g., suction type breast relievers, discharge draining devices for wounds) and that do so

- by an artificial method (e.g., subaquatic intestinal cleaning systems) or
- by enhancing a naturally occurring method (e.g., babies sucking on breast, boils natural discharging).

Devices or processes specially adapted to cause or provoke a change in the state of consciousness of humans (e.g., induce sleep, fully awaken) and that do so in a manner other than one which commonly occurs (e.g., falling asleep on a good mattress, physical exhaustion).

Devices or processes specially adapted to increase or decrease the mental activity of humans while awake (e.g., relax, stimulate) and that do so in a manner other than that which commonly occurs (e.g., creating boredom).

Accessories specially adapted for use with at least one of the above devices and that contribute to the effectiveness or safety of the device or its use.

Specially adapted components having structural features limiting them to use with a device of one of the types specified above.

Relationships with other classification places

When used with animals

If a device or process is usable for both humans and animals for the same purpose and in the same manner, and it is otherwise proper for this subclass, classification is made only in subclass [A61M](#). Similar devices or processes to those covered by subclass [A61M](#) that are usable exclusively for animals, or are used in animals in a different manner or for different purposes than for humans, are classified in subclass [A61D](#).

When used with living or dead human bodies

Patent documents for general-purpose medical devices or processes that are otherwise proper for subclass [A61M](#) are classified in subclass [A61M](#) when they either disclose only being used on living human bodies or broadly disclose being used on humans. Patent documents for general -purpose medical devices or processes that are otherwise proper for subclass [A61M](#) and fully identified as being used on both living and dead human bodies are classified in subclass [A61M](#) and subclass [A01N](#) or [A61B](#) Patent documents for similar devices or processes to those covered by subclass [A61M](#) that are specially adapted for use exclusively on dead humans are classified only in subclass [A01N](#) or [A61B](#).

Implantable prostheses or artificial organ replacements

With regard to human organs and their parts, the exact distinction between the artificial devices implantable into human bodies that are proper for subclass [A61F](#) and those proper for subclass [A61M](#) is somewhat imprecise. Therefore, for analogous situations that are not specifically covered by existing groups of these subclasses, the following listings are intended to provide guidance. Subclass [A61F](#) provides for the following replacements or substitutes for internal body organs or their parts: artificial hollow or tubular parts of organs (e.g., bladders, tracheae, bronchi, hearts valves and blood vessels, bile ducts), structural supporting or maintaining devices for such parts or their natural equivalents (e.g., stents), artificial eyes, and artificial ears. Subclass [A61M](#) provides for the following replacements or substitutes for internal body organs or their parts: artificial hearts, artificial livers, artificial ventilators, artificial pancreas, and artificial kidneys.

References

Limiting references

This place does not cover:

Applications or methods that use specific materials, compositions, or single compounds for the preservation of human bodies or for the preservation of living parts of human bodies	A01N 1/00
Devices or methods for handling cosmetic or toiletry substances	A45D
Surgical introduction or removal of body parts or their substitutes	A61B
Devices specially adapted for taking blood samples	A61B 5/15
Devices specially adapted for vivisection or autopsy	A61B 16/00
Devices or methods for introducing solid, liquid, or gaseous remedies or other materials into or onto the bodies of animals	A61D 7/00
Prostheses implantable into a human body	A61F 2/02
Medicinal preparations characterised by special physical form	A61K 9/00
Chemical aspects of bandages, dressings, absorbent pads, or other surgical articles placed upon into human body	A61L
Electrotherapy, e.g. producing anaesthesia by the use of alternating or intermittent currents	A61N 1/36021

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Devices worn by patients for reception of urine, faeces, catamenial, or other bodily discharges	A61F 5/44
Application swabs	A61F 13/15
Devices for receiving spittle	A61J 19/00

Informative references

Attention is drawn to the following places, which may be of interest for search:

Devices worn by patients for reception of urine, faeces, catamenial, or other bodily discharges	A61F 5/44
Application swabs	A61F 13/15
Devices for receiving spittle	A61J 19/00

Special rules of classification

When a device or method covered by subclass [A61M](#) includes a separating process for body-liquids that utilizes chromatography, and features of general interest related to chromatography are usefully disclosed but not claimed, the features should also be non-obligatorily classified within group [B01D 15/08](#).

The breakdown symbols (i.e. the non "parallel" or non "mirror" symbols) and "orthogonal" symbols are to be used for classifying the invention information (in addition to the invention symbols) in case the invention is insufficiently classified by an invention information symbol. They are also to be used for classifying the additional information. They are stored in the additional information field.

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Media	Solid, liquid or gaseous substances or devices (e.g. medicine, food, in vivo testing material, catheters) which are either used by or within human bodies for medical or physical purposes, components of or substances naturally within human bodies (e.g. artificial heart, blood, insulin), or bodily discharge or waste created by human bodies or medical processes taking place within human bodies (e.g. urine).
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A61M 1/00

Suction or pumping devices for medical purposes; Devices for carrying-off, for treatment of, or for carrying-over, body-liquids; Drainage systems (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](#))

References

Limiting references

This place does not cover:

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

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Tracheal tubes combined with suction tubes	A61M 16/0463
Drains not intended for suction treatment	A61M 27/00
Saliva removers for dentists	A61C 17/00 , A61C 17/06
Implantable gland structures or devices, e.g. implantable artificial pancreas	A61F 2/022
Bandages or dressings specially adapted for use with sub-pressure or over-pressure therapy, wound drainage or wound irrigation, e.g. for use with negative-pressure wound therapy [NPWT]	A61F 13/05
In vitro human cell grow apparatus	C12M 3/00

Informative references

Attention is drawn to the following places, which may be of interest for search:

Non-implantable gland structures or devices, e.g. non-implantable artificial pancreas	A61M 1/3489 , A61M 1/3679 , A61M 1/3689
Syringes; Infusion devices	A61M 5/00
Infusion devices using feedback of body parameters, e.g. blood-sugar, pressure, artificial pancreas	A61M 5/1723
Sprayers or atomizers	A61M 11/00
Inhalators	A61M 15/00
Respirators	A61M 16/00
Dilators	A61M 29/00
Devices for introducing or retaining media	A61M 31/00

Implements for holding wounds open	A61B 17/02
Devices worn by the patient for reception of urine, faeces, catamenial or other discharge	A61F 5/44
Tissue or organ culture	C12N 5/0671
Pumps in general	F04B , F04C , F04D , F04F

Special rules of classification

Suction-irrigation devices where the irrigation is described in detail should also be proposed for classification in [A61M 3/00](#).

If gas treatment is described in detail, the documents should also be proposed for classification in [A61M 35/00](#).

Only catheters specially adapted for suction drainage are classified in the relevant subgroups of [A61M 1/00](#); for general aspects of catheters, the documents should also be proposed for classification in [A61M 25/00](#).

In this main group, it is desirable to also allocate the indexing groups [A61M 2202/00](#) - [A61M 2250/00](#).

A61M 1/02

Blood transfusion apparatus (blood infusion by syringes [A61M 5/14](#))

Definition statement

This place covers:

Apparatus for blood transfusion, for blood collection in view of transfusion and for treatment of collected blood in view of later transfusion

References

Limiting references

This place does not cover:

Blood infusion by syringes	A61M 5/14
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Special rules of classification

Either collection of blood in amounts interesting for transfusion (taking a sample for diagnosis would not fall under this) or treatment of collected blood in view of later transfusion is required for classification in this group.

A61M 1/0209

{Multiple bag systems for separating or storing blood components}

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Details of blood bags	A61J 1/10
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A61M 1/024

{Means for controlling the quantity of transfused blood, e.g. by weighing the container and automatic stopping of the transfusion after reaching a determined amount}

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Containers with means for emptying the container with or without interrupting suction	A61M 1/63
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A61M 1/0245

{combined with blood container shaking means}

Definition statement

This place covers:

Means for controlling the quantity of transfused blood combined with blood container shaking means]

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Means for agitating or shaking blood containers not in combination with means for controlling the quantity of blood	A61M 1/025
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A61M 1/025

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

References

Limiting references

This place does not cover:

Combined with blood container shaking means	A61M 1/0245
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Shaking in general	B01F 31/00
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A61M 1/0259

{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](#))}

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

For agitating	A61M 1/025
For separating blood components present in distinct layers in a container	A61M 1/029

A61M 1/0272

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

Definition statement

This place covers:

Treatment of blood, after collection from a donor, for the purpose of being conserved.

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Prior to transfusion	A61M 1/0281
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A61M 1/0281

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

Definition statement

This place covers:

Treatment of blood for the purpose of being introduced into a patient.

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Prior to or for conservation	A61M 1/0272
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A61M 1/029

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

Definition statement

This place covers:

Separating stratified blood components.

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Containers for storing blood or blood components	A61J 1/10
Sampling or analysing blood by separating blood components	G01N 33/491

A61M 1/04

{Artificial} pneumothorax apparatus

Definition statement

This place covers:

Devices for treating pneumothorax (i.e. abnormal collection of gas in the pleural space) and devices for creating and treating a pneumostoma

A61M 1/06

Milking pumps

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Brassieres	A41C 3/00
Feeding bottles	A61J 9/00
Teats	A61J 11/00
Breast shields	A61J 13/00

A61M 1/08

Cupping glasses {, i.e. for enhancing blood circulation}

Definition statement

This place covers:

The traditional cupping glasses, used in cupping therapy where a partial vacuum is created in cups placed on the skin either by means of heat or suction; the group contains also some similar devices which are used as poison extractors

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Suction massage	A61H 9/005
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A61M 1/14

Dialysis systems; Artificial kidneys; Blood oxygenators (semi-permeable membranes characterised by the material, manufacturing processes therefor [B01D 71/00](#)) {; Reciprocating systems for treatment of body fluids, e.g. single needle systems for hemofiltration or pheresis}

References

Limiting references

This place does not cover:

Semi-permeable membranes characterized by the material, manufacturing therefor	B01D 71/00
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Peritoneal dialysis catheters	A61M 1/285
Haemofiltration using non reciprocating systems	A61M 1/34
Extracorporeal blood circuit aspects	A61M 1/36
Processes of separation using semi-permeable membranes	B01D 61/00

A61M 1/16

with membranes

Definition statement

This place covers:

Dialysis systems, artificial kidneys and blood oxygenators where treatment involves a semi-permeable membrane separating blood from dialysate in a dialyser and separating blood from oxygen in an oxygenator

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Single-needle systems	A61M 1/30
Blood-circuits thereof	A61M 1/3621
Membranes per se	B01D 69/00

A61M 1/1654

{Dialysates therefor}

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Chemical formulae of dialysates	A61K 31/00
Medicinal preparation containing inorganic ingredients	A61K 33/00
Treating water for medical purposes	C02F 2103/026

A61M 1/1656

{Apparatus for preparing dialysates}

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

With regeneration of dialysates	A61M 1/1696
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A61M 1/1658

{Degasification}

Definition statement

This place covers:

Degasification of dialysates

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Degasification in general	B01D 19/00
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A61M 1/1678**{intracorporal (peritoneal dialysis [A61M 1/28](#))}****Definition statement***This place covers:*

Intracorporal (e.g. implanted) dialysis systems, artificial kidneys, blood oxygenators.

References**Limiting references***This place does not cover:*

Peritoneal dialysis	A61M 1/28
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Informative references*Attention is drawn to the following places, which may be of interest for search:*

Artificial glands	A61F 2/022
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A61M 1/168**{Sterilisation or cleaning before or after use}****Definition statement***This place covers:*

Sterilisation or cleaning before or after use of the dialysis device, artificial kidneys or blood oxygenators, this can be both the dialysate or the blood side of the device and is not limited to self-cleaning.

References**Informative references***Attention is drawn to the following places, which may be of interest for search:*

Priming, rinsing blood circuits before or after use	A61M 1/3643
Sterilisation of materials in general	A61L 2/00
Cleaning or sterilisation of membrane modules apart from the machine	B01D 65/02

A61M 1/1686**{by heat}****Definition statement***This place covers:*

Sterilization or cleaning by heat, e.g. by steam

A61M 1/169**{using chemical substances}****References*****Informative references****Attention is drawn to the following places, which may be of interest for search:*

Priming, rinsing blood circuits before or after use	A61M 1/3643
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A61M 1/1692**{Detection of blood traces in dialysate}****Definition statement***This place covers:*

Dialysis systems where means are provided for detecting traces of blood in the dialysate, e.g. to detect the presence of a leak in the membrane

References***Informative references****Attention is drawn to the following places, which may be of interest for search:*

Other testing of filters for leaks	A61M 2205/705
Testing the membrane modules	B01D 65/10
Investigating fluid-tightness of structures in general	G01M 3/00

A61M 1/1694**{with recirculating dialysing liquid}****References*****Informative references****Attention is drawn to the following places, which may be of interest for search:*

Peritoneal dialysis	A61M 1/28
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A61M 1/1696**{with dialysate regeneration}****References*****Informative references****Attention is drawn to the following places, which may be of interest for search:*

Substitution fluid using dialysate	A61M 1/3465
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A61M 1/1698

{Blood oxygenators with or without heat-exchangers (intracorporal [A61M 1/1678](#); manufacturing of membranes therefor [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](#))}

References**Limiting references**

This place does not cover:

Intracorporal oxygenators	A61M 1/1678
Manufacturing of membranes therefor	B01D 67/00
Semi-permeable membranes for separation characterized by their properties	B01D 69/00

A61M 1/26

{and internal elements} which are moving

Definition statement

This place covers:

Dialysis systems, artificial kidneys and blood oxygenators which incorporate elements internal to the treatment module where the membrane is located which are moving (e.g. moving membranes)

Special rules of classification

Only used as an Indexing Code, documents are classified in [B01D](#)

A61M 1/28

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

Definition statement

This place covers:

contains also other peritoneal treatment, e.g. oxygenation

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Irrigation systems	A61M 3/02
Sterile connections	A61M 39/10
Bags therefor	A61J 1/10

A61M 1/285**{Catheters therefor}****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Sterile connections	A61M 39/10
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A61M 1/287**{Dialysates therefor}****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

For other dialysates	A61M 1/1654
Preparation of dialysates	A61M 1/1656

A61M 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}

Definition statement*This place covers:*

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

A61M 1/32**Oxygenators without membranes****Definition statement***This place covers:*

Oxygenators without membranes e.g. bubble oxygenators

A61M 1/34

Filtering material out of the blood by passing it through a membrane, i.e. hemofiltration or diafiltration

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Single-needle systems	A61M 1/30
Extracorporeal blood circuit aspects	A61M 1/36

A61M 1/3413

{Diafiltration}

Definition statement

This place covers:

Combined dialysis (i.e. using dialysate) and haemofiltration (i.e. with considerable amounts of ultrafiltrate requiring substitution).

A61M 1/342

{Adding solutions to the blood, e.g. substitution solutions (for preventing coagulation [A61M 1/3672](#))}

References**Limiting references**

This place does not cover:

For preventing coagulation	A61M 1/3672
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A61M 1/3441

{Substitution rate control as a function of the ultrafiltration rate}

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Weighing fresh and used dialysate	A61M 1/1643
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A61M 1/3455**{Substitution fluids}****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Using dialysate as substitution fluid	A61M 1/3465
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A61M 1/3462**{Circuits for the preparation thereof}****Definition statement***This place covers:*

Fluidic circuits for the preparation of substitution fluids.

References**Informative references***Attention is drawn to the following places, which may be of interest for search:*

Using dialysate as substitution fluid	A61M 1/3465
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Special rules of classification

The fact that the circuits are fluidic does not exclude that they may be electrically controlled.

A61M 1/3472**{with treatment of the filtrate}****Definition statement***This place covers:*

Filtering material out of the blood by passing it through a membrane, i.e. haemofiltration, diafiltration, with treatment of the filtrate, e.g. by filtration, dialysis, absorption, chemical treatment, biological treatment, heating

References**Informative references***Attention is drawn to the following places, which may be of interest for search:*

with treatment of the filtrate with treatment agent in the same enclosure as the membrane	A61M 1/3475
with treatment of the filtrate by dialysing the filtrate	A61M 1/3479
with treatment of the filtrate by filtrating the filtrate using another crossflow filter, e.g. a membrane filter	A61M 1/3482
with biological or chemical treatment of the filtrate, e.g. chemical precipitation, treatment by absorbents	A61M 1/3486

with treatment of the filtrate by using treatment agents in suspension	A61M 1/3493
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A61M 1/3496

{Plasmapheresis; Leucopheresis; Lymphopheresis ([A61M 1/3472](#) takes precedence)}

References

Limiting references

This place does not cover:

With treatment of the filtrate	A61M 1/3472
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Single-needle processes	A61M 1/30
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A61M 1/36

Other treatment of blood in a by-pass of the natural circulatory system, e.g. temperature adaptation, irradiation {; Extra-corporeal blood circuits}

Definition statement

This place covers:

Other treatment of blood in a by-pass of the natural circulatory system, e.g. temperature adaptation, irradiation

A61M 1/3621

{Extra-corporeal blood circuits (single-needle circuits [A61M 1/30](#))}

Definition statement

This place covers:

Includes all blood circuits (e.g. also for dialysis, haemofiltration), single needle circuits excepted.

References

Limiting references

This place does not cover:

Single-needle circuits	A61M 1/30
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Double lumen needles	A61M 5/1582
Multi lumen catheters	A61M 25/0026

A61M 1/3624**{Level detectors; Level control}****Definition statement***This place covers:*

Blood level detectors and blood level control.

References**Informative references***Attention is drawn to the following places, which may be of interest for search:*

Measuring liquid level in infusion	A61M 5/1684
Optical liquid level detectors in general	G01F 23/292
Measuring liquid level in general	G01F 25/20

A61M 1/3626**{Gas bubble detectors}****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Blood leak detection by change of transparency of dialysate	A61M 1/1692
In infusion devices	A61M 5/365
Observing bubbles in a liquid pool for leak detection, in general	G01M 3/06

A61M 1/3627**{Degassing devices; Buffer reservoirs; Drip chambers; Blood filters}****Definition statement***This place covers:*

Degassing devices, buffer reservoirs, drip chambers, blood filters, these devices can be isolated but often some of them are combined in one device

References**Informative references***Attention is drawn to the following places, which may be of interest for search:*

Priming	A61M 1/3643
Filters for solid matter in combination with suction devices	A61M 1/79
Blood filters for infusion	A61M 5/165

A61M 1/3633**{Blood component filters, e.g. leukocyte filters}****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Filters for lipoids	A61M 1/3627
Type of blood component	A61M 2202/04
Filtering out liquids in general	B01D 39/00

A61M 1/3639**{Blood pressure control, pressure transducers specially adapted therefor}****Definition statement***This place covers:*

Blood pressure control in the extracorporeal circuit of a blood treatment system and pressure transducers specially adapted therefor

References**Informative references***Attention is drawn to the following places, which may be of interest for search:*

Control of inversion time between collection and reinfusion phase in single needle systems by pressure control	A61M 1/305
Blood pressure measurement on the patient	A61B 5/02

A61M 1/3643**{Priming, rinsing before or after use}****Definition statement***This place covers:*

Priming, rinsing before or after use of the extracorporeal blood circuit

References**Informative references***Attention is drawn to the following places, which may be of interest for search:*

Sterilizing the dialyser	A61M 1/168
Arrangements for blood volume reduction	A61M 1/3606
Rinsing for regenerating the filter	A61M 2205/7554

A61M 1/3653**{Interfaces between patient blood circulation and extra-corporal blood circuit}****Definition statement***This place covers:*

Interfaces between the blood circulation of the patient and the extra-corporal blood circuit, e.g. mechanical interfaces such as adapted catheters, needles, cannulas, or electrical interfaces, e.g. electrodes for monitoring proper connection of the patient to the blood circuit

References**Informative references***Attention is drawn to the following places, which may be of interest for search:*

Catheter holding devices	A61M 25/02
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A61M 1/3655**{Arterio-venous shunts or fistulae}****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Access sites	A61M 39/02
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A61M 1/3663**{Flow rate transducers; Flow integrators}****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Measuring flow in general	G01F
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A61M 1/3664**{for preparing cardioplegia solutions}****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Means for cooling	A61M 2205/3606
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A61M 1/3666**{Cardiac or cardiopulmonary bypass, e.g. heart-lung machines}****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

With assisted venous return	A61M 1/3667
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A61M 1/3669**{Electrical impedance measurement of body fluids; transducers specially adapted therefor}****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Other measuring of impedance	A61M 2205/3317
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A61M 1/367**{Circuit parts not covered by the preceding subgroups of group [A61M 1/3621](#)}****Definition statement***This place covers:*Circuit parts not covered by the preceding subgroups of group [A61M 1/3621](#) e.g. connectors, sensors and valves**References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Level detectors	A61M 1/3624
Gas bubble detectors	A61M 1/3626
Degassing devices	A61M 1/3627
Blood pressure control	A61M 1/3639
Priming	A61M 1/3643
Interfaces	A61M 1/3653
Flow rate Transducers	A61M 1/3663
For cardioplegia	A61M 1/3664
Cardiac bypass	A61M 1/3666
Impedance measurement	A61M 1/3669

A61M 1/3672**{Means preventing coagulation}****Definition statement***This place covers:*

Extra-corporeal blood circuits having means preventing coagulation of the blood, e.g. heparine infusion or anticoagulant coating or a geometrical configuration described as minimizing coagulation

References**Informative references***Attention is drawn to the following places, which may be of interest for search:*

Aspiration tips with anticoagulant delivery	A61M 1/85
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A61M 1/3675**{Deactivation}****Definition statement***This place covers:*

Extra-corporeal blood circuits having means (e.g. chemical, in the blood) preventing coagulation of the blood, which means are thereafter deactivated (e.g. removed or neutralized so as not to compromise the health of the patient)

Synonyms and Keywords*In patent documents, the following words/expressions are often used as synonyms:*

- " heparin", "ACD" , "citrate" and " liquemine"

A61M 1/3679**{by absorption ([A61M 1/3675](#) takes precedence)}****Definition statement***This place covers:*

Extra-corporeal blood circuits whereby the blood is treated by absorption (the absorption of anticoagulants being classified in [A61M 1/3675](#))

References**Limiting references***This place does not cover:*

Deactivation of means preventing coagulation	A61M 1/3675
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Informative references*Attention is drawn to the following places, which may be of interest for search:*

Related fluid circuits	A61M 1/3621
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Special rules of classification

Distinction between absorption and chemical treatment not always easy, therefore see also	A61M 1/3687
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A61M 1/3681**{by irradiation}****Definition statement***This place covers:*

Extra-corporeal blood circuits in which the blood is treated by irradiation of any wavelength

References**Informative references***Attention is drawn to the following places, which may be of interest for search:*

Sterilization by irradiation in general	A61L
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A61M 1/3687**{Chemical treatment ([A61M 1/3675](#) takes precedence)}****Definition statement***This place covers:*

Extra-corporeal blood circuits in which the blood is treated by chemical means

References**Limiting references***This place does not cover:*

Deactivation of means preventing coagulation	A61M 1/3675
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Informative references*Attention is drawn to the following places, which may be of interest for search:*

Extra-corporeal blood circuits	A61M 1/3621
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Special rules of classification

As distinction between absorption and chemical treatment is not always clear, the group [A61M 1/3679](#) concerning blood treated by absorption means should be considered.

A61M 1/369**{Temperature treatment}****Definition statement***This place covers:*

Hypo-, and hyperthermia devices; not intended for preservation nor for adapting to body temperature, but for treatments with intended irreversible results

References**Informative references***Attention is drawn to the following places, which may be of interest for search:*

Heating or cooling devices for bringing media into the body or the media	A61M 5/44
Hypothermia	A61M 19/00
Heating or cooling the body for treatment	A61F 7/00

A61M 1/3693**{using separation based on different densities of components, e.g. centrifuging}****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Multiple bag systems therefor	A61M 1/0209
Rotating membrane filtering	A61M 1/262
Centrifuges in general	B04B 5/00

A61M 1/38**Removing constituents from donor blood and {storing or} returning remainder to body {, e.g. for transfusion}****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Blood transfusion apparatus	A61M 1/02
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A61M 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](#))}

Definition statement

This place covers:

Containers for suction drainage, adapted to be used with an external suction source. These containers are either connected permanently or connectable through a port to said external suction source which cannot be reasonably considered as being part of the container.

References

Limiting references

This place does not cover:

Containers not adapted for subjection to vacuum	A61M 1/69
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Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Containers specifically adapted for negative pressure wound therapy	A61M 1/98
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Blood reservoirs	A61M 1/3627
Containers with integrated suction means	A61M 1/64

Special rules of classification

This group covers containers which are described as being usable in the context of medical suction drainage; they thus can be considered as being part of a suction device. Therefore, there is no contradiction with the definition of [A61M 1/00](#). The containers do not need to be rigid but many of them are. The fluid does not have to pass through the vacuum source, but it can, in some cases. If a container has both external and integrated suction means, it should be classified in both [A61M 1/60](#) and [A61M 1/64](#) (or their relevant subgroups).

A61M 1/61

{Two- or three-bottle systems for underwater drainage, e.g. for chest cavity drainage}

Definition statement

This place covers:

Systems for underwater drainage having a chamber functioning as a "water seal", which acts as a one-way valve allowing gas to escape, but not to re-enter, often called two- or three-bottle systems, e.g. for chest cavity drainage.

Synonyms and Keywords

In patent documents, the following words/expressions are often used as synonyms:

- "Thoracic" or "pleural drainage"

A61M 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](#))}

Definition statement

This place covers:

Containers for suction drainage comprising a bag in a rigid low-pressure chamber, with suction applied to the outside surface of the bag, where the container serves for collecting the aspirated material.

References

Limiting references

This place does not cover:

Bag or liner in a rigid container, with suction applied to both	A61M 1/604
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Containers for suction drainage, adapted to be used with an external suction source	A61M 1/60
Containers with integrated suction means	A61M 1/64
Membrane pumps, e.g. bulbs	A61M 1/82
Containers specifically adapted for negative pressure wound therapy	A61M 1/98
Bulb-type hand operated air pumping means	A61M 2205/075

A61M 1/63

{with means for emptying the suction container, e.g. by interrupting suction}

Definition statement

This place covers:

Containers for suction drainage having foreseen means for emptying the container, e.g. means for interrupting suction so that the container can be removed; pulsating suction is not considered as having interruptions in the sense of the present definition.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Blood transfusion apparatus	A61M 1/02
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A61M 1/64

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

Definition statement

This place covers:

Containers with integrated suction means, i.e. being capable of applying suction without the use of an external suction source. Examples are: pre-evacuated containers (e.g. Redon-bottles) or containers having an electrical pump integrated into them as a compact device or containers having mechanical means creating suction such as a piston-type member or a flexible member (e.g. a bulb or a spring or bellows or a compressible elastic material such as a foam).

References

Limiting references

This place does not cover:

Drainage containers not being adapted for subjection to vacuum	A61M 1/69
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Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Containers specifically adapted for negative pressure wound therapy	A61M 1/98
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Containers for suction drainage, adapted to be used with an external suction source	A61M 1/60
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Special rules of classification

If a container has both integrated and external suction means, it should be classified in both [A61M 1/64](#) and [A61M 1/60](#) (or their relevant subgroups).

A61M 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](#))}

Definition statement

This place covers:

Drainage containers incorporating a piston-type member to create suction, e.g. syringes (thus not syringe pumps where the aspirated material is not entering the syringe barrel).

References

Limiting references

This place does not cover:

Cupping glasses	A61M 1/08
Containers with a flexible member creating suction	A61M 1/68

Informative references

Attention is drawn to the following places, which may be of interest for search:

Piston pumps	A61M 1/81
Piston pumps, e.g. syringes, the barrel serving as aspiration container	A61M 1/815

Special rules of classification

If the focus is clearly on the container, the document should be classified in [A61M 1/67](#); if the focus is clearly on the pump, it should be classified in [A61M 1/81](#) or [A61M 1/815](#); otherwise, it should be classified in both places.

A61M 1/68

{Containers incorporating a flexible member creating suction}

Definition statement

This place covers:

Containers incorporating a flexible member creating suction (thus not bulb or membrane pumps where the aspirated material is not collected inside the pump).

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Containers for suction drainage, adapted to be used with an external suction source	A61M 1/60
Rigid containers with a bag or liner	A61M 1/604
Containers with integrated suction means	A61M 1/64
Membrane pumps, e.g. bulbs	A61M 1/82
Containers specifically adapted for negative pressure wound therapy	A61M 1/98

Special rules of classification

If the focus is clearly on the container, the document should be classified in [A61M 1/68](#); if the focus is clearly on the pump, it should be classified in [A61M 1/82](#); otherwise it should be classified in both places.

A61M 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](#))}

Definition statement

This place covers:

Drainage containers not being adapted for subjection to vacuum, e.g. bags.

References**Limiting references**

This place does not cover:

Devices worn by the patient for reception of urine	A61F 5/44
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Surgical drapes with fluid collection means	A61B 46/00
emptying devices for medical drainage bags	B65B 69/0016

A61M 1/70

{Gravity drainage systems (drainage containers not being adapted for subjection to vacuum [A61M 1/69](#))}

Definition statement

This place covers:

Gravity drainage systems, i.e. where the drainage is actuated by gravity alone, without a pump.

References**Limiting references**

This place does not cover:

Drainage containers not being adapted for subjection to vacuum	A61M 1/69
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Surgical drapes with fluid collection means	A61B 46/00
Devices worn by the patient for reception of urine	A61F 5/44

A61M 1/71

{Suction drainage systems (containers therefor [A61M 1/60](#), [A61M 1/64](#); negative pressure wound therapy systems [A61M 1/90](#))}

Definition statement

This place covers:

Suction-drainage systems other than those qualifying as negative pressure wound therapy systems.

References

Limiting references

This place does not cover:

Containers for suction drainage adapted to be used with an external suction source	A61M 1/60
Containers with integrated suction means	A61M 1/64
Negative pressure wound therapy systems	A61M 1/90

Special rules of classification

A suction drainage system generally has a suction means, a container and a drainage tube. If the focus is on the container, [A61M 1/60](#) or [A61M 1/64](#) or their subgroups should be used. If the focus is on the system, [A61M 1/71](#) or subgroups should be used. If both are described with relevant details, both classifications should be given. If the vacuum source is at the same time the container receiving the drained liquid, then the device is not considered as a system but as a container under [A61M 1/64](#).

A61M 1/72

{Cassettes forming partially or totally the fluid circuit}

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Cassettes for irrigators	A61M 3/0201
With interchangeable cassettes forming partially or totally the fluid circuit in other devices for introducing media into, or onto the body	A61M 2205/12

A61M 1/74

{Suction control (underwater drainage [A61M 1/61](#))}

Definition statement

This place covers:

Suction control aspects of suction drainage systems.

References

Limiting references

This place does not cover:

Underwater drainage	A61M 1/61
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Controlling pressure, in general	A61M 2205/3331
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A61M 1/75

{Intermittent or pulsating suction ([A61M 1/63](#), [A61M 1/772](#) take precedence)}

Definition statement

This place covers:

Intermittent or pulsating suction, whereby interrupting the suction for emptying the container or alternation between suction and irrigation is not considered as falling under the definition of intermittent suction.

References

Limiting references

This place does not cover:

Containers with means for emptying the suction container, e.g. by interrupting suction	A61M 1/63
Suction-irrigation systems operating alternately	A61M 1/772

Informative references

Attention is drawn to the following places, which may be of interest for search:

Milk pumps	A61M 1/06
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A61M 1/76

{Handpieces (specially for suction-irrigation [A61M 1/774](#), aspiration tips [A61M 1/84](#))}

Definition statement

This place covers:

Handpieces for suction drainage, these being the proximal part of the suction device which the surgeon holds in his hand to perform suction drainage, e.g. for controlling suction.

References

Limiting references

This place does not cover:

Handpieces specially adapted for suction-irrigation	A61M 1/774
Aspiration tips	A61M 1/84

Informative references

Attention is drawn to the following places, which may be of interest for search:

Proximal part of endoscope body, e.g. handles	A61B 1/00064
Surgical cutting instruments	A61B 17/32
Handpieces of surgical instruments	A61B 2018/0091
Surgical instruments with suction drainage system	A61B 2217/005

A61M 1/77

{Suction-irrigation systems (aspiration tips supplying fluids [A61M 1/85](#); specific for negative pressure wound therapy [A61M 1/92](#); combined with tracheal tubes [A61M 16/0463](#))}

Definition statement

This place covers:

Suction-irrigation systems.

References

Limiting references

This place does not cover:

Aspiration tips supplying fluids	A61M 1/85
Suction-irrigation specific for negative pressure wound therapy	A61M 1/92
Suction-irrigation combined with tracheal tubes	A61M 16/0463

Informative references

Attention is drawn to the following places, which may be of interest for search:

Endoscopes with rinsing arrangements	A61B 1/12
Dental devices with irrigation and suction	A61C 17/0208

A61M 1/774

{Handpieces specially adapted for providing suction as well as irrigation, either simultaneously or independently}

Definition statement

This place covers:

Handpieces for suction-irrigation systems, these being the proximal part of the device which the surgeon holds in his hand to perform suction-irrigation e.g. for controlling suction and/or irrigation.

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Irrigators with suction means	A61M 3/0283
Proximal part of endoscope body, e.g. handles	A61B 1/00064
Endoscopes with cooling or rinsing arrangements	A61B 1/12
Surgical cutting instruments	A61B 17/32
Handpieces of surgical instruments	A61B 2018/0091
Surgical instruments with suction drainage system	A61B 2217/005
Surgical instruments with irrigation system	A61B 2217/007

A61M 1/78

{Means for preventing overflow or contamination of the pumping systems (combined with drainage containers [A61M 1/60](#))}

Definition statement

This place covers:

Means for preventing overflow or contamination of the pumping systems.

References**Limiting references**

This place does not cover:

Means for preventing overflow or contamination of the pumping systems combined with rigid drainage containers	A61M 1/60
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A61M 1/79

{Filters for solid matter (specially adapted for dental use [A61C 17/065](#))}

Definition statement

This place covers:

Filters for solid matter (e.g. blood clots, bone fragments) for use in the context of medical drainage devices other than for dental use.

References

Limiting references

This place does not cover:

Filters for solid matter specially adapted for dental use	A61C 17/065
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Filters for solid matter, e.g. microaggregates, in general	A61M 2205/7545
Bone (e.g. fragments)	A61M 2210/02
Surgical instruments for bone grafting, harvesting or transplantation	A61B 17/1635

A61M 1/80

{Suction pumps ([A61M 1/64](#), [A61M 1/71](#), [A61M 60/00](#) take precedence)}

Definition statement

This place covers:

Suction pumps for medical purposes (except for the groups mentioned as taking precedence) where the pump mechanism is described in detail.

References

Limiting references

This place does not cover:

Containers with integrated suction means	A61M 1/64
Suction drainage systems	A61M 1/71
Blood pumps	A61M 60/00
Implantable blood pumps	A61M 60/122

A61M 1/83

{Tube strippers, i.e. for clearing the contents of the tubes}

Definition statement

This place covers:

Tube strippers which are tools used for clearing the contents of the tubes.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Vein strippers	A61B 17/00008
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A61M 1/84

{Drainage tubes; Aspiration tips (for negative pressure wound therapy [A61M 1/90](#); for surgical cutting instruments [A61B 17/32](#))}

Definition statement

This place covers:

Drainage tubes and aspiration tips which are related to suction means.

References

Limiting references

This place does not cover:

Aspiration tips or tubes for negative pressure wound therapy	A61M 1/90
Aspiration tips or tubes for surgical cutting instruments	A61B 17/32

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Tracheal tubes combined with suction tubes	A61M 16/0463
Drains not intended for suction treatment	A61M 27/00

Informative references

Attention is drawn to the following places, which may be of interest for search:

Cupping glasses	A61M 1/08
Irrigator cannulas, nozzles, tips	A61M 3/0279
Surgical instruments with suction drainage system	A61B 2217/005

Special rules of classification

This is a subgroup to the group [A61M 1/00](#); if no suction is involved, then the documents are not for [A61M 1/84](#) either. However, this group is for documents where details of the drainage tubes or aspiration tips are described, even if no details of the suction are given.

A61M 1/85

{with gas or fluid supply means, e.g. for supplying rinsing fluids or anticoagulants (for negative pressure wound therapy [A61M 1/92](#), [A61M 1/94](#); combined with tracheal tubes [A61M 16/0463](#); dental instruments with combined rinsing and aspirating [A61C 17/0208](#))}

References

Limiting references

This place does not cover:

Negative pressure wound therapy with liquid supply means	A61M 1/92
Negative pressure wound therapy with gas supply means	A61M 1/94

Tracheal tubes combined with suction tubes	A61M 16/0463
Dental instruments with combined rinsing and aspirating	A61C 17/0208

Informative references

Attention is drawn to the following places, which may be of interest for search:

Cannulas of irrigators	A61M 3/0279
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A61M 1/86

{Connectors between drainage tube and handpiece, e.g. drainage tubes detachable from handpiece}

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Connectors between dressing and drainage tube in negative pressure wound therapy	A61M 1/912
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A61M 1/88

{Draining devices having means for processing the drained fluid, e.g. an absorber (for liposuction [A61M 1/892](#))}

References

Limiting references

This place does not cover:

Suction aspects of liposuction	A61M 1/892
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A61M 1/89

{Suction aspects of liposuction (surgical cutting instruments [A61B 17/32](#))}

References

Limiting references

This place does not cover:

Surgical cutting instruments	A61B 17/32
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Means for pre-treatment of biological substances	C12M 45/00
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A61M 1/90

{Negative pressure wound therapy devices, i.e. devices for applying suction to a wound to promote healing, e.g. including a vacuum dressing}

References

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Wound drains not intended for suction treatment	A61M 27/00
Bandages or dressings specially adapted for use with sub-pressure or over-pressure therapy, wound drainage or wound irrigation, e.g. for use with negative-pressure wound therapy [NPWT]	A61F 13/05

A61M 1/91

{Suction aspects of the dressing}

Definition statement

This place covers:

Negative pressure wound therapy devices where the dressing part is described in relation to its suction transmission and/or distribution capacities.

A61M 1/912

{Connectors between dressing and drainage tube}

Definition statement

This place covers:

Connectors between dressing and drainage tube. A dressing is often connected to an external vacuum source by some kind of connector. This is classified here if it presents specific details, e.g. concerning the particular mechanical configuration of the connection, its releasability, sealing aspects.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Connectors for medical suction devices between drainage tube and handpiece	A61M 1/86
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A61M 1/98

{Containers specifically adapted for negative pressure wound therapy}

Definition statement

This place covers:

Containers used in negative pressure wound therapy.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Containers for suction drainage, adapted to be used with an external suction source	A61M 1/60
Containers with integrated suction means	A61M 1/64

Special rules of classification

If the container could be used in applications other than negative pressure wound therapy and is described in some detail it should be also classified in the relevant (sub)groups of [A61M 1/60](#) or [A61M 1/64](#).

A61M 1/982

{with means for detecting level of collected exudate}

Definition statement

This place covers:

Containers used in negative pressure wound therapy with means for detecting level of collected exudate.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Containers for suction drainage, adapted to be used with an external suction source	A61M 1/60
Containers with integrated suction means	A61M 1/64

Special rules of classification

If the container could be used in applications other than negative pressure wound therapy and is described in some detail, it should be also classified in the relevant (sub)groups of [A61M 1/60](#) or [A61M 1/64](#).

A61M 1/984

{portable on the body}

Definition statement

This place covers:

Containers used in negative pressure wound therapy which are portable on the body of the treated patient, e.g. attached to the body using a belt or straps or attached to the skin using an adhesive.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Containers for suction drainage, adapted to be used with an external suction source	A61M 1/60
Containers with integrated suction means	A61M 1/64
Devices for introducing media into or onto the body and portable on the body in general	A61M 2209/088

Special rules of classification

If the container could be used in applications other than negative pressure wound therapy and is described with some detail, it should be also classified in the relevant (sub)groups of [A61M 1/60](#) or [A61M 1/64](#).

A61M 1/985

{the dressing itself forming the collection container}

Definition statement

This place covers:

Negative pressure wound therapy devices where there is no external collection container but the wound exudate is being retained inside the dressing itself. This can be achieved e.g. by the dressing comprising a (super)-absorbing material or by providing a compartment of the dressing which serves as a collection chamber.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Containers with integrated suction means	A61M 1/64
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Special rules of classification

If suction is created by the dressing itself, the documents should also be classified in the relevant subgroups of [A61M 1/64](#).

A61M 3/00

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

Definition statement

This place covers:

Medical syringes used for irrigation, e.g. enemata as well as medical irrigators.

Relationships with other classification places

Irrigation systems when combined with suction means classified in [A61M 3/00](#) if the focus of the invention information is on irrigation and in [A61M 1/77](#), [A61M 1/92](#) if the focus is on suction. In both cases an additional classification information in the other field may be given.

References

Limiting references

This place does not cover:

Devices for bringing media into the body in a subcutaneous, intra-vascular or intramuscular way, e.g. syringes, needles	A61M 5/00
Pistons	A61M 5/315
Catheters	A61M 25/00
Dilators	A61M 29/00

Informative references

Attention is drawn to the following places, which may be of interest for search:

Suction-irrigation systems	A61M 1/71
Drainage tubes with fluid supply means	A61M 1/85
Pistons in syringes for use in subcutaneous, intra-vascular or intramuscular way	A61M 5/315
Introducing media into body cavities	A61M 31/00
For colostomy	A61F 5/442
Ophthalmic surgery	A61F 9/007
Baths	A61H 35/00
Eye baths	A61H 35/02
Nose baths	A61H 35/04

Special rules of classification

The breakdown codes and "orthogonal" indexing codes are to be used for classifying the invention information (in addition to the invention symbols) in case the invention is insufficiently classified by an invention information symbol. They are also to be used for classifying the additional information.

Further details of subgroups

characteristics of the fluid: [A61M 3/0204](#)

before use: [A61M 3/0208](#)

after use: [A61M 3/0212](#)

pressure: [A61M 3/0216](#)

volume; flow rate: [A61M 3/022](#)

catheter holding devices see [A61M 25/02](#)

[A61M 3/0279](#)

colostomy with irrigation port see [A61F 5/442](#)

[A61M 3/0283](#)

This group does not cover devices whose main object is suctioning and which moreover have irrigation means, these are classified in [A61M 1/85](#)

[A61M 3/0287](#)

spraying on the skin: [A61H 9/0028](#)

surgical drapes with drain fluid collection means [A61B 2046/236](#)

splash shields for protection of the surgeon: [A61B 90/05](#)

glossary: splash shield

[A61M 3/06](#)

bidets in general see [E03D 9/08](#)

A61M 3/0201

{Cassettes therefor}

Definition statement

This place covers:

Cassettes for enemata or irrigators forming partially or totally the fluid circuit.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Cassettes for suction drainage systems	A61M 1/72
With interchangeable cassettes forming partially or totally the fluid circuit in other devices for introducing media into, or onto the body	A61M 2205/12

A61M 3/0283

{with at least two inner passageways, a first one for irrigating and a second for evacuating (suction-irrigation systems [A61M 1/77](#); aspiration tips with fluid supply means [A61M 1/85](#); for negative pressure wound therapy [A61M 1/92](#))}

Definition statement

This place covers:

Irrigator cannulas with at least two inner passageways, a first one for irrigating and a second for evacuating.

References

Limiting references

This place does not cover:

Suction-irrigation systems	A61M 1/77
Aspiration tips with fluid supply means	A61M 1/85
Negative pressure wound therapy devices with irrigation	A61M 1/92

Informative references

Attention is drawn to the following places, which may be of interest for search:

Suction-irrigation combined with tracheal tubes	A61M 16/0463
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A61M 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](#)})

Definition statement

This place covers:

Infusion devices (infusion by gravity, infusion pumps, infusion needles, flow control etc.), syringes and details therefrom (automatic syringes, ampoules syringes, syringe cartridges, pistons, needles), means for preventing injection of air in body, means for desensitising skin, means for cooling or heating media to be infused, means for controlling depth of insertion.

References**Limiting references**

This place does not cover:

Suction devices for medical purposes, blood pumps, blood filters...	A61M 1/00
Catheters	A61M 25/00
Devices for transducing body media or for taking media from the body	A61B 5/00 , A61B 5/15
Introducing media into/onto bodies of animals	A61D 7/00
Implantable gland structures or devices, e.g. implantable artificial pancreas	A61F 2/022
Containers for medicinal or pharmaceutical purposes	A61J 1/00
Medicinal preparations	A61K 35/00
In vitro human cell grow apparatus	C12M 3/00

Informative references

Attention is drawn to the following places, which may be of interest for search:

Blood transfusion	A61M 1/02
Means for agitating	A61M 1/025
Blood oxygenators	A61M 1/14
Hemofiltration equipment	A61M 1/34
Blood filters	A61M 1/34 , A61M 1/36

Informative references

Non-implantable gland structures or devices, e.g. non-implantable artificial pancreas	A61M 1/3489 , A61M 1/3679 , A61M 1/3689
Temperature treatment for blood	A61M 1/369
Infusion devices using feedback of body parameters, e.g. blood-sugar, pressure, artificial pancreas	A61M 5/1723
Pressure measurement lumen	A61M 2025/0003
Connecting catheter tubes to hubs	A61M 25/0014
Guide needles for catheters	A61M 25/065
Diffusion through the skin	A61M 35/00
Microneedles	A61M 37/00
Access sites	A61M 39/02
Detecting tissue temperature for diagnostic purposes	A61M 39/0247
Y-connectors	A61M 39/10
Measuring of body parameters	A61B 5/00
Syringes for taking blood samples	A61B 5/14
Surgical glue applicators	A61B 17/00491
Syringes for injecting impression materials	A61C 9/0026
Ampoules or carpules	A61J 1/06
Combination of vial and syringe for mixing or transferring their contents	A61J 1/2096
Making filter elements	B01D 29/111
Burettes, measuring cylinders for laboratory use	B01L 3/02
Heating or cooling in general	B01L 7/00
Disintegrating medical waste	B02C 19/0075
Disposal of medical waste in general	B09B 3/00 , B09B 2101/65
Making of hollow needles	B21G 1/08
Grinding sharp-pointed work pieces	B24B 19/16
Filling of medical containers in general	B65B 3/003 , A61J 1/20
Pressurized by contraction of elastic reservoir, in general	B65D 83/0061
Receptacles for refuse disposal in general	B65F 1/00
Cell injection devices	C12M 3/006
Linear peristaltic pumps, in general	F04B 43/12
Telescopic rods	F16B 7/10
Valves in general	F16K
Heat exchange in general	F28C , F28D , F28F , F28G
Hypodermic projectiles	F42B 12/54
Apparatus of the syringe type	G01F 11/027
Indicating or measuring liquid levels	G01F 23/292
Systems or apparatus for checking the occurrence of a condition	G07C 11/00
HOLDERS comprising label	G09F 3/0295

ICT specially adapted for therapies or health-improving plans (e.g. for handling prescriptions, for steering therapy or for monitoring patient compliance) relating to drugs or medications (e.g. for ensuring correct administration to patients)	G16H 20/10
Holders for storage of radioactive sources	G21F 5/018
Heating by electric fields	H05B 6/80

Special rules of classification

The classification of "additional information" in the group is mandatory, but only if the additional information has some importance.

For example, the main invention is an infusion pump of the reciprocating piston type ([A61M 5/14216](#)), but a regulating valve ([A61M 5/16881](#)) is present in the device. If the valve is just mentioned as being a general valve with no specific details given on how the valve relates to the pump, then it is not worth giving a class in the field of valves. On the contrary, if the valve is well described and presents some interesting features that cooperates with features from the pump, then the document should also be classified in the field of regulating valves.

In [A61B 8/0891](#), the blood vessel is analysed for diagnosis purpose using ultrasonic, sonic, or infrasonic waves. All couplings and connectors are classified in [A61M 39/00](#).

Further details of subgroups

[A61M 5/007](#)

Delivery of contrast media

[A61M 5/14](#)

This subgroup also comprises various accessories for infusing by gravity, like drip chambers or hanging up devices (see relevant sub-classes).

[A61M 5/142](#)

Most subdivisions in this subgroup mainly describe the way in which the infusion pump works (peristaltic pump, roller pump, impeller pump...).

Other subdivisions however also relates to the fact that the pump is portable or implantable.

[A61M 5/158](#) and [A61M 5/162](#)

These two subgroups contain general information on infusion needles. The details of said needles can be found in [A61M 5/32](#) and [A61M 5/34](#).

[A61M 5/165](#)

Blood filters are now found in [A61M 1/34](#) and [A61M 1/36](#).

[A61M 5/168](#)

This subgroup contains flow controllers (regulating the flow of media), but also means for sensing or detecting flow anomalies.

[A61M 5/178](#), [A61M 5/19](#), [A61M 5/20](#), [A61M 5/24](#), [A61M 5/28](#) and [A61M 5/30](#)

Many different kind of syringes can be found in these sub groups. The automatic syringes (a certain action on a trigger will start the automatic injection of the media, no further action being required from the user) are found in [A61M 5/20](#). [A61M 5/24](#) and [A61M 5/28](#) regroups the ampoules syringes. In [A61M 5/24](#) the syringe bears the needle, in [A61M 5/28](#) the needle is present on the ampoule.

[A61M 5/30](#) relates to syringes for injection by jet action, also known as needleless syringes.

More syringes can also be found in other fields ([A61J 1/00-A61J 1/22](#), [A61B 5/14](#), [A61B 17/00-A61B 17/921](#)). [A61M 5/31](#) and [A61M 5/315](#) general details of syringes (caps, constructional features, priming, valves, plugs, filling, etc.) can be found in the subgroup [A61M 5/31](#).

The subgroup [A61M 5/315](#) relates to detail of the piston (construction, blocking means, etc.), but also to dosing mechanisms (gears, electrical parts, axial movements, rotational movements) and other dosing-related subjects (feedback, keeping track of administered doses, etc.).

[A61M 5/32](#)

This subgroup deals with details of needles, and especially with ways to protect the user from the needle (needle caps, apparatus for removing or destroying needles, semi- or fully-automatic retractable needles, semi- or fully-automatic needle sleeves for protecting the needle, etc.).

[A61M 5/427](#)

In the blood vessel is located prior to an injection (treatment).

[A61M 5/44](#)

This subgroup deals with means for cooling or heating the device (pump, syringe, etc.) or the media contained in the device (infusate, medicine, etc.).

[A61M 5/50](#)

Often forgotten, this group useful group deals with means for preventing re-use, or also for indicating if the device has already been used or tampered with.

A61M 9/00

Baths for subaquatic intestinal cleaning

Relationships with other classification places

Baths are also classified in [A61H 35/00](#) and [A61H 33/00](#)

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Irrigators	A61M 3/00
Bathing devices for special therapeutic or hygienic purpose	A61H 33/00
Baths	A61H 35/00

A61M 11/00

Sprayers or atomisers specially adapted for therapeutic purposes (in general [B05B](#); {aerosol containers [B65D 83/14](#)})

Definition statement

This place covers:

Sprayers or atomisers of liquid, e.g. medication, water for humidification

References

Limiting references

This place does not cover:

Device to humidify the respiration air	A61M 16/16
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Irrigator	A61M 3/00
Spraying onto the body	A61M 35/00
Bath for the nose	A61H 35/04
Sprayers or atomisers specially adapted for therapeutic purposes in general	B05B
Aerosol container	B65D 83/14

Special rules of classification

Also contains nebulizers.

The "subdivision" Indexing Code symbols (i.e. the non "parallel" Indexing Code symbols) are used for classifying as well the invention information as the additional information. They are stored only in the additional information field". The "orthogonal" Indexing Code symbols are also used.

A61M 11/005

{using ultrasonics (spraying or atomising liquids using ultrasonic vibrations in general [B05B 17/06](#))}

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Inhalators using ultrasonic	A61M 15/0085
Spraying or atomising liquids using ultrasonic vibrations in general	B05B 17/06

A61M 11/02

operated by air {or other gas} 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](#))}

Definition statement

This place covers:

Devices with positive air pressure.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Sprayers for horticulture	A01G , A01H
Killing insects	A01M
Air disinfection	A61L 9/03
Atomizer for painting	B05B
Adding O2, perfume to air	B60H 3/0007
Air humidifying by nozzles	F24F 6/14 , F24F 6/18
Cooling by spraying	F28B , F28C

Special rules of classification

The positive air pressure be created by any means (i.e., piston, pre-pressurized canister with propellant, etc.)

A61M 11/04

operated by the vapour pressure of the liquid to be sprayed or atomised {(air-humidification, e.g. "room humidifiers" [F24F 6/00](#))}

Definition statement

This place covers:

Electrical heated vaporiser, e.g. devices in which the vapor pressure of the liquid acting in a confined space is used to propel the liquid through an orifice to spray or atomize the liquid.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Humidifiers	A61M 16/16
Air-humidification, e.g. "room humidifiers"	F24F 6/00
Electrical heated vaporizers	F24H 1/00

A61M 11/041

{using heaters}

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Heating the liquid	A61M 16/109
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Special rules of classification

Heater vaporizes the liquid or acts on liquid in confined space to increase vapour pressure.

A61M 11/06**of the injector type****Definition statement**

This place covers:

Devices with a venturi system, i.e. non pocket size.

References**Limiting references**

This place does not cover:

Pocket atomiser	A61M 11/08
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Operated by air	A61M 11/02
Spraying apparatus	B05B 7/0012
Single unit with follower	B05B 11/02

A61M 11/08**Pocket atomisers of the injector type {(aerosol cans [A61M 15/009](#))}****Definition statement**

This place covers:

Devices with a venturi system, i.e. pocket size.

References**Limiting references**

This place does not cover:

Injector type, i.e. non pocket	A61M 11/06
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Aerosol cans	A61M 15/009
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A61M 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 [B05B 11/062](#))}

Definition statement

This place covers:

Devices to inflate a cavity for easy access.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Hand-held units in which gas flow is produced by muscular energy at the moment of use	B05B 11/062
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Special rules of classification

The "subdivision" Indexing Code symbols (i.e. the non "parallel" Indexing Code symbols) are used for classifying as well the invention information as the additional information. They are stored only in the additional information field"

The "orthogonal" Indexing Code symbols are also used.

A61M 13/003

{Blowing gases other than for carrying powders, e.g. for inflating, dilating or rinsing}

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

For the destruction of noxious animals or noxious plants	A01M
Instrument for medical examination	A61B 1/00
Insufflating needles therefor	A61B 17/3474

A61M 15/00

Inhalators {(drug delivery in endotracheal tubes [A61M 16/04](#))}

Definition statement

This place covers:

Devices or processes specially adapted to be used to insert or place media into human bodies by enhancing a naturally occurring method other than oral.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Drug delivery in endotracheal tubes	A61M 16/04
For animals	A61D 7/04
Medicinal preparation for inhaling	A61K 9/0073

Special rules of classification

The "subdivision" Indexing Code symbols (i.e. the non "parallel" Indexing Code symbols) are used for classifying as well the invention information as the additional information. They are stored only in the additional information field"

The "orthogonal" Indexing Code symbols are also used.

A61M 15/0028

{using prepacked dosages, one for each application, e.g. capsules to be perforated or broken-up}

Definition statement

This place covers:

Inhalators with unit dose with manual feeding, e.g. the single dose is inserted manually in the inhaler.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Injector type	A61M 11/06
Single unit with follower	B05B 11/02

A61M 15/0045

{using multiple prepacked dosages on a same carrier, e.g. blisters}

Definition statement

This place covers:

An inhaler/inhalator that accepts a package containing plural dosages of inhalant, e.g. multi-unit dose, with automatic feeding

A61M 15/0065

{Inhalators with dosage or measuring devices ([A61M 15/0028](#) takes precedence; dosage devices incorporated in aerosol cans [B65D 83/52](#))}

Definition statement

This place covers:

Inhalators with multi-dose reservoir, i.e. without capsule or blister

References

Limiting references

This place does not cover:

Using prepacked dosages	A61M 15/0028
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Informative references

Attention is drawn to the following places, which may be of interest for search:

With aerosol and not described dosing	A61M 15/009
Details of the spray nozzle	B05B
Dosage devices incorporated in aerosol cans	B65D 83/52

A61M 15/0085

{using ultrasonics (spraying or atomising liquids using ultrasonic vibrations in general [B05B 17/06](#))}

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Sprayers using ultrasonic	A61M 11/005
Spraying or atomising liquids using ultrasonic vibrations in general	B05B 17/06

A61M 15/0086

{Inhalation chambers}

Definition statement

This place covers:

Inhalators with spacers

A61M 15/009

{using medicine packages with incorporated spraying means, e.g. aerosol cans (pocket atomiser of the injector type [A61M 11/08](#))}

Definition statement

This place covers:

Inhalators having a pressurized container, e.g. Metered Dose Inhaler (MDI). A sufficient structure to generate the spray is part of a package that is introduced into the inhalator and subsequently removed for disposal.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Pocket atomiser of the injector type	A61M 11/08
Dosing	A61M 15/0065
Details of the spray nozzle	B05B
Aerosol container	B65D 83/14

A61M 15/0091

{mechanically breath-triggered}

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Inhalation valve providing indirect breath activation	A61M 15/0013
Inhalation detection	A61M 2016/0015
Flow sensor	A61M 2016/003

A61M 15/02

with activated or ionised {fluids, e.g. electrohydrodynamic [EHD] or electrostatic devices}; Ozone-inhalators {with radioactive tagged particles}

Definition statement

This place covers:

Also bubble jet technology inhalators.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Bubble jet	A61M 15/025
Sterilisation, deodorisation of air	A61L 9/14
Sterilisation using UV light	A61L 9/20
Electrostatic spray gun	B05B 5/025
Apparatus for generating ions	H01T 23/00

A61M 15/06

Inhaling appliances shaped like cigars, cigarettes or pipes

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Simulated smoking devices, e.g. imitation cigarettes	A24F 40/00 , A24F 42/00
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A61M 15/08

Inhaling devices inserted into the nose

Definition statement

This place covers:

Also eyes drop, aromatherapy devices.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Irrigation	A61M 3/00
Using the smell sense	A61M 2021/0016
Correcting deformities of the nose	A61F 5/08
Bath for nose	A61H 35/04
Eucalyptus vaporizer	A61L 9/14
Spraying apparatus	B05B 11/00

A61M 16/00

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

Definition statement

This place covers:

Respirator, ventilator, devices for inflating the lungs

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Pneumothorax apparatus	A61M 1/04
Anaesthesia apparatus	A61M 16/01
Inserts in the lungs, e.g. stents	A61F 2002/043

Informative references

Correcting deformities of the nose	A61F 5/08
Device for preventing snoring	A61F 5/56
Supply appliance	A61G 13/107
Stimulating the respiratory movement by mechanical, pneumatic or electrical means, iron lungs combined with gas breathing means	A61H 31/00
Supine patient supports therefor	A61H 31/008
Gas bath	A61H 33/00
Respiratory apparatus in general	A62B
Breathing simulator	A62B 9/003
Testing ventilators	A62B 27/00 , A61M 2209/02
Portable appliance comprising a gas cartridge	B01F 23/23611
Respirators for working under water	B63C 11/00
Hyperbaric chamber	B63C 11/32 , A61G 10/026
Wall plug	F16L 37/24 , F16L 37/107 , F16L 5/02 , F16L 29/02
Gas reservoir	F17C
Pipelines, hospital facility gas supply system	F17D 1/02
Computer driven apparatus	G06F 17/00
Models for artificial respiration	G09B 23/288

Special rules of classification

Classification using breakdown symbols and orthogonal symbols (i.e. symbols in the 2000 range) is compulsory.

A61M 16/0045

{Means for re-breathing exhaled gases, e.g. for hyperventilation treatment}

Definition statement

This place covers:

Also devices for hypoxic delivery of gas, e.g. CO₂.

References**Limiting references**

This place does not cover:

CO ₂ absorbing device	A61M 16/22
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Hyperbaric training room	A61G 10/026
Hypoxic training	A63B 23/18

Training device	A63B 2213/006
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A61M 16/0048

{Mouth-to-mouth respiration (teaching or training models [G09B 23/288](#))}

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Teaching or training models	G09B 23/288
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A61M 16/0051

{with alarm devices}

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Alarm in devices for introducing media	A61M 2205/18
Audible feedback	A61M 2205/581
Tactile feedback	A61M 2205/582
Visual feedback	A61M 2205/583
Alarm for measuring apparatus	G01L 19/12

Special rules of classification

Classification using breakdown symbols and orthogonal symbols (i.e. symbols in the 2000 range) is compulsory.

A61M 16/0054

{Liquid ventilation}

Definition statement

This place covers:

Also ventilation in aerosol form.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Oxygenated solution	A61M 2202/0476
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A61M 16/0057**{Pumps therefor}****Definition statement***This place covers:*

Pumps with variable mechanical maximum volume, limited stroke, hand driven, motor driven, otherwise driven.

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Medical pump	A61M 1/00
Air pumping means for inhalator	A61M 11/006
Reinflatable by elasticity	A61M 16/0084
Other air pumps	A61M 2205/07
Mask with pump	A62B 18/006
Pumps in general	F04

Special rules of classification

The devices classified in [A61M 16/0075](#), [A61M 16/0078](#) are often inflatable (mostly in anaesthesia), but are not reinflatable by elasticity.

A61M 16/0066**{Blowers or centrifugal pumps}****Definition statement***This place covers:*

Pumps in the form of a fan, a turbine.

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Helmet with fan	A62B 18/045
Gas pump in general	F04D

A61M 16/0072**{Tidal volume piston pumps}****Definition statement***This place covers:*

Tidal-Volume means a precise inspiratory volume, e.g. single stroke piston pump.

A61M 16/0078**{Breathing bags}****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Buffer chamber	A61M 15/0086
Reinflatable by elasticity	A61M 16/0084
Material therefor	B23B 27/12

A61M 16/009**{Removing used or expired gases or anaesthetic vapours (filtering, sterilising or disinfecting the exhaust air in drainage systems [A61M 1/784](#); bacterial filters in the expiratory path [A61M 16/1065](#))}****Definition statement***This place covers:*

Devices with charcoal, active carbon filter

References**Limiting references***This place does not cover:*

Filtering, sterilising or disinfecting the exhaust air in drainage systems	A61M 1/784
Bacterial filters in the expiratory path	A61M 16/1065

A61M 16/0096**{High frequency jet ventilation}****Definition statement***This place covers:*

Mainly used for ventilation without respiratory movement, or in case of lung puncture.

A61M 16/01**specialy adapted for anaesthetising {([A61M 16/104](#), [A61M 16/18](#) take precedence)}****Definition statement***This place covers:*

Ventilation devices used for anaesthesia.

These devices include in general a closed circuit generally including a CO2 absorber.

References

Limiting references

This place does not cover:

Anaesthetic mixer	A61M 16/104
Vaporizers	A61M 16/18

Informative references

Attention is drawn to the following places, which may be of interest for search:

CO2 absorber	A61M 16/22
Determining the level of anesthesia	A61B 5/4821

A61M 16/021

{operated by electrical means ([A61M 16/202](#) – [A61M 16/205](#) take precedence)}

References

Limiting references

This place does not cover:

Controlled valves being electrically actuated	A61M 16/202 - A61M 16/205
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Monitoring the respiratory organs	A61B 5/08
Electric stimulation by contact electrodes	A61N 1/3601

A61M 16/022

{Control means therefor}

Definition statement

This place covers:

Control means including automated or user control having displays with feedback.

A61M 16/024

{including calculation means, e.g. using a processor}

Definition statement

This place covers:

Devices having analog or digital calculators, microprocessors, or computers as the calculation means.

Devices calculating characteristics such as resistance, compliance, or comparison against threshold values.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Measuring the resistance or compliance of the lungs	A61M 2230/46
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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}

Definition statement

This place covers:

Estimation systems, prediction systems, systems using root square, regression, or correlation techniques, Proportional-Integral-Derivative (PID) systems.

A61M 16/04

Tracheal tubes (catheters in general [A61M 25/00](#))

Definition statement

This place covers:

They are tubes introduced generally through the mouth or the nose of the patient, e.g. endotracheal tubes.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Catheters in general	A61M 25/00
Endoscope	A61B 1/00
Stethoscope	A61B 7/02
Prosthesis in the bronchi	A61F 2/04 , A61F 2002/043
Y-shaped prosthesis	A61F 2002/065
Ostial prosthesis	A61F 2002/821

A61M 16/044

{External cuff pressure control or supply, e.g. synchronisation with respiration}

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Pressure indicating device	A61M 5/486 , A61M 25/1018
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Mushroom valve	A61M 16/206
Blood pressure cuff pressurizing apparatus	A61B

A61M 16/0461

{Nasoendotracheal tubes}

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Nasal cannula	A61M 16/0666
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A61M 16/0463

{combined with suction tubes, catheters or the like; Outside connections}

Definition statement

This place covers:

A manifold, a suction inside the tube.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Acces means to the stomach	A61M 16/0415
Aseptic insertion for catheters in general	A61M 25/0111
Gastrotomy feeding tube	A61J 15/0015

Special rules of classification

Also combined with drug delivery tube.

A61M 16/0465

{Tracheostomy tubes; Devices for performing a tracheostomy; Accessories therefor, e.g. masks, filters}

Definition statement

This place covers:

Tube introduced through the trachea, e.g. tracheostomy tube.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Obturator	A61M 16/0429
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Artificial nose, transtracheal catheter, (trans)cricothyroid catheter, coniotomy prosthesis	A61F 2/203
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A61M 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](#))}

Definition statement

This place covers:

Example: To enable the patient to speak.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Air passages from trachea to oesophagus or to pharynx, artificial epiglottis	A61F 2/203
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A61M 16/047

{Masks, filters, surgical pads, devices for absorbing secretions, specially adapted therefor}

Definition statement

This place covers:

Also plaster therefor

A61M 16/0472

{Devices for performing a tracheostomy}

Definition statement

This place covers:

Tools for making an opening.

A61M 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](#))}

Definition statement

This place covers:

Also includes holders.

References

Limiting references

This place does not cover:

Mouthpieces for live saving	A62B 9/06
Mouthpieces in lung exercisers	A63B 23/18
Mouthpieces for divers	B63C 11/186

Informative references

Attention is drawn to the following places, which may be of interest for search:

Obturator	A61M 16/0429
Holding devices on the body	A61M 25/02
Guiding or introducing with laryngoscopes	A61B 1/267
Detecting from outside	A61B 5/06
Head rest	A61B 90/14 , A61G 13/12 , A61F 5/3707
Correcting deformities of the nose	A61F 5/08
Patient airway positioning	A61G 13/1215

A61M 16/06

Respiratory or anaesthetic masks

Definition statement

This place covers:

Also hoods, cups

References

Limiting references

This place does not cover:

Breathing masks in general	A62B 18/00
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Protective and/or surgical face mask	A41D 13/11
Correction of the deformities of the nose	A61F 5/08
First aid mask	A62B 17/04 , A62B 18/00
Half mask	A62B 18/025
Fabrication by injection moulding	B29C
Fabrication of gas mask	B29D 99/0071

A61M 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](#))}

Definition statement

This place covers:

Also mounts for nasal tube.

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Outside holding devices	A61M 25/02
Occluding, e.g. bellows	A61B 17/12022
Devices for improving normal breathing through the nose	A61F 5/08
Nose filters	A62B 23/06

A61M 16/0683

{Holding devices therefor}

Definition statement

This place covers:

Strap, headgear.

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Means for securing a tube	A61M 16/0488
Fastening means	A62B 18/084
Aquatic headgear	B63C 11/12

A61M 16/08

**Bellows; Connecting tubes {(having means for taking samples [G01N 1/22](#));
Water traps; Patient circuits}**

Definition statement

This place covers:

Between a ventilator and the mask.

References

Limiting references

This place does not cover:

Supports	F16M 11/00
Having means for taking samples	G01N 1/22

Informative references

Attention is drawn to the following places, which may be of interest for search:

Heated tubes	A61M 16/1095
Tube support	A61M 2209/082

A61M 16/0808

{Condensation traps}

Definition statement

This place covers:

To dry the gas.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Vaporization chambers	A61M 16/18
Drying gas	B01D 53/26

A61M 16/0816

{Joints or connectors}

Definition statement

This place covers:

Connector: the element between the ventilation device and the tube

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Tube connector	A61M 39/10
Detection of the connection	A61M 2205/14
Wall plug	F16L 37/24 , F16L 37/107 , F16L 5/02 , F16L 29/02

A61M 16/0875**{Connecting tubes}****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Tubes	A61M 39/08
Hoses in general	F16L 11/00
Pipelines, hospital facility gas supply system	F17D 1/02

A61M 16/10**Preparation of respiratory gases or vapours****Definition statement***This place covers:*

"Vapours": any substance in the vapour phase.

References**Informative references***Attention is drawn to the following places, which may be of interest for search:*

Local anaesthesia	A61M 19/00
O2 for aircraft	A62B 7/14 , B64D 13/06
Cryogenic reservoir	F17C 9/02

A61M 16/104**{specially adapted for anaesthetics ([A61M 16/18](#) takes precedence)}****Definition statement***This place covers:*

Mixer for anaesthetics with safety solution.

References**Limiting references***This place does not cover:*

Vaporizers	A61M 16/18
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Informative references*Attention is drawn to the following places, which may be of interest for search:*

Adapted for anaesthesia	A61M 16/01
Local anaesthesia	A61M 19/00

Veterinary applications	A61D 7/04
Mixing in general	B01F 23/10

A61M 16/1045

{Devices for humidifying or heating the inspired gas by using recovered moisture or heat from the expired gas}

Definition statement

This place covers:

HME, Heat and Moisture Exchanger, e.g. passive humidifier.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

CO2 canister	A61M 16/22
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Special rules of classification

Also for anaesthetic agent.

A61M 16/105

{Filters ([A61M 16/047](#), [A61M 16/22](#) take precedence; water traps [A61M 16/08](#))}

Definition statement

This place covers:

Gas filtering for medical purpose

References

Limiting references

This place does not cover:

Masks, filters, surgical pads, devices for absorbing secretions, specially adapted therefor	A61M 16/047
CO2 canister	A61M 16/22

Informative references

Attention is drawn to the following places, which may be of interest for search:

Water traps	A61M 16/0808
Respiratory filter	A62B 7/10
Filter in general	B01D 46/00

A61M 16/1075

{by influencing the temperature ([A61M 16/1045](#) takes precedence)}

Definition statement

This place covers:

The temperature of the gas or the liquid.

References**Limiting references**

This place does not cover:

Heat and Moisture Exchanger	A61M 16/1045
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Tube	A61M 16/08
Heating	A61M 2205/36
Biomedical electrical heating control	H05B 1/025

A61M 16/12

by mixing different gases

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Anaesthesia mixer	A61M 16/104
Gas mixing in general	B01F 23/10
Filling gas container	F17C 5/06
Vessel with valves	F17C 13/045

A61M 16/14

by mixing different fluids, one of them being in a liquid phase

Definition statement

This place covers:

Also powder mixing with gas.

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Sprayers with venturi	A61M 11/06
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Mixing in general	B01F 23/10
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A61M 16/16

Devices to humidify the respiration air {([A61M 16/1045](#) takes precedence)}

References

Limiting references

This place does not cover:

Heat and Moisture Exchanger	A61M 16/1045
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Passive humidifier	A61M 16/1045
Vaporizer	A61M 16/18
CO2 canister	A61M 16/22
Steam bath	A61H 33/12
Mixing gas and liquid in general	B01F 23/20
Air-humidification, e.g. "room humidifiers"	F24F 6/00
Humidification in general	F24F 6/00 , F24F 6/18 , F22B 1/28

A61M 16/162

{Water-reservoir filling system, e.g. automatic}

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Filling systems in general	B65D 5/32
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A61M 16/18

Vaporising devices for anaesthetic preparations

Definition statement

This place covers:

Vaporizer for a product such as Halothane, e.g. halogenated ethers.

A61M 16/183**{Filling systems}****Definition statement**

This place covers:

Anaesthetic-reservoir filling system; contains also level detection system therefor.

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Level detection	A61M 2205/3379
Filling system	A61M 2209/045
Filling systems in general	B65D 5/32

A61M 16/186**{Locking systems}****Definition statement**

This place covers:

System for safely locking a vaporizer to an anaesthesia machine; also for humidifier, bottles, switching system.

A61M 16/20**Valves specially adapted to medical respiratory devices****Definition statement**

This place covers:

Also PEEP(Positive End Expiratory Pressure) valve.

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Medical valve	A61M 39/22
Apparatus for passive exercising	A61H 1/00
Respiratory valve	A62B 9/02
Breathing training devices	A63B 23/18
Divers equipment	B63C 11/00
Valve in general	F16K

A61M 16/208

{Non-controlled one-way valves, e.g. exhalation, check, pop-off non-rebreathing valves}

Definition statement

This place covers:

Check valve.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Vibration means	A61M 16/0006
Respiratory one-way valves	A62B 18/10
One-way valves in general	F16K 15/14 , F16K 15/16

Special rules of classification

Also tanks

A61M 16/22

Carbon dioxide-absorbing devices {; Other means for removing carbon dioxide} (cartridges with absorbing substances for respiratory apparatus [A62B 19/00](#))

Definition statement

This place covers:

CO2 canister, soda-lime canister

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Filter	A61M 16/1045 , A61M 16/105
Cartridges with absorbing substances for respiratory apparatus	A62B 19/00

A61M 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](#))

References

Limiting references

This place does not cover:

Desensitising skin	A61M 5/42
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Cooling blood in a bypass of the arterial system	A61M 1/36
Syringes therefor	A61M 5/00
Epidural puncture	A61B 17/3401
Cooling internal body cavities	A61F 7/12

Special rules of classification

The breakdown symbols (i.e. the non "parallel" or non "mirror" symbols) and "orthogonal" symbols are to be used for classifying the invention information (in addition to the invention symbols) in case the invention is insufficiently classified by an invention information symbol. They are also to be used for classifying the additional information. They are stored in the additional information field. The "subdivision" Indexing Code symbols (i.e. the non "parallel" Indexing Code symbols) are used for classifying as well the invention information as the additional information. They are stored only in the additional information field." The "orthogonal" Indexing Code symbols are also used.

A61M 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**

Definition statement

This place covers:

Devices or processes specially adapted to increase or decrease the mental activity of humans while awake (e.g., relax, stimulate) and that do so in a manner other than that which commonly occurs (e.g., creating boredom).

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Measuring the level of relaxation	A61B 5/16
Biorhythms	A61B 5/4857
Light or sound exposure not directed to the corresponding sensory organ	A61N
Psychological treatment using light therapy	A61N 5/0618
Respiratory rhythm indicators	A63B 23/185
Alarm clocks	G04B 23/00 , G04C 21/00
Speech recognition	G10L 15/00
Tinnitus	H04R 25/75 , A61B 5/12

Special rules of classification

The "subdivision" Indexing Code symbols (i.e. the non "parallel" Indexing Code symbols) are used for classifying as well the invention information as the additional information. They are stored only in the additional information field".The "orthogonal" Indexing Code symbols are also used.

A61M 21/0094

{Isolation chambers used therewith, i.e. for isolating individuals from external stimuli (other treatment rooms or enclosures [A61G 10/00](#))}

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Other treatment rooms or enclosures	A61G 10/00
Isolators	A61G 10/02
Bathing devices	A61H 33/00

A61M 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](#))

References

Limiting references

This place does not cover:

Applying alternating or intermittent electric currents for producing	A61N 1/36021
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Analgesic delivery	A61M 5/00 , A61M 16/00
Sleep evaluation	A61B 5/4806
For massage	A61H
Electrotherapy	A61N 1/3601

A61M 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](#)})

Definition statement

This place covers:

Static features, like structure, shape, mechanical properties and method of making of catheters.

References

Limiting references

This place does not cover:

Peritoneal catheter	A61M 1/285
Tracheal tubes	A61M 16/04
Dynamic features of catheters, like steering, guiding and advancing	A61M 25/01
Drainage tubes	A61M 27/00
Catheters for natural cavities (e.g. uterus, vagina, rectum)	A61M 31/00
Surgical instruments	A61B 17/00
Surgical instruments for veterinary use	A61D 1/00
Feeding tubes	A61J 15/00
Materials for catheters	A61L 29/00

Special rules of classification

Due to the more general character of the main group [A61M 25/00](#) and its sub groups, there is an overlap with several different sub classes ([A61B](#), [A61E](#), [A61N](#), [A61J](#), [A61K](#), [A61L](#)) and main groups, especially with the main groups [A61B 17/00](#) (Surgical instruments, devices or methods), [A61B 18/00](#) (Surgical instruments, devices or methods for transferring non-mechanical forms of energy to or from the body) and [A61B 90/00](#) (Instruments, implements or accessories for surgery or diagnosis not covered) and their sub groups.

The difference should be made by the following (an example is given for surgical uses, but is valid for other uses as well, e.g. catheters for use in stent delivery see [A61F 2/95](#), endoscopes see [A61B 1/00](#), catheters for use as feeding tubes [A61J 15/00](#)):

If the technical feature, which appears to be the invention, is disclosed only in relationship with a surgical use, respectively adapted only for surgical use, it should be classified as invention information in the relevant sub group/sub groups of [A61B 17/00](#), [A61B 18/00](#) or [A61B 90/00](#).

If this technical feature appears to add a beneficial contribution to the documentation in [A61M 25/00](#), then classify it as additional information in the relevant sub group/sub groups of [A61M 25/00](#).

If the technical feature, which appears to be the invention, is disclosed in a general way, i.e. only one embodiment relates to a surgical use, or other uses are disclosed equivalently, then it should be classified as invention information into the relevant sub group/sub groups of [A61M 25/00](#).

If this technical feature appears to add a beneficial contribution to the documentation in [A61B 17/00](#), [A61B 18/00](#) or [A61B 90/00](#), then classify it as additional information in the relevant sub group/sub groups of [A61B 17/00](#), [A61B 18/00](#) or [A61B 90/00](#).

In doubt please classify in more sub classes, main groups and/or sub groups, rather than in too less.

A61M 2025/0002

{with a pressure sensor at the distal end}

Definition statement

This place covers:

Catheters with additional pressure sensors

Sensors at the distal end are only used for pressure measurement

Definition statement

The sensor is at the distal end, i.e. within the body during a measurement.

No details of pressure sensor or pressure measurement

The features "pressure sensor", "pressure measurement" are only additional features of the invention and not the invention itself

References

Limiting references

This place does not cover:

Pressure measurement catheters, details of pressure measurement, pressure sensors and other sensors	A61B 5/00
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A61M 2025/0003

{having an additional lumen transmitting fluid pressure to the outside for measurement}

Definition statement

This place covers:

Catheters with additional pressure sensors

Sensors are only used for pressure measurement.

The sensor is at the proximal end or outside of the catheter.

No details of pressure sensor or pressure measurement.

In this subgroup the features "pressure sensor", "pressure measurement" are only additional features of the invention and not the invention itself

References

Limiting references

This place does not cover:

Pressure measurement catheters, details of pressure measurement, pressure sensors and other sensors	A61B 5/00
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A61M 2025/0004

{having two or more concentrically arranged tubes for forming a concentric catheter system}

Definition statement

This place covers:

Catheter system, comprising concentric catheter tubes movable with respect to each other

Systems with two or more tubes/catheters within each other in a concentric way forming one entity

References

Limiting references

This place does not cover:

Catheters having telescopic features, interengaging nestable members movable in relation to one another	A61M 2025/0175
Systems with catheter and outer tubing	A61M 2025/0681

A61M 2025/0007

{Epidural catheters}

Definition statement

This place covers:

The use of catheters as epidural, peridural, peritoneal and spinal catheters; the terms "epidural, peridural, peritoneal, spinal" trigger the classification into this subgroup.

References

Limiting references

This place does not cover:

Puncturing needles	A61B 17/3401
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Informative references

Attention is drawn to the following places, which may be of interest for search:

For the use in the brain or cerebrum	A61M 2210/0693
For the use in the spinal column	A61M 2210/1003

A61M 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}

Definition statement

This place covers:

Visible (optical) markers on catheters, tubes or guide wires.

References

Limiting references

This place does not cover:

Radio-opaque and ultrasound marker on catheters or medical tubes	A61M 25/0108
Magnetic marker on catheters or medical tubes	A61M 25/0127
Radio-opaque markers on guide wires	A61M 2025/09166

Visible markers which specifically belong to surgical instruments	A61B 90/39 , A61B 2017/00796
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Optical identification means	A61M 2205/6063
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A61M 25/0009

{Making of catheters or other medical or surgical tubes}

Definition statement

This place covers:

- Methods and processes of making and manufacturing of catheters and medical or surgical tubes
- This subgroup covers as well apparatus for manufacturing, which are specifically used for producing catheters

References

Limiting references

This place does not cover:

Method of making a guide wire	A61M 2025/09108
Connections between catheter tubes and inflation tubes	A61M 25/1025
Method of making balloon catheters	A61M 25/1027
Making of surgical instruments	A61B 17/00
Making of surgical instruments for transferring non-mechanical forms of energy (specific features for such devices, e.g. electrodes, cryotips)	A61B 18/00

Informative references

Attention is drawn to the following places, which may be of interest for search:

Devices for applying a coating	B05C
Process for applying a coating	B05D
Cutting tools	B26B

For a single-step process, or a specific step in a multi-step process:

Injection moulding	B29C 45/00
Extrusion moulding	B29C 48/00
Blow moulding	B29C 49/00
Shaping by stretching, e.g. drawing through a die	B29C 55/22
Shaping of tube ends	B29C 57/00
Lining or sheathing	B29C 63/00
Joining	B29C 65/00

For a multi-step process:

Producing tubular articles	B29D 23/00
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Special rules of classification

If a process leads to an interesting product, classify as well in the relevant Indexing Code subgroup

All machines that are specifically used for performing these manufacturing processes should be classified here, including large machines. If they are not used specifically for manufacturing catheters, then please see the references in this definition.

General methods for manufacturing and apparatuses for performing such methods are classified in the classes regarding methods, e.g. class [B21](#) (for metal products), [B26](#) (for cutting), [B29](#) (for plastic products). Methods for manufacturing, which are adapted to produce only a certain medical device (e.g. catheter, guidewire) will be classified in the class for the product, e.g. [A61](#) (for medical products). Apparatus for manufacturing a medical device which belong to a certain method for manufacturing will be classified in the same subgroup as the method.

For example, a method and apparatus of manufacturing of a special shaped balloon for the sole use with a balloon catheter (balloon used only for a catheter) will be classified in [A61M 25/1029](#) as invention information. Usually this document should also be considered for [B29C 49/00](#) (blow moulding) in addition.

As another example, a method and apparatus for manufacturing a plastic tube including blow moulding which discloses only casually that catheters can be made with it, will be classified in the relevant subgroup of [B29C 49/00](#) as invention information and will get a classification in [A61M 25/1029](#) as additional information if this method/apparatus could be relevant for a future search in this field.

A61M 25/001

{Forming the tip of a catheter, e.g. bevelling process, join or taper}

Definition statement

This place covers:

Also apparatus for manufacturing, which are specifically used for forming the tip of a catheter.

References

Limiting references

This place does not cover:

Method of making balloon catheters	A61M 25/1027
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Catheter characterised by the distal end	A61M 25/0067
Cutting tools	B26B
Injection moulding	B29C 45/00
Extrusion moulding	B29C 48/00
Blow moulding	B29C 49/00
Shaping of tube ends	B29C 57/00

Joining	B29C 65/00
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Special rules of classification

If a process leads to an interesting product, classify as well in the relevant Indexing Code subgroup of [A61M 25/0067](#)

A61M 25/0012

{with embedded structures, e.g. coils, braids, meshes, strands or radiopaque coils}

Definition statement

This place covers:

Methods or processes of making or manufacturing of catheters or medical or surgical tubes, which have structures made of different materials incorporated into bulk material, e.g. through moulding, or in-between two coatings.

This subgroup covers also apparatus for manufacturing, which are specifically used for embedding structures into catheters.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Catheters with embedded materials	A61M 25/005
Devices for applying a coating	B05C
Process for applying a coating	B05D
Injection moulding	B29C 45/00
Extrusion moulding	B29C 48/00
Blow moulding	B29C 49/00
Lining or sheathing	B29C 63/00
Producing tubular articles	B29D 23/00

Special rules of classification

If a process leads to an interesting product, classify as well in the relevant Indexing Code subgroup [A61M 25/005](#)

A61M 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}

Definition statement

This place covers:

This group covers as well apparatus for manufacturing, which are specifically used for weakening parts of catheter tubings.

References

Limiting references

This place does not cover:

Tip steering due to weakening outer material	A61M 25/0138
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Catheters with regions for increasing flexibility	A61M 25/0054
Cutting tools	B26B

Special rules of classification

If a process leads to an interesting product, classify as well in the relevant Indexing Code subgroups of [A61M 25/0054](#)

A61M 25/0014

{Connecting a tube to a hub}

Definition statement

This place covers:

This group covers as well apparatus for manufacturing, which are specifically used for connecting a catheter tube to a hub

References

Limiting references

This place does not cover:

Connections between catheter tubes and inflation tubes	A61M 25/1025
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Characterised by the hub	A61M 25/0097
Tube connectors; tube couplings	A61M 39/10
Joining	B29C 65/00

Special rules of classification

If a process leads to an interesting product, classify as well in the relevant Indexing Code subgroup [A61M 25/0097](#)

A61M 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}

Definition statement

This place covers:

This group covers as well apparatus for manufacturing, which are specifically used to make lateral openings in a catheter tube

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Side holes	A61M 25/007
Cutting tools	B26B

A61M 25/0017

{specially adapted for long-term hygiene care, e.g. urethral or indwelling catheters to prevent infections}

Definition statement

This place covers:

- All catheters which stay in the body for a prolonged period of time and are specially adapted therefore, e.g. antimicrobial coatings, surface properties, drainage
- Urinary catheters (used within the bladder, urethra, etc.) only for long-term use
- All catheters which stay in the body for a prolonged period of time and are therefore specially adapted to reduce the risks of a long term treatment (e.g. inflammation, clotting), e.g. by coatings, surface properties

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Drainage catheters	A61M 27/00
Closure means for urethra	A61F 2/0004
Devices worn by the patient for reception of urine	A61F 5/44

A61M 2025/0019

{Cleaning catheters or the like, e.g. for reuse of the device, for avoiding replacement}

Definition statement

This place covers:

- Cleaning the catheter from the inside and/or outside.
- Cleaning with or without solutions.

Definition statement

- Cleaning with or without mechanical means, e.g. brush.

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Cleaning pipes or tubes, external surfaces	B08B 9/023
Cleaning pipes or tubes, internal surfaces	B08B 9/027

Special rules of classification

Give [A61M 25/00](#) in addition to the Indexing Code subgroup [A61M 2025/0019](#), if only a process or an apparatus for cleaning a catheter or medical tube is disclosed.

Otherwise give the most relevant classification symbol, e.g. cleaning a balloon catheter with a special shape: [A61M 25/1002](#) and [A61M 2025/0019](#).

A61M 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](#))}

Definition statement

This place covers:

Packages only for catheters, medical tubes and guide wires

References**Limiting references**

This place does not cover:

Packages specially adapted for devices for bringing media into the body in a subcutaneous, intra-vascular or intramuscular way	A61M 5/002
Aseptic insertion devices	A61M 25/0111
Catheter dispensers	A61M 25/0113
Packages or dispensers for (surgical) needles or sutures	A61B 17/06114
Casings for packaging, protecting or dispensing (surgical) articles	A61B 50/30
Packages or dispensers for prostheses or other implants	A61F 2/0095

Informative references

Attention is drawn to the following places, which may be of interest for search:

Containers, packaging elements or packages specially adapted for particular articles or materials	B08B 9/02
Containers, packaging elements or packages for contents presenting particular transport or storage problems	B65D 81/00
Containers or packaging with special means for dispensing contents (i.e. to take things out of a package)	B65D 83/00

Containers, packaging elements or packages specially adapted for particular articles or materials	B65D 85/00
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A61M 25/0021

{characterised by the form of the tubing ([A61M 25/0054](#) takes precedence)}

Definition statement

This place covers:

Tubings with specific shapes of the outer tubing or the inner lumen, e.g. rectangular outer tubing

References

Limiting references

This place does not cover:

With regions for increasing flexibility (takes precedence)	A61M 25/0054
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A61M 2025/0024

{Expandable catheters or sheaths}

Definition statement

This place covers:

Catheters, medical tubes or sheaths which are expandable over their entire or at least sufficient length (not tip only)

References

Limiting references

This place does not cover:

For holding in lumen	A61M 25/04
Balloon catheter	A61M 25/10
Dilators	A61M 29/00

Informative references

Attention is drawn to the following places, which may be of interest for search:

Guide tubes	A61M 25/0662
Trocars; Puncturing needles, details of tips or shafts	A61B 17/3421

A61M 2025/0025**{having a collapsible lumen}****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Trocars; Puncturing needles, details of tips or shaft	A61B 17/3421
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A61M 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 2025/0175](#))}

Definition statement*This place covers:*

- Tubes defining the multi-lumens or the multi-lumens themselves do not move relative to each other
- Aspiration and irrigation catheters should be classified into this group as well
- Only multi-lumen catheters

References**Limiting references***This place does not cover:*

Concentric catheters	A61M 2025/0004
Catheter tip with multiple lumens	A61M 25/0071
Balloon catheters	A61M 25/10

Informative references*Attention is drawn to the following places, which may be of interest for search:*

Catheters for dialysis	A61M 1/285
Interfaces of extra-corporeal blood circuits	A61M 1/3653
Drainage tubes; Aspiration tips	A61M 1/84

A61M 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](#))}

Definition statement*This place covers:*

- Multilumen catheters with features relating to the proximal part of the lumens

- Only multi-lumen catheters

References

Limiting references

This place does not cover:

characterised by the hub	A61M 25/0097
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A61M 25/0029

{characterized by features relating to least one lumen located at the middle part of the catheter, e.g. slots, flaps, valves, cuffs, apertures, notches, grooves or rapid exchange ports (catheter shaft surface irregularities [A61M 2025/006](#))}

Definition statement

This place covers:

- Multilumen catheters with features relating to the middle part of the lumens
- Only multi-lumen catheters

References

Limiting references

This place does not cover:

Having a special surface topography or special surface properties	A61M 2025/006
Side holes at distal tip	A61M 25/007
Balloon catheter	A61M 25/10

A61M 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 25/0067](#))}

Definition statement

This place covers:

- Multilumen catheters with features relating to the distal part of the lumens
- Only multi-lumen catheters

References

Limiting references

This place does not cover:

Distal tip features generally	A61M 25/0067
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A61M 2025/0031

{characterized by lumina for withdrawing or delivering, i.e. used for extracorporeal circuit treatment}

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Catheters for dialysis	A61M 1/285
Extra-corporeal blood circuits	A61M 1/3621

A61M 25/0041

{pre-formed, e.g. specially adapted to fit with the anatomy of body channels (urethral catheters [A61F 2/04](#))}

References**Limiting references**

This place does not cover:

Tip steering with pre-shaped mechanisms	A61M 25/0152
Pre-shaped guide wires	A61M 25/09
Pre-shaped drainage appliances, for use in the urethral or ureteral tract	A61M 27/008
Implantable prosthesis in hollow or tubular parts of organs	A61F 2/04

A61M 2025/0042

{Microcatheters, cannula or the like having outside diameters around 1 mm or less}

Definition statement

This place covers:

Classify documents into this group if the outer diameter of a catheter is 1 mm or less or the word "microcatheters", etc. is used.

A61M 25/0045

{multi-layered, e.g. coated (coating materials [A61L 29/08](#))}

Definition statement

This place covers:

Multi-layer structures of catheters made e.g. by coating tubes, by coextruding tubes, by laminating tubes

References**Limiting references***This place does not cover:*

Coating materials	A61L 29/08
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A61M 2025/0046**{Coatings for improving slidability}****References****Limiting references***This place does not cover:*

Coating materials	A61L 29/08
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A61M 25/005**{with embedded materials for reinforcement, e.g. wires, coils, braids}****Definition statement***This place covers:*

Features to reinforce catheter tubes.

References**Limiting references***This place does not cover:*

Methods of making catheters with embedded structures	A61M 25/0012
Improve flexibility of catheters	A61M 25/0054
Tip steering due to inner reinforcing means	A61M 25/0144

A61M 25/0051**{made from fenestrated or weakened tubing layer}****Definition statement***This place covers:*

Catheter tubes reinforced by using an embedded fenestrated additional tube

References**Limiting references***This place does not cover:*

Reinforcement by embedded coils or braids	A61M 25/005
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A61M 25/0054**{with regions for increasing flexibility}****References****Limiting references***This place does not cover:*

Method of making catheters by 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	A61M 25/0013
Tip steering due to weakening outer material	A61M 25/0138
Tip steering due to material with different mechanical properties	A61M 25/0141

Informative references*Attention is drawn to the following places, which may be of interest for search:*

Catheters having a soft tip	A61M 2025/0081
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A61M 2025/0056**{provided with an antibacterial agent, e.g. by coating, residing in the polymer matrix or releasing an agent out of a reservoir}****References****Limiting references***This place does not cover:*

Drug delivery coatings	A61M 2025/0057
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Informative references*Attention is drawn to the following places, which may be of interest for search:*

Biological active materials	A61L 29/16
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A61M 2025/0057**{Catheters delivering medicament other than through a conventional lumen, e.g. porous walls or hydrogel coatings}****Definition statement***This place covers:*

Catheters using unconventional ways (i.e. other than delivery through large holes) for medicament delivery, e.g. through porous walls, hydrogel coatings with incorporated medicaments, through coils.

References

Limiting references

This place does not cover:

Antibacterial coatings	A61M 2025/0056
Side openings	A61M 25/007

Informative references

Attention is drawn to the following places, which may be of interest for search:

Biological active materials	A61L 29/16
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A61M 2025/0058

{having an electroactive polymer material, e.g. for steering purposes, for control of flexibility, for locking, for opening or closing}

References

Limiting references

This place does not cover:

Tip steering	A61M 25/0158
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Materials for catheters characterised by their function	A61L 29/14
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A61M 2025/006

{having a special surface topography or special surface properties, e.g. roughened or knurled surface}

Definition statement

This place covers:

Catheters with an unusual surface topography (i.e. other than standard smooth surfaces) for solving technical problems, e.g. roughened surface for increasing friction between tissue and catheter.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Endoscopes with grooved shaft	A61B 1/00073
Endoscopes with roughened shaft	A61B 1/00075

A61M 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](#))}

Definition statement

This place covers:

Catheters which have specific features to reduce frictions, e.g. roughened surface, lubricants, in use with a second entity, e.g. guidewire.

References**Limiting references**

This place does not cover:

Coatings	A61M 2025/0046
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A61M 2025/0063

{having means, e.g. stylets, 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}

Definition statement

This place covers:

Means for changing the mechanical properties, that are inserted while the catheter is already in place within the human body

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Catheters or medical tubes with inner stiffening members, which will be inserted into the catheter only for insertion or introduction purposes, i.e. they will be inserted while the catheter is introduced into the body and removed after insertion of the catheter into the body.	A61M 25/0102
Endoscopes with stiffening means	A61B 1/00078

A61M 25/0067

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

References**Limiting references**

This place does not cover:

With regions for increasing flexibility (takes precedence)	A61M 25/0054
Tip steering	A61M 25/0133

Limiting references

Holding in the body (takes precedence)	A61M 25/04
Balloon catheters	A61M 25/10
Surgical instruments for transferring non-mechanical energy to the body (ablation)	A61B 18/00

Informative references

Attention is drawn to the following places, which may be of interest for search:

Distal tips of endoscopes	A61B 1/0008
Surgical instruments for scraping out cavities of body organs	A61B 17/22

A61M 25/0068

{Static characteristics of the catheter tip, e.g. shape, atraumatic tip, curved tip or tip structure}

Definition statement

This place covers:

- Tip structure can be internal (i.e. inside the lumen) or external (i.e. outside the lumen onto the catheter shaft)
- Curved tip refers to an angled distal tip with respect to the rest of the catheter shaft,
- Tips specially adapted to fit with the anatomy of body channels should not be classified here
- Atraumatic tips which are atraumatic because of their shape (and not because of material choice).

References**Limiting references**

This place does not cover:

Pre-formed, e.g. specially adapted to fit with the anatomy of body channels	A61M 25/0041
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Special rules of classification

Check whether atraumatic tip should also be classified in [A61M 25/008](#) and/or [A61M 2025/0081](#).

A61M 25/0069

{Tip not integral with tube}

Definition statement

This place covers:

Separate tips either of the same material as the proximal tube and attached by e.g. gluing, welding or of a different material than the proximal tube

A61M 25/007

{Side holes, e.g. their profiles or arrangements; Provisions to keep side holes unblocked}

References**Limiting references**

This place does not cover:

Catheter with injection needles	A61M 25/0084
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Needles for infusion	A61M 5/158
Side holes for perfusion	A61M 2025/1095
Side holes for perfusion	A61M 2025/1097

A61M 25/0071

{Multiple separate lumens (multiple separate lumens throughout the catheter [A61M 25/0026](#))}

Definition statement

This place covers:

When main catheter lumens split into several lumens only at the distal tip of the catheter.

References**Limiting references**

This place does not cover:

Multi-lumen catheters with stationary elements	A61M 25/0026
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A61M 25/0074

{Dynamic characteristics of the catheter tip, e.g. openable, closable, expandable or deformable}

References**Limiting references**

This place does not cover:

Tools at the distal tip	A61M 25/0082
Expandable structures for holding within the body	A61M 25/04
Balloon catheters	A61M 25/10

A61M 25/0075**{Valve means}****Definition statement***This place covers:*

Valves at the distal tip

References**Limiting references***This place does not cover:*

Cerebrospinal drainage, e.g. valves	A61M 27/006
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Informative references*Attention is drawn to the following places, which may be of interest for search:*

Valves (if the disclosure of the document emphasises the details of a valve)	A61M 39/22
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A61M 2025/0079**{Separate user-activated means, e.g. guidewires, guide tubes, balloon catheters or sheaths, for sealing off an orifice, e.g. a lumen or side holes, of a catheter}****Definition statement***This place covers:*

Only the sealing of a catheter or tube lumen with a separate device

References**Limiting references***This place does not cover:*

Catheter with collapsible lumen	A61M 2025/0025
Occlusion of natural lumens	A61M 2025/1052

Informative references*Attention is drawn to the following places, which may be of interest for search:*

Guide wire having a balloon	A61M 2025/09008
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A61M 2025/0081**{Soft tip}****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Catheters having regions for increasing flexibility	A61M 25/0054
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A61M 25/0082**{Catheter tip comprising a tool}****Definition statement***This place covers:*

- Tools at the distal tip of a catheter
- A tool is a device which interacts with the surrounding tissue, i.e. it has an impact on the patient
- Tools can be internal (i.e. inside the lumen) or external (i.e. outside the lumen onto the catheter shaft) but linked to the catheter

References**Limiting references***This place does not cover:*

Pre-formed, e.g. specially adapted to fit with the anatomy of body channels	A61M 25/0041
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A61M 25/0084**{being one or more injection needles}****Definition statement***This place covers:*

- Catheters with needles for drug delivery into the surrounding tissue
- Catheters with needles for holding and for drug delivery
- If the details of the construction of a catheter with a needle appears to be the "invention" (the technical feature is the "invention"), then it should be classified here

References**Limiting references***This place does not cover:*

Drug delivery through needles without catheter	A61M 5/00
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Informative references*Attention is drawn to the following places, which may be of interest for search:*

Endoscopic needles	A61B 17/3478
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Special rules of classification

Please propose the following classes as well:

Solid needle for holding [A61M 2025/0095](#)

Holding in a body lumen [A61M 25/04](#)

If the medical treatment of a body with such a catheter appears to be the "invention" (the use is the "invention") [A61B 17/3478](#)

If no catheter is disclosed, only drug delivery [A61M 5/00](#)

A61M 2025/0086

{the needles having bent tips, i.e. the needle distal tips are angled in relation to the longitudinal axis of the catheter}

Definition statement

This place covers:

A catheter with multiple needles at its distal end, The needles are protruding along the longitudinal axis of the catheter. The tip of the needles themselves are bend out of plane and are therefore no longer parallel to the longitudinal axis of the catheter

A61M 2025/009

{the needle having a bent tip, i.e. the needle distal tip is angled in relation to the longitudinal axis of the catheter}

Definition statement

This place covers:

A catheter with a single needle at its distal end, The needle is protruding along the longitudinal axis of the catheter. The tip of the needle itself is bend out of plane and is therefore not any longer parallel to the longitudinal axis of the catheter

A61M 2025/0093

{wherein at least one needle is a microneedle}

References**Limiting references**

This place does not cover:

Details of microneedles	A61M 37/0015
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A61M 2025/0095

{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}

References**Limiting references**

This place does not cover:

Introducing instruments through an endoscopic needle	A61B 17/3478
Electrodes for stimulation	A61N 1/04

Informative references

Attention is drawn to the following places, which may be of interest for search:

Holding in a body lumen	A61M 25/04
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A61M 2025/0096

{being laterally outward extensions or tools, e.g. hooks or fibres}

References**Limiting references**

This place does not cover:

Catheters with injection needles	A61M 25/0084
Catheters with solid needles e.g. for holding	A61M 2025/0095
Electrodes	A61N 1/04

Informative references

Attention is drawn to the following places, which may be of interest for search:

Surgical instruments for scraping out cavities of body organs	A61B 17/22
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A61M 25/0097

{characterised by the hub (connectors [A61M 39/10](#))}

Definition statement

This place covers:

- Hubs for introducing fluid or other devices
- Handles without steering purpose

References**Limiting references**

This place does not cover:

Method of connecting a hub to a tubing	A61M 25/0014
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Handles for tip steering	A61M 25/0136
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Tube connectors; tube couplings	A61M 39/10
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A61M 25/01

Introducing, guiding, advancing, emplacing or holding catheters ([A61M 25/10](#) takes precedence)

Definition statement

This place covers:

- Dynamic features of catheters and medical tubes, e.g. advancing, guiding, steering
- Holding devices for catheters or medical tubes
- Guide tubes and guide needles
- Guide wires

References

Limiting references

This place does not cover:

Balloon catheter	A61M 25/10
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A61M 25/0102

{Insertion or introduction using an inner stiffening member, e.g. stylet or push-rod}

Definition statement

This place covers:

Catheters or medical tubes with inner stiffening members, which will be inserted into the catheter only for insertion or introduction purposes, i.e. they will be inserted while the catheter is introduced into the body and removed after insertion of the catheter into the body.

References

Limiting references

This place does not cover:

Means for changing the mechanical properties, that are inserted while the catheter is already in place within the human body	A61M 2025/0063
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A61M 25/0105

{Steering means as part of the catheter or advancing means; Markers for positioning (systems for detection of markers [A61B](#))}

Definition statement

This place covers:

- Steering means for steering the whole catheter, which are part of a catheter and not a separate device
- Markers, which are located on the catheter or medical tube
- If the markers are interesting for the identification of catheters or medical tubes (not marker specially adapted for surgical instruments)

References

Limiting references

This place does not cover:

Tip steering	A61M 25/0133
Radio-opaque markers on guide wires	A61M 2025/09166
Systems for detection of markers, without using radiation or US	A61B 5/06
Systems for detection of markers, using radiation	A61B 6/12
Systems for detection of markers, without using US	A61B 8/0833
Surgical robots for guiding instruments in the body; if the control device of this robots is outside the body of the patient	A61B 34/30
Markers, which specifically belong to surgical instruments	A61B 90/39

Informative references

Attention is drawn to the following places, which may be of interest for search:

Radio-opaque indicia	A61M 2205/32
Endoscopes, for steering device is disclosed	A61B 1/005

Special rules of classification

All markers should additionally be sent to [A61B 90/39](#)

Steering mechanisms of endoscopes (steering of the whole endoscope body) should be classified as the following:

If the technical feature, which appears to be the invention, is disclosed in a general way, i.e. not limited only to the use with an endoscope, then it should be classified as invention information in [A61M 25/0105](#).

If the technical feature, which appears to be the invention, is limited only to the use with an endoscope, but it appears to add a beneficial contribution to the documentation in [A61M 25/0105](#), then classify it as additional information in [A61M 25/0105](#).

A61M 25/0108**{using radio-opaque or ultrasound markers}****Definition statement***This place covers:*

If the markers are interesting for the identification of catheters or medical tubes (not marker specially adapted for surgical instruments)

References**Limiting references***This place does not cover:*

Ultrasound markers, which specifically belong to surgical instruments	A61B 2090/3925
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A61M 25/0111**{Aseptic insertion devices}****References****Limiting references***This place does not cover:*

Tracheal tubes combined with catheters	A61M 16/0463
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A61M 25/0113**{Mechanical advancing means, e.g. catheter dispensers}****Definition statement***This place covers:*

Devices which are adapted mechanically for moving a catheter in respect to the patient, e.g. catheter dispenser, mechanical catheter insertion devices

References**Limiting references***This place does not cover:*

Guide wire insertion devices	A61M 25/09041
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A61M 25/0116**{self-propelled, e.g. autonomous robots ([A61M 25/0122](#) takes precedence)}****Definition statement***This place covers:*

Self-propelled devices, where the control of such devices is within the device and not outside the patient

References

Limiting references

This place does not cover:

Advancing means having fluid drives by external fluid in an open fluid circuit (takes precedence)	A61M 25/0122
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Endoscopes using self-propulsion, e.g. capsule endoscopes, if a camera is part of the device	A61B 1/00156
Micromanipulators	A61B 34/72

A61M 25/0122

{with fluid drive by external fluid in an open fluid circuit}

References

Limiting references

This place does not cover:

Bodily fluids	A61M 25/0125
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Endoscopes using self-propulsion, e.g. capsule endoscopes	A61B 1/00156
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A61M 25/0125

{Catheters carried by the bloodstream, e.g. with parachutes; Balloon catheters specially designed for this purpose}

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Endoscopes using self-propulsion, e.g. capsule endoscopes	A61B 1/00156
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A61M 25/0127

{Magnetic means; Magnetic markers}

Definition statement

This place covers:

Magnetic means for guiding a catheter through the body, e.g. system which uses a catheter with a magnet, not marker, and an outer magnetic field for moving the catheter through the body of a patient.

Magnetic markers, which are located on the catheter or medical tube.

References

Limiting references

This place does not cover:

Systems for detection of markers, without using radiation or US	A61B 5/06
Magnetic markers, which specifically belong to surgical instruments	A61B 90/39 , A61B 2090/3954

Special rules of classification

Magnetic guidance means and markers are classified here. Detection systems are classified in [A61B](#). The combination of position detection and magnetic guidance means will be classified either here if the invention lies within the guidance, or in [A61B](#) if the invention lies in detection, or both here and in [A61B](#) if the inventions covers both aspects.

A61M 25/0133

{Tip steering devices}

References

Limiting references

This place does not cover:

Steering of the whole catheter	A61M 25/0105
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Endoscopes	A61B 1/005
Ablation catheters	A61B 18/1492

Special rules of classification

Steering mechanisms of endoscopes (steering of the endoscope tip only) should be classified as the following:

If the technical feature, which appears to be the invention, is disclosed in a general way, i.e. not limited only to the use with an endoscope, then it should be classified as invention information in [A61M 25/0133](#) and its sub groups.

If the technical feature, which appears to be the invention, is limited only to the use with an endoscope, but it appears to add a beneficial contribution to the documentation in [A61M 25/0133](#) and its sub groups, then classify it as additional information in [A61M 25/0133](#) and its sub groups.

A61M 25/0138

{having flexible regions as a result of weakened outer material, e.g. slots, slits, cuts, joints or coils}

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Regions for increasing flexibility	A61M 25/0054
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A61M 25/0141

{having flexible regions as a result of using materials with different mechanical properties}

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Regions for increasing flexibility	A61M 25/0054
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A61M 25/0144

{having flexible regions as a result of inner reinforcement means, e.g. struts or rods}

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Embedded materials	A61M 25/005
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A61M 25/0152

{with pre-shaped mechanisms, e.g. pre-shaped stylets or pre-shaped outer tubes}

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Pre-formed catheters	A61M 25/0041
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A61M 2025/0175

{having telescopic features, interengaging nestable members movable in relations to one another}

Definition statement

This place covers:

Catheters or medical tubes which can adapt their length thanks to a telescopic structure

References**Limiting references**

This place does not cover:

Concentric catheters; Systems with two or more tubes/catheters within each other in a concentric way	A61M 2025/0004
Systems with catheter and outer tubing	A61M 2025/0681

A61M 2025/0177

{having external means for receiving guide wires, wires or stiffening members, e.g. loops, clamps or lateral tubes}

Definition statement

This place covers:

External means, e.g. hooks, loops, for receiving wire shaped objects, except standard rapid exchange or monorail catheters with standard guidewire guiding means, e.g. short tubes

References**Limiting references**

This place does not cover:

Rapid exchange or monorail catheters with standard guidewire guiding means	A61M 2025/0183
Locking guide wires	A61M 2025/09125

Special rules of classification

Rapid exchange (rx) or monorail catheters with non standard guidewire guiding means, e.g. hooks, loops, should be classified here and in [A61M 2025/0183](#)

A61M 2025/0183

{Rapid exchange or monorail catheters}

Definition statement

This place covers:

Monorail or rapid exchange (rx) catheters have in contrast to the over the wire catheters only a short guidewire lumen which is parallel over a short distance to the catheter tube.

References

Limiting references

This place does not cover:

Balloon catheters having a guide wire lumens outside the main shaft, i.e. the guide wire lumen is within or on the surface of the balloon	A61M 2025/1056
---	--------------------------------

Informative references

Attention is drawn to the following places, which may be of interest for search:

Balloon catheters	A61M 25/10
Rapid exchange or monorail catheters as well in	A61F 2/95 , A61N , A61B 17/00

Special rules of classification

Rapid exchange (rx) or monorail catheters with non standard guidewire guiding means, e.g. hooks, loops, should be classified here and in [A61M 2025/018](#)

A61M 25/0194

{Tunnelling catheters}

Definition statement

This place covers:

Catheters which have a distal portion that enters the human body, leaving it and entering it again to create a fixation outside the human body

A61M 25/02

Holding devices, e.g. on the body

Definition statement

This place covers:

Holding of catheters, medical tubes and guide wires

A61M 2025/022

{specifically adapted for the mouth}

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Mouth	A61M 2210/0625
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A61M 2025/0226**{specifically adapted for the nose}****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Nose	A61M 2210/0618
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A61M 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}****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Fixing Trocars	A61B 2017/348
Gastrostomy feeding tubes	A61J 15/0015

A61M 2025/0266**{using pads, patches, tapes or the like}****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Adhesive bandages or dressings	A61F 13/02
--------------------------------	----------------------------

A61M 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](#))}****References****Limiting references***This place does not cover:*

Holding within a natural lumen, e.g. vessel	A61M 25/04
---	----------------------------

A61M 25/04

in the body, e.g. expansible {([A61M 25/10](#), [A61M 16/0488](#) take precedence)}

Definition statement

This place covers:

- Expandable devices for holding (not balloons)
- Other mechanisms

References**Limiting references**

This place does not cover:

Tracheal tubes, means for securing the tubes	A61M 16/0488
Balloon catheters	A61M 25/10

A61M 25/06

Body-piercing guide needles or the like

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Needles	A61M 5/158
Needles	A61M 5/32
Trocars; Puncturing needles (usually for introducing bigger sized instruments or tubes)	A61B 17/34

A61M 25/0606

{"Over-the-needle" catheter assemblies, e.g. I.V. catheters}

Definition statement

This place covers:

Systems of a body piercing needle and catheter, catheter will be delivered over the needle for introduction into the body.

References**Limiting references**

This place does not cover:

Guide needles, where the catheter will be delivered within the needle for introduction into the body	A61M 25/065
--	-----------------------------

A61M 25/0612

{Devices for protecting the needle; Devices to help insertion of the needle, e.g. wings or holders}

Definition statement

This place covers:

Needle protection devices, only if a catheter is part of the device

References**Limiting references**

This place does not cover:

Needle protection devices for assemblies without catheters	A61M 5/321
--	----------------------------

A61M 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}

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Retractable needles	A61M 5/322
---------------------	----------------------------

A61M 25/065

{Guide needles}

Definition statement

This place covers:

- Needles for the introduction of catheters, medical tubes or guide wires into the body; catheter will be delivered within the needle for introduction into the body
- Catheters with needle-shaped tips

References**Limiting references**

This place does not cover:

"Over-the needle" catheter assemblies	A61M 25/0606
---------------------------------------	------------------------------

Informative references

Attention is drawn to the following places, which may be of interest for search:

Body piercing needles (usually for introducing bigger sized instruments or tubes)	A61B 17/3415
---	------------------------------

A61M 25/0662

{Guide tubes}

Definition statement

This place covers:

- Guide tubes are larger than guide needles
- Guide tubes are usually made out of plastics
- Guide tubes usually do not have a piercing tip

References

Limiting references

This place does not cover:

"Over-the-needle" catheters	A61M 25/0606
Guide needles	A61M 25/065

Informative references

Attention is drawn to the following places, which may be of interest for search:

Guide tubes for endoscopes	A61B 1/00154
Guiding arrangements for endoscopes (this group is less relevant for the search for guide tubes; a search in A61B 1/01 should only take place if nothing could be found!)	A61B 1/01

A61M 2025/0675

{Introducing-sheath slitters}

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Apparatus for cutting tubes longitudinally	B26D 3/001
--	----------------------------

A61M 2025/0687

{having means for atraumatic insertion in the body or protection of the tip of the sheath during insertion, e.g. special designs of dilators, needles or sheaths}

Special rules of classification

Documents which disclose special designs of dilators should be classified in [A61M 29/00](#) as well.

A61M 25/0693**{Flashback chambers}****Definition statement***This place covers:*

A flashback chamber is a small chamber connected to a needle in a catheter assembly, which will be filled with blood if a vessel is punctured for indicating the correct insertion of the assembly.

References**Limiting references***This place does not cover:*

Devices for taking blood samples	A61B 5/15
----------------------------------	---------------------------

Informative references*Attention is drawn to the following places, which may be of interest for search:*

Devices for taking blood samples provided with indicating means	A61B 5/1422
---	-----------------------------

A61M 25/09016**{with mandrils}****Definition statement***This place covers:*

Guide wire comprising a core wire and an additional wire, which is connected to the core wire or proceed parallel to the core wire, e.g. for different mechanical properties.

A61M 25/09025**{with sliding mandrils}****Definition statement***This place covers:*

Guide wire with a movable additional wire, not core wire, within the guide wire, e.g. for steering.

A61M 25/09041**{Mechanisms for insertion of guide wires}****References****Limiting references***This place does not cover:*

Mechanisms for the insertion of catheters	A61M 25/0113
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A61M 25/0905**{extendable, e.g. mechanisms for extension}****Definition statement***This place covers:*

Guide wires with variable length

A61M 2025/09108**{Methods for making a guide wire}****Definition statement***This place covers:*

- Methods and processes of making and manufacturing of guidewires
- This group covers as well apparatus for manufacturing, which are specifically used for producing guidewires

References**Limiting references***This place does not cover:*

Methods of making catheters	A61M 25/0009
Methods of making balloon catheters	A61M 25/1027

Informative references*Attention is drawn to the following places, which may be of interest for search:*

Drawing wires	B21C 1/02
Specifics of dies	B21C 3/02
Manufacturing of fine wires	B21C 37/047
Coiling wire	B21F 3/00
Twisting wire	B21F 7/00
Cutting wire	B21F 11/00
Connecting wire with wire	B21F 15/02
Metallic coating of wire	B21F 19/00
Heat treatment	C21D 1/00
Modifying physical properties of steel by cold working	C21D 7/02

A61M 2025/09125**{Device for locking a guide wire in a fixed position with respect to the catheter or the human body}****Definition statement***This place covers:*

Locks within and/or outside a catheter or human body

A61M 2025/09166**{having radio-opaque features}****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Radio-opaque markers on catheters	A61M 25/0108
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A61M 25/10

Balloon catheters (**{[A61M 25/0125](#) takes precedence; embolectomy [A61B 17/22032](#); retractors [A61B 17/02](#);} inflatable balloons for placing stents or stent-grafts [A61F 2/958](#) {; stomach balloons for treatment of obesity [A61F 5/0003](#); oesophageal tubes [A61J 15/00](#)})**

Definition statement*This place covers:*

Mechanical and structural features of balloon catheters and balloons for catheters.

Methods for making balloon catheters.

References**Limiting references***This place does not cover:*

Catheters carried by the bloodstream, e.g. with parachutes; Balloon catheters specially designed for this purpose (takes precedence)	A61M 25/0125
Retractor	A61B 17/02
Embolectomy	A61B 17/22032
Stomach balloons for treatment of obesity	A61F 5/0003
Oesophageal tubes	A61J 15/00

Informative references*Attention is drawn to the following places, which may be of interest for search:*

Temporary occlusion for surgery	A61B 17/1204
Surgical occlusion balloons	A61B 17/12136
Scraping balloon	A61B 2017/22051
Cutting balloons	A61B 17/320725 ; A61B 17/32075
Balloons for stent delivery	A61F 2/958
Balloons for radiation therapy	A61N 2005/1003

A61M 25/1002

{characterised by balloon shape ([A61M 25/1006](#), [A61M 25/1009](#) take precedence)}

References**Limiting references**

This place does not cover:

Balloons formed between concentric tubes	A61M 25/1006
Balloons anchored to a disk or plate	A61M 25/1009

A61M 25/1011

{Multiple balloon catheters}

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Occlusion balloons	A61M 2025/1052
Surgical occlusion balloons	A61B 17/12136

A61M 25/1018

{Balloon inflating or inflation-control devices}

Definition statement

This place covers:

Balloon inflating or inflation control devices and balloon deflation and deflation control devices

References**Limiting references**

This place does not cover:

Active ventricular assist devices, i.e. heartbags with motor	A61M 60/268
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Inside a blood vessel, e.g. using grafting	A61M 60/135
--	-----------------------------

A61M 25/1027**{Making of balloon catheters}****Definition statement**

This place covers:

This group covers as well apparatus for manufacturing, which are specifically used for producing balloon catheters

References**Limiting references**

This place does not cover:

Making of catheters	A61M 25/0009
Method of making a guide wire	A61M 2025/09108
Making of surgical instruments	A61B 17/00
Making of surgical instruments for transferring non-mechanical forms of energy (specific features for such devices, e.g. electrodes, cryotips)	A61B 18/00

Informative references

Attention is drawn to the following places, which may be of interest for search:

Devices for applying a coating	B05C
Process for applying a coating	B05D
Cutting tools	B26B

For a single-step process, or a specific step in a multi-step process:

Injection moulding	B29C 45/00
Extrusion moulding	B29C 48/00
Blow moulding	B29C 49/00
Shaping by stretching, e.g. drawing through a die	B29C 55/22
Shaping of tube ends	B29C 57/00
Lining or sheathing	B29C 63/00
Joining (please contact the gérant in this field if a search must be done here)	B29C 65/00

For a multi-step process:

Producing tubular articles	B29D 23/00
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Special rules of classification

If a process leads to an interesting product, classify as well in the relevant Indexing Code group

A61M 2025/1031

{Surface processing of balloon members, e.g. coating or deposition; Mounting additional parts onto the balloon member's surface}

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Cutting balloons	A61B 17/320725 , A61B 17/32075
Devices for applying a coating	B05C
Process for applying a coating	B05D

A61M 25/1034

{Joining of shaft and balloon}

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Joining	B29C 65/00
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A61M 25/1036

{Making parts for balloon catheter systems, e.g. shafts or distal ends
([A61M 25/1029](#) takes precedence)}

Definition statement

This place covers:

Methods for making parts of balloon catheters, except balloons.

This group covers as well apparatus for manufacturing, which are specifically used for producing parts of balloon catheters, except of balloons

References**Limiting references**

This place does not cover:

Production methods of balloon member	A61M 25/1029
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A61M 25/104**{used for angioplasty}****Definition statement***This place covers:*

Balloon catheters, which are used for angioplasty (PTA, PTCA)

References**Limiting references***This place does not cover:*

Expandable dilators (e.g. balloons, struts) not used for angioplasty	A61M 29/02
--	----------------------------

Special rules of classificationClassify balloon dilators for angioplasty as well in IPC [A61M 29/02](#)**A61M 2025/1045****{for treating bifurcations, e.g. balloons in y-configuration, separate balloons or special features of the catheter for treating bifurcations}****Definition statement***This place covers:*

- Balloon catheters for treating bifurcations
- Other means for treating bifurcations

A61M 2025/1052**{for temporarily occluding a vessel for isolating a sector}****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Temporary occlusion for surgery	A61B 17/1204
Surgical occlusion balloons	A61B 17/12136

A61M 2025/1054**{having detachable or disposable balloons}****References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Stomach balloons for treatment of obesity	A61F 5/0003
---	-----------------------------

A61M 2025/1079

{having radio-opaque markers in the region of the balloon}

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Radio-opaque markers on catheters	A61M 25/0108
Radio-opaque markers on guide wires	A61M 2025/09166
Radio-opaque markers	A61B 90/39

A61M 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}

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Sheaths for balloon length adjustment	A61M 2025/1068
Stent covering sheaths	A61F 2/962

A61M 2025/1086

{having a special balloon surface topography, e.g. pores, protuberances, spikes or grooves}

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Scraping balloon	A61B 2017/22051
Cutting balloons	A61B 17/320725 , A61B 17/32075

A61M 2025/109

{having balloons for removing solid matters, e.g. by grasping or scraping plaque, thrombus or other matters that obstruct the flow}

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Scraping balloon	A61B 2017/22051
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Cutting balloons	A61B 17/320725 , A61B 17/32075
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A61M 27/00

Drainage appliance for wounds or the like {, i.e. wound drains, implanted drains} ({negative pressure wound therapy devices [A61M 1/90](#);} implements for holding wound open [A61B 17/02](#) {; middle ear drainage [A61F 11/202](#)})

Definition statement

This place covers:

- Wound drainage tubes.
- Systems for temporarily by-passing an vessel area with at least a part of circuit outside the body, e.g. for performing a surgical treatment in the by-passed area.

References

Limiting references

This place does not cover:

Wound drainage systems (with negative pressure or suction)	A61M 1/90
Implements for holding wounds open	A61B 17/02
Middle ear drainage	A61F 11/202

Informative references

Attention is drawn to the following places, which may be of interest for search:

Multi-lumen catheters	A61M 25/0026
Valve means for lumen inflow	A61M 2025/0078

Special rules of classification

The term "wound" covers all injuries of the skin which originate from the impact of outer forces to the body, e.g. during a surgery, during an accidents.

A61M 27/002

{Implant devices for drainage of body fluids from one part of the body to another (intraocular [A61F 9/00781](#); middle ear [A61F 11/202](#))}

Definition statement

This place covers:

Implantable drainage tubes, e.g. shunts

References

Limiting references

This place does not cover:

Anastomosis	A61B 17/11
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Intraocular drainage	A61F 9/00781
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A61M 27/006

{Cerebrospinal drainage; Accessories therefor, e.g. valves}

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Subcutaneous access sites for injecting or removing fluids	A61M 39/0208
--	------------------------------

A61M 27/008

{pre-shaped, for use in the urethral or ureteral tract}

Definition statement

This place covers:

Urethral or ureteral pre-shaped stents for draining

A61M 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](#))

Definition statement

This place covers:

Dilators, which do not change their shapes

References

Limiting references

This place does not cover:

Balloon dilators used for angioplasty	A61M 25/104
Expandable dilators, e.g. balloons not used for angioplasty, struts	A61M 29/02

A61M 29/02

Dilators made of swellable material {(balloon catheters for angioplasty
[A61M 25/104](#))}

Definition statement

This place covers:

Expandable dilators, e.g. balloons not used for angioplasty, struts.

A61M 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](#)})

Definition statement

This place covers:

Introducing or retaining medias in natural cavities, e.g. nose, anus, ear, vagina.

References

Limiting references

This place does not cover:

Introducing or retaining medias in vessels	A61M 25/00
Introducing or retaining ophthalmic products into the ocular cavities	A61F 9/0008
Injector for tampons	A61F 13/20
Tablets, pills	A61J 3/00
Feeding devices	A61J 15/0015

A61M 31/002

{Devices for releasing a drug at a continuous and controlled rate for a prolonged period of time (artificial gland structures or devices [A61F 2/022](#); intra-uterine contraceptive devices [A61F 6/14](#); tampons for introducing into the vagina [A61F 13/20](#), [A61L 15/00](#); suppositories or bougies for intra-vaginal or intra-uterine application [A61K 9/02](#); physical forms of medicinal preparations for sustained or differential drug release [A61K 9/20](#), [A61K 9/50](#))}

Definition statement

This place covers:

- Tampons with drug delivery.
- Electronic pills with drug delivery.
- Other devices for releasing a drug in a natural cavity.

References

Limiting references

This place does not cover:

Artificial gland structures or devices	A61F 2/022
Intra-uterine contraceptive devices	A61F 6/14
Suppositories or bougies for intra-vaginal or intra-uterine application	A61K 9/02
Medicinal preparations for sustained or differential drug release	A61K 9/20 , A61K 9/50

Informative references

Attention is drawn to the following places, which may be of interest for search:

Endoscopes using self-propulsion, e.g. capsule endoscopes	A61B 1/00156
Electronic pills	A61B 5/073

A61M 35/00

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](#))

Definition statement

This place covers:

Devices only for applying drugs, including antiseptics, sun protection lotions and self-tanning lotions onto the body and onto wounds.

This group does not cover devices which enhance the permeability of the skin, for example by iontophoresis or phonophoresis.

References**Limiting references**

This place does not cover:

Devices for handling toiletry or cosmetic substances	A45D
Absorbent pads, e.g. swabs, for medical use, in general	A61F 13/15

Informative references

Attention is drawn to the following places, which may be of interest for search:

Apparatus for applying media using vibrations	A61M 37/0092
Bathing devices, in general	A61H 33/00
Baths for specific parts of the body, in general	A61H 35/00
Transdermal patches with drugs	A61K 9/7023
Apparatus for iontophoresis	A61N 1/30

A61M 35/003

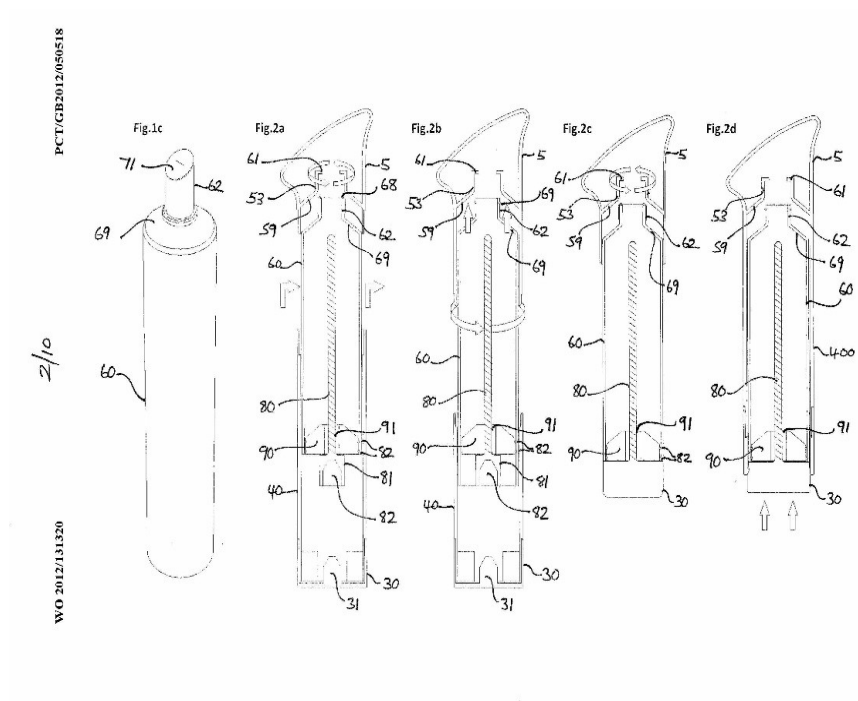
{Portable hand-held applicators having means for dispensing or spreading integral media (hand-held massage devices with liquid delivery [A61H 7/003](#))}

Definition statement

This place covers:

Handheld devices only for applying drugs, including antiseptics, onto the body and onto wounds. The drug to be applied is an integral part of the applicator.

For example:



References

Limiting references

This place does not cover:

Hand-held massage devices with liquid delivery	A61H 7/003
--	----------------------------

Informative references

Attention is drawn to the following places, which may be of interest for search:

Apparatus with means for delivering media, e.g. drugs or cosmetics	A61H 2201/105
Hand tools for applying fluent material to surfaces, in general	B05C 17/00
Container closures with pads or like contents-applying means, in general	B65D 47/42

A61M 35/006

{using sponges, foams, absorbent pads or swabs as spreading means}

Definition statement

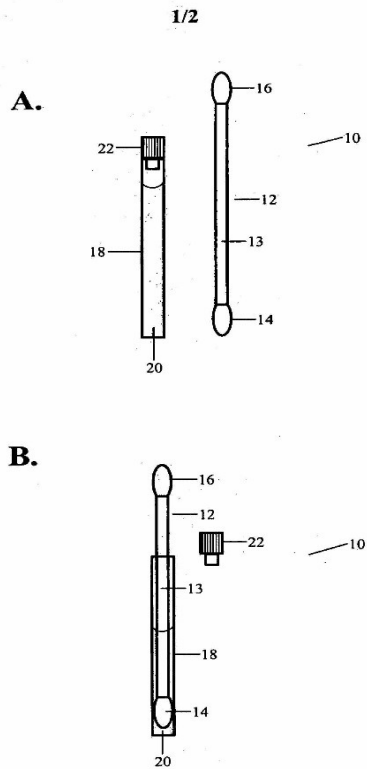
This place covers:

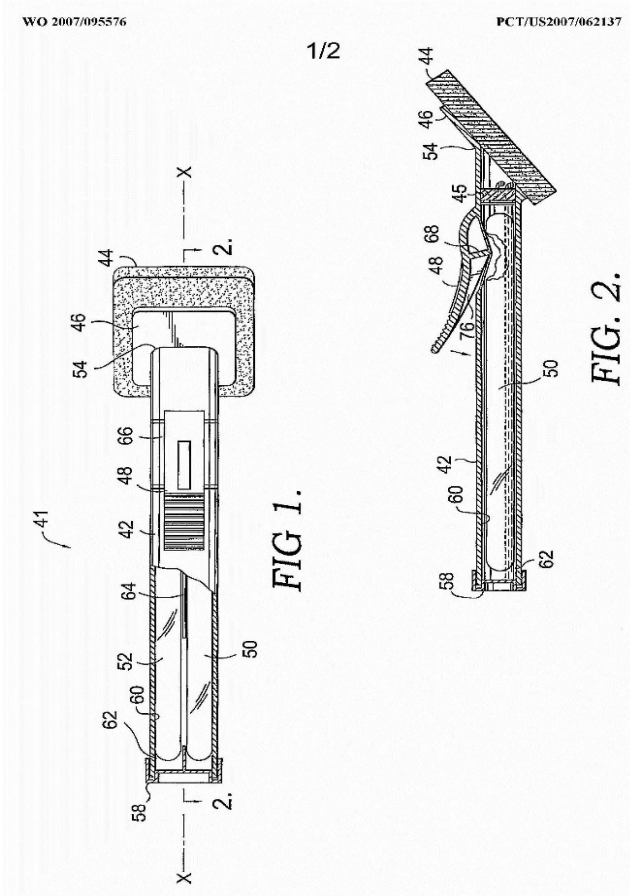
Portable hand-held applicators using sponges, foams or absorbent pads or swabs specifically used as spreading means, however not absorbent pads or swabs in general.

For example:

WO 2011/057363

PCT/AU2010/001537





A61M 35/10

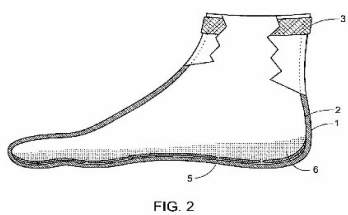
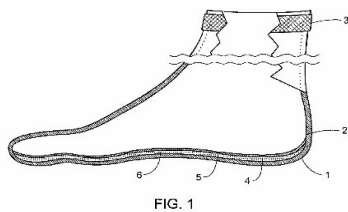
{Wearable devices, e.g. garments, glasses or masks}

Definition statement

This place covers:

For example:

Patent Application Publication Feb. 20, 2014 Sheet 1 of 2 US 2014/0052080 A1



Patent Application Publication Feb. 20, 2014 Sheet 2 of 2 US 2014/0052080 A1

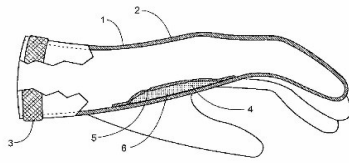


FIG. 3

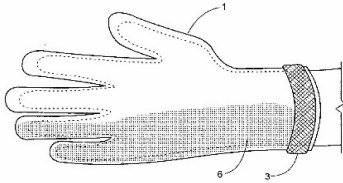


FIG. 4

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Garments, in general	A41D 1/00
Garments for therapeutic use	A41D 2400/32
Hats, caps, hoods, in general	A42B 1/00
Goggles, in general	A61F 9/02
Eye masks, in general	A61F 9/04
Bandages or dressings	A61F 13/00
Glasses, in general	G02C

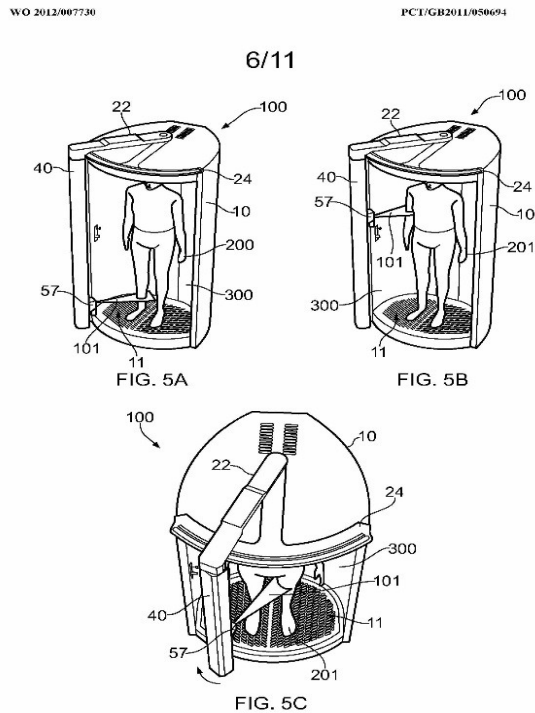
A61M 35/20

{Non-portable devices, e.g. spraying booths}

Definition statement

This place covers:

For example:



References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Spraying apparatus, in general	B05B
Coin operated apparatus for spraying fluids, in general	G07F 13/08

A61M 35/25

{specially adapted for the application of sunscreen, tanning or self-tanning lotions}

References

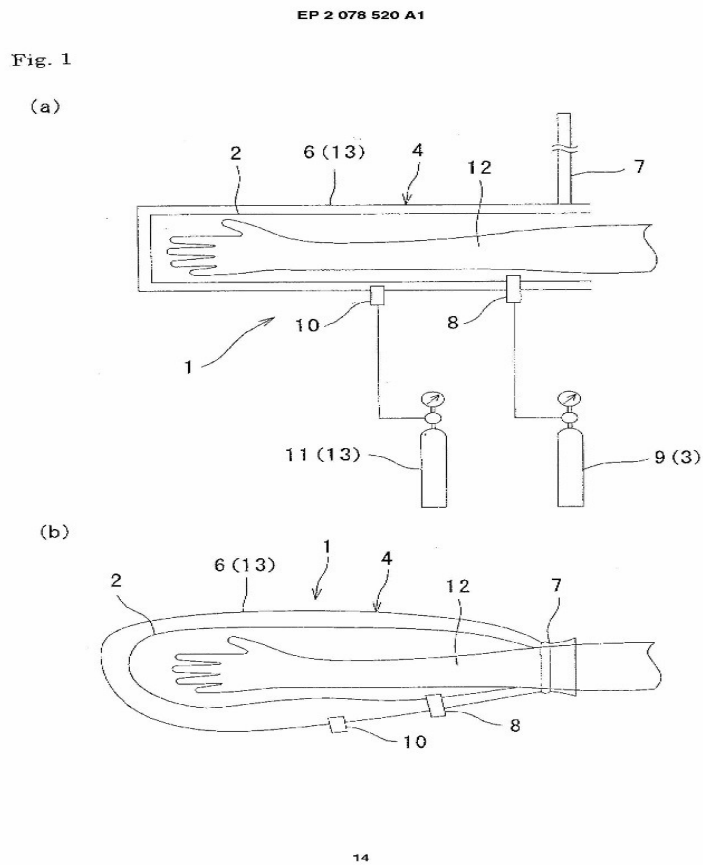
Informative references

Attention is drawn to the following places, which may be of interest for search:

Apparatus for tanning the skin using electromagnetic radiation	A61N 5/0614
Spraying apparatus, in general	B05B
Coin operated apparatus for spraying fluids, in general	G07F 13/08

A61M 35/30**{Gas therapy for therapeutic treatment of the skin}****Definition statement***This place covers:*

For example:

**References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Bathing devices, in general	A61H 33/00
Baths for specific parts of the body, in general	A61H 35/00

A61M 37/00

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

Definition statement

This place covers:

Devices for introducing substances (mainly drugs) into the body through artificial openings, e.g. thanks to puncturing with needles, thanks to application of ultrasound

References

Limiting references

This place does not cover:

Implantable pumps	A61M 5/14276
Syringes	A61M 5/178
Reproduction or fertilisation	A61B 17/425
Salt baths	A61H 33/04
Iontophoresis or cataphoresis	A61N 1/30

Informative references

Attention is drawn to the following places, which may be of interest for search:

Vaccination needles	A61B 17/205
Acupuncture	A61H 39/08

A61M 2037/0007

{having means for enhancing the permeation of substances through the epidermis, e.g. using suction or depression, electric or magnetic fields, sound waves or chemical agents}

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Ultrasound, e.g. phonophorese	A61M 37/0092
Iontophoresis or cataphoresis	A61N 1/30

A61M 37/0015

{by using microneedles}

Relationships with other classification places

Please propose the following classes as well:

Drug coated or drug delivering microneedles with specific drugs

[A61K 9/0021](#)

A61M 2037/0053

{Methods for producing microneedles}

Relationships with other classification places

Please propose the following classes as well (if applicable):

Shaping techniques

[B29C 67/00](#)

Manufacture or treatment of devices or systems in or on a substrate

[B81C 1/00](#)

A61M 37/0069

{Devices for implanting pellets, e.g. markers or solid medicaments (for introducing of radioactive sources for interstitial radiation therapy, i.e. brachytherapy [A61N 5/1027](#))}

Definition statement

This place covers:

Solid implants, e.g. solid medicaments, marker, etc., and devices for implanting solid implants into the body invasively

References

Limiting references

This place does not cover:

Radioactive implants and devices which are used only for implantation of radioactive implants (special sizes, shapes, radiation protection, etc.)	A61N 5/1001
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Cannula for implanting or removing devices	A61B 17/3468
Solid drug implants	A61K 9/0024

A61M 37/0076

{Tattooing apparatus (apparatus for marking animals [A01K 11/00](#); vaccine applicators having needles or other puncturing means [A61B 17/205](#))}

Definition statement

This place covers:

- Devices for applying permanent tattoos.
- Devices for applying temporary tattoos.

Definition statement

- Devices for applying temporary tattoos without using needles, e.g. adhesive tattoos.

References**Limiting references**

This place does not cover:

Apparatus for marking animals	A01K 11/00
Vaccination needles	A61B 17/205

A61M 39/00

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](#))

Definition statement

This place covers:

Access sites (subcutaneous or transcutaneous), haemostasis valves, medical tubes and means for storage of said tubes, tube connectors, caps or plugs for tubes or connectors, valves and clamping means for medical tubes.

References**Limiting references**

This place does not cover:

Connecting needles to syringes	A61M 5/34
Tracheal tubes (respiratory tubes)	A61M 16/04 , A61M 16/08
Respiratory valves	A61M 16/20
Connecting catheter tubes to hubs	A61M 25/0014
Vascular valves	A61F 2/24 - A61F 2/2496

Informative references

Attention is drawn to the following places, which may be of interest for search:

Peritoneal dialysis catheter	A61M 1/285
Fistulas	A61M 1/3655
Tube strippers	A61M 1/83
Regulating valves in infusion systems	A61M 5/16881
Resheathing means for used needles	A61M 5/321
Locating means to allow access to septum	A61M 5/427
Tracheotomy devices	A61M 16/0465
Measuring pressure within body	A61B 5/03
Cranial plugs	A61B 2090/103
Colostomy devices	A61F 5/445
Gastrotomy feeding tubes	A61J 15/0015

Informative references

Method or apparatus for disinfecting or sterilizing	A61L 2/00
Screw clamps in general	F16K 7/061
Lever clamps in general	F16K 7/063
Camp clamps in general	F16K 7/065
Wedge clamps in general	F16K 7/066
Tube cut-off devices by bending or twisting the tube in general	F16K 7/068
Starling valves in general	F16K 7/07
Multiway valves in general	F16K 11/08
Swivel nut connector (screw threaded joint) in general	F16L 15/00
Union screw connector (sealing surfaces pressed together by means of a member) in general	F16L 19/00
Rotating or swivel joints in general	F16L 27/00
Connecting hose to rigid members in general	F16L 33/00
Quick-acting type connectors in general	F16L 37/00
Multi-channel connectors in general	F16L 37/56

Special rules of classification

The classification of "additional information" in the field is mandatory, but only if the additional information has some importance.

For example, the main invention is an access site ([A61M 39/02](#)), but a valve ([A61M 39/22](#)) is present in the device. If the valve is just a common check valve with no specific details, then it is not worth giving a class in the field of valves. On the contrary, if the check valve is well described and presents some interesting features, then the document should also be classified in the field of valves.

Further details of subgroups

[A61M 39/02](#)

This subgroup contains the access sites. They are divided in two main categories: the subcutaneous access sites ([A61M 39/0208](#)) that are implanted under the skin and are therefore invisible to the user; and the transcutaneous access sites ([A61M 39/0247](#)) that actually go through the skin and that therefore have a part exposed to the outside. Historically the transcutaneous access sites were in an other field, they have been recently regrouped with the subcutaneous access sites. [A61M 39/0208](#) still contains documents that would now belong in [A61M 39/0247](#) but that were put in [A61M 39/0208](#) at a time where [A61M 39/0247](#) did not yet exist.

[A61M 39/06](#)

Haemostatis valves.

[A61M 39/10](#)

This subgroup regroups all kinds of medical connectors (except respiratory connectors that can be found in [A61M 16/08](#)). Some of the subdivisions of this subgroup mirror the way in which the general connectors are classified in [F16L](#). Other subdivisions are more specific to the medical connectors.

[A61M 39/24](#)

This subgroup contains medical check valves that are mostly classified by the way in which the check valve works, i.e. what kind of element (hinged member, flexible disc, ball, stem etc.) is used inside the

valve to get the desired "non-return effect". Again here, the subdivisions in this subgroup mirror the subdivisions of the group [F16K 15/00](#) that contains general check valves.

[A61M 39/26](#)

This subgroup contains valve closing automatically on disconnecting the line and opening on reconnection. Part of the subdivisions deals with the way in which the fluid space inside the valve is affected by disconnection. It can be difficult to find that information in the document to be classified, therefore extra-care is required when classifying in this subgroup.

[A61M 39/28](#)

This subgroup contains medical clamps for squeezing flexible tubes. Again here, the subdivisions in this subgroup mirror the subdivisions of the group [F16K 7/00](#) that contains general clamps.

A61M 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](#))

Definition statement

This place covers:

Blood pumps, implantable or extracorporeal, as well as devices for mechanical circulatory actuation, e.g. a harness rhythmically squeezing the heart, as well as balloon-like elements, implantable in the heart or vessel structure, which can be expanded or collapsed to assist the heart. They can be used for various medical purposes (e.g. enhancing renal perfusion). This group also covers their various details (e.g. speed control, magnetic drive coupling, and shape of impeller blades).

References

Limiting references

This place does not cover:

Heart stimulation	A61H 31/00
Heart stimulators for electrotherapy	A61N 1/362

Special rules of classification

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 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.

The following example is to clarify: a catheter-based intravascularly inserted axial flow pump for renal perfusion, driven by a cable rotated by an electromotor, with the impeller supported by a pivot bearing, and the pump being controlled for pulsatile operation synchronous with the heart.

The following aspects are identified:

- A. Location: Implantable by means of a catheter via a blood vessel; e.g. temporarily introduced.
- B. Type: A non-positive displacement, axial flow type pump.
- C. Medical purpose: For perfusion of the kidneys.
- D. Is driven by: A rotating cable.
- E. Is controlled to: Pump in a pulsating fashion; synchronous with the patient heart beat), and
- F. Has some further constructional details (relating to a contact bearing).

These aspects must be classified in (the appropriate subgroups of) groups:

- A. [A61M 60/10](#)
- B. [A61M 60/20](#)
- C. [A61M 60/30](#)
- D. [A61M 60/40](#)
- E. [A61M 60/50](#)
- F. [A61M 60/80](#)

Aspect #	Aspect	(Sub)group
A	Location (implantable; blood vessel; catheter)	A61M 60/13
B	Type (non-positive displacement; impeller; axial flow)	A61M 60/237
C	Medical purpose (in vivo organ perfusion; kidneys)	A61M 60/33
D	Driving details (mechanical force acting on impeller; generated by electromotor; transmitted by rotating cable)	A61M 60/414
E	Control details (for making flow pulsatile; synchronous with native hear beat)	A61M 60/569
F	Other constructional details (bearings; contact bearings)	A61M 60/825

A61M 60/205

Non-positive displacement blood pumps

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Electric motors	H02K
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A61M 60/268

the displacement member being flexible, e.g. membranes, diaphragms or bladders

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Constructive details of valves therefor	A61F 2/24
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A61M 60/40**Details relating to driving****Definition statement**

This place covers:

Drive systems therefor, e.g. mechanically, electromechanically or skeletal muscle drive means.

A61M 60/50**Details relating to control****Definition statement**

This place covers:

Electronical or mechanical regulation or controlling systems for any type of blood pumps.

A61M 60/871**Energy supply devices; Converters therefor****Definition statement**

This place covers:

Energy supply devices and converters therefor for all types of blood pumps.

References***Informative references***

Attention is drawn to the following places, which may be of interest for search:

Telemetry, communication with implanted devices	A61M 2205/3507
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