

A61F

FILTERS IMPLANTABLE INTO BLOOD VESSELS; PROSTHESES; DEVICES PROVIDING PATENCY TO, OR PREVENTING COLLAPSING OF, TUBULAR STRUCTURES OF THE BODY, e.g. STENTS; ORTHOPAEDIC, NURSING OR CONTRACEPTIVE DEVICES; FOMENTATION; TREATMENT OR PROTECTION OF EYES OR EARS; BANDAGES, DRESSINGS OR ABSORBENT PADS; FIRST-AID KITS (dental prosthetics [A61C](#))

Definition statement

This place covers:

Apparatus, devices or methods for physically correcting or altering the body of patients or disabled persons that are directly and for prolonged periods of time (i.e. not just during acute exceptional circumstances) used on or in the body of the patient or the disabled person:

Stents and similar devices providing patency to, or preventing collapsing of, tubular structures of the body;

Prostheses, i.e. artificial substitutes or replacements for parts of the body that are either implantable into the body (e.g. blood vessels, eye parts, heart valves, bones, joints) or not implantable in the body (e.g. mammary prostheses, artificial arms, hands, legs or feet or parts thereof);

Specially adapted electrical, bioelectrical or fluid operating or control means for prostheses or sphincters;

Specially adapted means for connecting prostheses with or to the body (e.g. bandages, harnesses, sockets, stockings for the limb stump);

Specially adapted means for protecting prostheses;

Filters implantable into blood vessels;

Lengthening pieces for natural legs;

Orthopaedic methods or devices for non-surgical treatment of bones or joints, e.g. splints, casts, corsets, devices for stretching including equipment for beds or treatment tables, medical insertions for shoes, pressure pads, suspensory bandages;

Methods or devices for physically treating or correcting of the eyes (e.g. eye surgery using laser);

Apparatus specially adapted for guiding the blind by supplementing or replacing their visual perception;

Methods or devices for treatment of the ears, e.g. surgical.

Methods or devices (e.g. head or eye-gaze-direction actuated control devices, oral communication actuated control devices) for enabling patients or disabled persons to operate independent apparatus or machines (i.e. apparatus such as room lights or doors that is not a part of, or used in conjunction with the functioning of, artificial or natural parts of their body) without the application of direct force from the part of the human body that would normally be used by individuals for controlling operation of the independent apparatus or machine such as a hand, foot or their artificial equivalents.

Contraceptive devices for males (e.g. condoms, vas deferens occluders) or females (e.g. pessaries, intra-uterine type, fallopian occluders).

Devices for medical or hygienic care of living individuals that are worn by the individual or directly contact the body of the individual during their care:

Devices worn by the patient for reception of urine, faeces; colostomy devices;

Bandages or dressings, e.g. plasters, elastic stockings;

Absorbent pads, e.g. sanitary towels, absorbent garments, e.g. diapers, tampons, e.g. catamenial tampons, surgical swabs; supporting and fastening means for pads.

Heating or cooling devices for medical or therapeutic treatment of the human body and for body cavities, e.g. compresses, warming pads, pans or mats, hot water bottles, ice bags.

Protective devices for the eyes, e.g. goggles, eye-masks worn to prevent particulates or chemicals from striking the eyes.

Devices for inserting contact lenses.

Protective devices for the ears, e.g. ear plugs or earmuffs.

Auxiliary appliances for wound dressings; dispensing containers for dressings or bandages; packages or wrapping arrangements for used pads, e.g. for disposal.

Containers having various emergency medical supplies such as bandages, simple medical tools, and medicines (i.e. first-aid kits) that are intended to be used for administering initial treatment to injured or sick individuals.

Relationships with other classification places

If an apparatus, method, device, or material 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 [A61F](#). Similar devices or processes to those covered by subclass [A61F](#) 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 [A01K](#) or [A61D](#).

Surgical apparatus or processes in general are covered by subclass [A61B](#).

Subclass [A61H](#) provides for massage, chiropractic, or physical therapy apparatus or processes used for the treatment of disease, injuries or disability (i.e. an abnormal condition of the body) by utilisation of direct mechanical energy.

Chemical and material aspects of prostheses, structures inserted into tubular structures of human bodies, bandages, dressings, absorbent pads or surgical articles are covered by subclass [A61L](#).

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: hollow or tubular parts of organs (e.g. bladders, tracheae, bronchi, heart valves and blood vessels, bile ducts), structural supporting or maintaining devices for such parts (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 (based on catchword index), artificial livers, artificial lungs, artificial pancreas, artificial kidneys and catheters in general.

Devices for introducing media into or onto the body, devices for taking media from the body are also covered by subclass [A61M](#).

Spectacles, sunglasses, contact lenses or goggles insofar as they have the features of vision correction or protection against high levels of visible and ultraviolet light are covered by subclass [G02C](#).

References

Limiting references

This place does not cover:

Dental prostheses	A61C
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Informative references

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

Undergarments	A41B 9/00
Baby linen	A41B 13/00
Corsets or girdles	A41C 1/00
Brassieres	A41C 3/00
Cosmetic articles, e.g. wigs, hair pieces	A41G
Caps with means for protecting the eyes or the ears	A42B 1/018
Ordinary arch supports for shoes	A43B 7/14
Artificial nails	A45D 31/00
Heating or cooling means in connection with bedsteads or mattresses	A47C 21/00
Surgical instruments	A61B 17/00
Devices for closing wounds, or holding wounds closed	A61B 17/08
Surgical drapes	A61B 46/00
Chiropractic methods or devices	A61H 1/00
Appliances for aiding patients or disabled persons to walk	A61H 3/00
Massage of the genitals	A61H 19/00
Chemical aspects of contraception	A61K
Transdermal drug delivery patches	A61K 9/70
Chemical aspects of, or use of materials for, bandages, dressings or absorbent pads	A61L 15/00 , A61L 26/00
Adhesives for colostomy devices	A61L 24/00
Surgical adhesives or cements	A61L 24/00
Materials for prostheses	A61L 27/00
Materials for colostomy devices	A61L 28/00
Artificial hearts, kidneys	A61M 1/00
Irrigators	A61M 3/02
Balloon catheters	A61M 25/10
Drainage appliances for wounds	A61M 27/00
Dilators	A61M 29/00
Valves specially adapted for medical use	A61M 39/00
Exercising apparatus specially adapted for particular parts of the body	A63B 23/00
Goggles for swimming	A63B 33/00
Making artificial eyes from organic plastic material	B29C , B29D 11/02

Arm rests for use as writing aids	B43L 15/00
Arrangements of tyre-inflating valves to tyres or rims	B60C 29/00
Diving masks	B63C 11/12
Safety devices for welding in general	F16P 1/06
Sunglasses or goggles having the same features as spectacles	G02C
Removable contact lenses	G02C 7/04
Electric heating elements	H05B

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.

Classify in both [A61M](#) and [A61F](#) if the disclosed utility is injecting media into the body, e.g. blood, to cool the body.

Glossary of terms

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

Absorbent articles	Articles adapted to absorb liquid excreted by the body.
Dilator	A (surgical) device or instrument used to dilate, distend, enlarge, expand, stretch an opening, organ, passage, tube, canal or cavity of a human or animal body (e.g. urethrotomy, tracheotomy, nasal, anal or cervix (Hegar's dilator) or vaginal dilation, bougienage, percutaneous dilation of tissues (Byrd dilator), whereas stents are not dilators but prostheses for providing patency, or preventing collapsing of tubular structures of the body.
Disabled person	A human being that is unable to do certain basic physical tasks (e.g. walking) due to a physical or mental impairment/condition.
Patient	A human being awaiting or undergoing any form of (a) medical care (e.g. testing) or treatment by medical staff (e.g. doctors, dentists, midwives, chiropractors), or (b) physical tending (e.g. feeding) by care giver (e.g. hospice or nursing home staff) due to impairment.
Stent	Balloon- or self-expandable tubular device for use in the treatment of duct-like organs typified for example by a blood vessel, biliary tract, urinary tract, digestive tract, and the like providing patency.
Stent graft	Stent with a tubular member made of a synthetic resin affixed to the inside or outside of the stent.

Synonyms and Keywords

In patent documents, the following words/expressions are often used with the meaning indicated:

Device for fluid management	incontinence article.
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A61F 2/00

Filters implantable into blood vessels; Prostheses, i.e. artificial substitutes or replacements for parts of the body; Appliances for connecting them with the body; Devices providing patency to, or preventing collapsing of, tubular structures of the body, e.g. stents (as cosmetic articles, see the relevant subclasses, e.g. wigs, hair pieces, [A41G 3/00](#), [A41G 5/00](#); artificial nails [A45D 31/00](#); dental prostheses [A61C 13/00](#); materials for prostheses [A61L 27/00](#); artificial hearts [A61M 60/00](#); artificial kidneys [A61M 1/14](#))

References

Limiting references

This place does not cover:

Cosmetic articles, e.g. wigs, hair pieces	A41G 3/00 , A41G 5/00
Artificial nails	A45D 31/00
Dental prostheses	A61C 13/00
Materials for prostheses	A61L 27/00
Artificial kidneys	A61M 1/14
Artificial hearts	A61M 60/00

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.

Prostheses classified in groups [A61F 2/00](#) - [A61F 2/26](#) or [A61F 2/82](#) or [A61F 9/00](#) or [A61F 11/00](#) or subgroups thereof:

[A61F 2210/00](#) Particular material properties

[A61F 2220/00](#) Fixations or connections

[A61F 2230/00](#) Geometry of prostheses

[A61F 2240/00](#) Manufacturing or designing of prostheses (specific manufacturing fields take precedence)

[A61F 2250/00](#) Special features of prostheses

A61F 2/0004

{Closure means for urethra or rectum, i.e. anti-incontinence devices or support slings against pelvic prolapse}

Relationships with other classification places

Colostomy devices: [A61F 5/445](#)

Receptacles for taking up urine or feces: [A61F 5/451](#)

Drainage catheters: [A61M 27/00](#)

References

Limiting references

This place does not cover:

Closure means for other lumina	A61B 17/12
Drainage of urine without closure	A61M 25/0017
Catheters for rectum	A61M 31/00

Informative references

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

Healthcare informatics	G16H
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A61F 2/0009

{placed in or outside the body opening close to the surface of the body
(plugging an opening in the wall of a hollow or tubular organ [A61B 17/0057](#))}

References

Limiting references

This place does not cover:

Plugging an opening in the wall of a hollow or tubular organ	A61B 17/0057
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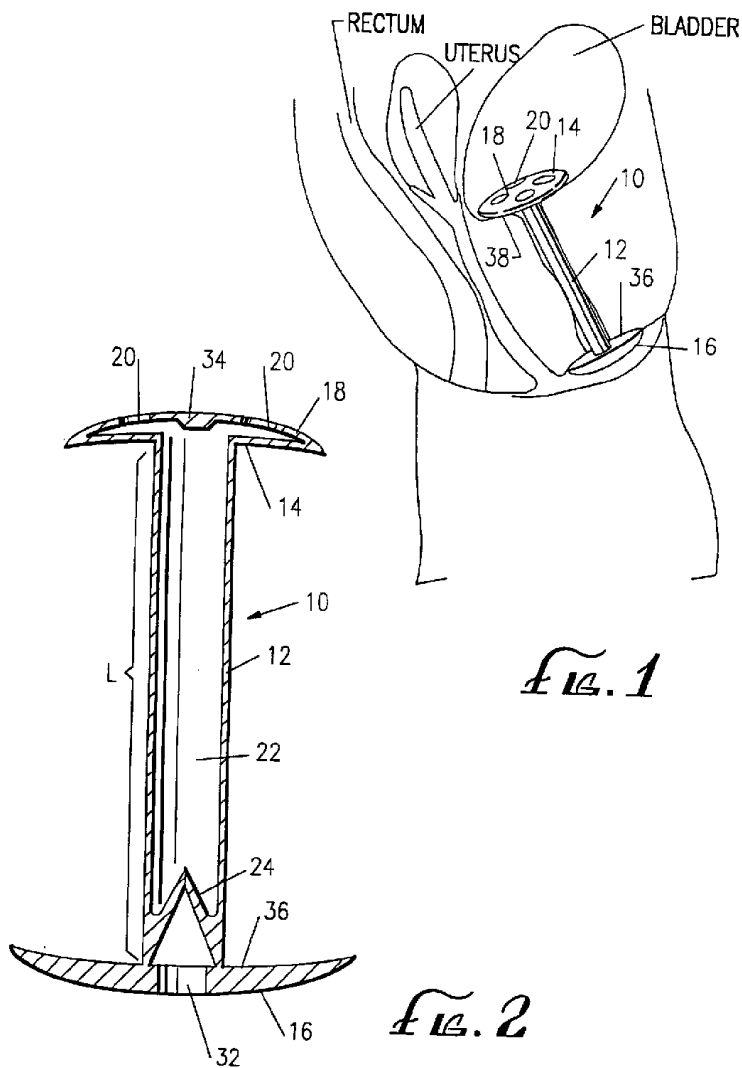
Special rules of classification

Illustrative example of subject matter classified in [A61F 2/0009](#).

WO 96/03942

PCT/US95/10179

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A61F 2/0013

{inflatable}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/0013](#).

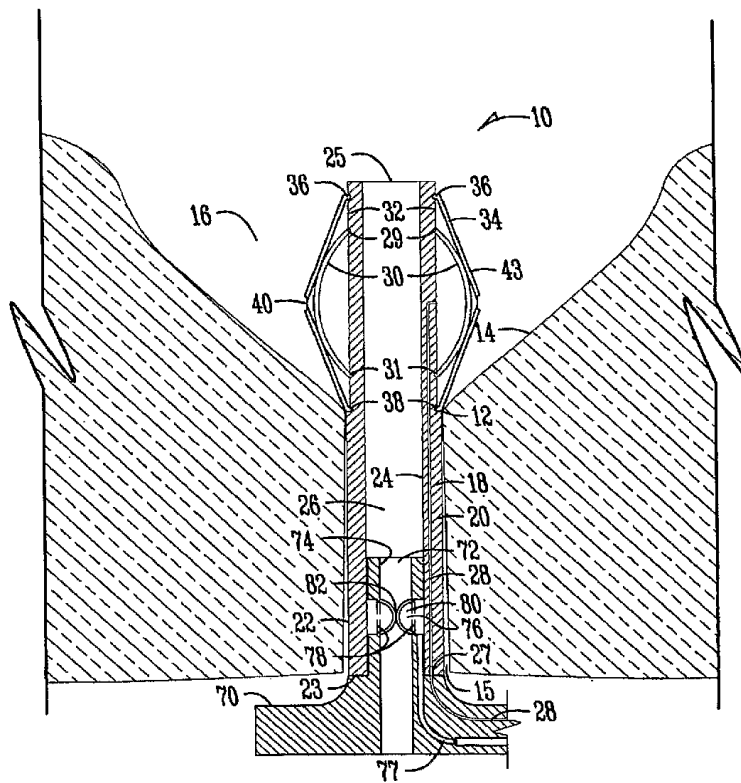


Fig. 3

A61F 2/0022

{placed deep in the body opening (occluding blood vessels by internal devices [A61B 17/12022](#))}

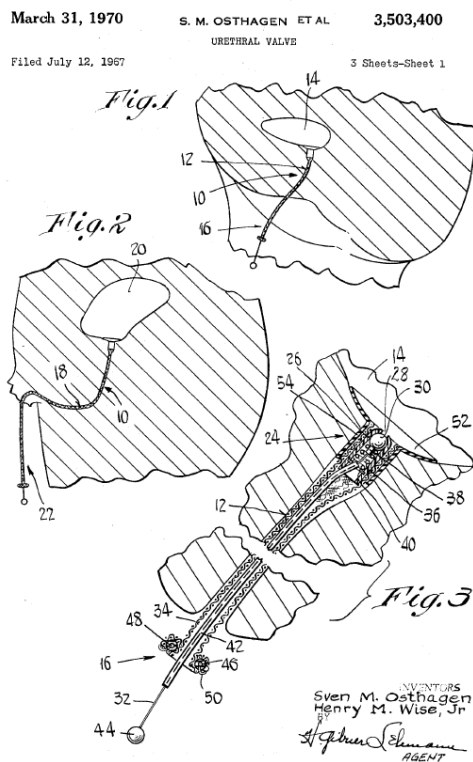
References**Limiting references**

This place does not cover:

Occluding blood vessels by internal devices	A61B 17/12022
Urethral drainage stents	A61M 25/0017

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/0022](#)



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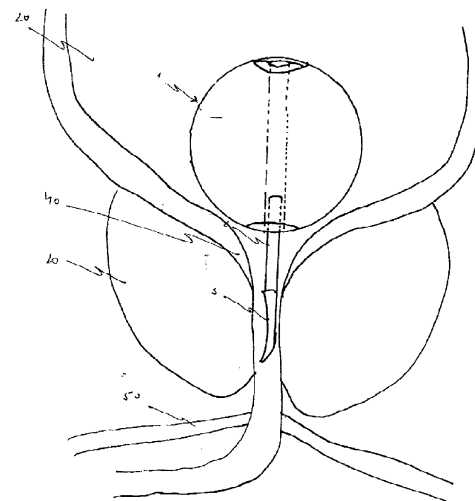


Fig. 3a

A61F 2/0036

{implantable ([A61F 2/0018](#) takes precedence)}

Relationships with other classification places

Implanted gastrointestinal electrodes for the anal tract: [A61N 1/0512](#)

Implanted gastrointestinal electrodes for the urinary tract: [A61N 1/0514](#)

References

Limiting references

This place does not cover:

Magnetic closure means placed in or outside the body opening close to the surface of the body	A61F 2/0018
Injectable solid implants	A61K 9/0024
Drainage implants in the urethral tract	A61M 27/008
Stimulation by electrodes	A61N 1/36007

A61F 2/004

{inflatable}

Relationships with other classification places

Means for transferring electromagnetic energy to implants: [A61F 2250/0001](#)

A61F 2/0045

{Support slings}

Definition statement

This place covers:

Slings or meshes for pelvic prolapse

Relationships with other classification places

Hernia repair meshes: [A61F 2/0063](#)

References

Informative references

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

Treatment of female stress incontinence, i.e. especially delivery devices or other devices for implantation	A61B 2017/00805
Bone anchors for fixation of slings	A61B 17/0401
Suturing instruments	A61B 17/06

A61F 2/005

{with pressure applied to urethra by an element placed in the vagina}

Relationships with other classification places

Tampons: [A61F 13/20](#)

Pessaries, i.e. devices worn in the vagina to support the uterus: [A61F 6/08](#)

Exercising apparatus for vaginal muscles: [A63B 23/20](#)

A61F 2/0054

{with pressure applied to urethra by an element placed around the penis, e.g. penis clamp}

Relationships with other classification places

Absorbent pads for male use: [A61F 13/471](#)

Penis implants: [A61F 2/26](#)

References**Informative references**

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

Clamps or clips in general	A61B 17/122
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A61F 2/0059

{Cosmetic or alloplastic implants ([A61F 2/10](#) - [A61F 2/16](#), [A61F 2/28](#) take precedence)}

Definition statement

This place covers:

Implants are structurally confined; there are no uncontained fillers

Relationships with other classification places

Cosmetic fillers: [A61K 8/02](#)

Cosmetic materials containing animal cells: [A61L 27/38](#)

References**Limiting references**

This place does not cover:

Hair or skin implants	A61F 2/10
Mammary prosthesis	A61F 2/12
Eye parts	A61F 2/14
Intraocular lenses	A61F 2/16
Bones	A61F 2/28

A61F 2/0063

{Implantable repair or support meshes, e.g. hernia meshes}

Relationships with other classification places

Knitting processes for the production of meshes: [D04B 21/12](#)

References

Limiting references

This place does not cover:

Support slings for the urethra	A61F 2/0045
Breast lifts	A61F 2/12
Heart meshes, i.e. covering the external surface of the heart	A61F 2/2481
Bandages	A61F 13/00
Implants for closing a vessel puncture or a septal defect	A61B 17/0057
Mesh patterns and the fabrication thereof	D04B 21/00

A61F 2/0077

{Special surfaces of prostheses, e.g. for improving ingrowth ([A61F 2/30767](#) takes precedence)}

References

Limiting references

This place does not cover:

Bone surfaces	A61F 2/30767
Materials for coating prostheses	A61L 27/28
Sand blasting	B24C 1/00 - B24C 11/00
Processes for functionalising a surface	B81C 1/00206
Inorganic coating processes	C23C 14/00

A61F 2/0095

{Packages or dispensers for prostheses or other implants (for intraocular lenses [A61F 2/1691](#); for dental surgery [A61C 19/02](#))}

Relationships with other classification places

Packages or dispensers for instruments: [A61B 50/30](#)

Packages in general: [B65D 1/00](#) - [B65D 90/00](#)

References

Limiting references

This place does not cover:

Packages or dispensers for intraocular lenses	A61F 2/1691
Packages or dispensers for dental surgery	A61C 19/02

Special rules of classification

Implants receive their particular Indexing Code-code together with the subgroup [A61F 2/0095](#) (Example: a package for a soft heart valve prosthesis will be classified in [A61F 2/0095](#) (Example: a package for a soft heart valve prosthesis will be classified in [A61F 2/0095](#) and [A61F 2/2412](#)).

A61F 2/01

Filters implantable into blood vessels

Relationships with other classification places

Catheters for removing obstructions in lumina with perfusion capabilities: [A61B 17/22](#)

Aspiration catheters: [A61M 1/84](#)

Dilation catheters with perfusion capabilities: [A61M 2025/1095](#)

References

Informative references

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

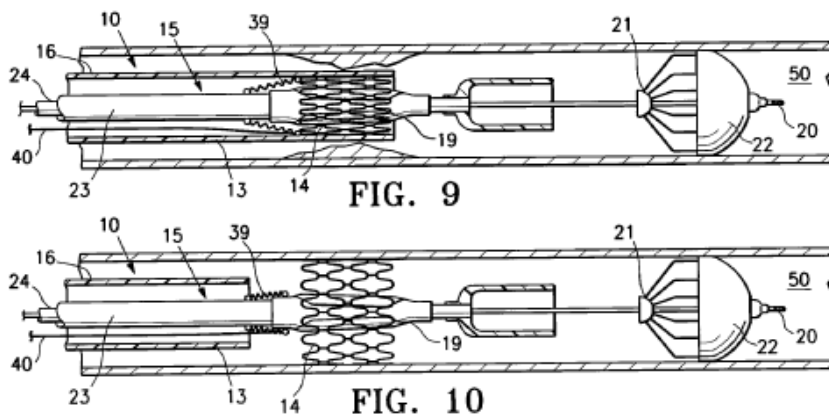
Internal occluding devices	A61B 17/12022
Filters used as gripping instruments	A61B 17/221
Snare instruments	A61B 17/32056

A61F 2/013

{Distal protection devices, i.e. devices placed distally in combination with another endovascular procedure, e.g. angioplasty or stenting}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/013](#).



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The other endovascular procedure in addition to the filtering device has to be classified in the appropriate groups such as for example:

Stent or stent-graft delivery devices: [A61F 2/95](#)

Balloon catheters: [A61M 25/10](#)

A61F 2/02

Prostheses implantable into the body {(closure means for urethra or rectum or for artificial body openings therefor [A61F 2/0004](#))}

References

Limiting references

This place does not cover:

Closure means for urethra or rectum or for artificial body openings therefor	A61F 2/0004
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A61F 2/022

{Artificial gland structures using bioreactors (hemodialysis [A61M 1/16](#); hemofiltration [A61M 1/34](#); other extracorporeal blood treatment [A61M 1/36](#))}

Definition statement

This place covers:

Devices which replace or supplement a natural gland and deliver enzymes.

References

Limiting references

This place does not cover:

Drug delivery	A61K 9/0024
Hemodialysis	A61M 1/16
Hemofiltration	A61M 1/34
Other extracorporeal blood treatment	A61M 1/36

Informative references

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

Bioreactors for enzymes	C12M 1/40
Processes for producing enzymes	C12N 11/00

A61F 2/04

Hollow or tubular parts of organs, e.g. bladders, tracheae, bronchi or bile ducts ([A61F 2/18](#), [A61F 2/20](#) take precedence; devices, other than stent-grafts, providing patency to, or preventing collapsing of, tubular structures of the body other than stent-grafts, e.g. stents [A61F 2/82](#); instruments specially adapted for placement or removal of stents or stent-grafts [A61F 2/95](#))

Relationships with other classification places

Urethral drainage stents: [A61M 25/0017](#)

References

Limiting references

This place does not cover:

Internal ear or nose parts	A61F 2/18
Epiglottis, Larynxes Tracheae	A61F 2/20
Stents	A61F 2/82
Instruments specially adapted for placement or removal of stents or stent-grafts	A61F 2/95

Informative references

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

Bariatric or gastric sleeves	A61F 5/0076
Tear duct implants	A61F 9/00772

Special rules of classification

Documents receiving a symbol in [A61F 2/04](#) have to receive a further symbol information, such as:

Urinary bladders: [A61F 2/042](#)

Bronchi: [A61F 2002/043](#)

Oesophageal anti-reflux valves and devices: [A61F 2002/044](#)

Tubes in the stomach: [A61F 2002/045](#)

Trachea: [A61F 2002/046](#)

Urethrae: [A61F 2002/047](#)

Ureters: [A61F 2002/048](#)

A61F 2/042

{Urinary bladders}

Relationships with other classification places

Drainage implant : [A61M 27/002](#)

A61F 2/06

Blood vessels

Definition statement

This place covers:

Tubular structures that substitute natural blood vessels, e.g. bypass grafts

References

Limiting references

This place does not cover:

Materials for artificial blood vessels	A61L 27/507
Artificial blood vessels as access point for injections e.g. for repeated puncture	A61M 1/3655
Tracheal tubes	A61M 16/00

A61F 2/062

{Apparatus for the production of blood vessels made from natural tissue or with layers of living cells (prostheses made from natural tissue or living cells [A61L 27/507](#))}

Definition statement

This place covers:

Devices for creating vascular grafts by mechanical means.

Relationships with other classification places

Materials containing animal cells: [A61L 27/38](#)

Cell culture and products made of cells: [C12N 5/00](#)

References

Limiting references

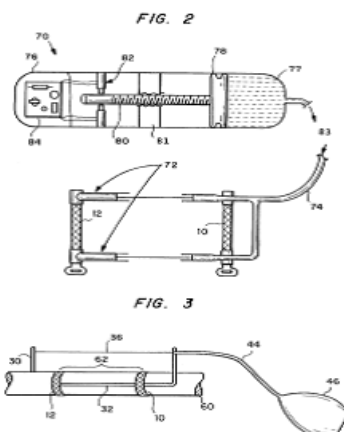
This place does not cover:

Protheses made from natural tissue or living cells	A61L 27/36
Bioreactors for producing artificial tissue or for ex-vivo cultivation of tissue	C12M 21/08

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/062](#):

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A61F 2/064

{with special features to facilitate anastomotic coupling (anastomosis of natural blood vessels [A61B 17/11](#))}

Definition statement

This place covers:

The artificial blood vessel has special technical features, e.g. hooks to provide a connection to a natural or artificial blood vessel.

References

Limiting references

This place does not cover:

Anastomosis in general; Anastomosis of natural blood vessels	A61B 17/11
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A61F 2/07

Stent-grafts

Definition statement

This place covers:

Stent-grafts for blood vessels. Stent-grafts are tubular grafts with stents embedded therein or attached to the graft material. The stent-graft for blood vessels is usually deployed within an aneurysm. The stent anchors the graft to the blood vessel wall. The graft is usually made from fabric material

Relationships with other classification places

External clamps or sleeves around an aneurism: [A61B 17/12](#)

Reinforcement of blood vessels, e.g. for repeated puncture: [A61M 1/3655](#)

References

Limiting references

This place does not cover:

Stent-grafts for tubular structures of the body other than blood vessels	A61F 2/04
Instruments for placement or removal	A61F 2/95
External stent or sleeve around aneurysm	A61B 17/12

A61F 2/08

Muscles; Tendons; Ligaments {(sutures [A61B 17/04](#))}

Definition statement

This place covers:

Artificial muscles implanted in the body

Relationships with other classification places

Tendon anastomosis: [A61B 17/1146](#)

References

Limiting references

This place does not cover:

Sutures	A61B 17/04
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Informative references

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

Artificial muscles as exoprotheses, i.e. not implanted but outside the body	A61F 2/68 and A61F 2002/5066
Programme-controlled manipulators with muscles or tendons	B25J 9/1075

A61F 2/0805

{Implements for inserting tendons or ligaments}

References

Limiting references

This place does not cover:

Guiding means for bone drills	A61B 17/17
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A61F 2/0811

{Fixation devices for tendons or ligaments}

References

Limiting references

This place does not cover:

Suture anchors	A61B 17/0401
Staples for connecting tendon to bone	A61B 17/0642

Special rules of classification

Documents receiving a class in [A61F 2/0811](#) have to receive a further class information, such as:

Structure of the anchor	A61F 2002/0817
Modular anchors comprising a plurality of separate parts	A61F 2002/0823
without deformation of anchor parts, e.g. fixation screws on bone surface, extending barbs, cams, butterflies, spring-loaded pins	A61F 2002/0829
with deformation of anchor parts, e.g. expansion of dowel by set screw	A61F 2002/0835
Longitudinal channel for insertion tool running through the whole tendon anchor, e.g. for accommodating bone drill, guidewire	A61F 2002/0841
Mode of fixation of anchor to tendon or ligament	A61F 2002/0847

Fixation of a loop or U-turn, e.g. eyelets, anchor having multiple holes	A61F 2002/0852
Fixation of tendon or ligament between anchor and bone, e.g. interference screws, wedges	A61F 2002/0858
Fixation of tendon or ligament between anchor elements, e.g. by additional screws in the anchor, anchor crimped around tendon	A61F 2002/0864
Anchor integrated into tendons, e.g. bone blocks, integrated rings	A61F 2002/087
Position of anchor in respect to the bone	A61F 2002/0876
Anchor in or on top of a bone tunnel, i.e. a hole running through the entire bone	A61F 2002/0882
Anchor in or on a blind hole or on the bone surface without formation of a tunnel	A61F 2002/0888

A61F 2/10

Hair or skin implants

References

Limiting references

This place does not cover:

Instruments for implanting hair follicles	A61B 17/3468
Hair cells	C12N 5/0627

Informative references

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

Wigs	A41G 3/00
Hair pieces	A41G 5/00

A61F 2/105

{Skin implants, e.g. artificial skin}

References

Limiting references

This place does not cover:

Skin cells	C12N 5/0698
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Informative references

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

Materials for use in artificial skin	A61L 27/60
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A61F 2/12

Mammary prostheses and implants

Relationships with other classification places

External mammary prostheses: [A61F 2/52](#)

References

Limiting references

This place does not cover:

Devices for expanding tissue	A61B 90/02
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Special rules of classification

Illustrative example of subject matter classified in [A61F 2/12](#)

WO 2007/092385

PCT/US2007/003043

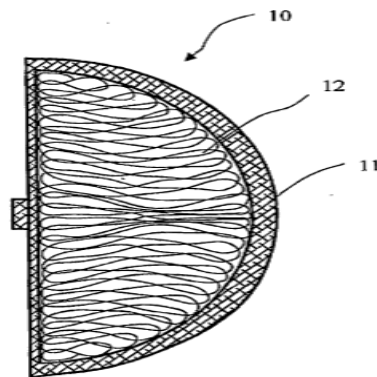
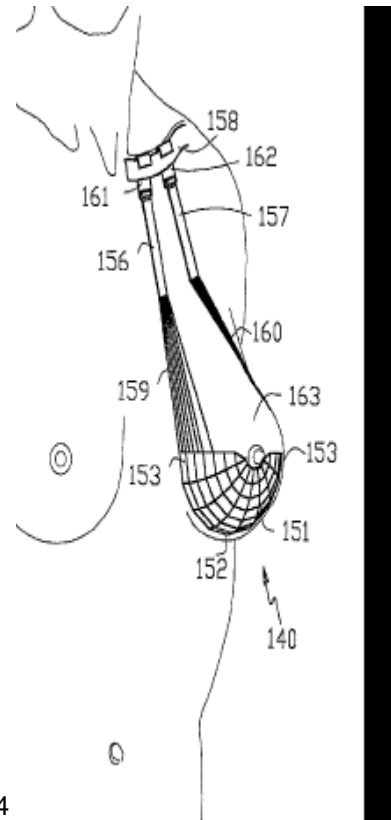


FIG. 2



Example for mammary support implant: WO2007004214

A61F 2/14

Eye parts, e.g. lenses, corneal implants; {Implanting instruments specially adapted therefor}; Artificial eyes

Definition statement

This place covers:

All eye prostheses and replacement parts not provided for in the subclasses

Relationships with other classification places

Retinal electrodes: [A61N 1/0526](#)

Retinal implants: [A61N 1/36046](#)

Removable contact lenses: [G02C 7/04](#)

References

Limiting references

This place does not cover:

Artificial eyes (making thereof from organic plastic material)	B29C , B29D 11/02
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Informative references

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

Packages or dispensers for prostheses or other implants in general	A61F 2/0095
Exercisers for the eye	A61H 5/00

A61F 2/141

{Artificial eyes}

References

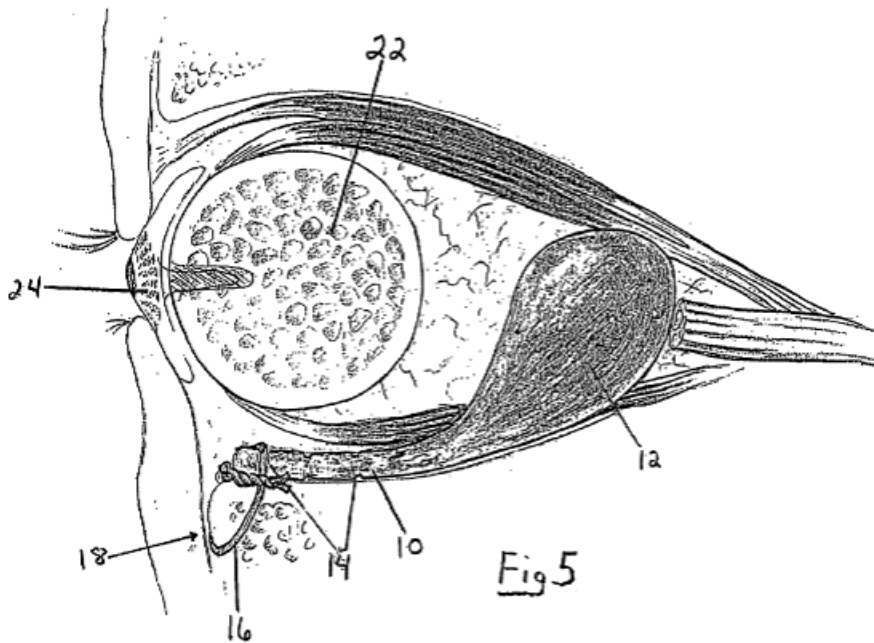
Informative references

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

Surgical instruments for osteosynthesis of orbital bone	A61B 17/6433
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Special rules of classification

Illustrative example of subject matter classified in [A61F 2/141](#)



Patent Application Publication Feb. 26, 2004 Sheet 3 of 3 US 2004/0039445 A1

A61F 2/142

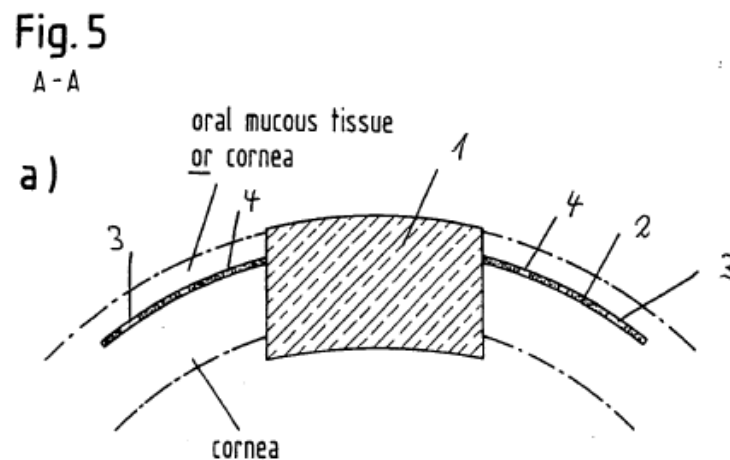
{Cornea, e.g. artificial corneae, keratoprotheses or corneal implants for repair of defective corneal tissue}

Definition statement

This place covers:

Artificial or natural cornea replacement implant for repair of defective corneal tissue.

EP 2 067 453 A1



Relationships with other classification places

Implantation instruments therefor: [A61F 2/148](#)

References

Limiting references

This place does not cover:

Optically active corneal inlay or onlays for refractive correction	A61F 2/145
Corneal implants for refractive correction by alteration of the shape of the cornea	A61F 2/147

A61F 2/145

{Corneal inlays, onlays, or lenses for refractive correction}

Definition statement

This place covers:

Optically active elements inserted between corneal layers for refractive correction.

WO 03/022168

PCT/US02/28714

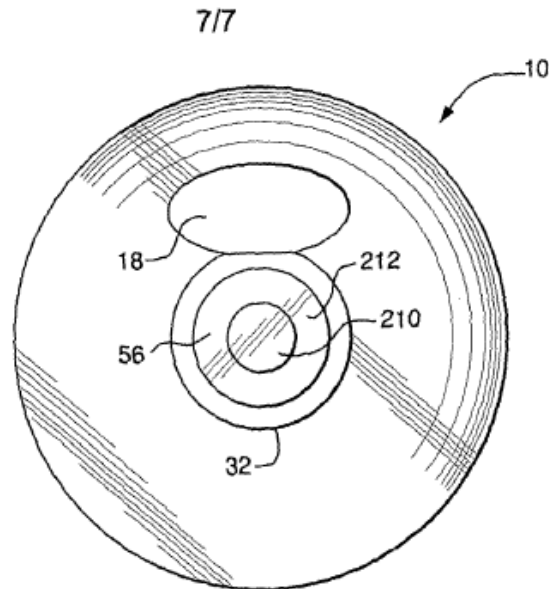


FIG. 24

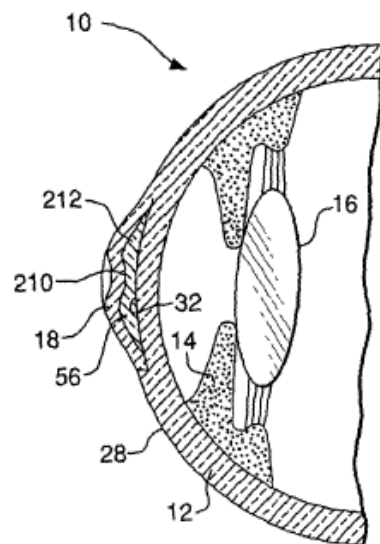


FIG. 25

References

Limiting references

This place does not cover:

Corneal onlays and inlays for photoablative laser surgery	A61F 9/00812
---	------------------------------

Corneal onlays and inlays for photodisruptive laser surgery	A61F 9/00834
Reshaping the cornea assisted by thermal and/or chemical treatment and the like	A61F9/012

Informative references

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

Contact lenses for reshaping the cornea, i.e. orthokeratology	G02C 7/04
---	---------------------------

A61F 2/147

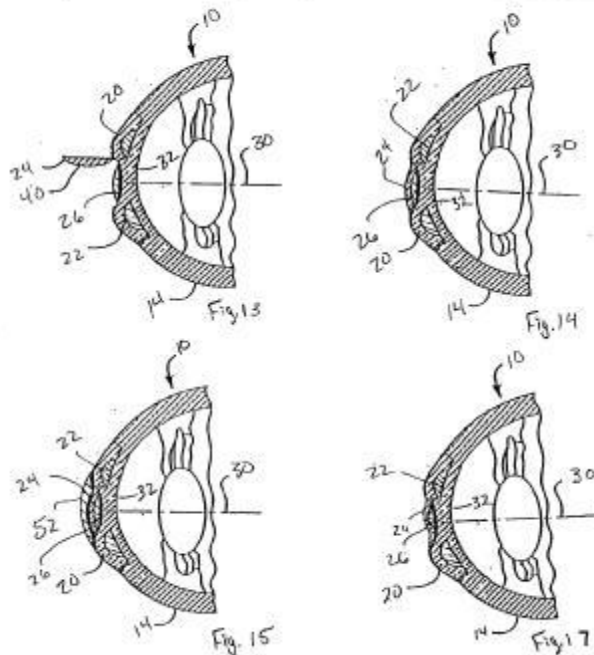
{Implants to be inserted in the stroma for refractive correction, e.g. ring-like implants}

Definition statement

This place covers:

Stromal or corneal implants, in general at least partial rings, shaping the cornea for refractive correction.

Patent Application Publication Jan. 22, 2004 Sheet 3 of 3 US 2004/0015234 A1



Relationships with other classification places

Contact lenses for reshaping the cornea, i.e. orthokeratology: [G02C 7/04](#)

A61F 2/148

{Implantation instruments specially adapted therefor}

Definition statement

This place covers:

Implantation instruments for corneal implants altering the shape of the cornea for refractive correction

WO 2004/041323

PCT/US2003/034296

9/16

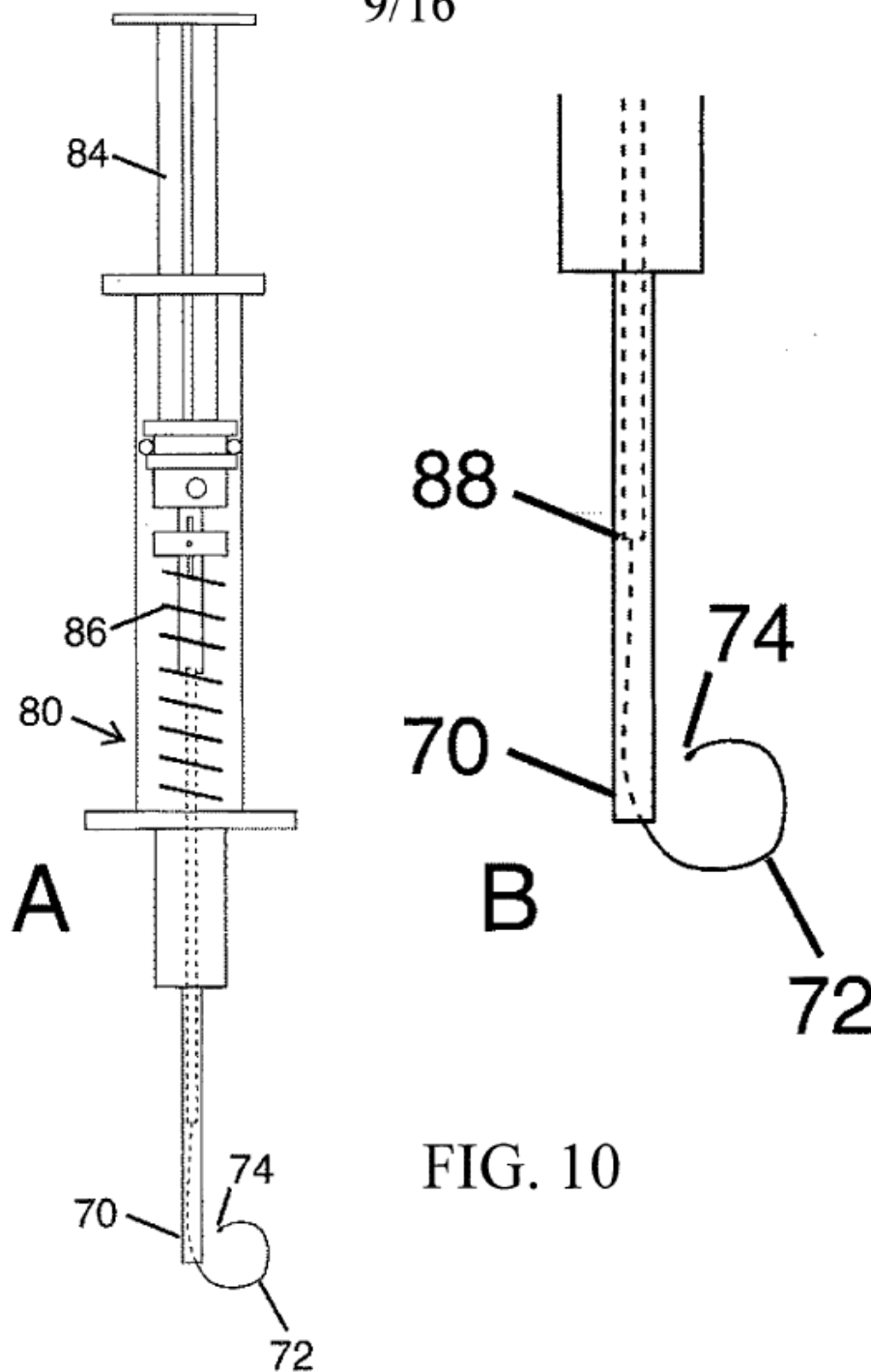


FIG. 10

References

Limiting references

This place does not cover:

Implantation instruments for intraocular lenses	A61F 2/1662
---	-----------------------------

A61F 2/16

Intraocular lenses

Definition statement

This place covers:

An intraocular lens (IOL) is an optically active element implanted in the eye, either replacing a removed natural crystalline lens (aphakic) or for additional refractive correction of the existing crystalline lens (phakic) or a separate artificial IOL (pseudo-phakic).

An intraocular prism shifting the image on the retina slightly away from the fovea (e.g. in case of macular degeneration) is considered as an IOL.

References

Informative references

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

Mirrors and prisms in general	G02C 7/14
-------------------------------	---------------------------

Glossary of terms

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

Phakia	the presence of the natural crystalline lens.
Aphakia	the absence of the natural crystalline lens, either from natural causes or because it has been removed.
Pseudophakia	substitution of the natural crystalline lens with a synthetic lens.
Pseudophakic IOLs	are used in cataract surgery

A61F 2/1602

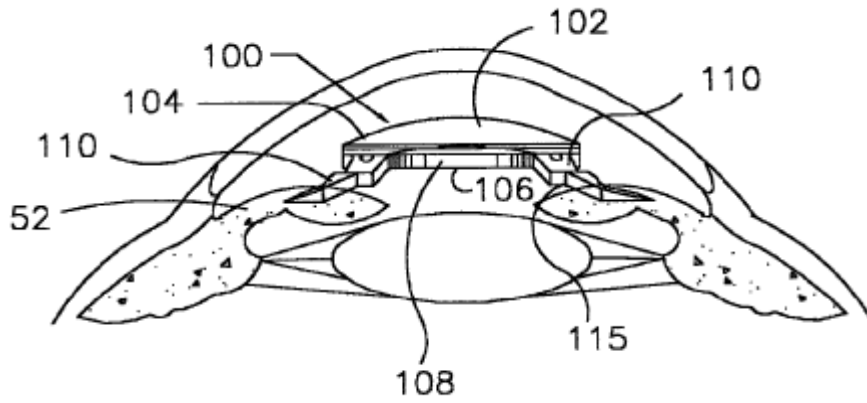
{Corrective lenses for use in addition to the natural lenses of the eyes or for pseudo-phakic eyes}

Definition statement

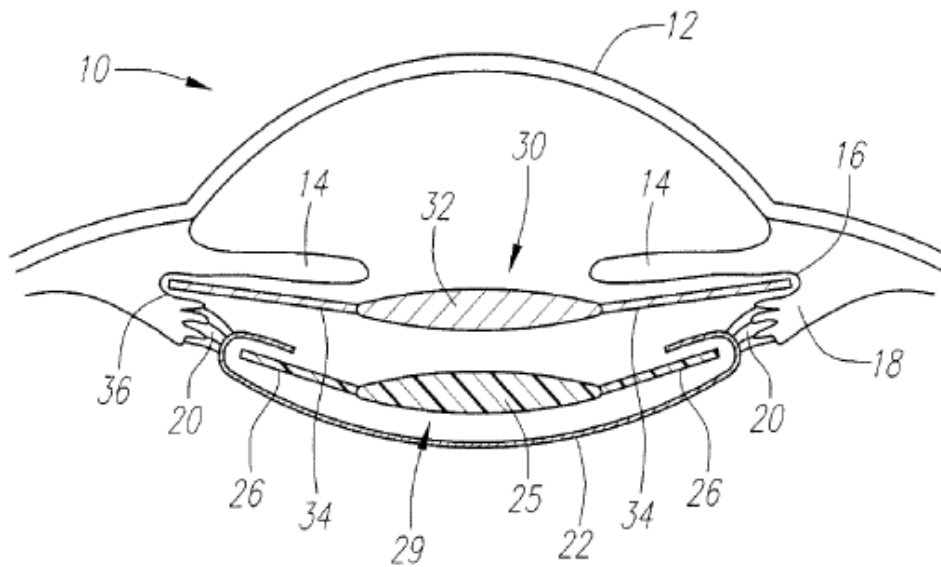
This place covers:

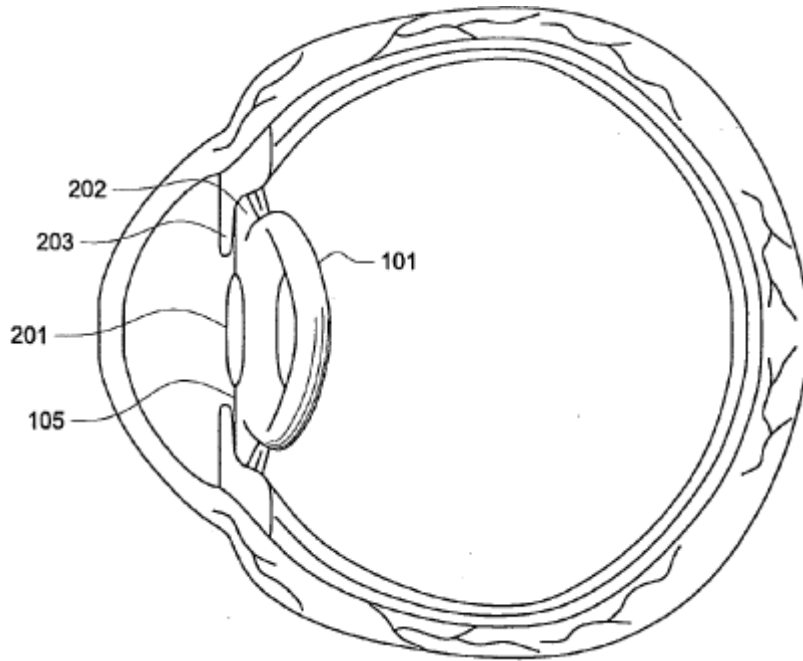
Corrective lenses for phakic or pseudophakic eyes.

PN - US2002103537 A1 20020801



Patent Application Publication Nov. 20, 2008 Sheet 1 of 2 US 2008/0288066 A1





References

Limiting references

This place does not cover:

Intraocular lenses for replacing the natural crystalline lens	A61F 2/1613
---	-----------------------------

Special rules of classification

Piggyback lenses: additional IOL for "fine tuning" already implanted IOL (pseudophakic), [A61F 2/1602](#) (& [A61F 2/1648](#)) & [A61F 2/1613](#)

Glossary of terms

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

Phakic eye:	having natural crystalline lens
Pseudophakic eye	having an artificial lens replacing the natural crystalline lens

A61F 2/1613

{having special lens configurations, e.g. multipart lenses; having particular optical properties, e.g. pseudo-accommodative lenses, lenses having aberration corrections, diffractive lenses, lenses for variably absorbing electromagnetic radiation, lenses having variable focus}

Definition statement

This place covers:

Having special lens configuration and particular optical properties, e.g. pseudo-accommodative, having variable focus, aberration correcting, multipart, diffractive, variably absorbing electromagnetic radiation.

A61F 2/1616

{Pseudo-accommodative, e.g. multifocal or enabling monovision}

Definition statement

This place covers:

Pseudo-accommodative IOL having fixed power or power distribution, the brain selects the sharp image formed on the retina, neglecting blurred images.

References

Limiting references

This place does not cover:

Accommodative IOL having variable focal power	A61F 2/1624
---	-----------------------------

A61F 2/1618

{Multifocal lenses}

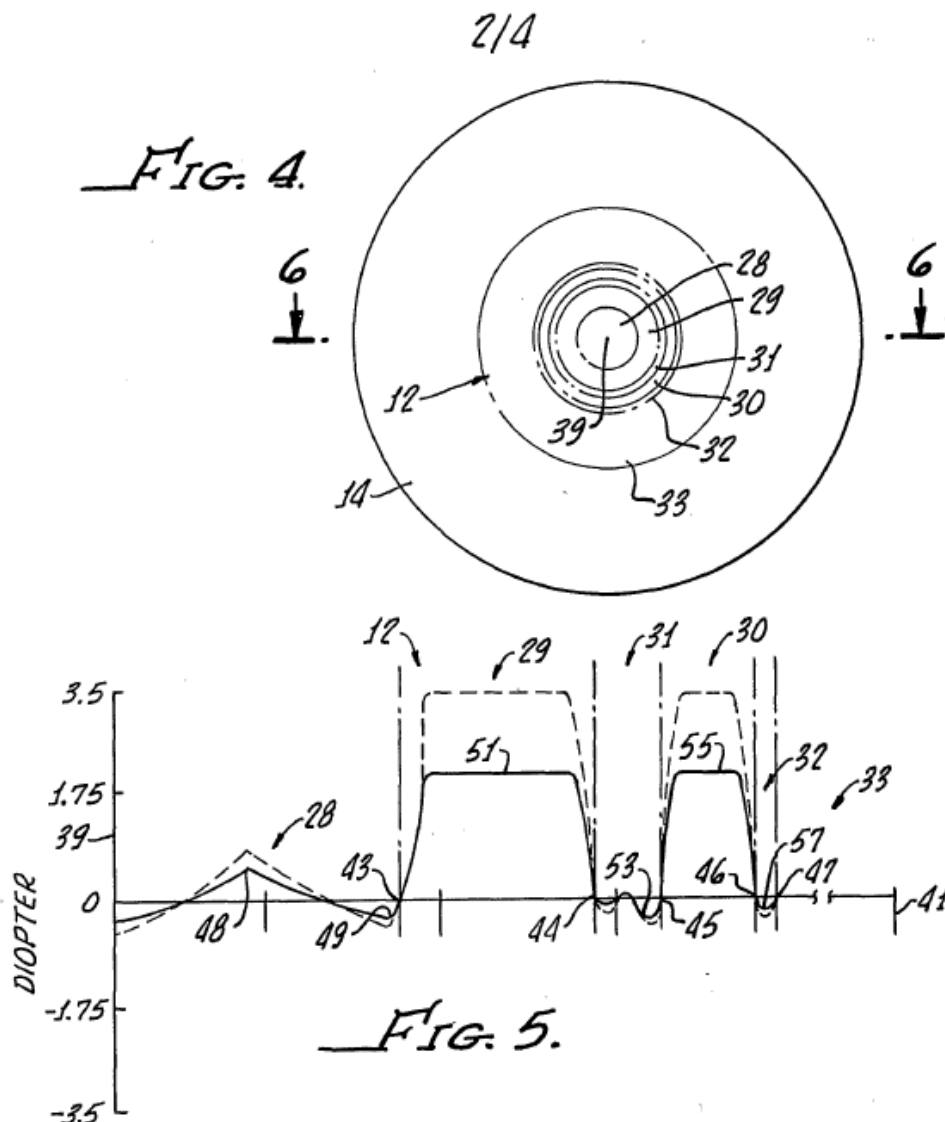
Definition statement

This place covers:

A plurality of different but fixed powers usually distributed on concentric circles, bifocal lenses are comprised

WO 01/82839

PCT/US01/14141



A61F 2/1621

{enabling correction for monovision}

Definition statement

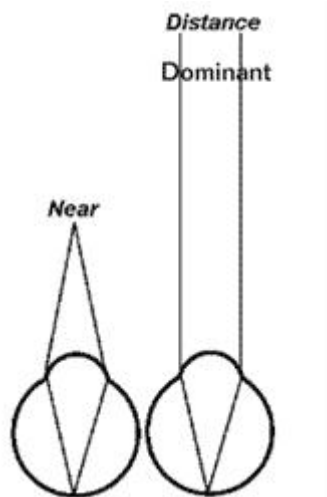
This place covers:

A different lens in each eye, with different foci, e.g. to enable near and far vision.

Definition statement

Term referring to a method of correcting presbyopia by using a lens corrected for distance in one eye (usually the dominant one) and a lens corrected for near in the other eye. Binocular vision is impaired with this method, especially stereoscopic vision. It is assumed that at any time one eye is focused while the other is not and the cortical visual system suppresses this latter image.

[Image taken from WIKIPEDIA]



References

Informative references

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

Monovision in general	G02C
-----------------------	----------------------

A61F 2/1624

{having adjustable focus; power activated variable focus means, e.g. mechanically or electrically by the ciliary muscle or from the outside}

Definition statement

This place covers:

Actuated by external means as e.g. mechanically, by electrical or magnetic fields, or by an internal mechanisms of the eye, as e.g. mechanically or electrically by ciliary body action or by pupillary constriction (accommodating IOL).

References

Limiting references

This place does not cover:

Pseudo-accommodative lenses simultaneously offering distinct foci to the brain	A61F 2/1616
--	-----------------------------

A61F 2/1627

{for changing index of refraction, e.g. by external means or by tilting}

Definition statement

This place covers:

Crosslinked regions of a polymeric lens have increased volume, and hence increased refractive index and increased dioptrre power,

References

Informative references

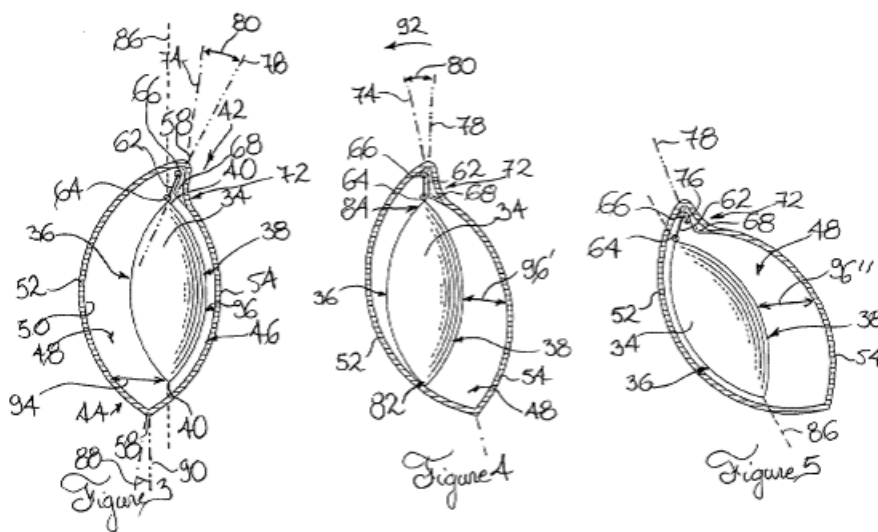
Attention is drawn to the following places, which may be of interest for search:

Photosensitive materials with macromolecular compounds as photosensing material in general	G03C 1/733
--	----------------------------

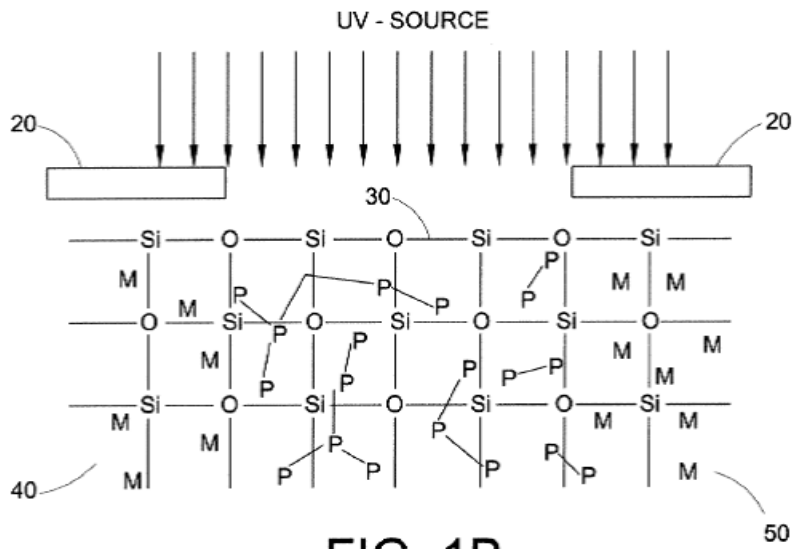
Special rules of classification

Illustrative example of subject matter classified in [A61F 2/1627](#)

e.g. WO2009124231



Patent Application Publication May 1, 2003 Sheet 3 of 8 US 2003/0083744 A1



For polymeric materials capable of changing focal power in response to crosslinking: [A61F 2/1627](#) and [A61F 2/1635](#) (or [A61F 2/1635](#) and [A61F 2/1627](#) depending on which effect is identified as dominant)

A61F 2/1629

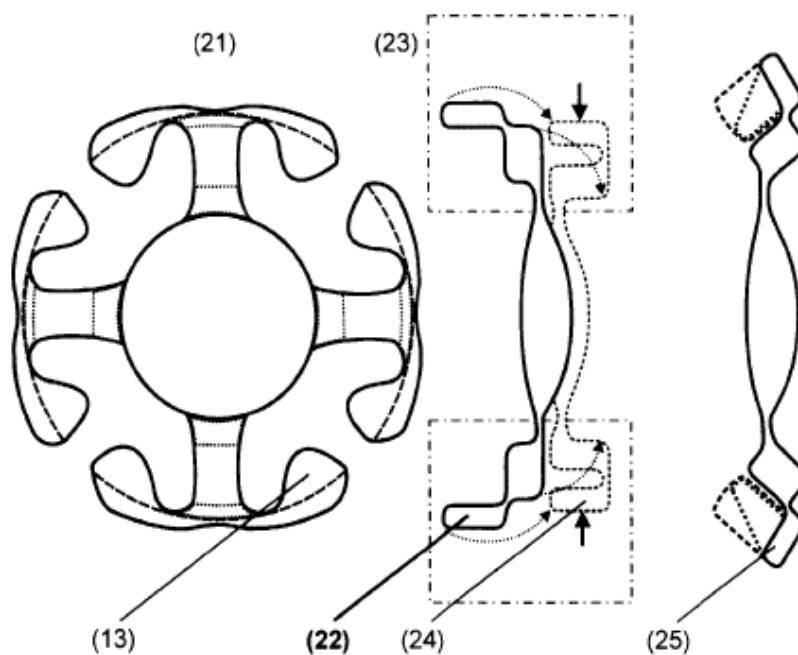
{for changing longitudinal position, i.e. along the visual axis when implanted}

Definition statement

This place covers:

Single optical elements changing position along its optical axis (like a slide machine) or more than one optical elements changing relative distance to alter the focal power.

EP 1 108 402 A2

**References****Limiting references**

This place does not cover:

Changing position perpendicularly to longitudinal axis	A61F 2/1632
--	-----------------------------

Special rules of classification

For more than one optically active element	A61F 2/1629 , A61F 2/1648
For one or more optically active element and one or more optically inactive additional elements like e.g. movement arms	A61F 2/1629 , A61F 2/1648

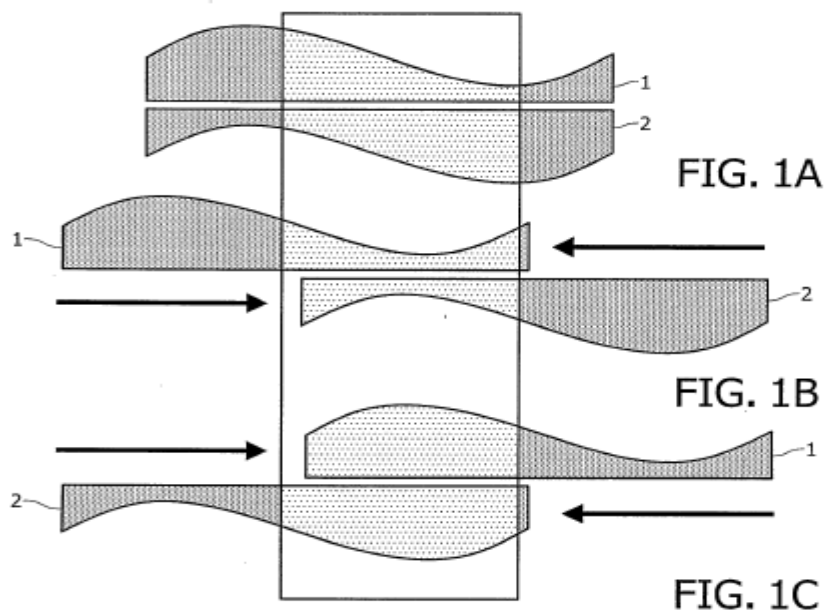
A61F 2/1632

{for changing radial position, i.e. perpendicularly to the visual axis when implanted}

Definition statement

This place covers:

Changing position vertically to visual axis, either one single optical element having irregular power distribution or at least two optic elements changing relative radial position



WO/2015/084587

1/3

PCT/NL2015/000153

Special rules of classification

For more than one optical element: [A61F 2/1632](#) and [A61F 2/1648](#)

A61F 2/1635**{for changing shape}****Definition statement***This place covers:*

Changing either shape or curvature of an external surface of the lens or e.g. of an internal interface between to immiscible fluids having different index of refraction.

WO 89/06520

1/2

PCT/US89/00092

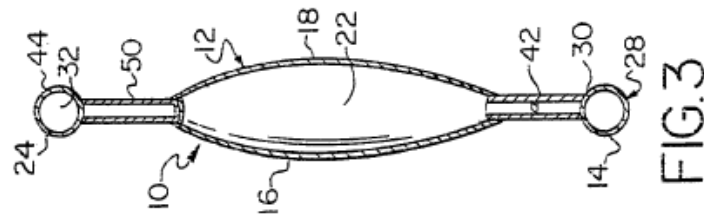


FIG. 3

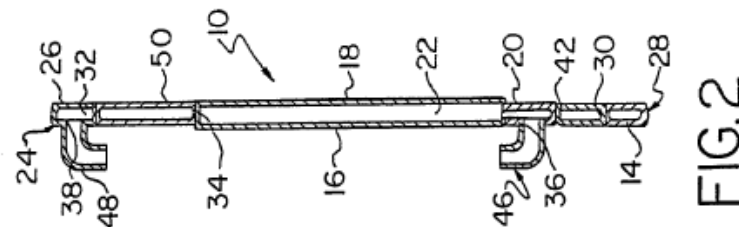


FIG. 2

Special rules of classification

Two media having different optical properties (e.g. refractive index): [A61F 2250/0053](#)

A61F 2/1637

{Correcting aberrations caused by inhomogeneities; correcting intrinsic aberrations, e.g. of the cornea, of the surface of the natural lens, aspheric, cylindrical, toric lenses}

Definition statement*This place covers:*

IOL adapted for correcting higher order optical errors either by a particular form or by particular treatment of the refracting surfaces

Special rules of classification

Aspheric IOL	A61F 2/164
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Cylindrical IOL	A61F 2/1643
Toric IOL	A61F 2/1645
Special surface	A61F 2210/0076

A61F 2/1648

{Multipart lenses}

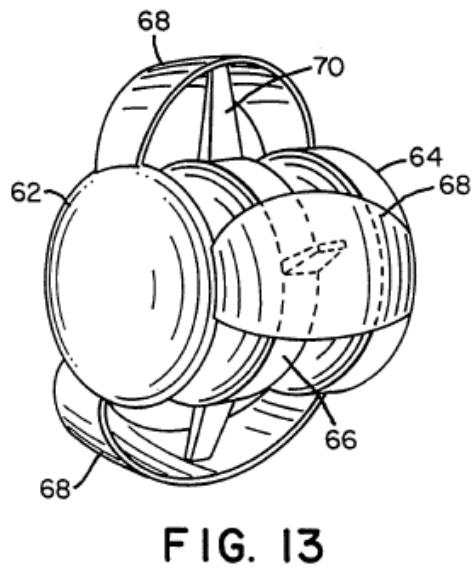
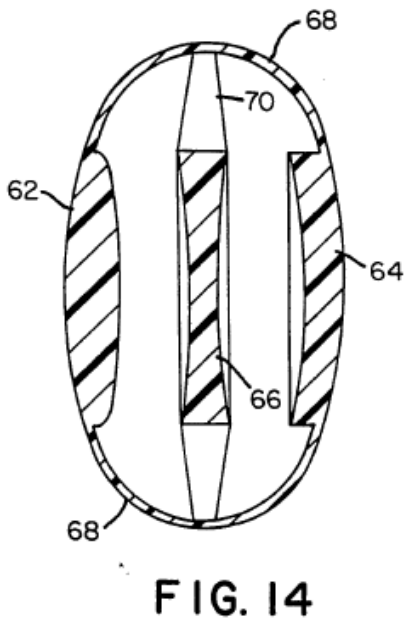
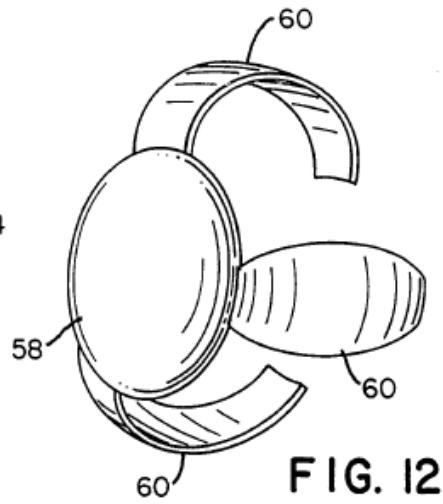
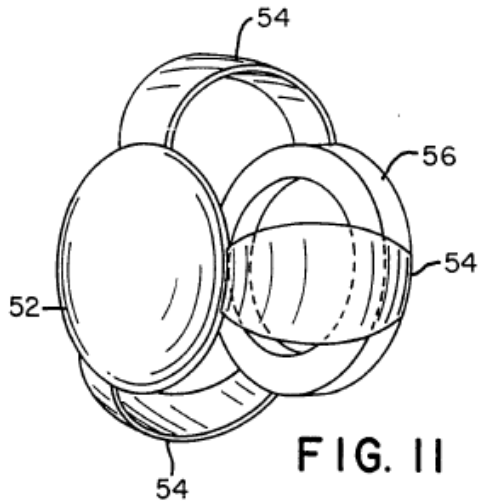
Definition statement

This place covers:

At least two optically active components.

WO 00/61036

PCT/US00/08713



Relationships with other classification places

Principle of different correction for the two eyes (far/near, colours, arrangement of power zones) in general: [G02C](#)

Special rules of classification

At least one optically active and at least one optically inactive component, both necessary for the performance of the IOL assembly: [A61F 2/1648](#)

Made from materials having different optical properties (e.g. index of refraction) : [A61F 2250/0053](#)

A61F 2/1654

{Diffractive lenses}

Definition statement

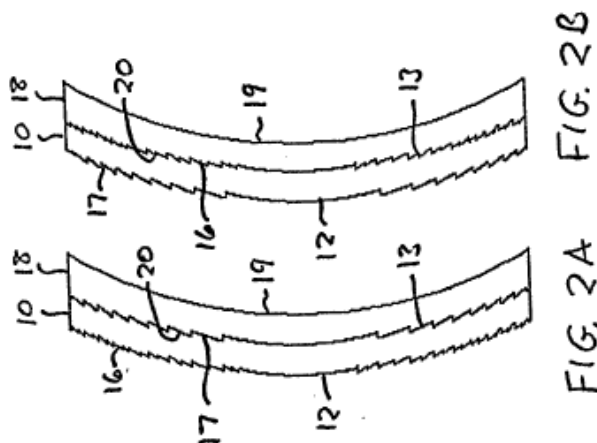
This place covers:

IOL having at least one diffractive element

WO 2006/023404

PCT/US2005/028848

3/19



Relationships with other classification places

Ophthalmic lenses having diffractive optical surfaces in general: [G02C](#)

IOL comprising a Fresnel lens, prism or plate: [A61F 2/1656](#)

A61F 2/1656

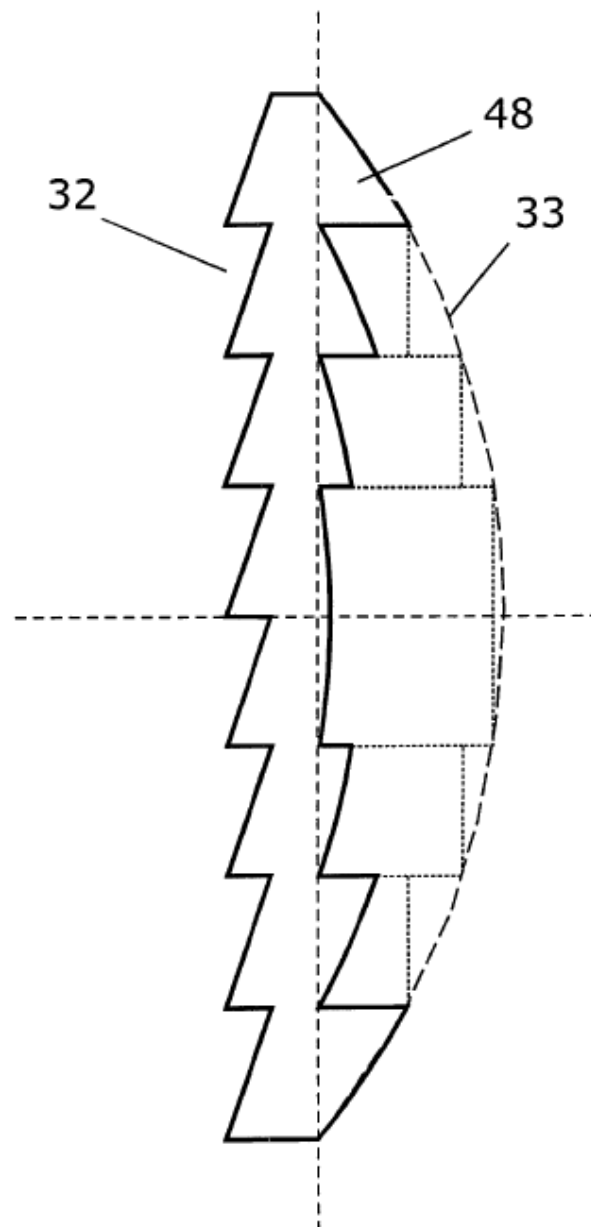
{Fresnel lenses, prisms or plates}

Definition statement

This place covers:

The Fresnel lens reduces the amount of material required compared to a conventional spherical lens by dividing the lens into a set of concentric annular sections known as Fresnel zones.

DE 103 49 254 A1 2005.05.12



A61F 2/1659

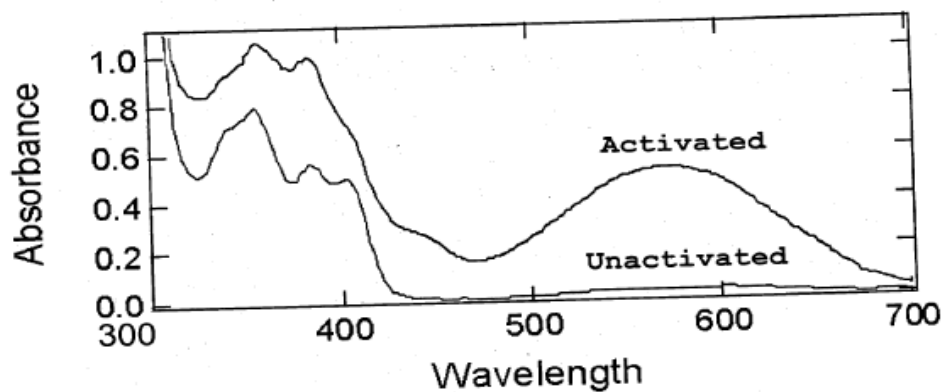
{having variable absorption coefficient for electromagnetic radiation, e.g. photochromic lenses}

Definition statement

This place covers:

Microscopically and macroscopically variable absorption, i.e. due to modification of the structure or variable size of an opening in an opaque medium (e.g. for increasing depth of focus).

Figure 1. Absorption Spectrum of the Example



Patent Application Publication Sep. 23, 2004 Sheet 1 of 2 US 2004/0186241 A1

Special rules of classification

Radiopaque	K61F250/00W93
------------	---------------

A61F 2/1662

{Instruments for inserting intraocular lenses into the eye}

Definition statement

This place covers:

Any kind of instrument for inserting IOL in an eye during surgery for implantation

Relationships with other classification places

Instruments for inserting mechanical ocular implants : [A61F 2/148](#)

Instruments for directly injecting therapeutic agents or drug eluting implants in an eye: [A61F 9/0008](#)

A61F 2/1664

{for manual insertion during surgery, e.g. forceps-like instruments}

Definition statement

This place covers:

Instruments for manually (folding) and inserting an IOL in an eye during surgery, e.g. forceps-like

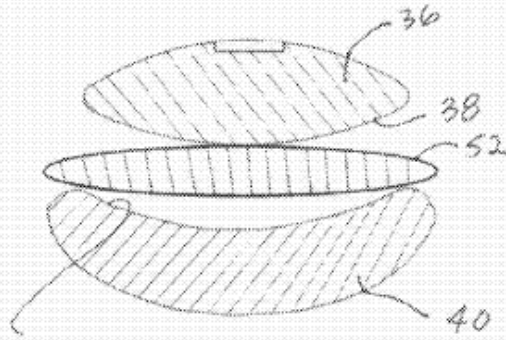


Fig. 7

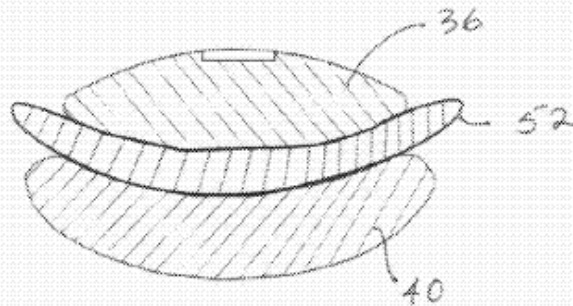


Fig. 8

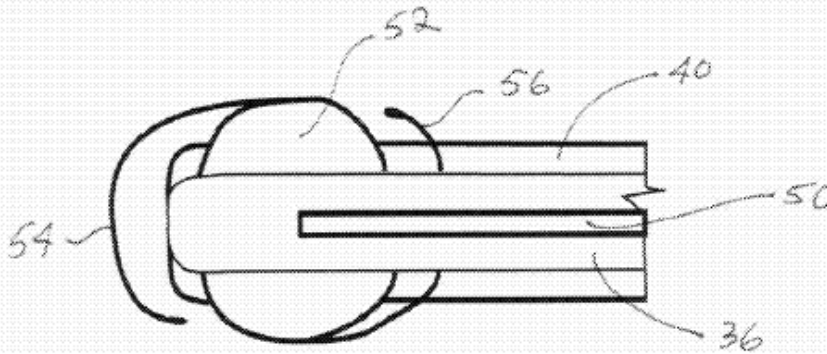


Fig. 9

For manual insertion during surgery, e.g. forceps-like instruments, tweezers

A61F 2/1667

{with rotatable plungers}

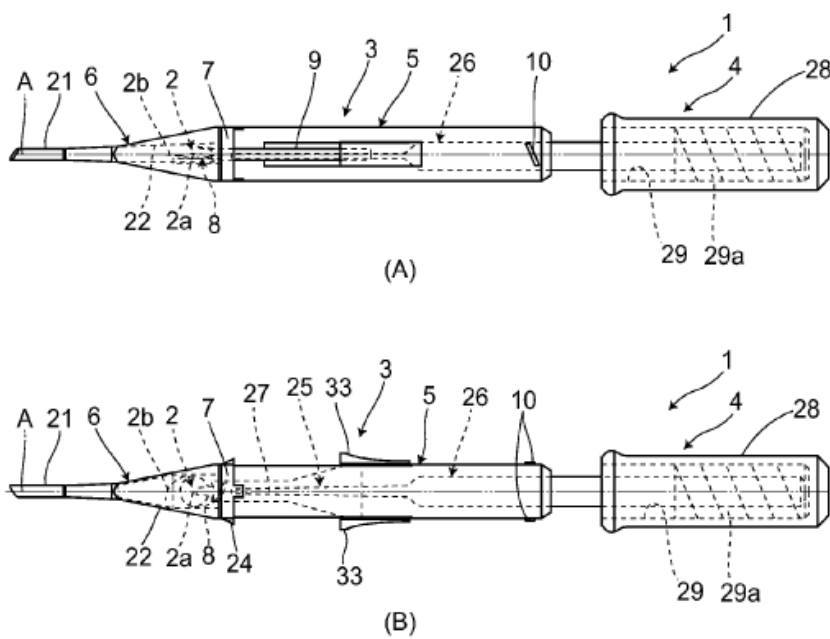
Definition statement

This place covers:

IOL insertion instrument having a plunger for moving and ejecting the IOL actuated by rotation

EP 1 972 306 A1

FIG.1



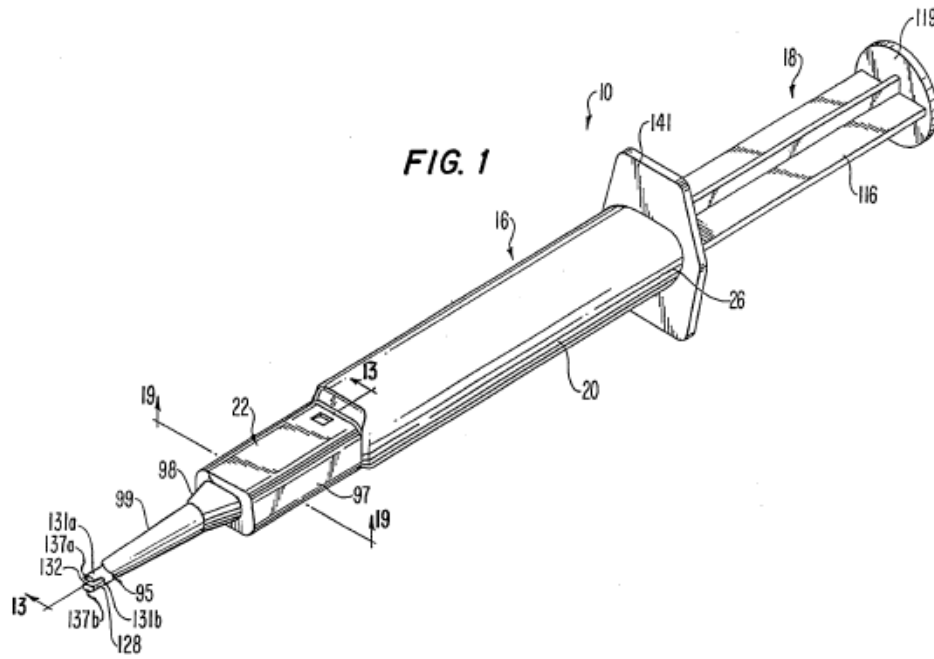
A61F 2/167

{with pushable plungers}

Definition statement

This place covers:

Instruments for inserting an IOL in an eye during surgery, the plunger for moving and ejecting the IOL being actuated by being pushed



U.S. Patent

Feb. 23, 1999

Sheet 1 of 9

5,873,879

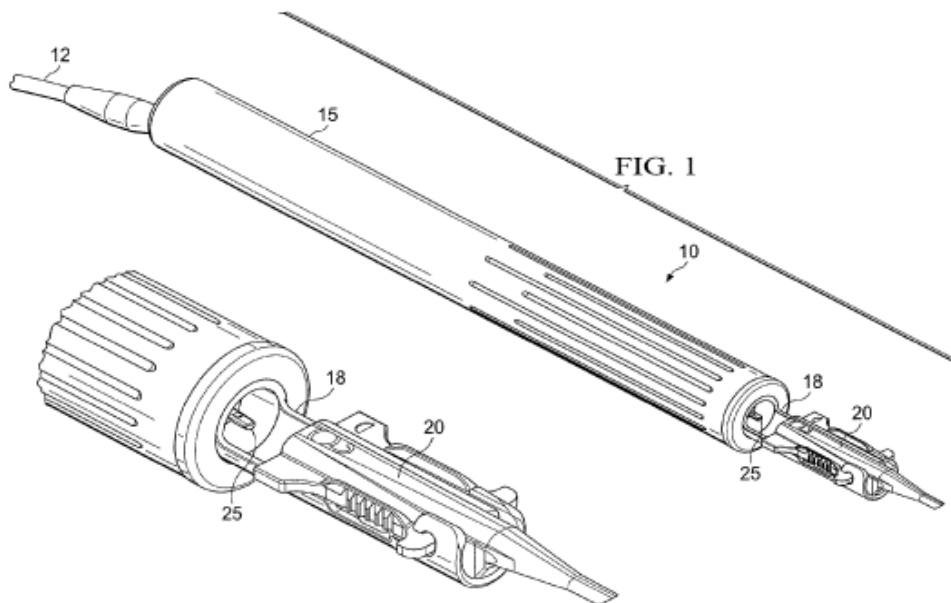
A61F 2/1672

{with a two-stage plunger, e.g. rotatable and pushable or rotatable at different speeds}

Definition statement

This place covers:

Instruments for inserting an IOL in an eye having a plunger that allows for different kind of actuation e.g. for advancing and for ejecting the IOL



Patent Application Publication Jul. 14, 2011 Sheet 1 of 22 US 2011/0172676 A1

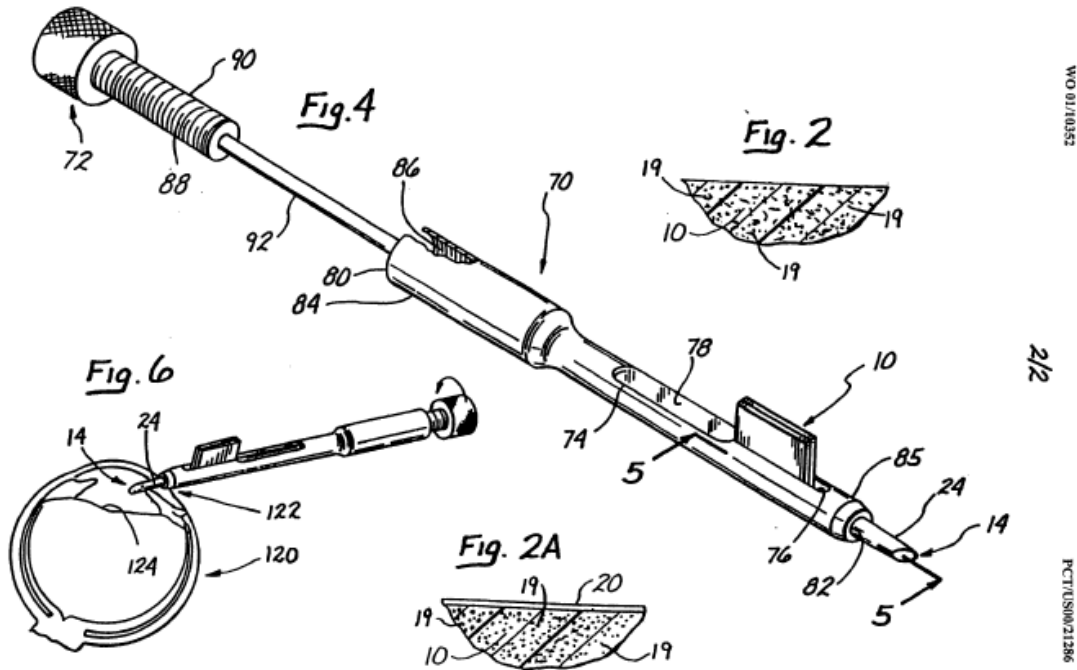
A61F 2/1675

{with a lubricated inner surface, e.g. the lubricant being coated on the inner surface or being injected through a port}

Definition statement

This place covers:

Insertion instruments having a lubricated surface, e.g. of the barrel, the loading chamber, the folding section or the ejecting nozzle, for reducing friction



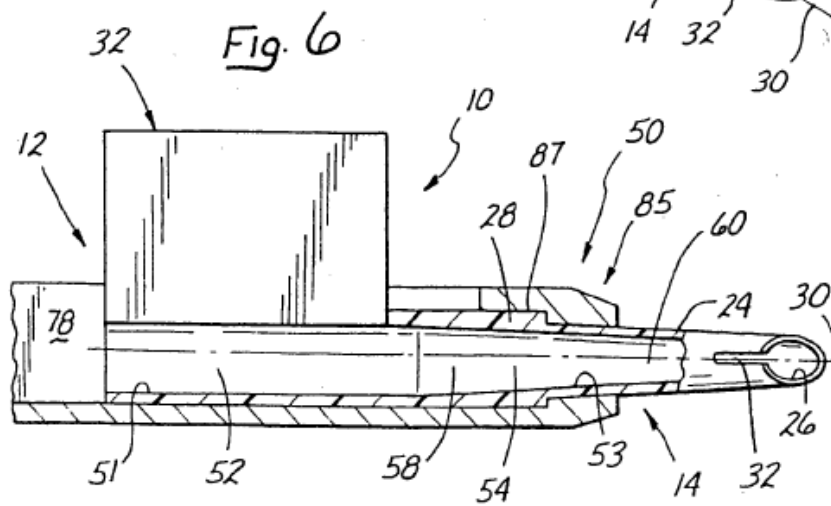
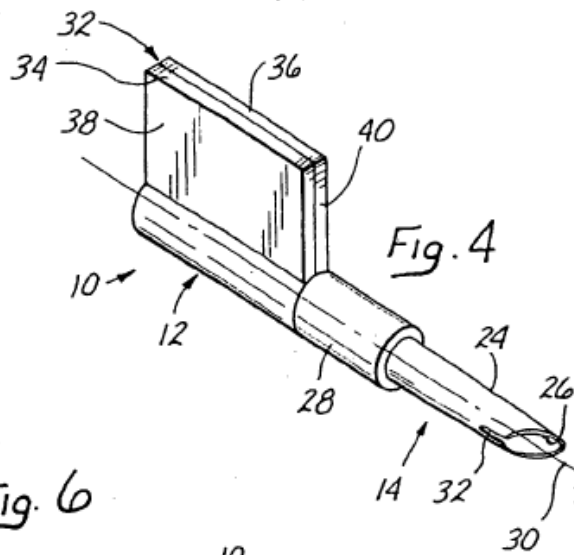
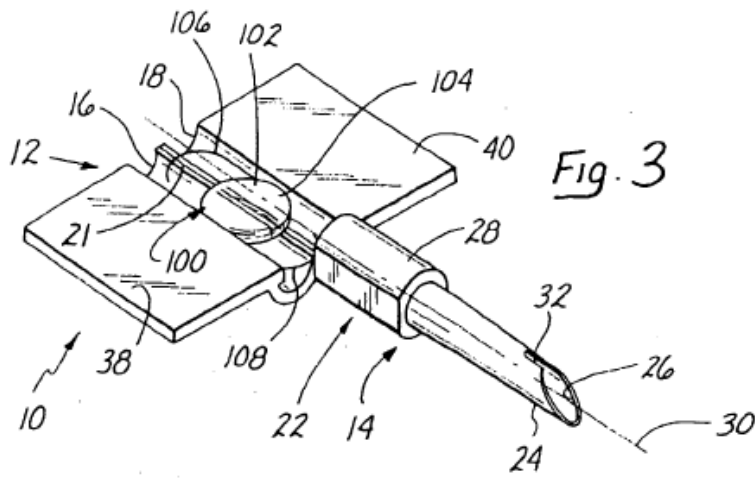
A61F 2/1678

{with a separate cartridge or other lens setting part for storage of a lens, e.g. preloadable for shipping}

Definition statement

This place covers:

Insertion device having a separate cartridge, e.g. for storing (pre-packing) or for compaction of lens in order to avoid contamination due to handling of the IOL during loading in the inserter.



Relationships with other classification places

Packages or dispensers for IOL: [A61F 2/1691](#)

A61F 2/1691

{Packages or dispensers for intraocular lenses (for contact lenses [A45C 11/005](#))}

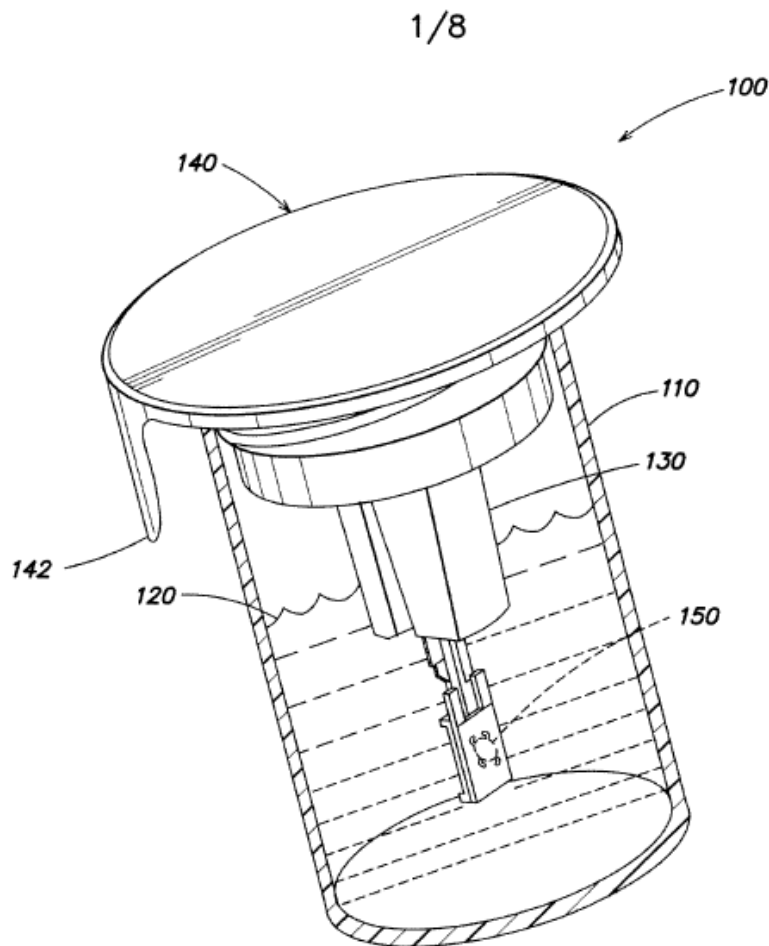
Definition statement

This place covers:

Packages and holders for IOL ; individual containers or packages suitable for encasing and/or securing intraocular lenses e.g. for shipping and/or storage before implantation

WO 2009/029472

PCT/US2008/073822

**FIG. 1**

Relationships with other classification places

IOL insertion instruments having a separate cartridge: [A61F 2/1678](#)

References***Limiting references***

This place does not cover:

Packages and holders for contact lenses	A45C 11/005
---	-----------------------------

A61F 2/1694

{Capsular bag spreaders therefor}

Special rules of classification

Implantable holder for an, e.g. exchangeable, IOL	A61F 2/1694 , A61F 2/1648
---	--

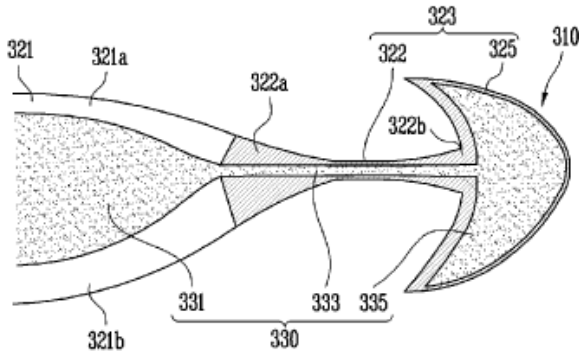
Illustrative example of subject matter classified in [A61F 2/1694](#).

For example ring-shaped elements for supporting or stretching the capsular bag for easier implantation of an IOL

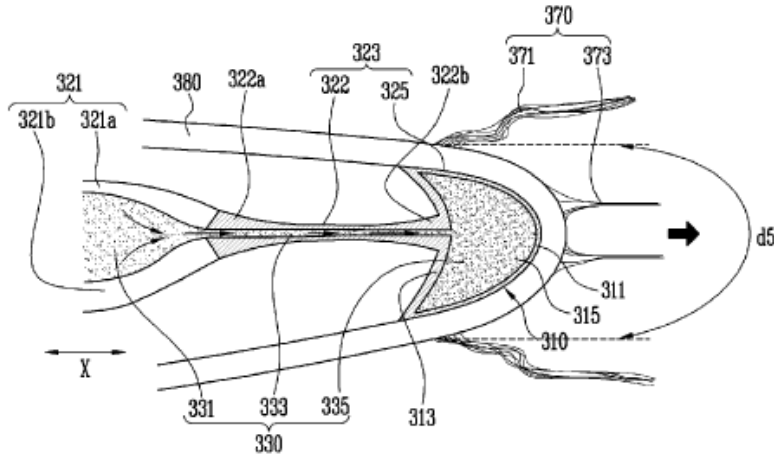
WO 2008/108524

PCT/KR2007/004632

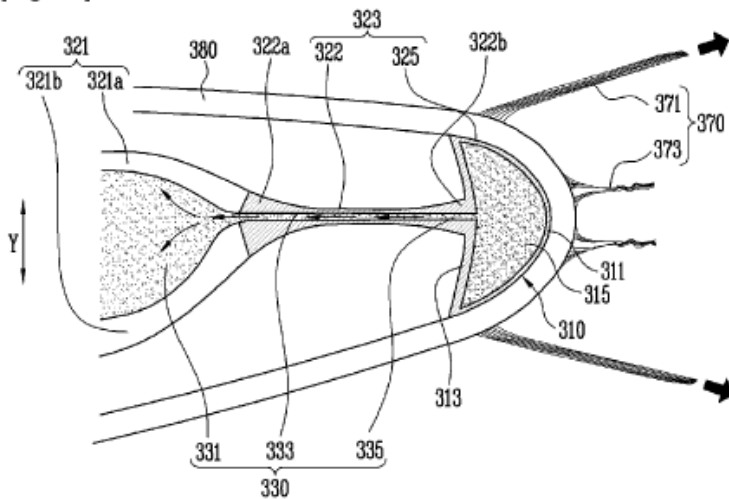
[Fig. 12]



[Fig. 13]



[Fig. 14]



A61F 2/18

Internal ear or nose parts, e.g. ear-drums {(implants for middle ear ventilation or drainage [A61F 11/202](#))}

Special rules of classification

Implants for middle ear ventilation or drainage	A61F 11/202
Cochlear electrodes	A61N 1/0541

A61F 2/186

{Nose parts}

Special rules of classification

Implants for plugging a hole in a nasal septum: [A61B 17/0057](#)

Orthopaedic devices for correcting deformities of the nose: [A61F 5/08](#)

A61F 2/20

{Epiglottis}; Larynxes; Tracheae combined with larynxes or for use therewith (tracheae, bronchi per se [A61F 2/04](#) {; tracheostomy tubes [A61M 16/0465](#))}

Special rules of classification

Tracheae, bronchi per se: [A61F 2/04](#)

Tracheostomy tubes: [A61M 16/0465](#)

A61F 2/24

Heart valves {; Vascular valves, e.g. venous valves; Heart implants, e.g. passive devices for improving the function of the native valve or the heart muscle; Transmyocardial revascularisation [TMR] devices; Valves implantable in the body}

Definition statement

This place covers:

Vascular valves, e.g. venous valves; Heart implants, e.g. passive devices for improving the function of the native valve or the heart muscle; Transmyocardial revascularisation [TMR] devices as this is the most suitable place for.

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:

Esophageal, Lung/bronchial valves	A61F 2/2476
Plugging a cardiac septal defect	A61B 17/0057
Motor for/with heart valve	A61M 60/871

Informative references

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

Valvuloplasty	A61B 2017/00783
Apical access devices / heart ports	A61B 2017/3425

A61F 2/2403

{with pivoting rigid closure members (check valves with hinged closure members in general [F16K 15/03](#))}

References**Limiting references**

This place does not cover:

Check valves with hinged closure members in general	F16K 15/03
---	----------------------------

A61F 2/2409

{Support rings therefor, e.g. for connecting valves to tissue (annuloplasty rings [A61F 2/2442](#))}

Definition statement

This place covers:

Sewing rings

References**Limiting references**

This place does not cover:

Annuloplasty rings	A61F 2/2442
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A61F 2/2412

{with soft flexible valve members, e.g. tissue valves shaped like natural valves (check valves with flexible valve members in general [F16K 15/14](#))}

References**Limiting references**

This place does not cover:

Check valves with flexible valve members in general	F16K 15/14
---	----------------------------

Special rules of classification

Two part valves with a docking frame into which a valve is mounted during surgery get both [A61F 2/2418](#) and [A61F 2250/006](#) (modular).

A61F 2/2415**{Manufacturing methods}****Definition statement***This place covers:*

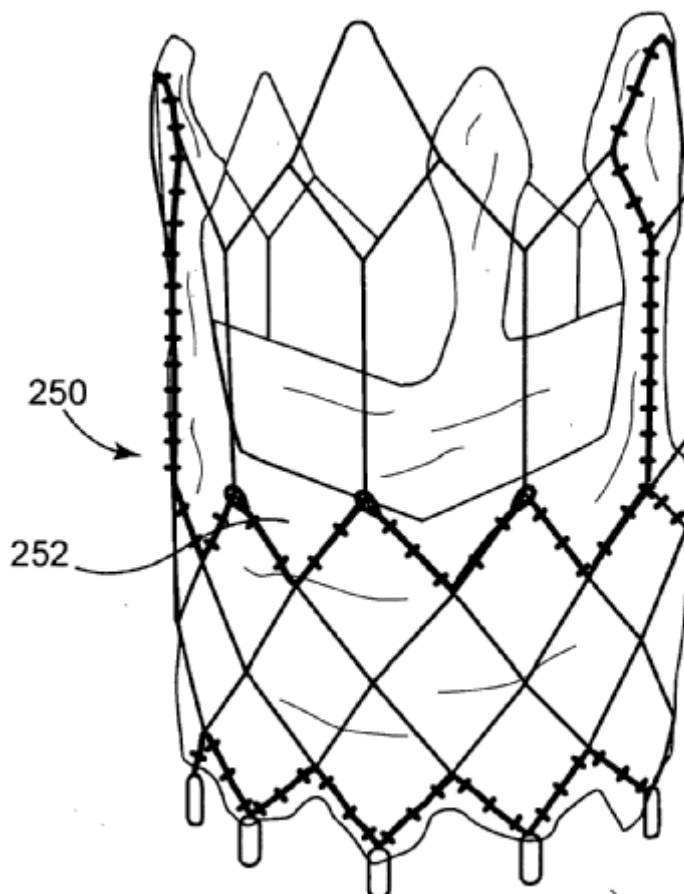
In particular cutting and forming of the prosthetic valve leaflets.

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

Surgical cutting instruments for a heart valve	A61B 17/32
--	----------------------------

A61F 2/2418**{Scaffolds therefor, e.g. support stents}****Definition statement***This place covers:*

This class includes features of the valve leaflets (e.g. geometrical) in relation to their fixation to the scaffold:

**WO2009094188 A2**

References

Limiting references

This place does not cover:

Annular rigid support rings	A61F 2/2409
Stents used for opening blocked vessels	A61F 2/82

Special rules of classification

Stents solely used for heart valves do not get a class in [A61F 2/82](#) but may get codes (additional information).

Two part valves with a docking frame into which a valve is mounted during surgery get both [A61F 2/2418](#) and [A61F 2250/006](#) (modular).

Stent-like anchor members (no class in [A61F 2/82](#) and subgroups is given additionally, except if a stent without valve is explicitly mentioned)

A61F 2/2427

{Devices for manipulating or deploying heart valves during implantation}

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:

Delivery devices for annuloplasty implants or for inserts in the coronary sinus for correcting the valve shape or for implants for improving the function of a native heart valve	A61F 2/2466
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Informative references

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

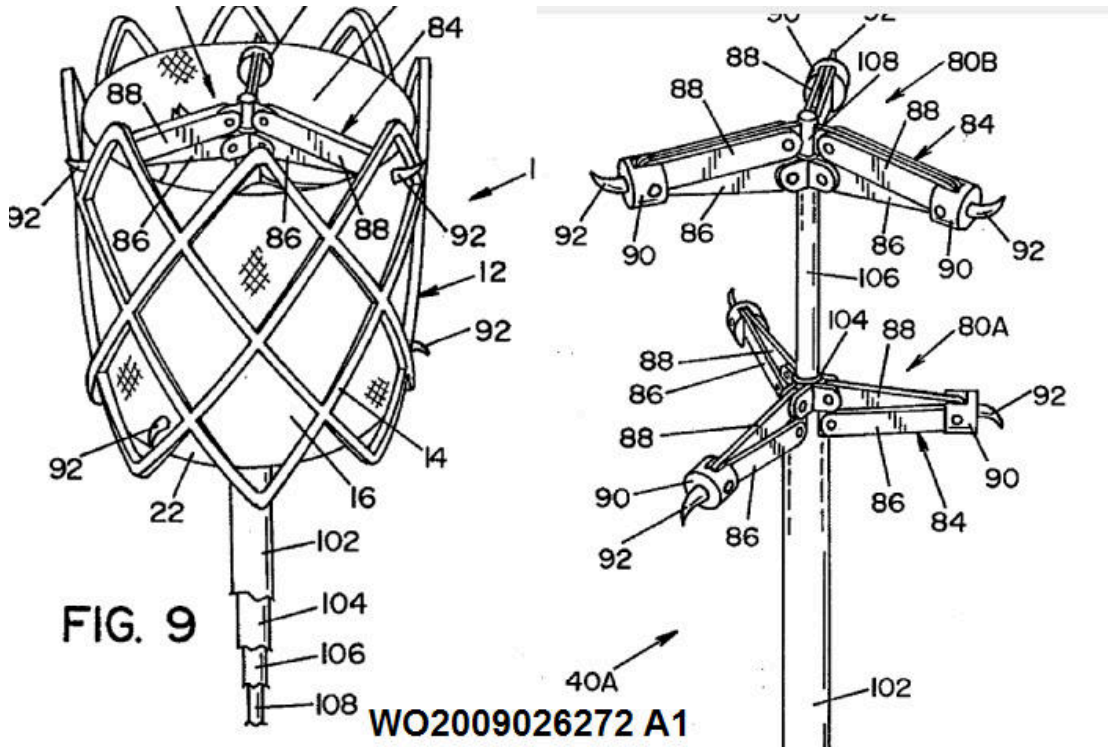
Handle mechanisms	A61F 2/9517
Heart valve crimping devices	A61F 2/9522

A61F 2/243

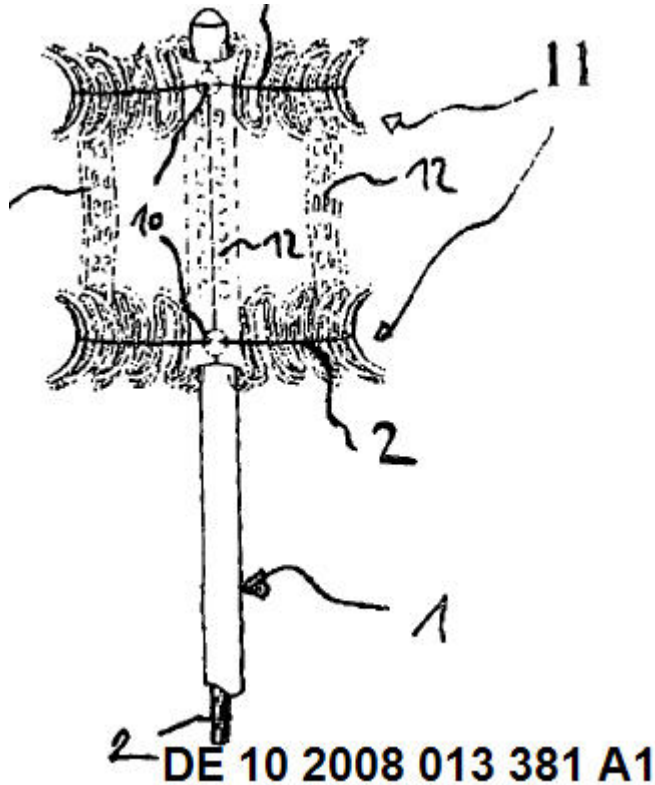
{Deployment by mechanical expansion}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/243](#)



If an additional retractable sheath is mentioned also a code (additional information) is given [A61F 2/2436](#).

A61F 2/2439**{Expansion controlled by filaments}****Special rules of classification**Illustrative example of subject matter classified in [A61F 2/2439](#)**A61F 2/2442****{Annuloplasty rings or inserts for correcting the valve shape; Implants for improving the function of a native heart valve}****References****Limiting references***This place does not cover:*

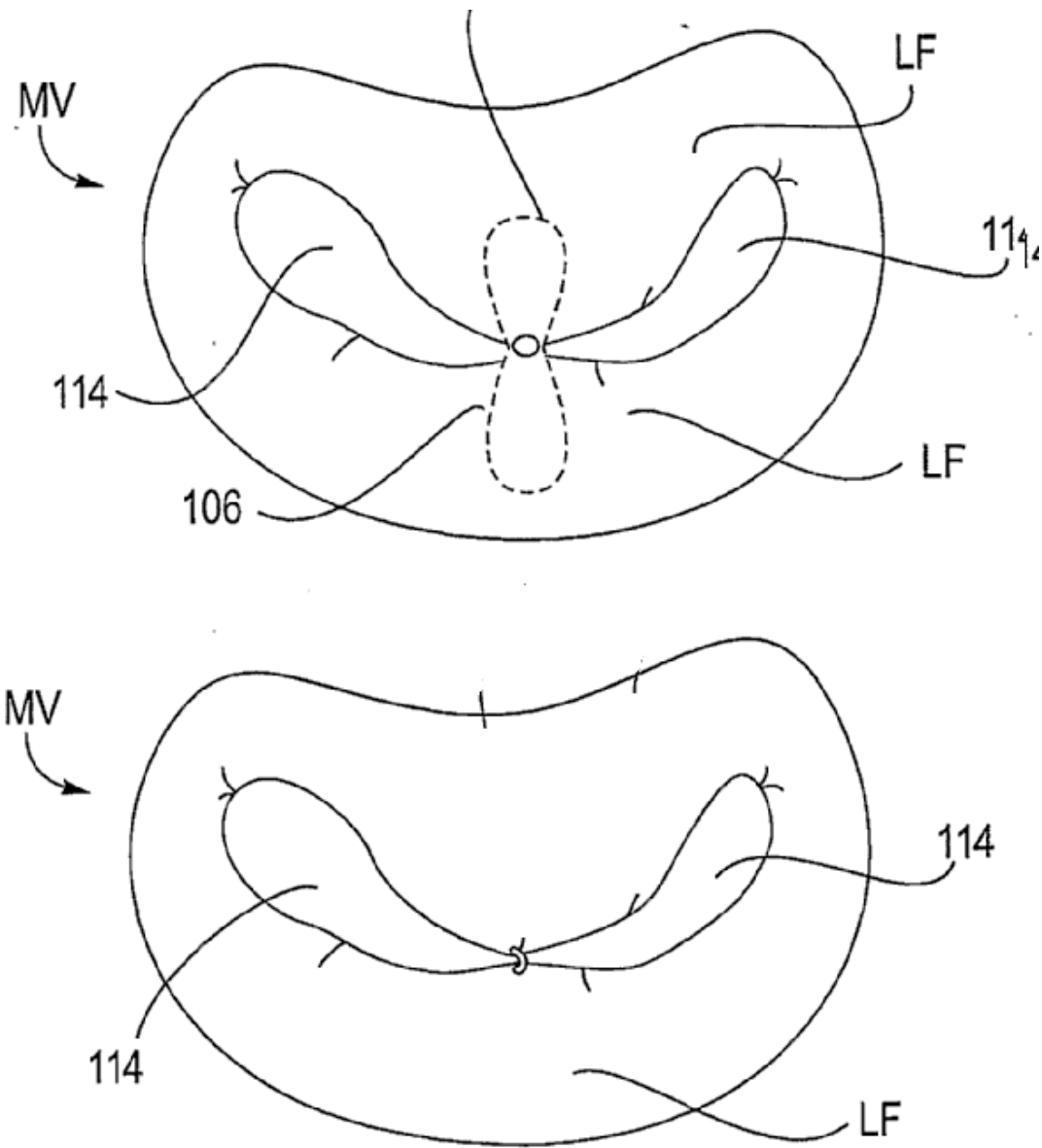
Staples connected by a thread for plicating the annulus	A61B 17/064 , A61B 2017/00783 , A61B 2017/00243
Devices for joining two adjacent leaflets at a single point, e.g. clips	A61B 17/064 , A61B 17/08

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

Plugging a cardiac septal defect	A61B 17/0057
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Special rules of classification

Illustrative example of subject matter classified in [A61F 2/2442](#)



WO03001893 A2

A61F 2/2445

{Annuloplasty rings in direct contact with the valve annulus}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/2445](#)

WO 2010/085659

1/19

PCT/US2010/021822

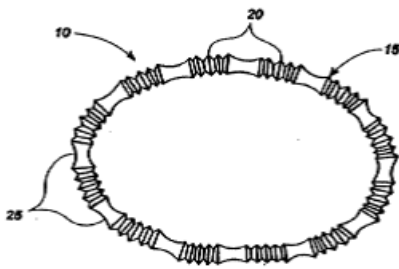


Fig. 1

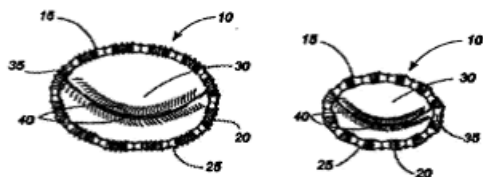


Fig. 2

Fig. 3

Springs for tensioning or expanding the annulus:

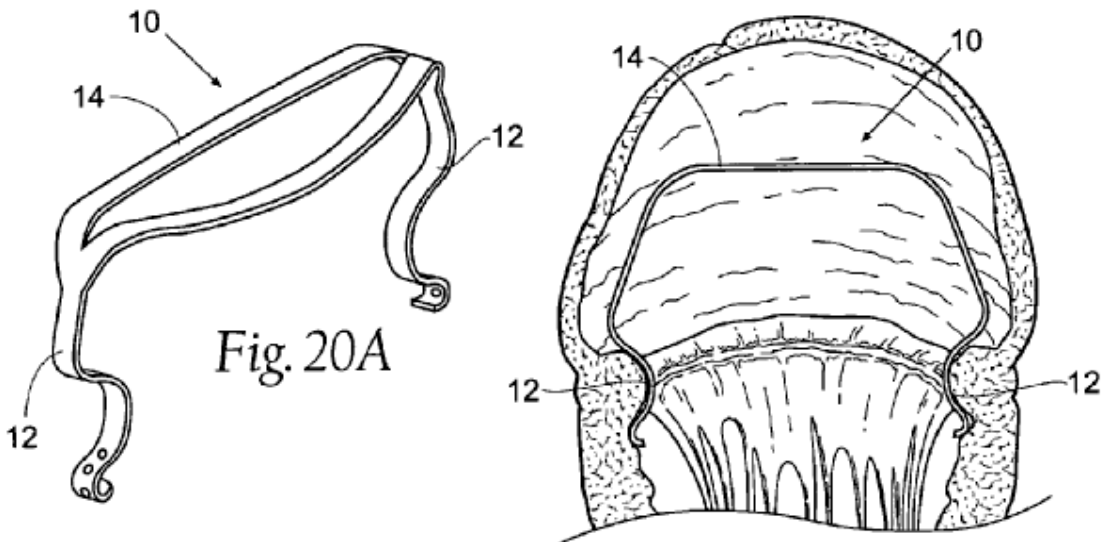


Fig. 20A

US2004127982 A1

A61F 2/2451

{Inserts in the coronary sinus for correcting the valve shape}

Definition statement

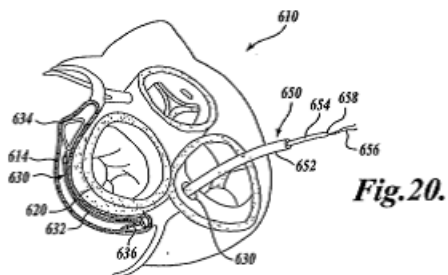
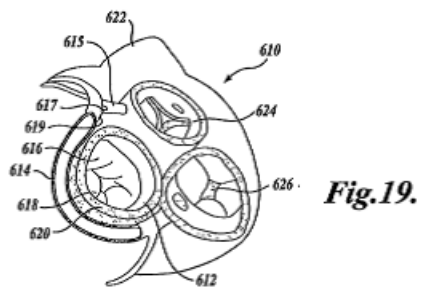
This place covers:

Inserts not only in the coronary sinus but also in other coronary vessels.

WO 03/094801

PCT/US03/14007

16/24

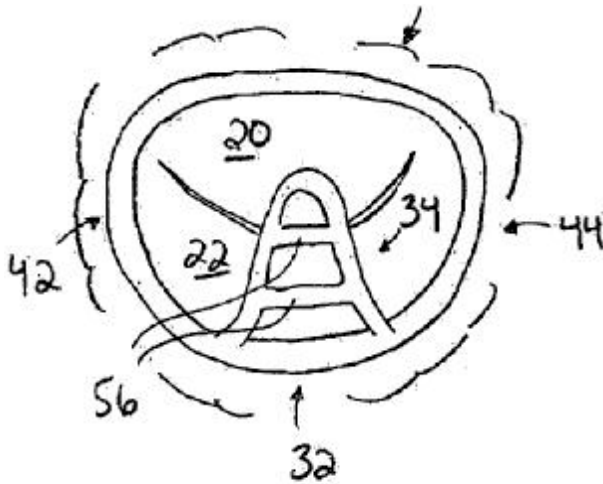


A61F 2/2454

{Means for preventing inversion of the valve leaflets, e.g. chordae tendineae prostheses}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/2454](#)



US2009132036 A1

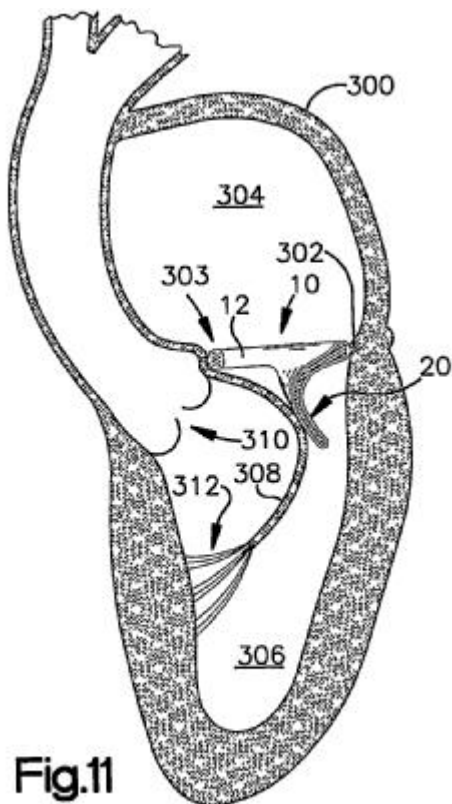
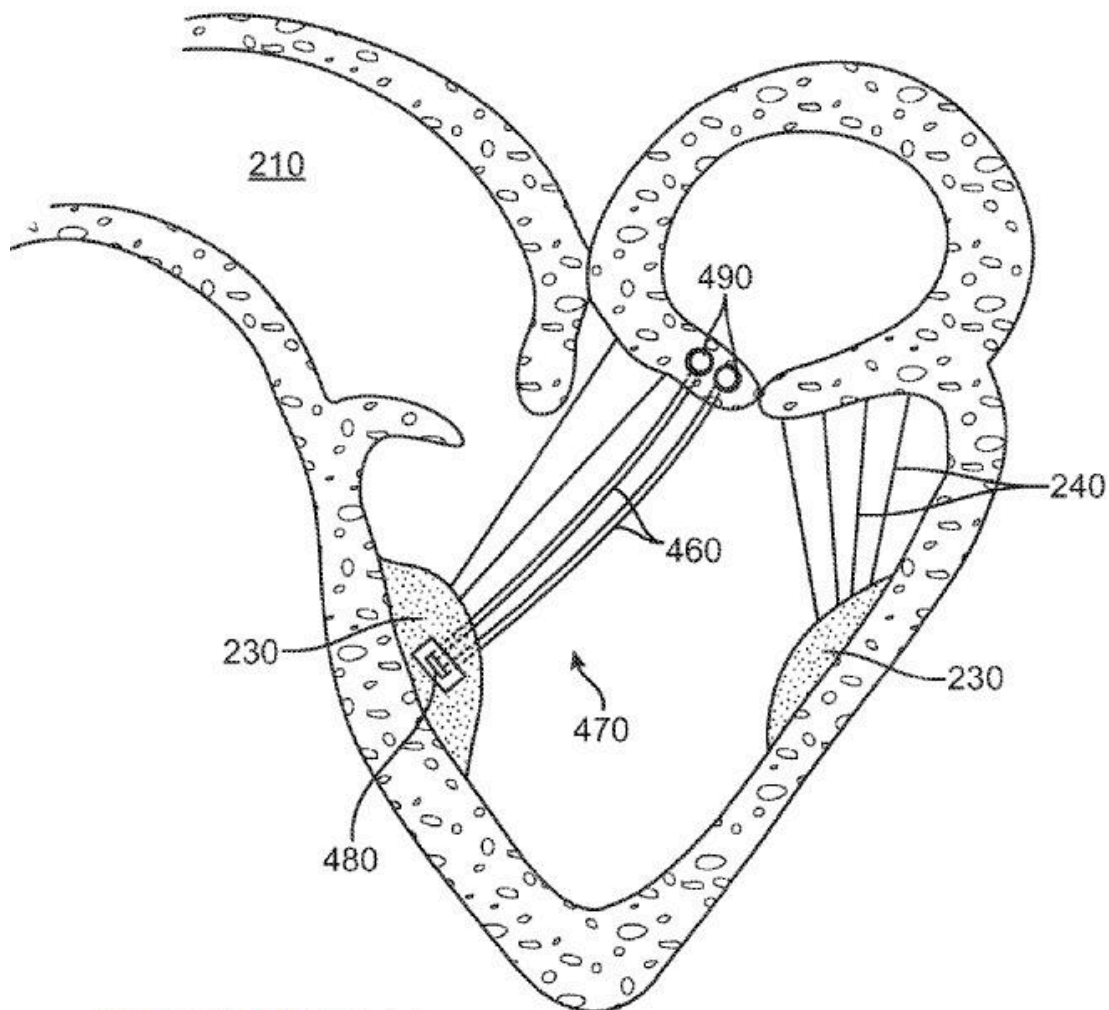


Fig.11

WO2004014258 A

A61F 2/2457**{Chordae tendineae prostheses}****Special rules of classification**Illustrative example of subject matter classified in [A61F 2/2457](#)**US2010179574 A1**

Valves with soft leaflets with artificial chordae get a class in both [A61F 2/2412](#) (subclass where appropriate) and [A61F 2/2457](#)

A61F 2/246**{Devices for obstructing a leak through a native valve in a closed condition}****References****Limiting references***This place does not cover:*

Plugs per se	A61B 17/12022
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Special rules of classification

Illustrative example of subject matter classified in [A61F 2/246](#)

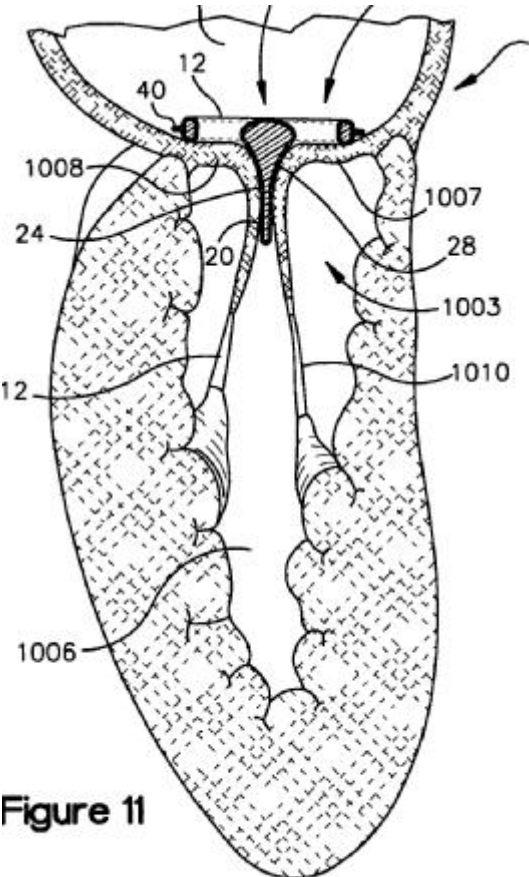
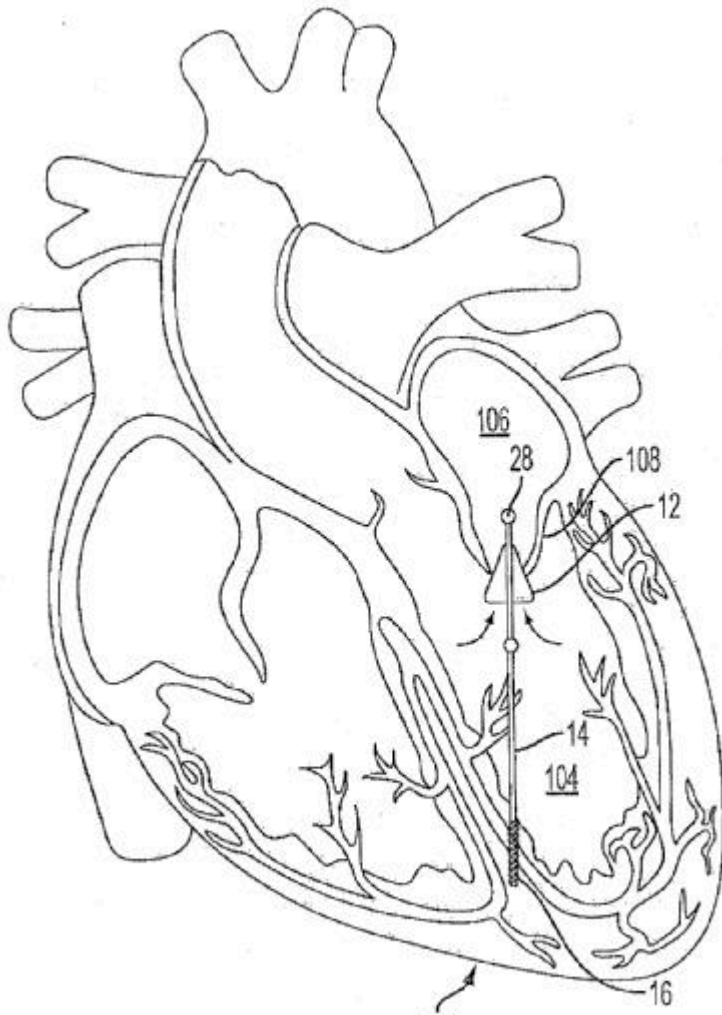


Figure 11

US2005038508 A1



WO2008141322 A1

102

A61F 2/2463

{Implants forming part of the valve leaflets}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/246](#)

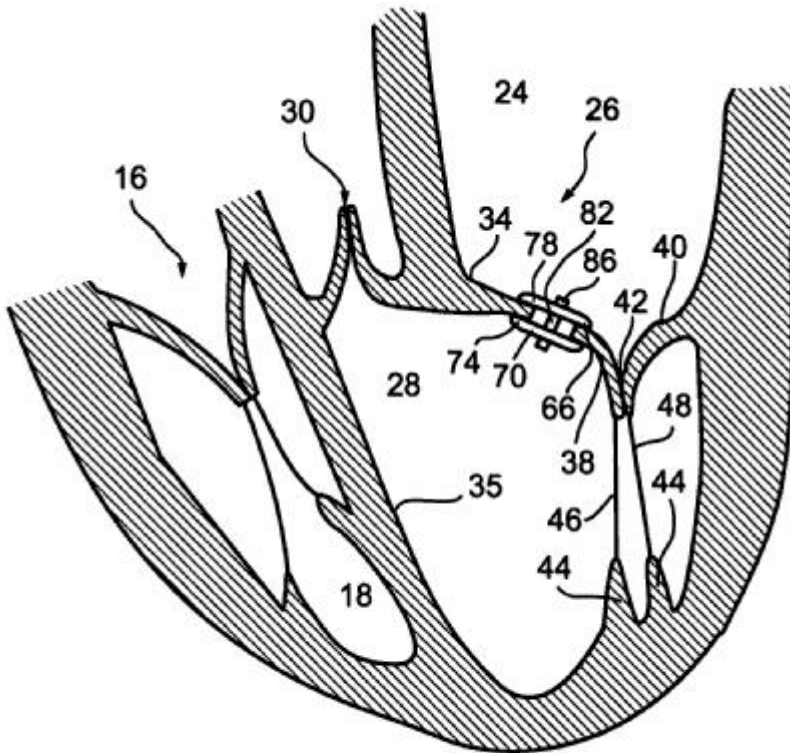
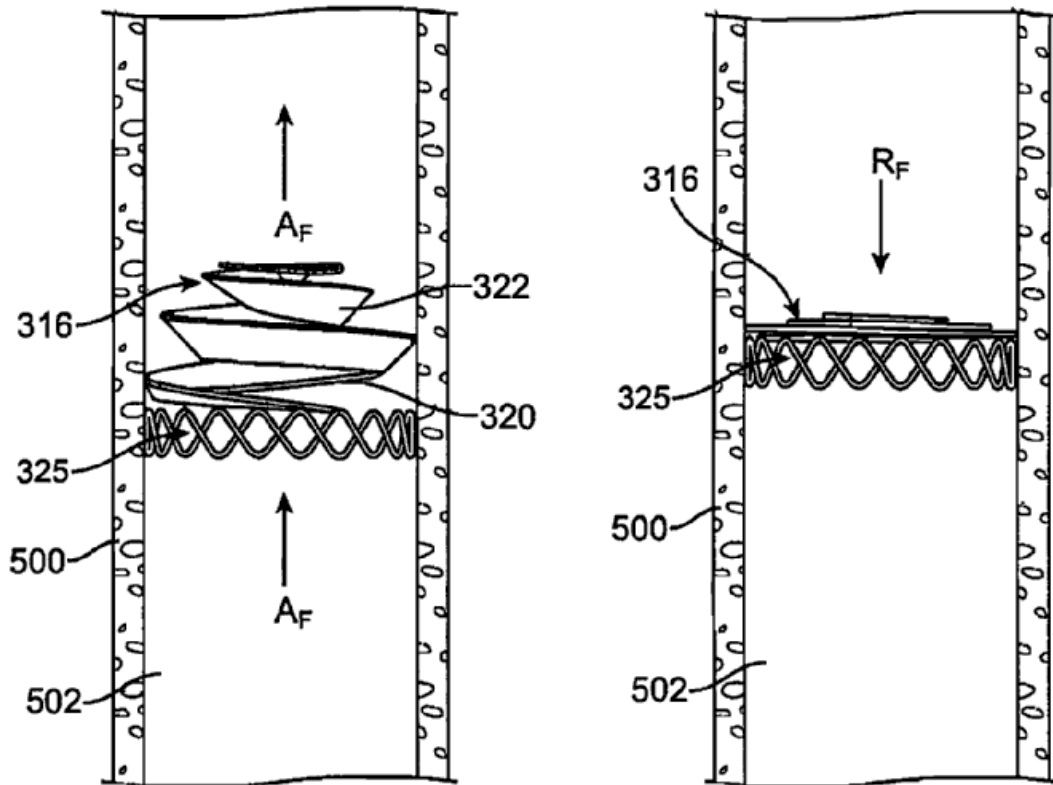


Fig. 4K
WO2008149355 A2

A61F 2/2469**{with resilient valve members, e.g. conical spiral}****Special rules of classification**Illustrative example of subject matter classified in [A61F 2/2469](#)**WO2011059863 A1****A61F 2/2472****{Devices for testing}****Definition statement***This place covers:*

Devices for testing the proper functioning of the prosthetic valve in vivo or in vitro

A61F 2/2475**{Venous valves}****Definition statement***This place covers:*

Also annuloplasty devices for venous valves and springs inside or outside the vein for reshaping the annulus.

Special rules of classification

Annuloplasty devices for venous valves and springs inside or outside the vein for reshaping the annulus. Those also get the appropriate class in [A61F 2/2442](#). Venous valves do not get a class in [A61F 2/06](#) or [A61F 2/07](#)

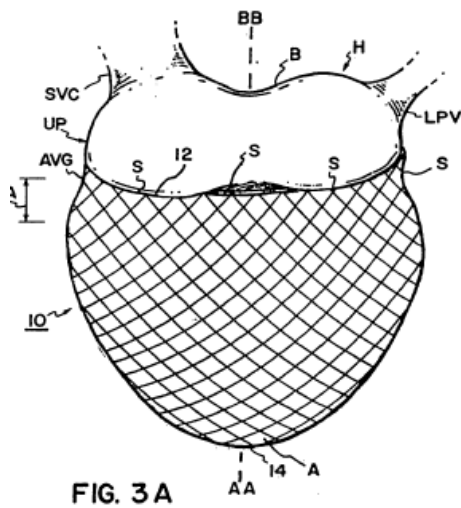
A61F 2/2481

{Devices outside the heart wall, e.g. bags, strips or bands}

Definition statement

This place covers:

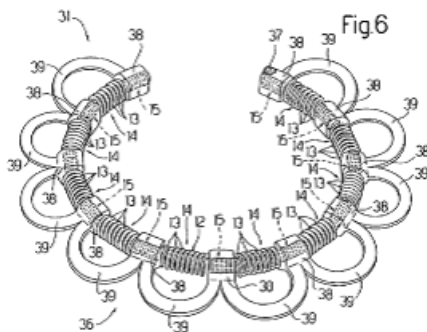
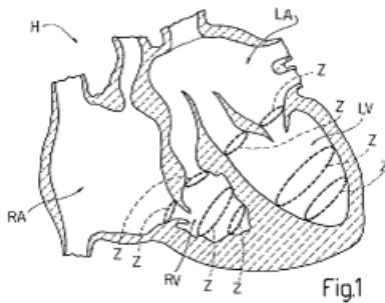
Bags outside the heart wall:



Patent Application Publication Jul. 8, 2004 Sheet 4 of 10 US 2004/0133069 A1

Heart splints:

Patent Application Publication Feb. 4, 2010 Sheet 1 of 13 US 2010/0030014 A1



References

Informative references

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

Active ventricular assist devices, i.e. heartbags with motor	A61M 60/268
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Special rules of classification

Heart splints, i.e. two anchors connected by string to reduce heart volume: [A61B 2017/048](#)

Devices for improving valve function being external to the heart wall adjacent to the valve annulus:
[A61F 2/2442](#)

A61F 2/2487

{Devices within the heart chamber, e.g. splints}

Definition statement

This place covers:

Also internal heart bags/meshes that pull the heart wall inside (e.g. equipped with barbs).

References

Limiting references

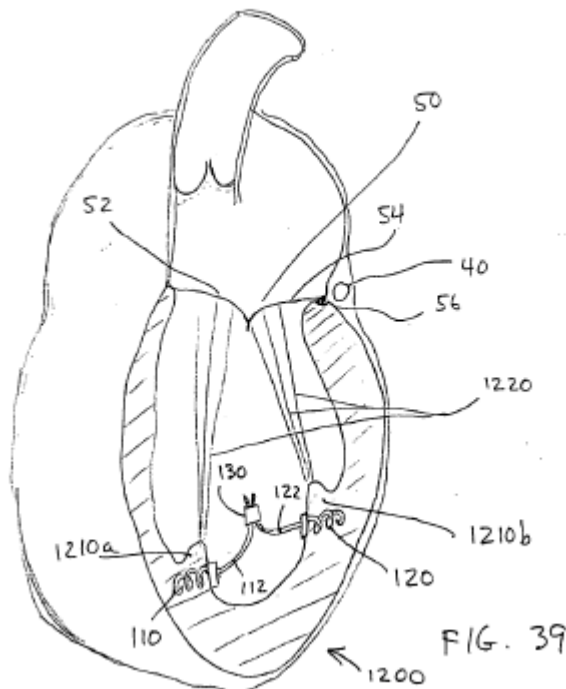
This place does not cover:

Membranes dividing the heart chamber volume into an active and a passive part	A61B 17/00234 , A61B 17/12022
Barbs, anchors per se	A61B 17/04

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/2487](#)

Patent Application Publication Sep. 23, 2004 Sheet 35 of 41 US 2004/0186566 A1



A61F 2/2493

{Transmyocardial revascularisation [TMR] devices}

Definition statement

This place covers:

Also implants for revascularising the myocardium, e.g. screws.

References

Limiting references

This place does not cover:

By-pass connections, i.e. connections from heart chamber to blood vessel or from blood vessel to blood vessel	A61B 2017/00252
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Anastomosis	A61B 17/11
Side-to-side connections, i.e. shunts between vessels (clips without an elongate tubular middle part)	A61B 2017/1139

A61F 2/2496

{Devices for determining the dimensions of the prosthetic valve to be implanted, e.g. templates, sizers}

Definition statement

This place covers:

Also templates for artificial heart valves, annuloplasty rings or other heart implants.

References

Informative references

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

Measuring per se	A61B 5/107
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A61F 2/26

Penis implants

References

Limiting references

This place does not cover:

External devices for promoting erection	A61F 5/41
---	---------------------------

Special rules of classification

If inflatable do not classify in [A61F 2250/0003](#)

A61F 2/28

Bones (joints [A61F 2/30](#))

Definition statement

This place covers:

Prosthetic bones, i.e. implants for replacing bones or parts of bones.

Relationships with other classification places

Surgical implants which are not prosthetic, but added to the natural bone, are classified in [A61B 17/00](#). Examples classified in [A61B 17/00](#) are: Bone plates, bone screws, bone fixators, devices for injection of materials into bone.

References

Limiting references

This place does not cover:

Joints	A61F 2/30
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Informative references

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

Means for introducing bone substitute, for implanting bone graft implants or for compacting them in the bone cavity	A61F 2/4601
Devices for grinding or milling bone material	A61F 2/4644
Anatomical models for scientific, medical or mathematical purposes	G09B 23/30

Special rules of classification

Additional information is classified under [A61F 2002/30001](#) - [A61F 2/48](#) and [A61F 2310/00](#). Any additional information which may be useful for search must be completely classified.

A61F 2/2803

{for mandibular reconstruction (temporo-mandibular joints [A61F 2/3099](#); bone plates for the jaw [A61B 17/8071](#))}

References

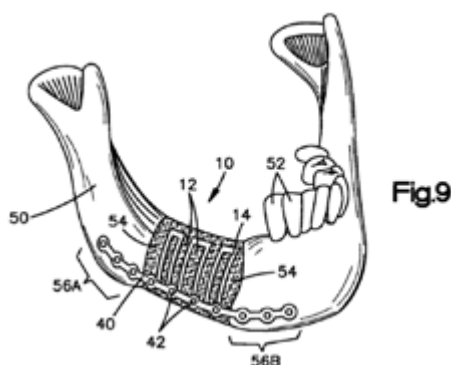
Informative references

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

Skull or cranium	A61F 2/2875
Temporo-mandibular joints	A61F 2/3099
Bone plates for the jaw	A61B 17/8071
Periodontal bone regeneration for consolidating natural teeth	A61C 8/0006

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/2803](#)



A61F 2/2814

{Bone stump caps}

Relationships with other classification places

Devices for attachment of external prostheses to bone stumps are classified in both [A61F 2/2814](#) and [A61F 2/78](#).

References

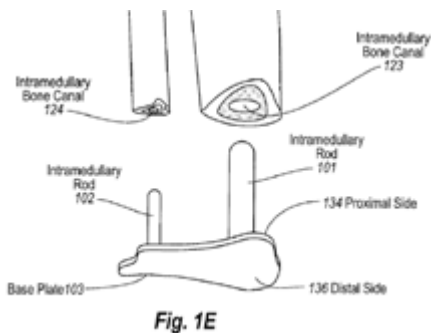
Informative references

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

Means for attaching external orthopedic prostheses to the body	A61F 2/78
--	---------------------------

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/2814](#)



A61F 2/2846

{Support means for bone substitute or for bone graft implants, e.g. membranes or plates for covering bone defects (nets or sleeves applied to surface of endoprotheses [A61F 2/30907](#); bone plates [A61B 17/80](#); bone regeneration in dental surgery [A61C 8/0006](#))}

References

Informative references

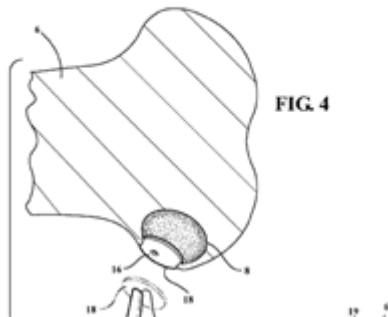
Attention is drawn to the following places, which may be of interest for search:

Nets or sleeves applied to surface of endoprotheses	A61F 2/30907
Bone plates	A61B 17/80
Bone regeneration in dental surgery	A61C 8/0006

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/2846](#)

Patent Application Publication Dec. 16, 2010 Sheet 3 of 3 US 2010/0318091 A1

**A61F 2/2857**

{for cadavers (devices for autopsy [A61B 16/00](#))}

References**Informative references**

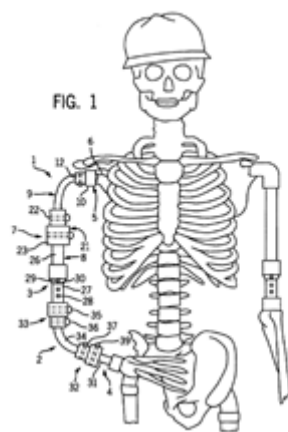
Attention is drawn to the following places, which may be of interest for search:

Devices for autopsy	A61B 16/00
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Special rules of classification

Illustrative example of subject matter classified in [A61F 2/2857](#)

U.S. Patent Nov. 4, 1997 5,683,462

**A61F 2/2875**

{Skull or cranium ([A61F 2/2803](#) and [A61F 2/3099](#) take precedence)}

References**Limiting references**

This place does not cover:

For mandibular reconstruction	A61F 2/2803
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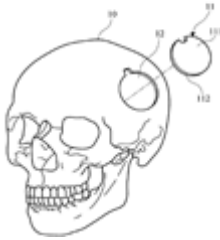
Temporo-mandibular joints

A61F 2/3099

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/2875](#)

Patent Application Publication Jul 1, 2010 Sheet 1 of 09 US 2010/028751 A1



A61F 2/30

Joints

Definition statement

This place covers:

Prosthetic joints, i.e. implants for replacing joints or parts of joints. The classes [A61F 2/30](#) - [A61F 2/46](#) comprise:

Hip joints

Knee and elbow joints

Shoulder joints

Wrist, ankle, finger and toe joints

Vertebrae and vertebral joints

Tools for implanting or extracting prosthetic joints

Operating or control means

Accessories

Cartilage endoprostheses

Special articulating or bone contacting surfaces

Relationships with other classification places

Surgical implants which are not prosthetic, but added to the natural joint, are classified in [A61B 17/00](#). Examples classified in [A61B 17/00](#) are: Devices implanted between the natural articulating surfaces, devices implanted adjacent a natural joint for stabilising it.

[A61F 2/30](#) contains implantable devices for replacing anatomical joints.

Special rules of classification

Additional information is classified under [A61F 2/30](#) - [A61F 2/48](#). Any additional information which may be useful for search must be completely classified.

Additional information concerning a particular anatomical joint is classified under the corresponding subgroup ([A61F 2/32](#) - [A61F 2/48](#)).

Additional information concerning accessories is classified under [A61F 2/30721](#).

Additional information concerning cartilage endoprostheses is classified under [A61F 2/30756](#).

Additional information concerning external or bone-contacting surfaces of joint or bone prostheses is classified under [A61F 2/30767](#).

Additional information concerning manufacturing of endoprostheses is classified under [A61F 2/3094](#).

Additional information concerning anatomical joints not covered by [A61F 2/32](#) - [A61F 2/44](#) is classified under [A61F 2/30988](#).

Further additional information applicable for joint or bone prostheses is classified under [A61F 2002/30003](#) - [A61F 2002/30667](#).

Additional information concerning the use of particular materials in joint or bone prostheses is classified under [A61F 2310/00](#).

Additional information for which classes exist in neighbouring fields, is coded in said fields, e.g.

- Joint distractors: [A61B 17/025](#)
- Surgical staples for bones: [A61B 17/0642](#)
- Securing of bone screws: [A61B 17/8033](#), [A61B 17/8052](#)
- Fastening to the bone by wires, bands or straps: [A61B 17/842](#)
- Fastening to the bone by screws or pins: [A61B 17/86](#)
- Packages for prostheses: [A61F 2/0095](#)
- Fixation devices for tendons or ligaments: [A61F 2/08](#)

A61F 2/30723

{Plugs or restrictors for sealing a cement-receiving space (tools for inserting plugs [A61F 2/4614](#); sealing collars for use during cementing [A61B 17/8808](#))}

References

Informative references

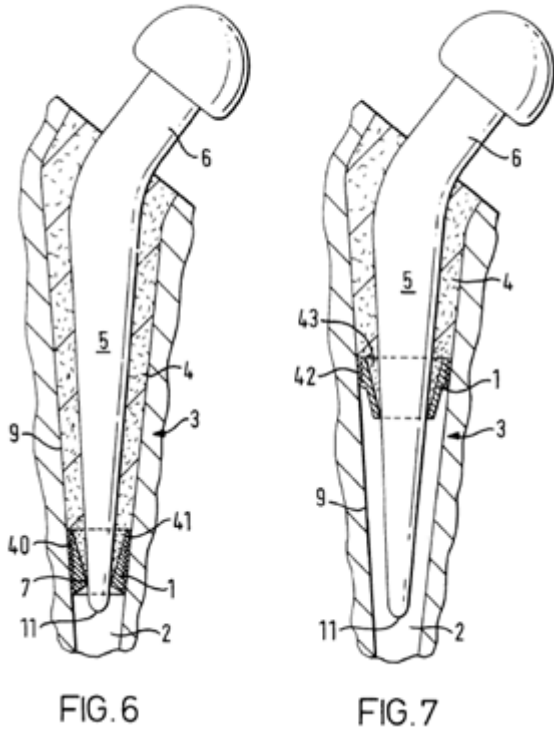
Attention is drawn to the following places, which may be of interest for search:

Tools for inserting plugs	A61F 2/4614
Sealing collars for use during cementing	A61B 17/8808

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/30723](#)

EP 0 962 198 A2

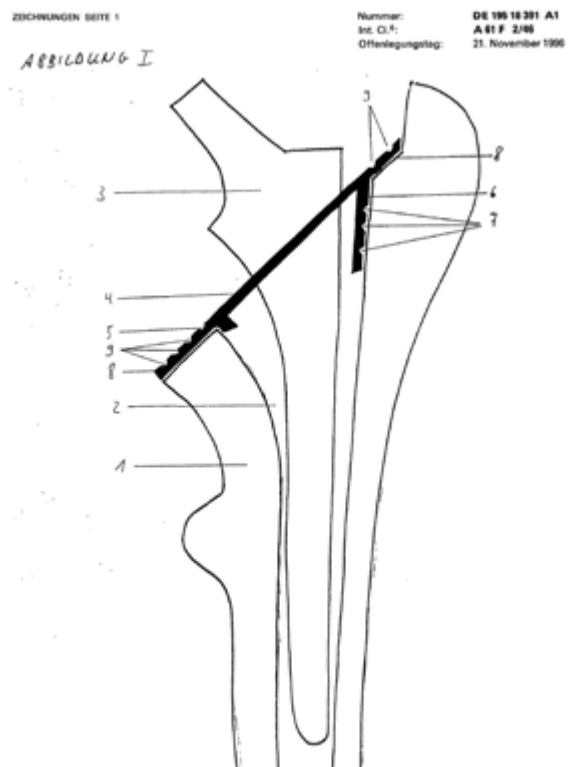


A61F 2/30724

{Spacers for centering an implant in a bone cavity, e.g. in a cement-receiving cavity}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/30724](#)



A61F 2/30728

{Collars; Bone edge protectors ([A61F 2/30734](#) takes precedence; sealing collars for use during cementing [A61B 17/8808](#))}

References

Limiting references

This place does not cover:

Modular inserts, sleeves or augments	A61F 2/30734
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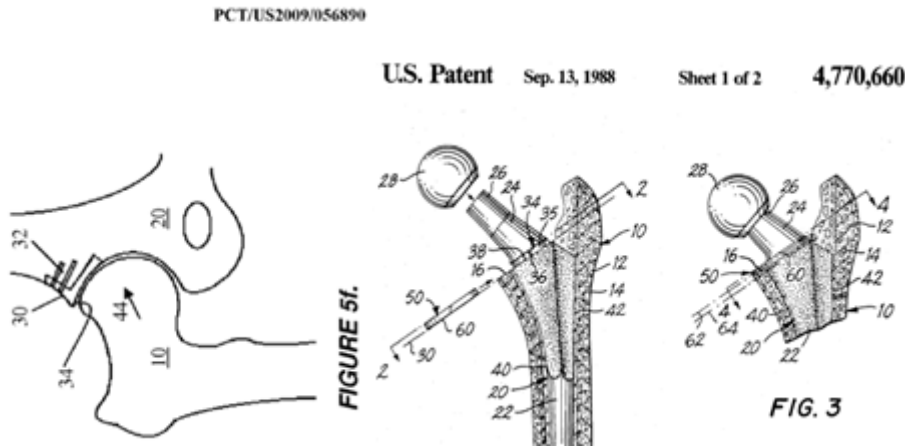
Informative references

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

Sealing collars for use during cementing	A61B 17/8808
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Special rules of classification

Illustrative example of subject matter classified in [A61F 2/30728](#)



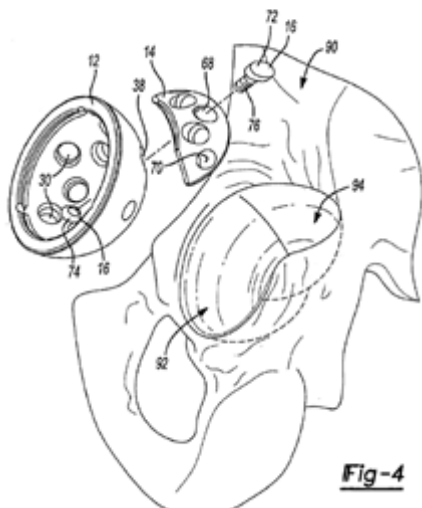
A61F 2/30734

{Modular inserts, sleeves or augments, e.g. placed on proximal part of stem for fixation purposes or wedges for bridging a bone defect}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/30734](#)

Patent Application Publication Aug. 13, 2009 Sheet 3 of 8 US 2009/0204225 A1



A61F 2/30739

{Devices connected to the proximal part of an endoprosthetic femoral shaft for reinforcing or replacing the trochanters, e.g. the greater trochanter (proximal parts of endoprosthetic femoral shafts [A61F 2/367](#); non-prosthetic trochanteric devices [A61B 17/74](#))}

References

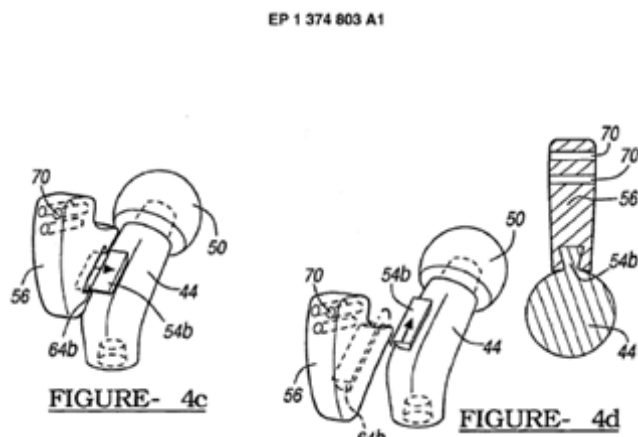
Informative references

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

Proximal parts of endoprosthetic femoral shafts	A61F 2/367
Non-prosthetic trochanteric devices	A61F 2/74

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/30739](#)



A61F 2/30742

{Bellows or hose-like seals; Sealing membranes ([A61B 17/8808](#) takes precedence; sealing membranes for retaining bone substitute [A61F 2/2846](#))}

References

Limiting references

This place does not cover:

Tool for implantation with bone cement and with sealing collar for bone cavity	A61B 17/8808
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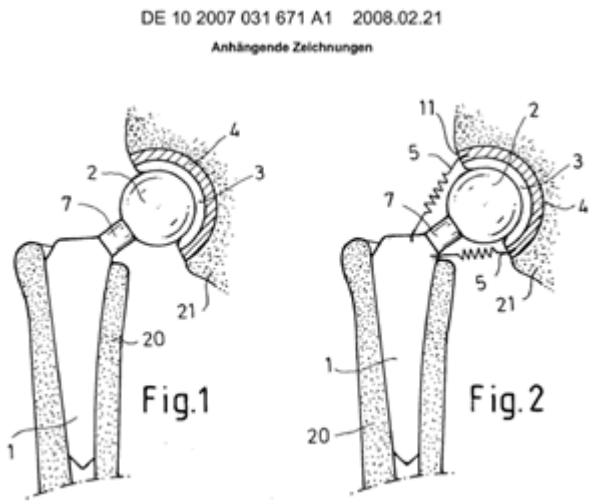
Informative references

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

Sealing membranes for retaining bone substitute	A61F 2/2846
---	-----------------------------

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/30742](#)

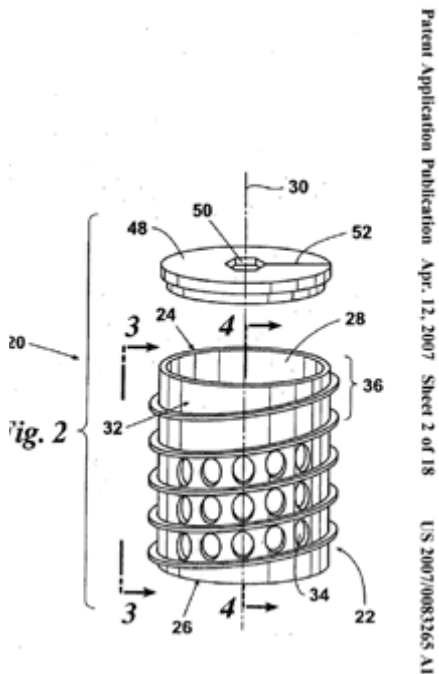


A61F 2/30744

{End caps, e.g. for closing an endoprosthesis cavity}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/30744](#)



A61F 2/30749**{Fixation appliances for connecting prostheses to the body}****References*****Informative references****Attention is drawn to the following places, which may be of interest for search:*

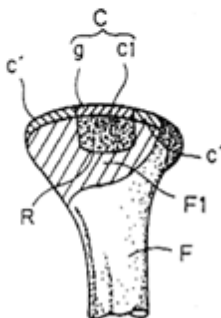
Cartilage endoprotheses	A61F 2/30756
-------------------------	------------------------------

A61F 2/30756**{Cartilage endoprotheses ([A61F 2/3603](#) takes precedence)}****References*****Limiting references****This place does not cover:*

Femoral heads implanted without ablation of the whole natural femoral head	A61F 2/3603
--	-----------------------------

Special rules of classificationIllustrative example of subject matter classified in [A61F 2/30756](#)

EP 0 505 634 A1

FIG. 1

A61F 2/30767

{Special external or bone-contacting surface, e.g. coating for improving bone ingrowth}

References**Informative references**

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

Materials for coating prostheses	A61L 27/28
----------------------------------	----------------------------

A61F 2/30771

{applied in original prostheses, e.g. holes or grooves}

Definition statement

This place covers:

The following figures show an illustrative example of subject matter classified here. Figure 1 is a longitudinal section of a surgical implant (1) having a structured surface (2) for contact with bone tissue. A plurality of cavities (3) are mechanically produced on surface (2). The cavities (3) are provided with an undercut (5). Figure 2 is a top view on the surface region of the surgical implant shown in figure 1.

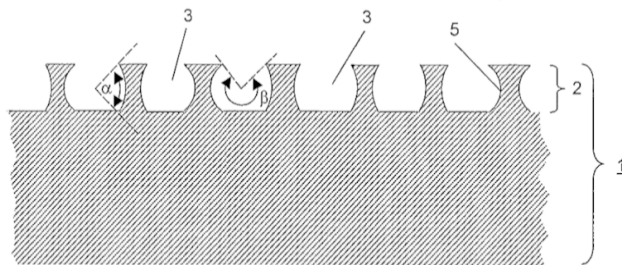


Fig. 1

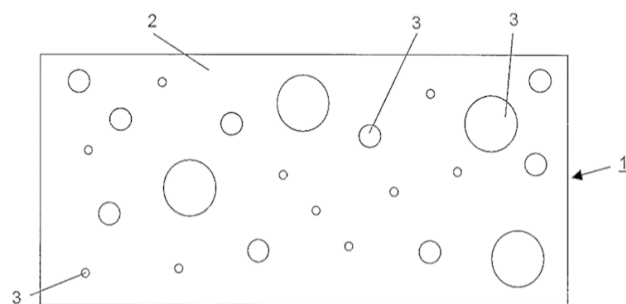


Fig. 2

References**Informative references**

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

Etching into the surface	A61F 2/30767
--------------------------	------------------------------

A61F 2/30942

{for designing or making customized prostheses, e.g. using templates, CT or NMR scans, finite-element analysis or CAD-CAM techniques}

References

Informative references

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

Computer-assisted sizing or machining of dental prostheses	A61C 13/0004
CAD-CAM techniques per se	G05B 19/4097

A61F 2/3099

{for temporo-mandibular [TM, TMJ] joints (endoprotheses for mandibular reconstruction [A61F 2/2803](#))}

References

Informative references

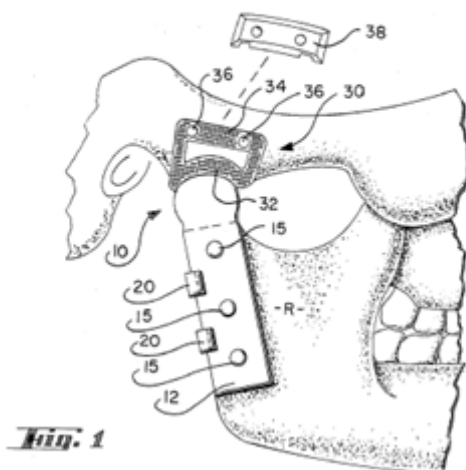
Attention is drawn to the following places, which may be of interest for search:

Endoprotheses for mandibular reconstruction	A61F 2/2803
---	-----------------------------

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/3099](#)

U.S. Patent Sep. 15, 1987 Sheet 1 of 4 4,693,722



A61F 2/34

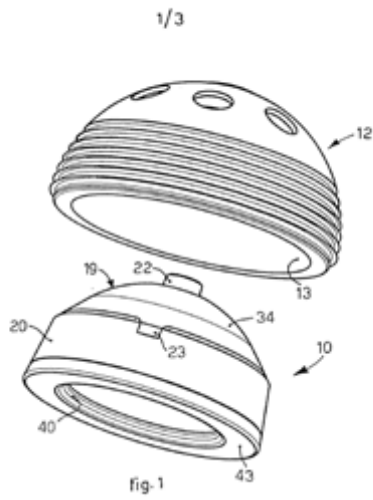
Acetabular cups

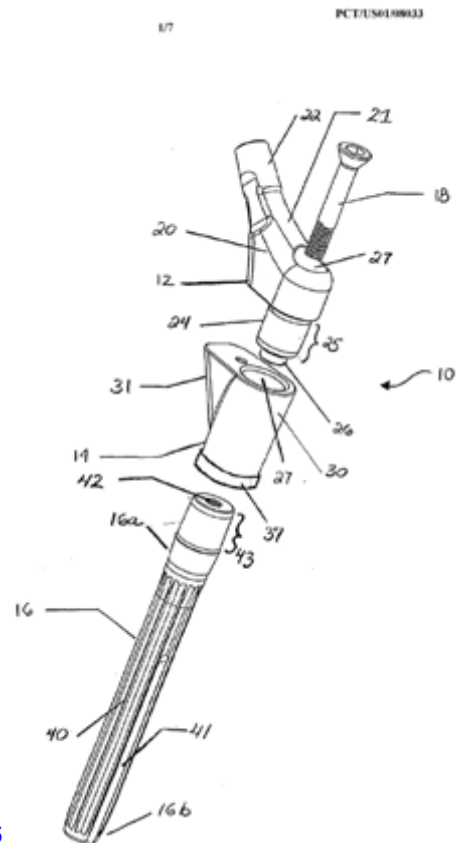
Special rules of classification

Illustrative example of subject matter classified in [A61F 2/34](#)

WO 2008146121

PCT/BR2008/01289



A61F 2/36**Femoral heads {; Femoral endoprosthesis}****Special rules of classification**

Illustrative example of subject matter classified in [A61F 2/36](#)

A61F 2/3601

{for replacing only the epiphyseal or metaphyseal parts of the femur, e.g. endoprosthesis femoral heads or necks directly fixed to the natural femur by internal fixation devices (non-prosthesis internal fixation devices for the femoral head or neck [A61B 17/74](#))}

References**Informative references**

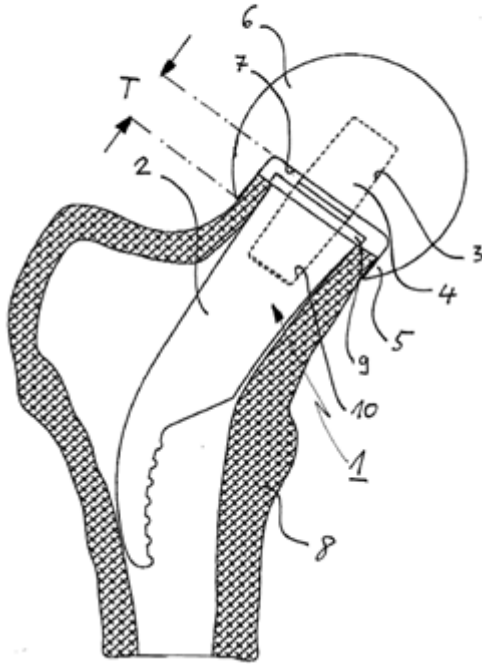
Attention is drawn to the following places, which may be of interest for search:

Non-prosthesis internal fixation devices for the femoral head or neck	A61B 17/74
---	----------------------------

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/3601](#)

EP 1 332 736 A1



A61F 2/3603

{implanted without ablation of the whole natural femoral head (endoprosthetic cartilage [A61F 2/30756](#))}

References

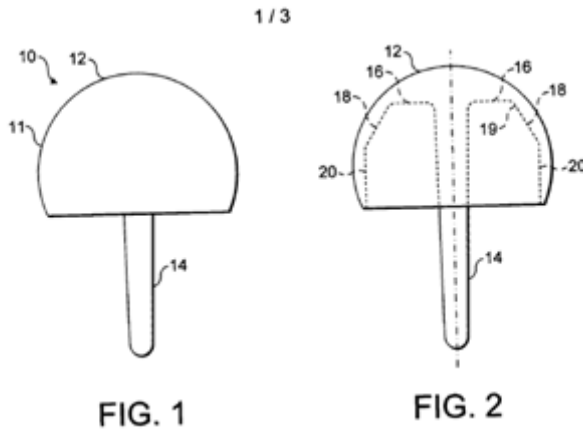
Informative references

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

Endoprosthetic cartilage	A61F 2/30756
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Special rules of classification

Illustrative example of subject matter classified in [A61F 2/3603](#)

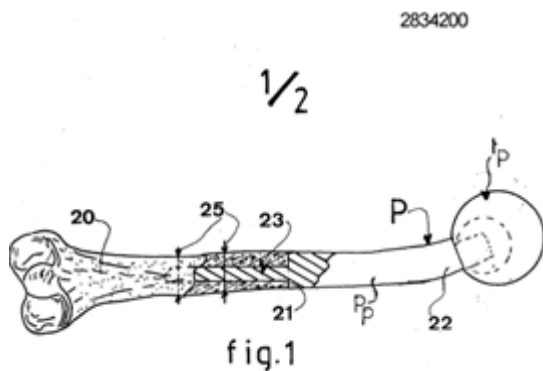


A61F 2/3607

{including proximal or total replacement of the femur}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/3607](#)



A61F 2/3609

{Femoral heads or necks; Connections of endoprosthetic heads or necks to endoprosthetic femoral shafts ([A61F 2/3601](#) takes precedence)}

References

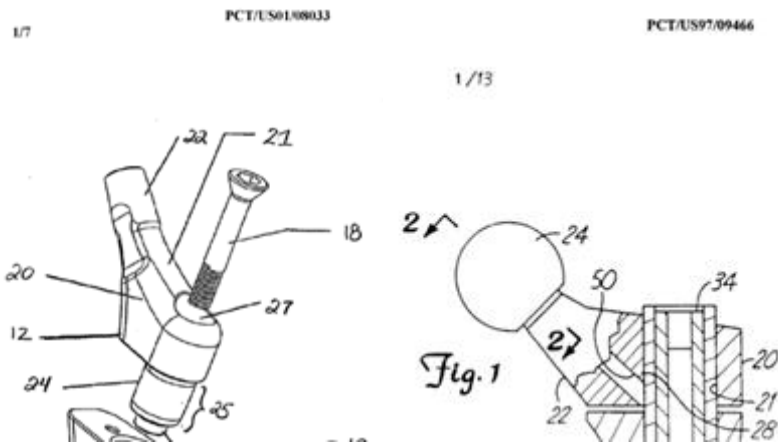
Limiting references

This place does not cover:

Femoral endoprostheses for replacing only the epiphyseal or metahpyseal parts of the femur	A61F 2/3601
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Special rules of classification

Illustrative example of subject matter classified in [A61F 2/3609](#)

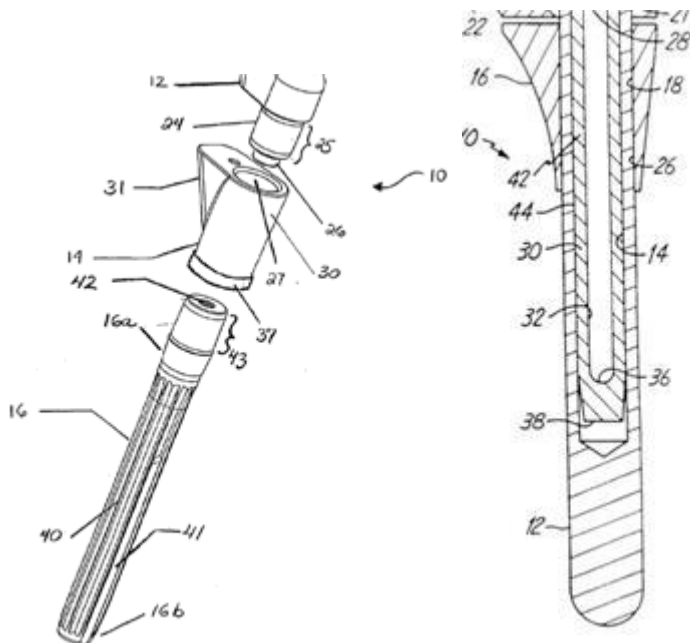


A61F 2/3662

{Femoral shafts}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/3662](#)



A61F 2/367

{Proximal or metaphyseal parts of shafts (trochanteric devices connected to said proximal parts [A61F 2/30739](#))}

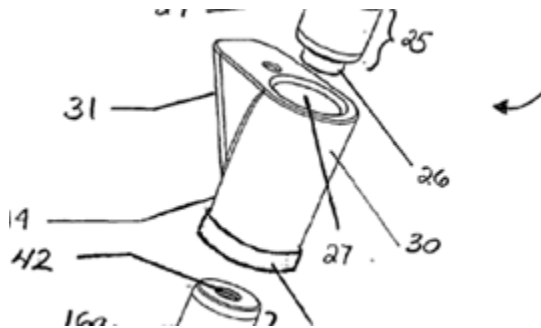
References**Informative references**

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

Trochanteric devices connected to said proximal parts	A61F 2/30739
---	------------------------------

Special rules of classification

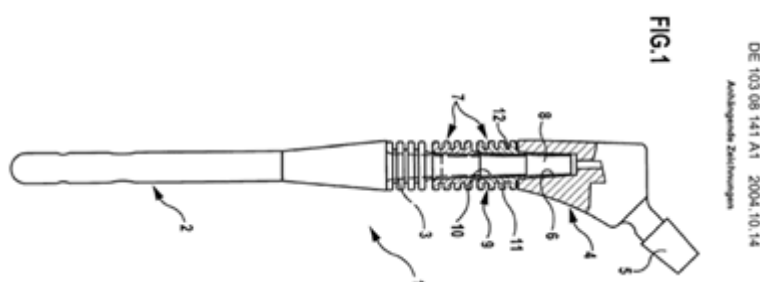
Illustrative example of subject matter classified in [A61F 2/367](#)

**A61F 2/3672**

{Intermediate parts of shafts}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/3672](#)

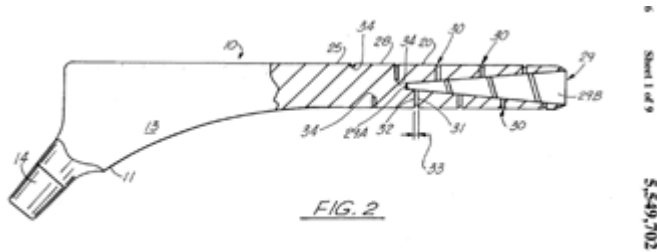


A61F 2/3676

{Distal or diaphyseal parts of shafts}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/3676](#)

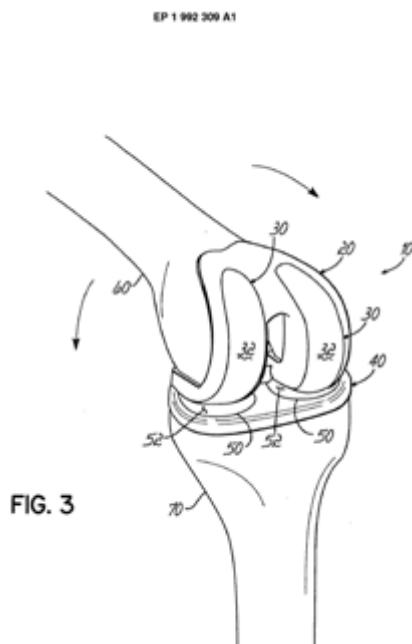


A61F 2/38

for elbows or knees

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/38](#)



A61F 2/3804

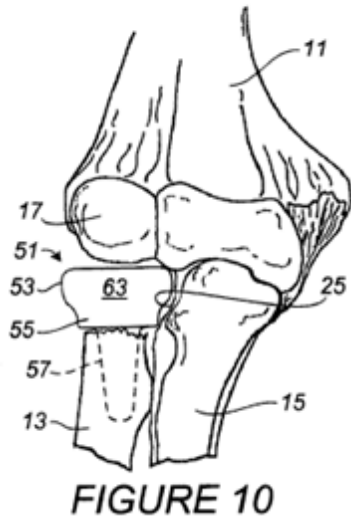
{for elbows}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/3804](#)

WO 00/13617

3/



A61F 2/3859

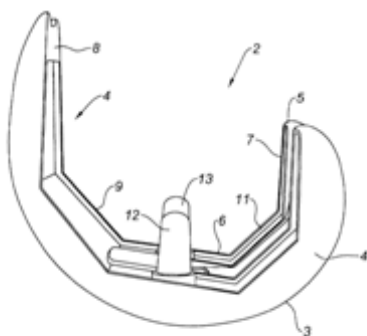
{Femoral components}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/3859](#)

2934770

1 / 1



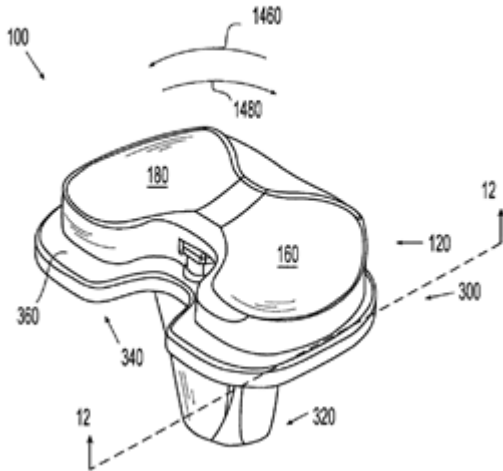
A61F 2/3868

{with sliding tibial bearing}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/3868](#)

Patent Application Publication Sep. 22, 2005 Sheet 6 of 25 US 2005/0209702 A1



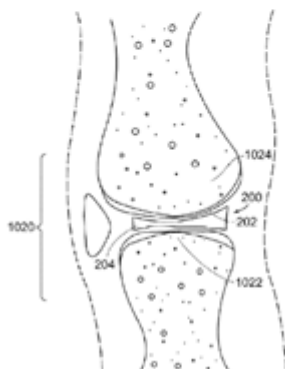
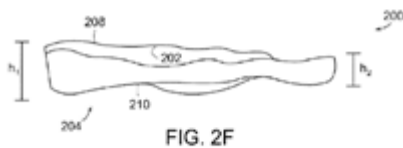
A61F 2/3872

{Meniscus for implantation between the natural bone surfaces}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/3872](#)

Patent Application Publication Oct. 4, 2007 Sheet 6 of 12 US 2007/0233249 A1

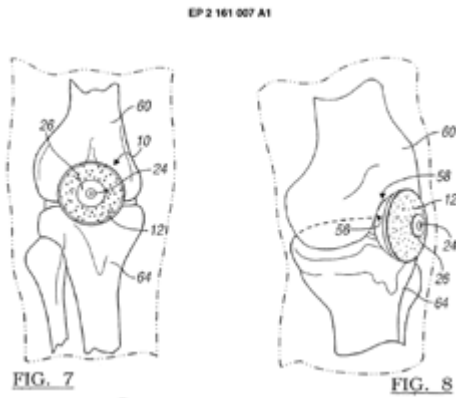


A61F 2/3877

{Patellae or trochleae}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/3877](#)



A61F 2/3886

{for stabilising knees against anterior or lateral dislocations}

References

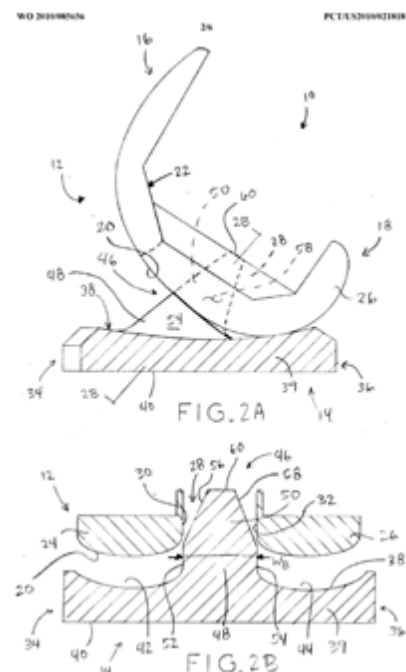
Limiting references

This place does not cover:

Knee prostheses with sliding tibial bearing	A61F 2/3868
---	-----------------------------

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/3886](#)



A61F 2/389

{Tibial components ([A61F 2/3868](#) takes precedence)}

References**Limiting references**

This place does not cover:

Knee prostheses with sliding tibial bearing	A61F 2/3868
---	-----------------------------

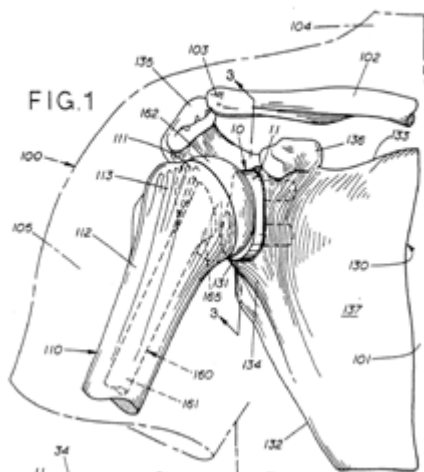
A61F 2/40

for shoulders

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/40](#)

U.S. Patent Jan. 14, 1992 Sheet 1 of 6 5,080,673

**A61F 2/4003**

{Replacing only the epiphyseal or metaphyseal parts of the humerus, i.e. endoprosthesis not comprising an entire humeral shaft (replacing only the epiphyseal or metaphyseal parts of the femur [A61F 2/3601](#))}

References**Informative references**

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

Replacing only the epiphyseal or metaphyseal parts of the femur	A61F 2/3601
---	-----------------------------

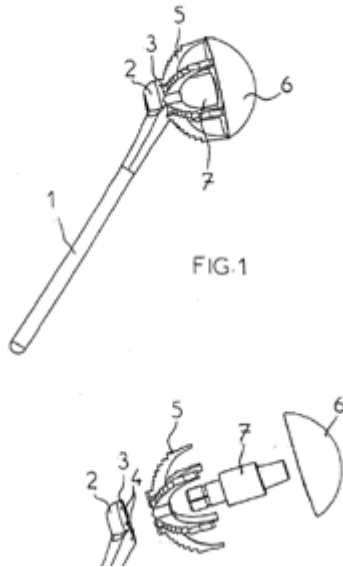
A61F 2/4014

{Humeral heads or necks; Connections of endoprosthesis heads or necks to endoprosthesis humeral shafts}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/4014](#)

Patent Application Publication Sep. 7, 2006 Sheet 1 of 7 US 2006/0200249 A1



A61F 2/4059

{Humeral shafts}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/4059](#)

EP 1 088 532 A2

Fig.1

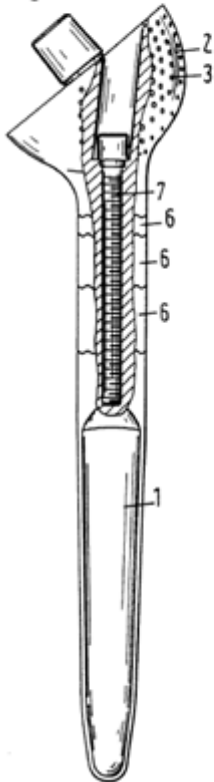
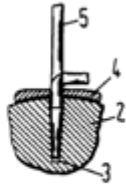


Fig.2



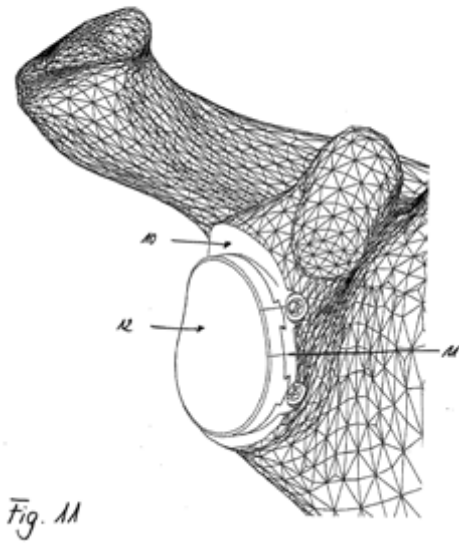
A61F 2/4081

{Glenoid components, e.g. cups}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/4081](#)

DE 10 2008 021 110 A1 2009.10.29

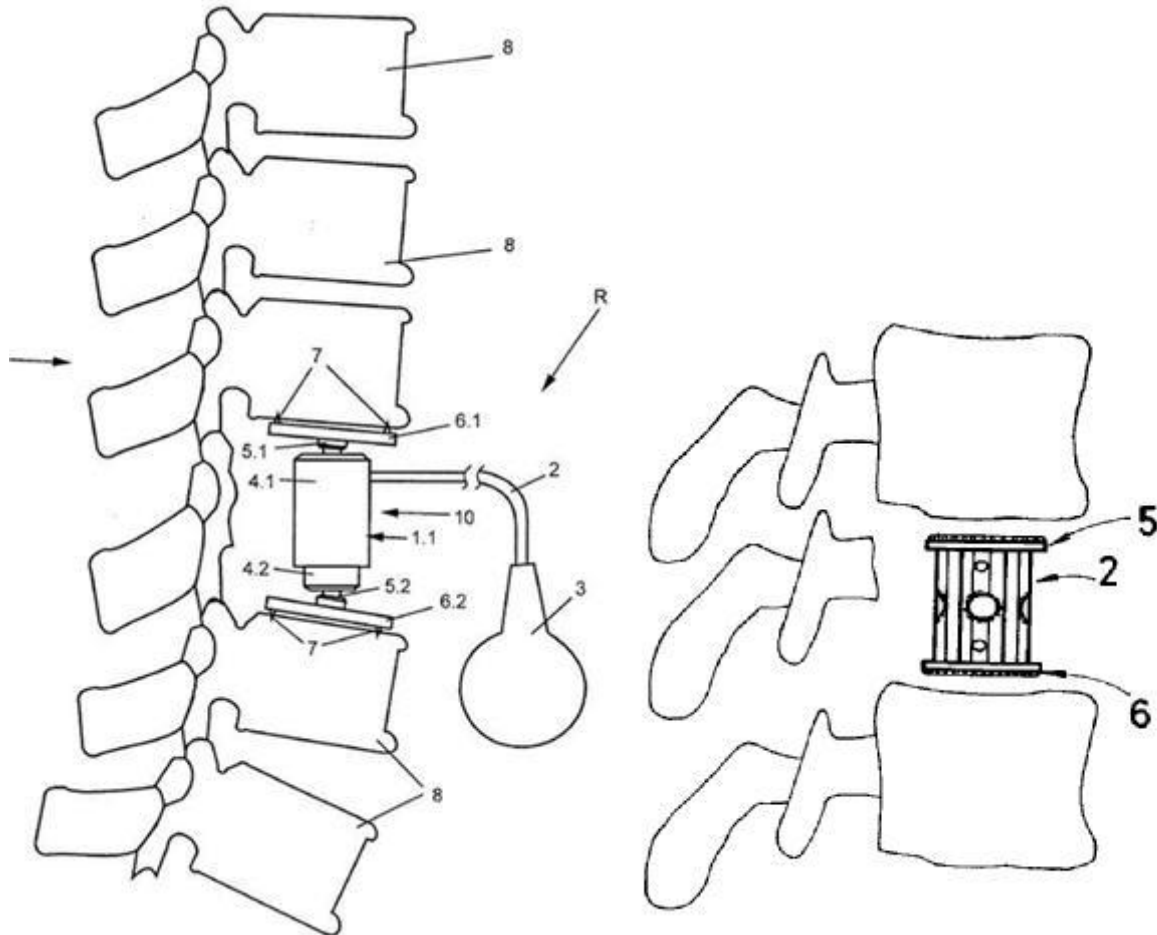


A61F 2/44

for the spine, e.g. vertebrae, spinal discs

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/44](#)

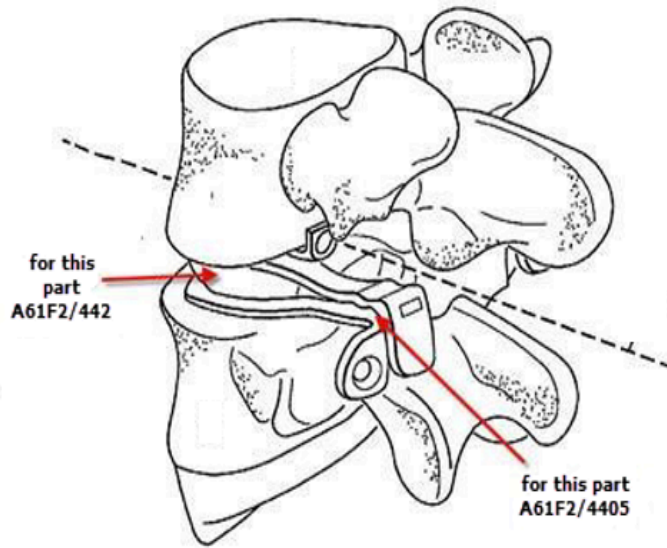
**A61F 2/4405**

{for apophyseal or facet joints, i.e. between adjacent spinous or transverse processes (devices implanted between spinous or transverse processes [A61B 17/7062](#))}

Definition statement

This place covers:

- facet joint prostheses,
- facet joint fusion implants, if the implant replaces the joint.



References

Informative references

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

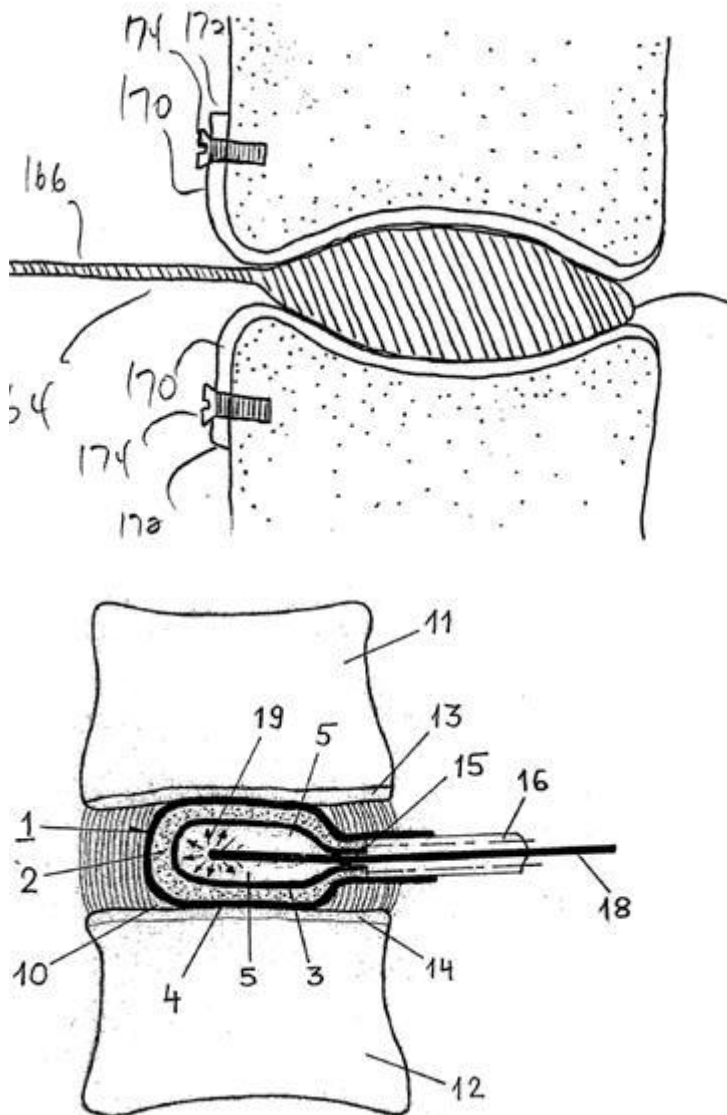
Devices implanted between spinous or transverse processes	A61B 17/7062
---	------------------------------

A61F 2/441

{made of inflatable pockets or chambers filled with fluid, e.g. with hydrogel}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/441](#)

**A61F 2/442**

{Intervertebral or spinal discs, e.g. resilient (non-disc-shaped intervertebral inflatable pockets [A61F 2/441](#); non-disc-shaped intervertebral fusion implants [A61F 2/4455](#))}

References**Informative references**

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

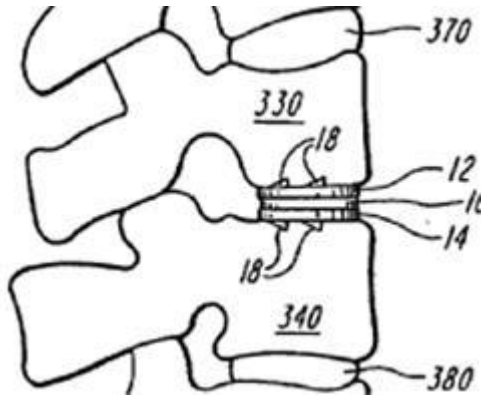
Non-disc-shaped intervertebral inflatable pockets	A61F 2/441
---	----------------------------

Intervertebral fusion implants

[A61F 2/445](#)

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/442](#)

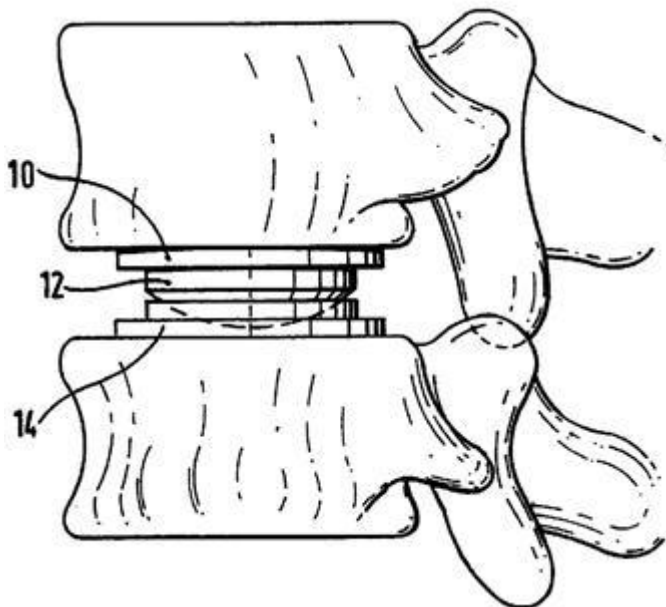


A61F 2/4425

{made of articulated components}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/4425](#)



A61F 2/4455

{for the fusion of spinal bodies, e.g. intervertebral fusion of adjacent spinal bodies, e.g. fusion cages (intervertebral discs [A61F 2/442](#))}

References

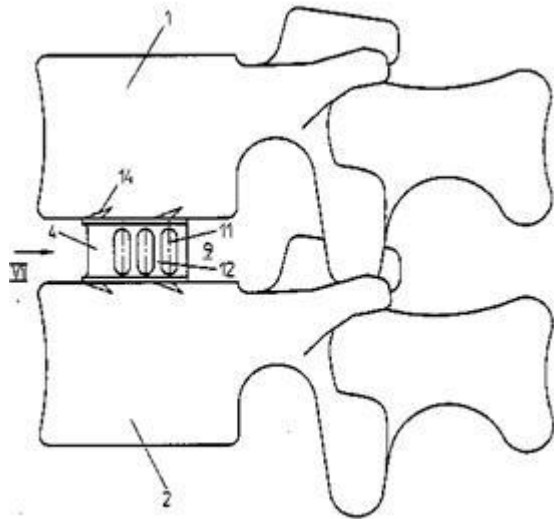
Informative references

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

Intervertebral discs	A61F 2/442
----------------------	----------------------------

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/4455](#)

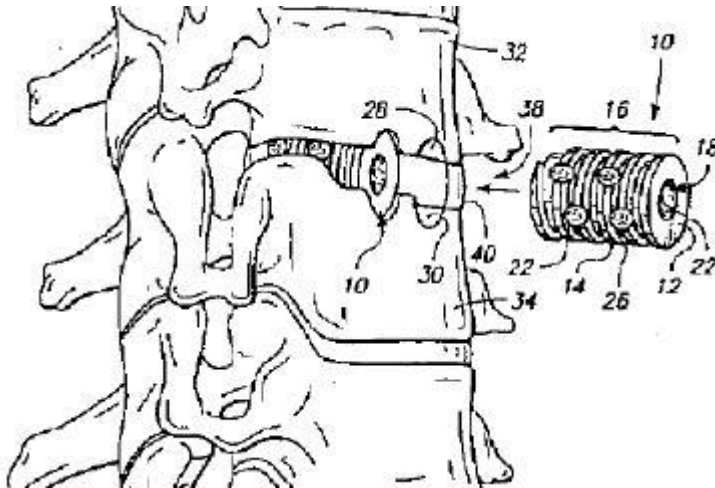


A61F 2/446

{having a circular or elliptical cross-section substantially parallel to the axis of the spine, e.g. cylinders or frustocones}

Special rules of classification

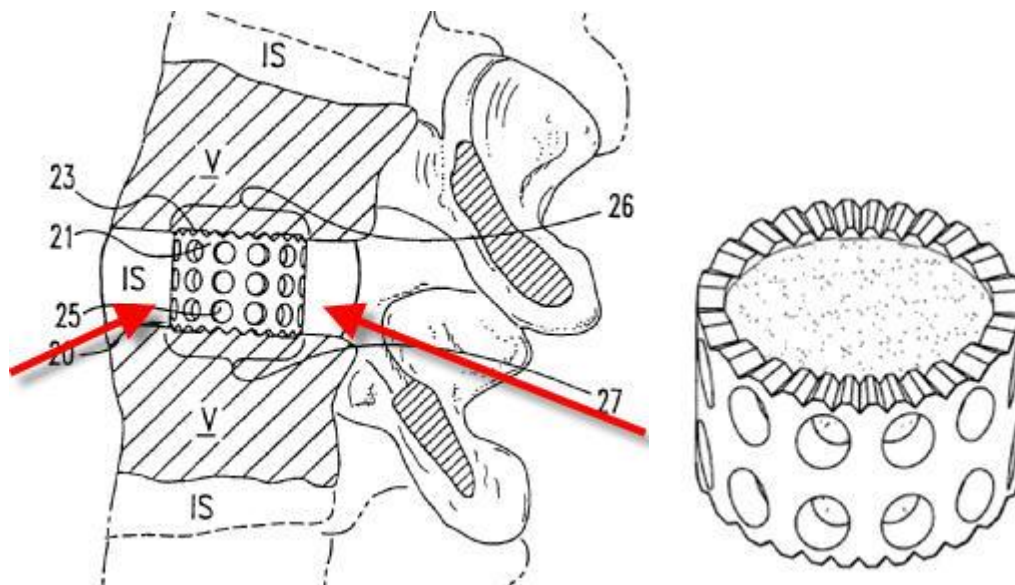
Illustrative example of subject matter classified in [A61F 2/446](#)

**A61F 2/4465**

{having a circular or kidney shaped cross-section substantially perpendicular to the axis of the spine}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/4465](#)

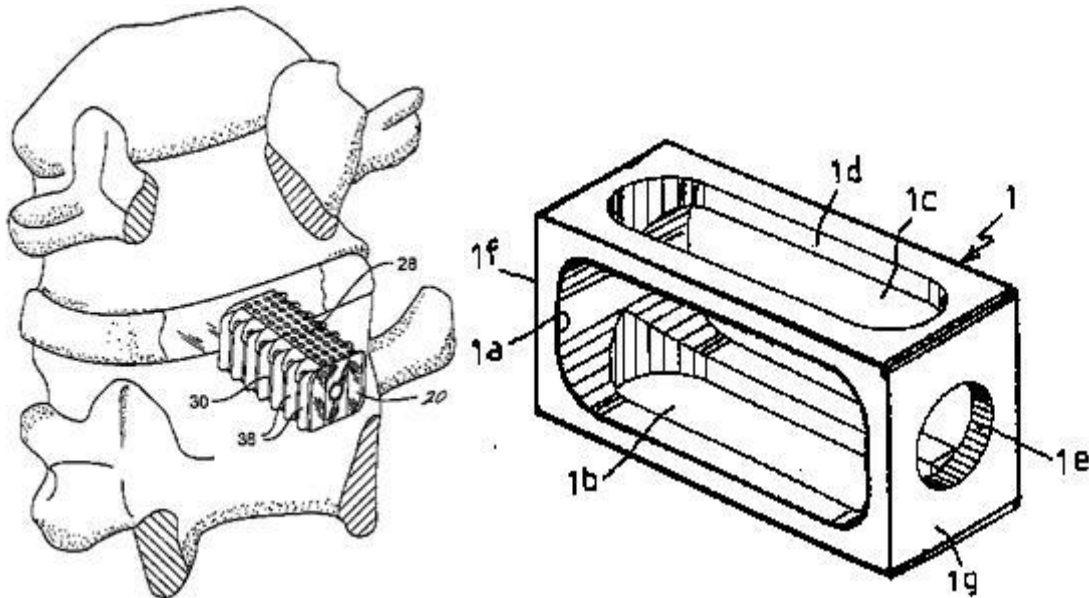


A61F 2/447

{substantially parallelepipedal, e.g. having a rectangular or trapezoidal cross-section}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/447](#)

**A61F 2/46**

Special tools or methods for implanting or extracting artificial joints, accessories, bone grafts or substitutes, or particular adaptations therefor

References**Informative references**

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

Surgical instruments	A61B 17/00
----------------------	----------------------------

A61F 2/4601

{for introducing bone substitute, for implanting bone graft implants or for compacting them in the bone cavity}

References**Informative references**

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

For introducing bone cement	A61B 17/8802
-----------------------------	------------------------------

A61F 2/4605

{of elbows}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/4605](#)

WO 2011/017620

PCT/US2010/044719

17 / 19

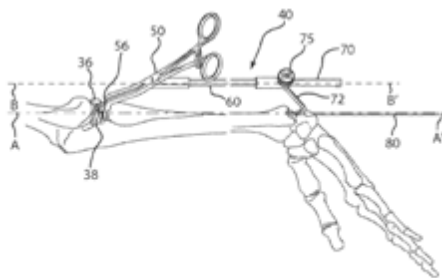


Fig. 15B

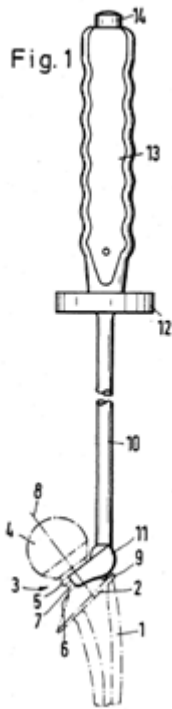
A61F 2/4607

{of hip femoral endoprotheses}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/4607](#)

Sheet 1 of 2 4,642,121



A61F 2/4609

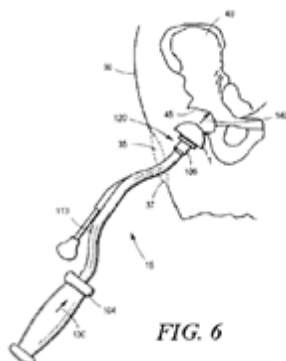
{of acetabular cups}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/4609](#)

2900328

8 / 12

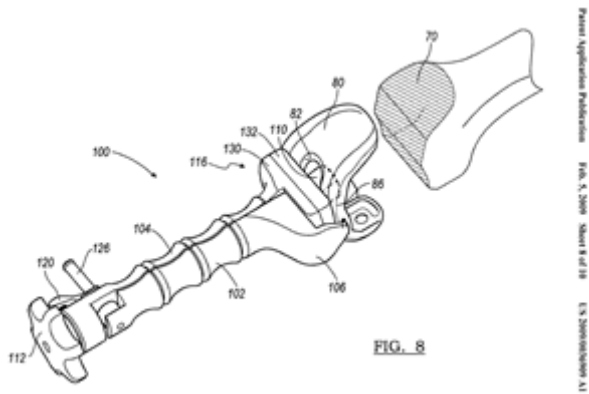


A61F 2/461

{of knees}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/461](#)

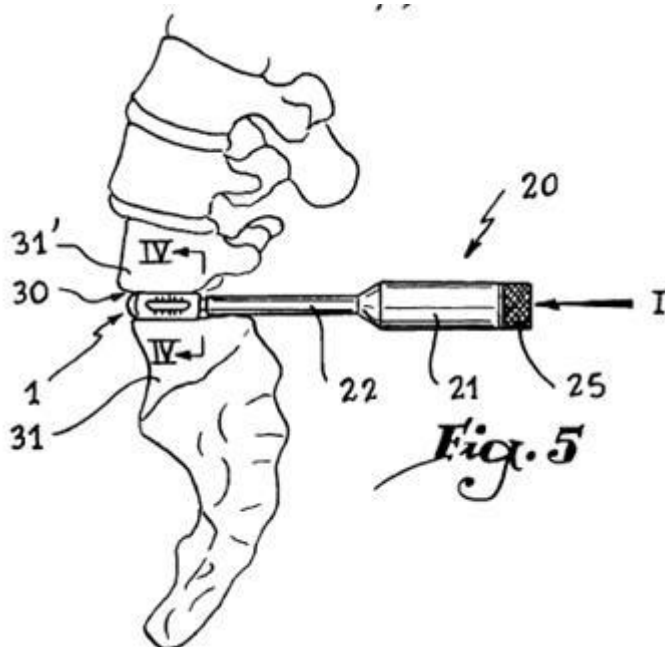


A61F 2/4611

{of spinal prostheses}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/4611](#)

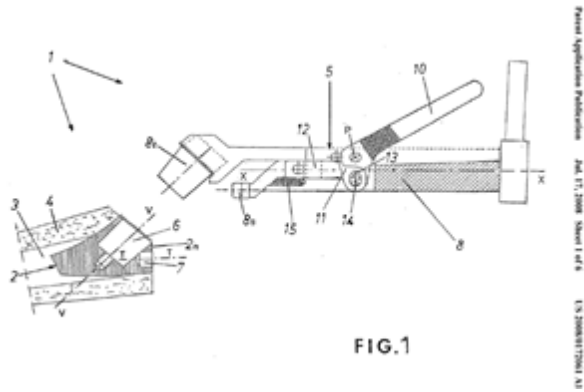


A61F 2/4612

{of shoulders}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/4612](#)

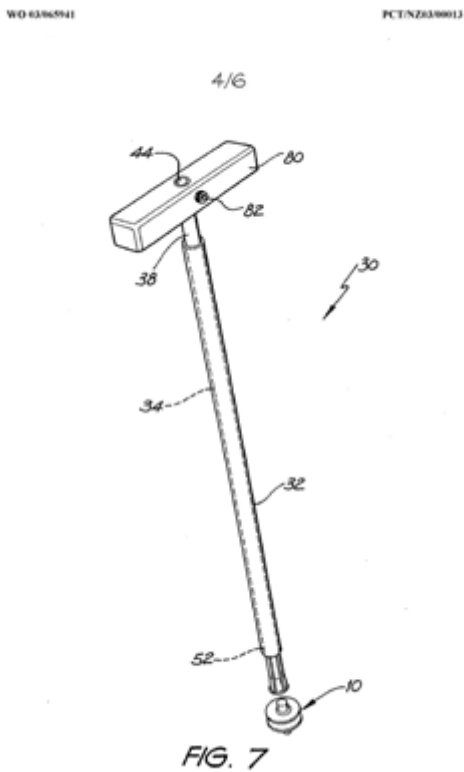


A61F 2/4614

{of plugs for sealing a cement-receiving space}

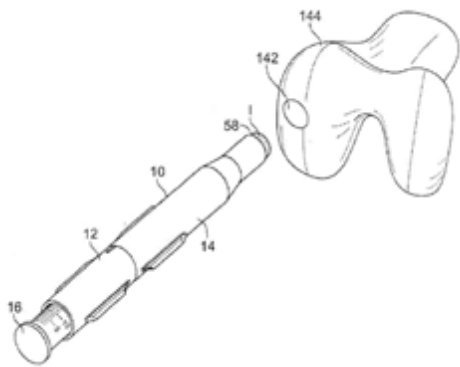
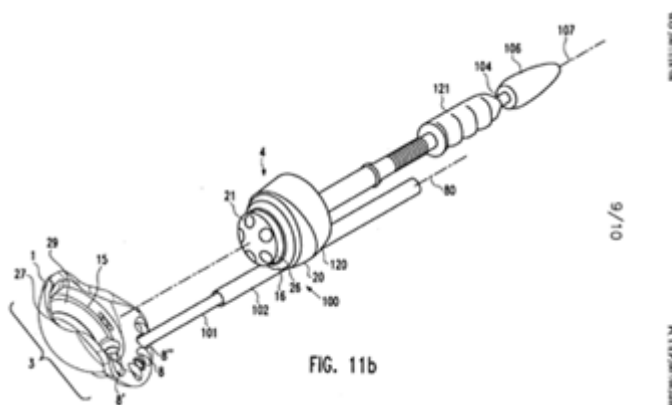
Special rules of classification

Illustrative example of subject matter classified in [A61F 2/4614](#)



A61F 2/4618**{of cartilage}****Special rules of classification**Illustrative example of subject matter classified in [A61F 2/4618](#)

Patent Application Publication Nov. 18, 2010 Sheet 19 of 21 US 2010/0292704 A1

**A61F 2/4637****{for connecting or disconnecting two parts of a prosthesis}****Special rules of classification**Illustrative example of subject matter classified in [A61F 2/4637](#)

For the concerned anatomical joint, as additional information, a classification symbol in [A61F 2/30](#) - [A61F 2/44](#) is given.

A61F 2/4644

{Preparation of bone graft, bone plugs or bone dowels, e.g. grinding or milling bone material (bone material [A61F 2/28](#); disintegrating or milling devices [B02C](#))}

References**Limiting references**

This place does not cover:

Surgical bone cutting instruments for harvesting bone graft	A61B 17/1635
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Informative references

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

Bone prostheses	A61F 2/28
Bone as a prosthesis material	A61F 2310/00359
Disintegrating or milling devices	B02C
Cutting in general	B26D

A61F 2/4657

{Measuring instruments used for implanting artificial joints (for surgical instruments [A61B 90/06](#))}

References**Informative references**

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

For surgical instruments	A61B 90/06
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Special rules of classification

For the concerned anatomical joint, as additional information, a classification symbol in [A61F 2/30](#) - [A61F 2/44](#) is given.

A61F 2/4675

{for cleaning or coating bones, e.g. bone cavities, prior to endoprosthesis implantation or bone cement introduction (for cleaning teeth cavities [A61C 17/00](#); irrigators [A61M 3/02](#))}

References**Informative references**

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

For cleaning teeth cavities	A61C 17/00
Irrigators	A61M 3/02

A61F 2/468

{Testing instruments for artificial joints (for testing non-implantable prostheses [A61F 2/76](#))}

References**Informative references**

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

For testing non-implantable prostheses	A61F 2/76
Investigating strength properties of solid materials by application of mechanical stress	G01N 3/00

Special rules of classification

For the concerned anatomical joint, as additional information, a classification symbol in [A61F 2/30](#) - [A61F 2/44](#) is given.

A61F 2/4684

{Trial or dummy prostheses}

Special rules of classification

For the concerned anatomical joint, as additional information, a classification symbol in [A61F 2/30](#) - [A61F 2/44](#) is given.

A61F 2/50

Prostheses not implantable in the body {(closure means for urethra or rectum or for artificial body openings therefor [A61F 2/0004](#))}

Definition statement

This place covers:

Prostheses, i.e. artificial substitutes or replacements for parts of the body, which are NOT implantable in the body, as well as fitting and attaching measures for such devices.

References**Limiting references**

This place does not cover:

Closure means for urethra or rectum or for artificial body openings therefor	A61F 2/0004
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Informative references

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

Implantable devices	A61F 2/01 , A61F 2/02
Bone stump	A61F 2/2814
Orthopaedic devices	A61F 5/01
Brassieres	A41C 3/00

Programme-controlled manipulators	B25J 9/00
Exoskeleton	B25J 9/0006
Gripping heads	B25J 15/00
Joints	B25J 17/00
Arms	B25J 18/00

Special rules of classification

Designing or making customized prostheses, e.g. using templates, finite-element analysis or CAD-CAM techniques: [A61F 2/5046](#)

Prostheses which are not implantable; e.g. upper and lower artificial limbs, or mammary prostheses: [A61F 2/54](#), [A61F 2/60](#), [A61F 2/52](#)

Operating or control means for such prostheses: [A61F 2/68](#)

Means for assembling, fitting or testing prostheses: [A61F 2/76](#)

Means for attaching such prostheses to the body: [A61F 2/78](#)

Note: Additional information is classified under [A61F 2/50](#) - [A61F 2/80](#).

A61F 2/72

Bioelectric control, e.g. myoelectric

Relationships with other classification places

The bioelectrical control may be in response to physiological signals or parameters recorded from the body as found in [A61B 5/389](#) or [A61B 5/4851](#).

References

Informative references

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

Detecting, measuring or recording bioelectric signals of the body or parts thereof	A61B 5/24
Electromyography	A61B 5/389

A61F 2/78

Means for protecting prostheses or for attaching them to the body, e.g. bandages, harnesses, straps, or stockings for the limb stump

References

Informative references

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

Heating or cooling appliances for medical or therapeutic treatment of stumps after amputation	A61F 2007/0051
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Special rules of classification

Prosthetic liners or sockets with a heating or cooling function should also be classified under [A61F 2007/0051](#) as Additional Information.

A61F 2/82

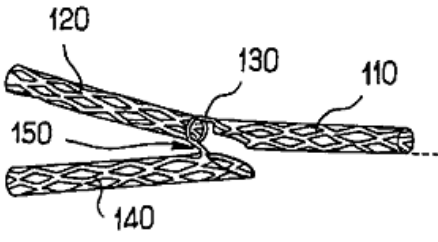
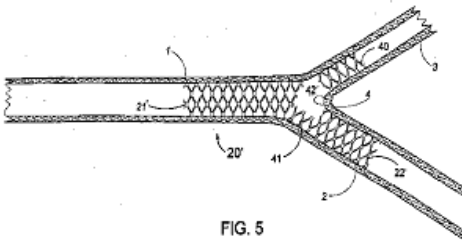
Devices providing patency to, or preventing collapsing of, tubular structures of the body, e.g. stents (stent-grafts for tubular structures of the body other than blood vessels [A61F 2/04](#); stent-grafts for blood vessels [A61F 2/07](#); instruments specially adapted for placement or removal of stents or stent-grafts [A61F 2/95](#); for closing wounds, or holding wounds closed [A61B 17/04](#) - [A61B 17/115](#); dilators [A61M 29/00](#))

Definition statement

This place covers:

Stents with tubular structures deployed within a stenosis in order to widen and support the vessel. The stent is usually made from a rigid material like metal or polymer.

Illustrative examples for classification:

	<p>A61F 2/82 /low (specific stent class) A61F 2002/065, A61F 2002/828 (means for connecting a plurality of stents)</p>
 <p>FIG. 5</p>	<p>A61F 2/82 /low (specific stent class) A61F 2002/067, A61F 2002/828, A61F 2/856 :If it is not clear if there is a portal or if there are 2 stents connected, classify both possibilities</p>

Relationships with other classification places

Stent Manufacturing:

Laser cutting	B23K 26/00
Etching	C23F 1/00
Bending sheets of metals for making tubes	B21D 5/10
Injection Moulding	B29C 45/00
Moulds or cores	B29C 33/00
Wire-working in the manufacture of stents (e.g. bending around mandrel)	B21F 45/008

Relationships with other classification places

Stent braiding	D04C 1/00
Electroplating, tubes	C25D 7/04
Coating by spraying	B05B 17/00
Materials for stents	A61L 31/00

References

Limiting references

This place does not cover:

Stent-grafts for blood vessels	A61F 2/07
Instruments for placement or removal of stents or stent grafts	A61F 2/95
Closing wounds, or holding wounds closed	A61B 17/04 – A61B 17/115
Dilators	A61M 29/00

Informative references

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

Stent-grafts for tubular structures of the body other than blood vessels	A61F 2/04
Urinary catheters	A61M 25/0017

Special rules of classification

The following additional information is given to stents when appropriate:

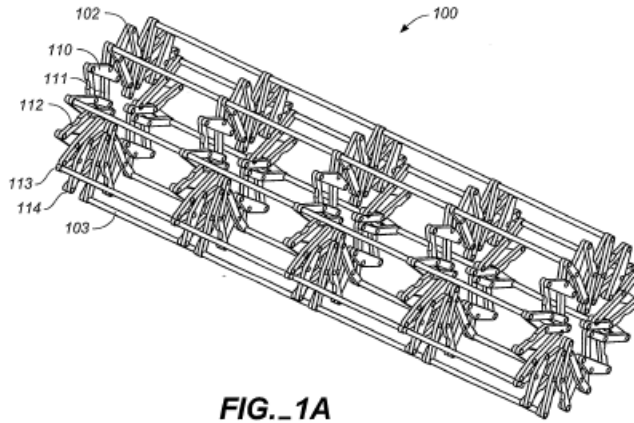
Ostial stents	A61F 2002/821
Stents, different from stent-grafts, adapted to cover an aneurysm	A61F 2002/823
having longitudinal struts	A61F 2002/825
more than one stent being applied sequentially	A61F 2002/826
Means for connecting a plurality of stents allowing flexibility of the whole structure	A61F 2002/828

A61F 2/844

folded prior to deployment

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/844](#)



WO 03/08100

2 / 14

PCT/US02/27007

CLXVa. [A61F 2/848](#)

having means for fixation to the vessel wall, e.g. barbs

The following additional information is given to stents when appropriate:

Barbs	A61F 2002/8483
provided on at least one of the ends	A61F 2002/8486

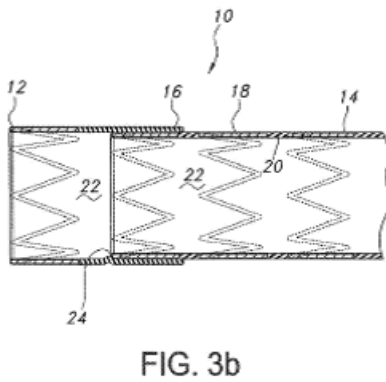
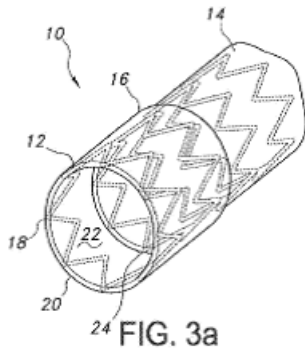
A61F 2/852

Two or more distinct overlapping stents

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/852](#)

Patent Application Publication Nov. 22, 2012 Sheet 2 of 4 US 2012/0296406 A1



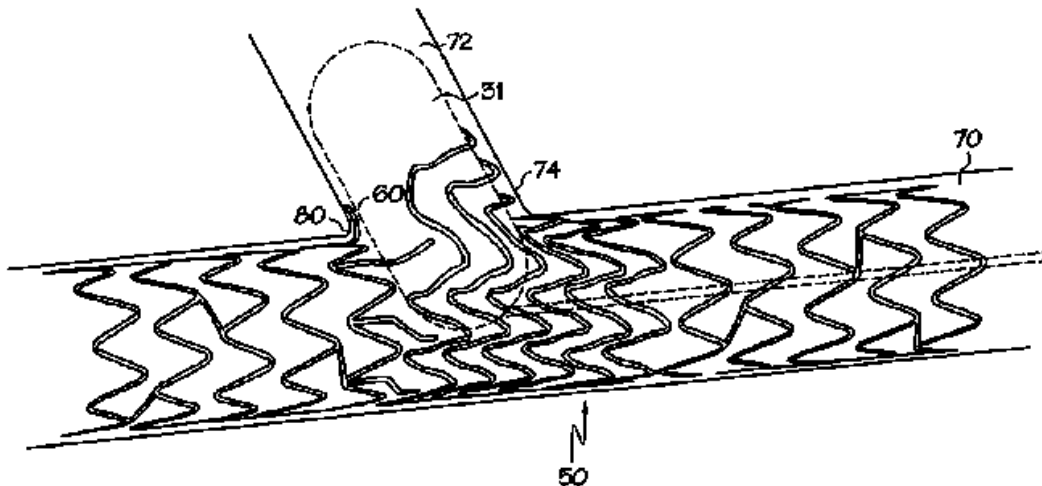
A61F 2/856

Single tubular stent with a side portal passage

Definition statement

This place covers:

Single tubular stent with a passage in side of the stent for allowing access to secondary lumen (see passage 60 in the example drawing).



References

Limiting references

This place does not cover:

Stents or stent-grafts having a Y-shape	A61F 2002/065
---	-------------------------------

A61F 2/88

the wire-like elements formed as helical or spiral coils (forming a net-like or mesh-like structure [A61F 2/90](#))

References

Limiting references

This place does not cover:

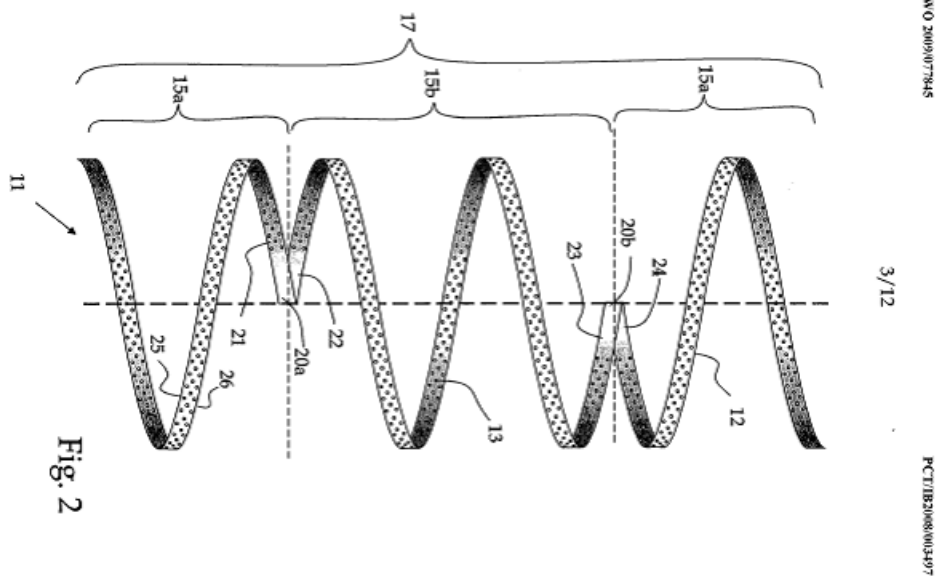
Nets formed from intersecting coils	A61F 2/90
-------------------------------------	---------------------------

A61F 2/885

{comprising a coil including a plurality of spiral or helical sections with alternate directions around a central axis}

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/885](#)

**A61F 2/89**

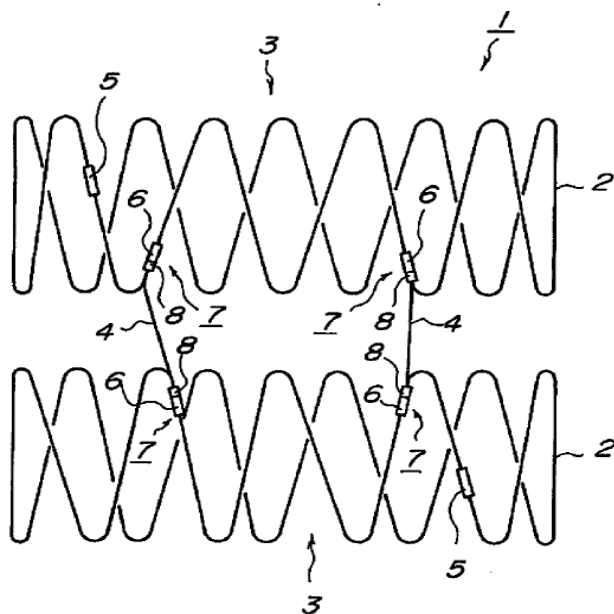
the wire-like elements comprising two or more adjacent rings flexibly connected by separate members

Definition statement

This place covers:

Single, discrete rings joined by a connector.

Stent rings which are connected in order to allow flexibility of the whole structure (see connectors (4) between stent rings (2) in the example drawing).



WO 01/24735

PCT/US00/27075

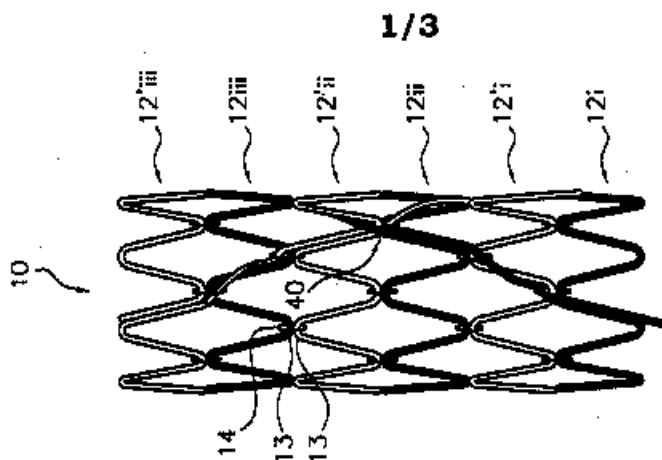


FIG. 3

References

Limiting references

This place does not cover:

Stent-grafts	A61F 2/07
Means for connecting a plurality of stents allowing flexibility of the whole structure	A61F 2002/828
Stents having meander bands being connected to each other by struts	A61F 2/915

Illustrative example of a document classified in [A61F 2002/828](#) and not [A61F 2/89](#) to demonstrate the difference between both groups:

US2009/0254164 A

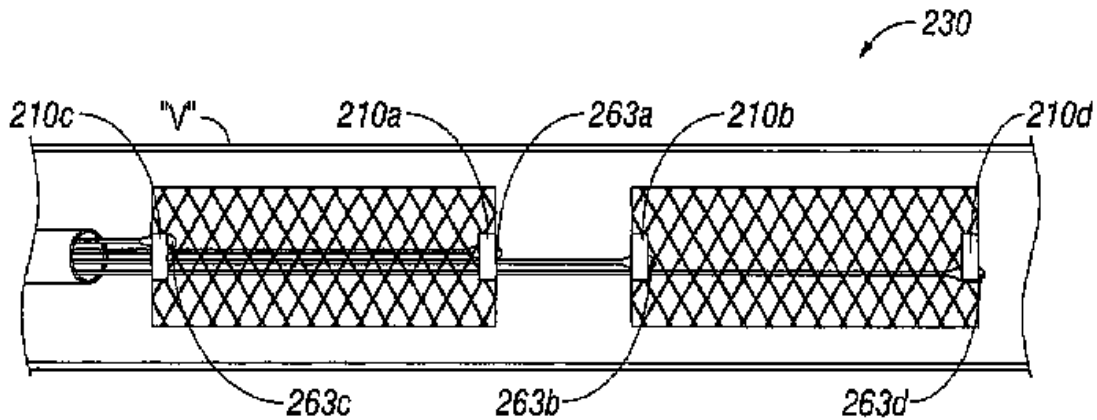


FIG. 9B

[A61F 2002/828](#) : Stents must be "standing alone" structures (in the absence of the connector, they would still accomplish their supporting function). Do not give [A61F 2250/006](#) "modular" if they are joined (single structure).

Illustrative example of a document classified in [A61F 2/915](#) and not [A61F 2/89](#) to demonstrate the difference between both groups:

US2009105809

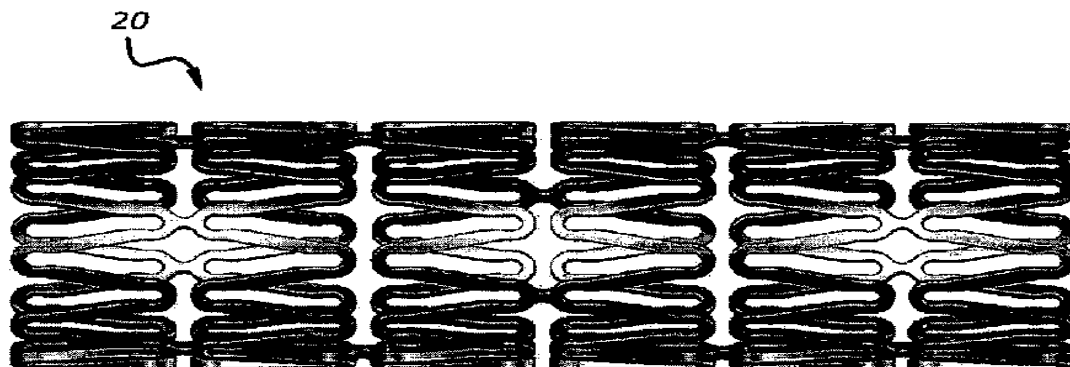


FIG. 1C

Special rules of classification

The following additional information is given to stents when appropriate:

Frangible connectors	A61F 2250/0071
Biodegradable covering or connection	A61F 2210/0004

A61F 2/90

characterised by a net-like or mesh-like structure

References

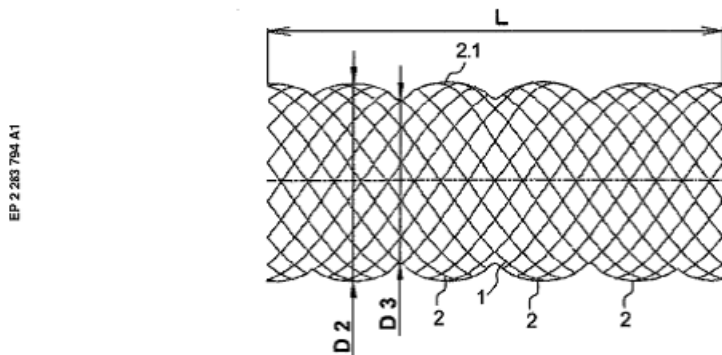
Informative references

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

Woven tubular fabrics	D03D 3/02
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Special rules of classification

Illustrative example of subject matter classified in [A61F 2/90](#)



Synonyms and Keywords

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

- "net", "net-like", "mesh" and "mesh-like"

A61F 2/91

made from perforated sheet material or tubes, e.g. perforated by laser cuts or etched holes

Definition statement

This place covers:

Stents made from perforated sheet material or tubes. Perforated sheet material or tubes are created by methods including, for example, laser cutting, etching or some other techniques.

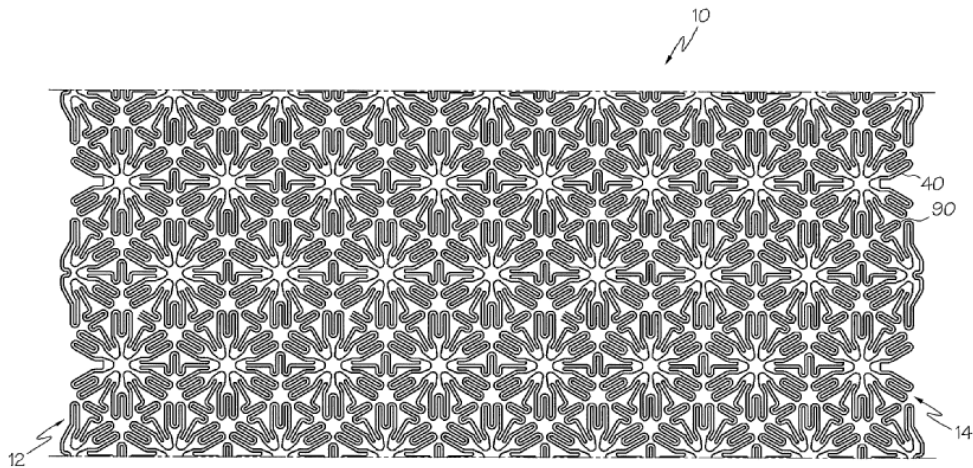


FIG. 2

WO 2009/148832

2 / 16

PCT/US2009/044689

A61F 2/915

with bands having a meander structure, adjacent bands being connected to each other

Definition statement

This place covers:

Stents having a meander or wave-like pattern. The stent comprises several meander bands. Each meander band forms peaks and troughs. The bands are connected to each other by struts (see connector 50 between bands 40 and 60 in the example drawing) or directly connected without struts.

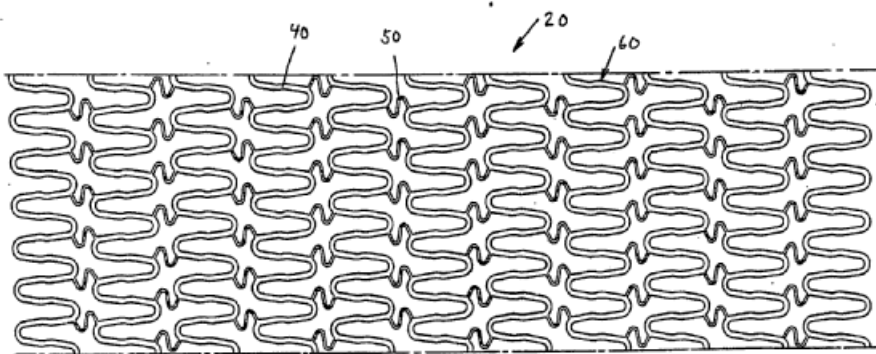


FIG. 10

Special rules of classification

The meander structure receives further additional classification:

The meander having a difference in amplitude along the band: [A61F 2002/91508](#)

The meander having a change in frequency along the band: [A61F 2002/91516](#)

Within the whole structure different bands showing different meander characteristics, e.g. frequency or amplitude: [A61F 2002/91525](#)

Characterised by the phase between adjacent bands: [A61F 2002/91533](#)

Adjacent bands are arranged out of phase: [A61F 2002/91541](#)

Adjacent bands being connected to each other: [A61F 2002/9155](#)

Adjacent bands being connected peak to peak, i.e. bridge with each end connected to a convex side of an apex: [A61F 2002/91558](#)

Adjacent bands being connected trough to trough, i.e. bridge with each end connected to a concave side of an apex: [A61F 2002/91566](#)

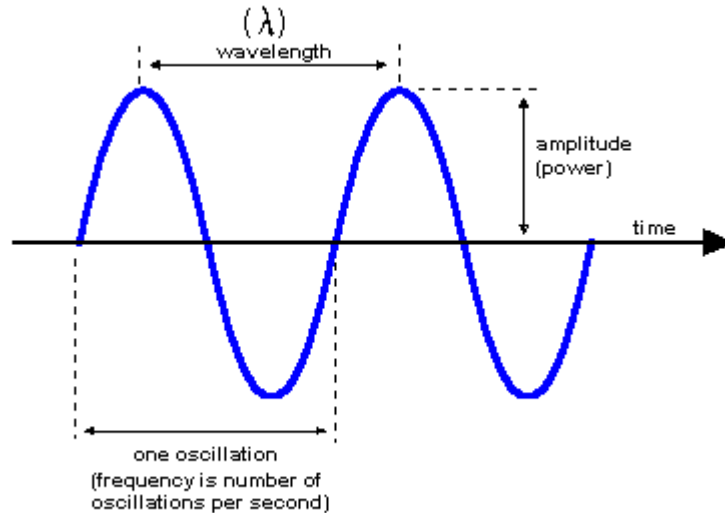
Adjacent bands being connected peak to trough, i.e. bridge with one end connected to a convex side of an apex and with the other end connected to a concave side of an apex: [A61F 2002/91575](#)

Adjacent bands being connected by a bridge, whereby at least one of its ends is connected along the length of a strut between two consecutive apices within a band: [A61F 2002/91583](#)

Locking connectors, e.g. using male-female connections: [A61F 2002/91591](#)

Glossary of terms

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



Amplitude

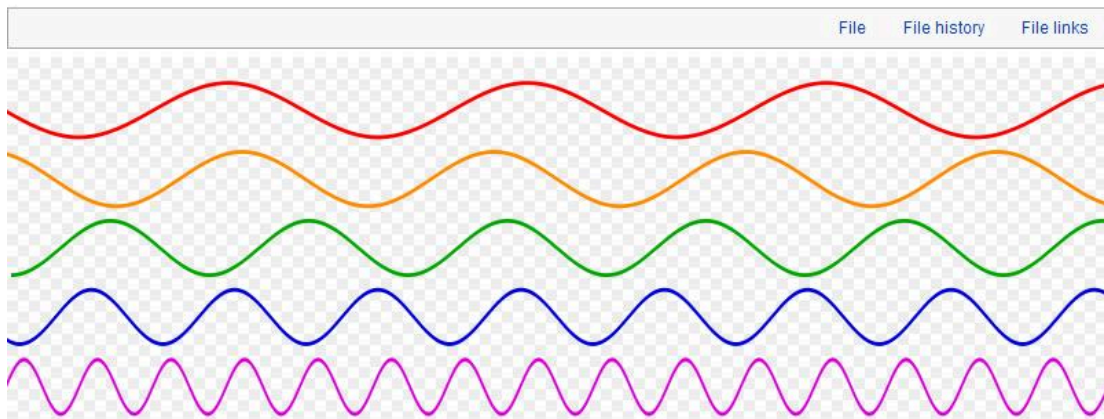
An amplitude is:

Frequency:

Sinusoidal waves of various frequencies; the bottom waves have higher frequencies than those above. The horizontal axis represents time.

File:Sine waves different frequencies.svg

From Wikipedia, the free encyclopedia



A61F 2/92

Stents in the form of a rolled-up sheet expanding after insertion into the vessel
{, e.g. with a spiral shape in cross-section}

Synonyms and Keywords

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

- "rolled-up" and "coiled"

A61F 2/93

circumferentially expandable by using ratcheting locks

Special rules of classification

Illustrative example of subject matter classified in [A61F 2/93](#)

Patent Application Publication Oct. 23, 2003 Sheet 3 of 17 US 2003/0199969 A1

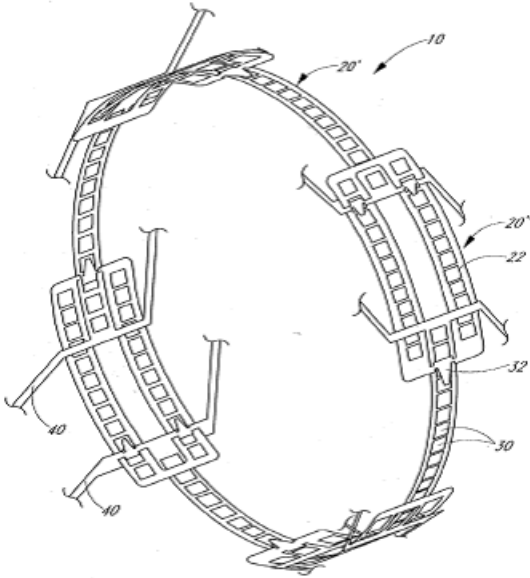


FIG. 3

A61F 2/94

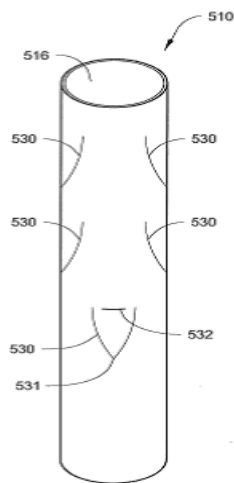
Stents retaining their form, i.e. not being deformable, after placement in the predetermined place

Definition statement

This place covers:

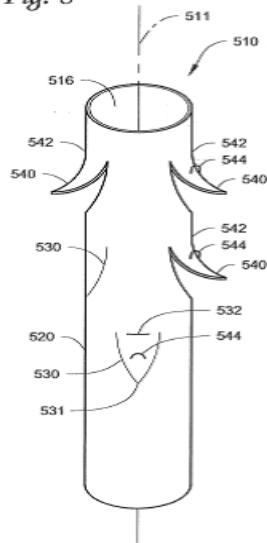
WO 2011/050234

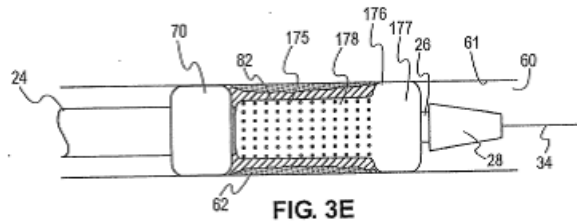
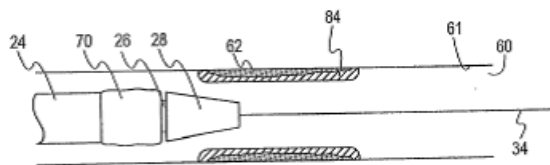
Fig. 7



PCT/US2010/055671

3/7
Fig. 8



A61F 2/945**hardenable, e.g. stents formed in situ****Special rules of classification**Illustrative example of subject matter classified in [A61F 2/945](#)**FIG. 3E****FIG. 3F**

9/20

WO 2006/134336

PCT/US2006/018385

A61F 2/95**Instruments specially adapted for placement or removal of stents or stent-grafts****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:

Means for mounting a stent or stent-graft onto or into a placement instrument	A61F 2/9522
Instruments for placing occluding devices	A61B 17/12022
Handles for angioplasty balloon inflation	A61M 25/1018

Informative references

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

Having retaining means other than an outer sleeve, e.g. male-female connector between stent or stent-graft and instrument	A61F 2002/9505
The retaining means being filaments or wires	A61F 2002/9511
Handle assemblies therefor	A61F 2/9517

For retrieval of stents or stent-grafts	A61F 2002/9528
For repositioning of stents or stent-grafts	A61F 2002/9534
Closing wounds, or holding wounds closed	A61B 17/04 - A61B 17/115
Catheters; hollow probes	A61M 25/00

A61F 2/954

for placing stents or stent-grafts in a bifurcation

References

Limiting references

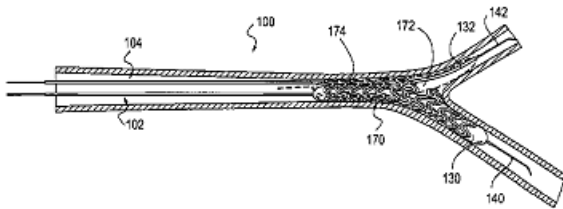
This place does not cover:

Stents or stent-grafts having a Y-shape	A61F 2002/065
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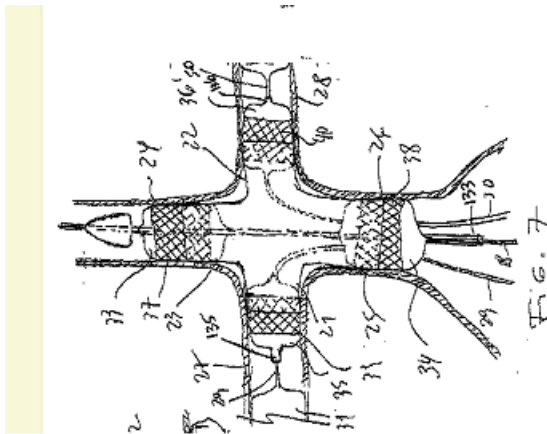
Special rules of classification

Illustrative examples of subject matter classified in [A61F 2/954](#)

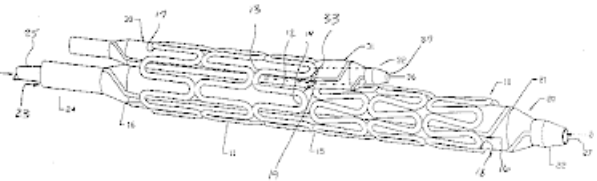
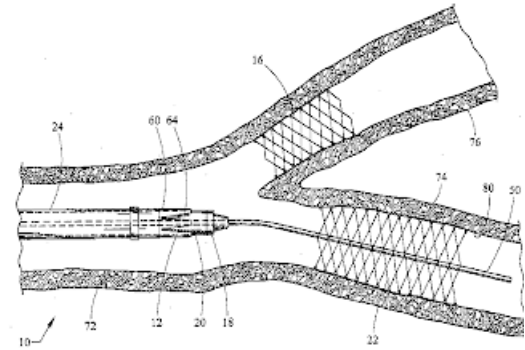
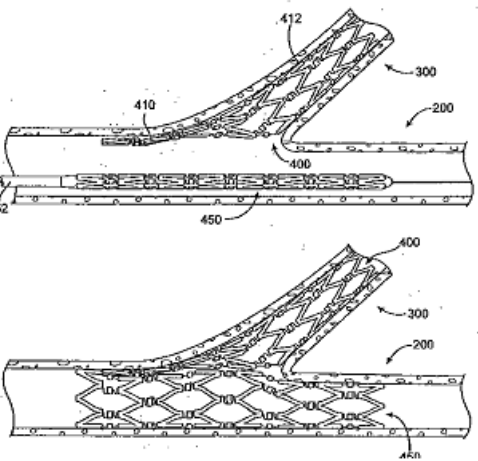
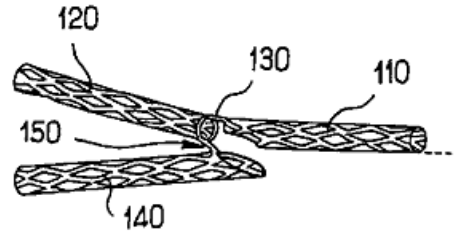
and in particular to point out the differences between stents and their delivery devices having a secondary lumen or bifurcation:

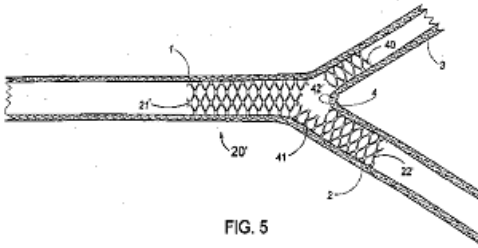


WO 02/056799



	<p>EP1031325 A</p> <p>A61F 2/856 only if stent is not described A61F 2/954 (class for delivery device for bifurcations)</p>
	<p>US2001/0003161</p> <p>A61F 2/954, A61F 2/856, A61F 2250/006 modular if further stents are applied NEVER A61F 2002/065 These are not Y shaped</p>

<p>EP0904746</p> 	<p>A61F 2/954, A61F 2/856 eventually A61F 2250/0039 (differing in diameter)</p>
	<p>A61F 2/954, A61F 2/82/low or A61F 2/82/low specific stent class or additional information A61F 2002/067 :This additional information can be given in exceptional cases like this one, where the vessel is Y shaped even though there are no 3 distinctive stents present.</p>
 <p>WO2006/036319</p>	<p>A61F 2/856, A61F 2/954, A61F 2002/821 (ostial) A61F 2/852 (overlapping)</p>
 <p>FR2733689</p>	<p>A61F 2/82/low (specific stent class) A61F 2002/065, A61F 2002/828 (means for connecting a plurality of stents)</p>

	US5749825	<p>A61F 2/82 /low (specific stent class) A61F 2002/067, A61F 2002/828, A61F 2/856 :If it is not clear if there is a portal or if there are 2 stents connected, classify both possibilities</p>
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A61F 2/958

Inflatable balloons for placing stents or stent-grafts

Special rules of classification

Means for holding the stent on the balloon, e.g. using protrusions, adhesives or an outer sleeve	A61F 2002/9583
the means being inside the balloon	A61F 2002/9586

A61F 2/966

with relative longitudinal movement between outer sleeve and prosthesis, e.g. using a push rod

Definition statement

This place covers:

Retractable outer sleeves

Special rules of classification

with additional retaining means	A61F 2002/9665
---------------------------------	--------------------------------

A61F 2/9662

{the middle portion of the stent or stent-graft is released first}

Definition statement

This place covers:

The wording in the title "released" is regarded as "expanded", i.e. "the middle portion of the stent or stent-graft is expanded first"

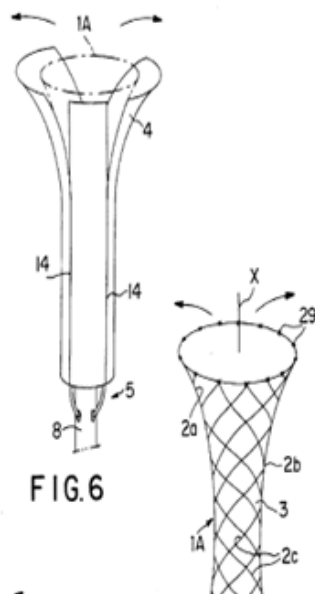
A61F 2/97

the outer sleeve being splittable

Definition statement

This place covers:

U.S. Patent May 26, 1998 Sheet 2 of 3 5,755,769

**A61F 3/00**

Lengthening pieces for natural legs

Definition statement

This place covers:

devices which are applied to natural legs for lengthening said legs, e.g. to compensate for a difference in length between the two legs of a user.

Relationships with other classification places

Artificial legs or feet or parts thereof: [A61F 2/60](#)

Shoe-like orthopaedic devices for protecting the feet against injuries after operations: [A61F 5/0195](#)

References**Limiting references**

This place does not cover:

Internal fixation devices	A61B 17/68
---------------------------	----------------------------

A61F 4/00

Methods or devices enabling patients or disabled persons to operate an apparatus or a device not forming part of the body (operating or control means for prostheses [A61F 2/48](#), [A61F 2/68](#))

Definition statement

This place covers:

methods or devices enabling invalids to operate a device which, otherwise, the person would not be able to, e.g. control of computers or ambulation devices like a wheel-chair.

Relationships with other classification places

Chairs or personal conveyances specially adapted for disabled persons, e.g. wheelchairs: [A61G 5/00](#)

Input arrangements or combined input and output arrangements for interaction between user and computer: [G06F 3/01](#)

References

Limiting references

This place does not cover:

Operating or control means for prostheses implantable into the body	A61F 2/48
Operating or control means for prostheses not implantable in the body	A61F 2/68

Informative references

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

Input arrangements or combined input and output arrangements for interaction between user and computer	G06F 3/01
--	---------------------------

A61F 5/00

Orthopaedic methods or devices for non-surgical treatment of bones or joints (surgical instruments or methods for treatment of bones or joints, devices specially adapted therefor [A61B 17/56](#)); Nursing devices; {Anti-rape devices} (bandages, dressings or absorbent pads [A61F 13/00](#))

Definition statement

This place covers:

Orthopaedic methods or devices for non-surgical treatment of bones or joints, e.g. long-term immobilising or pressure directing devices for treating broken or deformed bones such as splints, casts or braces. Furthermore, it covers devices worn by the patient for reception of urine, faeces, catamenial or other discharge, e.g. colostomy devices. Also, devices for preventing snoring as well as for correcting stammering or stuttering are covered.

Relationships with other classification places

Prostheses not implantable in the body: [A61F 2/50](#).

References

Limiting references

This place does not cover:

Bandages, dressings or absorbent pads	A61F 13/00
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Informative references

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

Closure means for urethra or rectum	A61F 2/0004
Penile implants	A61F 2/26
Operating or control means for external prostheses	A61F 2/68
Pessaries	A61F 6/08
Insoles for arch support	A43B 7/14
Mattress underlays	A47C 21/06
Devices for taking faeces samples	A61B 10/0038
Devices for taking sperm samples	A61B 10/0058
Devices for taking urine samples	A61B 10/007
Surgical instruments or methods for treatment of bones or joints	A61B 17/56
Massage of genitals	A61H 19/00
Adhesive for colostomy devices	A61L 24/00
Devices for preventing snoring by gas treatment	A61M 16/00
Handcuffs	E05B 75/00

Special rules of classification

Reference [A61B 17/56](#) is non-limiting in subclass [A61F](#). CPC will be updated/corrected once this inconsistency is resolved in IPC.

A61F 5/14

Special medical insertions for shoes for flat-feet, club-feet or the like

References

Informative references

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

Ordinary arch supports	A43B 7/14
------------------------	---------------------------

A61F 5/44

Devices worn by the patient for reception of urine, faeces, catamenial or other discharge; {Portable urination aids} (absorbent pads, e.g. sanitary towels, [A61F 13/15](#); drainage appliances for wounds [A61M 27/00](#); {emptying devices for urine bags [B65B 69/0016](#)}); Colostomy devices (adhesives for colostomy devices [A61L 24/00](#); materials for colostomy devices [A61L 28/00](#))

References

Limiting references

This place does not cover:

Drainage appliances for wounds	A61M 27/00
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Informative references

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

Absorbent pads, e.g. sanitary towels	A61F 13/15
Adhesives for colostomy devices	A61L 24/00
Materials for colostomy devices	A61L 28/00
Emptying devices for urine bags	B65B 69/0016

Special rules of classification

Looping references between [A61F 5/44](#) and [A61F 13/15](#) have been identified. Until this inconsistency is resolved in IPC, the current classification practice in CPC is as follows: [A61F 13/15](#) and [A61F 5/44](#) are informative references to each other. CPC will be updated/corrected once this inconsistency is resolved in IPC.

References [A61L 24/00](#), [A61L 28/00](#) and [B65B 69/0016](#) are non-limiting in subgroup [A61F 5/44](#). CPC will be updated/corrected once this inconsistency is resolved in IPC.

A61F 6/00

Contraceptive devices; Pessaries; Applicators therefor (chemical aspects of contraception [A61K](#))

Definition statement

This place covers:

contraceptive devices; pessaries and applicators therefore, which can be used by males or females, and which can be applied externally, e.g. condoms, sheaths or the like; internally, like devices worn in the vagina to support the uterus, remedy a malposition, or prevent conception; as well as implantable occluding device, e.g. for vas deferens or fallopian tubes.

Relationships with other classification places

Devices for promoting penis erection: [A61F 5/41](#)

Massage of genitals: [A61H 19/00](#)

Chemical aspects of contraception: [A61K](#)

Obstruction of tubular structures by internal devices: [A61B 17/12](#)

References

Limiting references

This place does not cover:

Chemical aspects of contraception	A61K
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Informative references

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

Obstruction of tubular structures by internal devices	A61B 17/12
---	----------------------------

Special rules of classification

Packages or dispensers for contraceptive devices

[A61F 6/005](#)

Contraceptive devices for males, like condoms, sheaths or the like, e.g. combined with devices protecting against contagion

[A61F 6/04](#)

Contraceptive device for females, like intra-vaginal or intra-uterine devices

[A61F 6/08](#)

Occluders for vas deferens or fallopian tubes

[A61F 6/20](#)

Note: Additional information is classified under [A61F 6/00](#) - [A61F 6/24](#).

A61F 7/00

Heating or cooling appliances for medical or therapeutic treatment of the human body (heating or cooling means in connection with bedsteads or mattresses [A47C 21/00](#) {; massage, therapeutic baths [A61H](#)}; hyperthermia using electric or magnetic fields or ultrasound [A61N](#); electric heating elements [H05B](#))

Definition statement

This place covers:

Heating and cooling of (parts of) a patient for therapeutic purposes not resulting in tissue destruction or intended tissue damage.

References

Limiting references

This place does not cover:

Heating or cooling for surgical purposes, such as tissue removal, ablation, coagulation etc.	A61B 18/00 - A61B 18/24
Heating or cooling of tissue immediately around tissue treated by a surgical probe	A61B 2018/00005

Limiting references

Temperature treatment of blood in bypass of the human or animal body	A61M 1/369
Heating or cooling media before injection into the body	A61M 5/44
Hyperthermia with electromagnetic fields	A61N 1/403
Magnetotherapy	A61N 2/00
Heating by radiation such as microwave, light or other electromagnetic waves	A61N 5/02 , A61N 5/06 , A61N 5/10

Informative references

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

Protective garmets	A41D 13/00
Gloves	A41D 19/00
Hats, caps, hoods	A42B 1/00
Attachments for beds	A47C 21/00
Bed covers, blankets, pillows	A47G 9/00
Massage and therapeutic baths	A61H 1/00
Therapeutic heating with ultrasound	A61N 7/02
Heating for divers	B63C 11/28
Materials for the production of heat or cold by chemical reaction	C09K 5/00
Refrigeration in general	F25B 1/00 , F25C 1/00 , F25D 1/00
Electrical heating means	H05B 1/00

Special rules of classification

Documents describing treatment with a device for heating alone or a device described to be able to apply both heating and cooling (with the necessary adaptations to the heat source, e.g. a self-heating exothermic pad which is described or claimed as being equally configurable as self-cooling endothermic pad by using the appropriate chemicals) should be classified in [A61F 7/00](#) - [A61F 7/08](#) or [A61F 7/12](#).

Documents related to bags, pads etc. exclusively using cooling should be classified in [A61F 7/10](#) (e.g. chemically cooled endothermic pads only described for cooling in [A61F 7/106](#)).

As an exception in [A61F 7/00](#), [A61F 2007/0056](#) and [A61F 2007/0063](#) also exclusively deal with cooling.

Further details of subgroups

[A61F 2007/0001](#): locations on the human body for heating and cooling. Not for invention information. Headgroup [A61F 2007/0001](#) not to be used for classification.

[A61F 7/0053](#): Cabins, rooms chairs or other equipments for treatment with a hot or cold circulating fluid. Does not cover heating pads with a circulating fluid, those are to be classified in [A61F 7/02](#).

[A61F 2007/0054](#): "closed fluid circuit" refers to a device in which the circulating thermal medium, e.g. water, is not in direct contact with the treatment area;

[A61F 2007/0059](#): "open fluid circuit" refers to a device in which the circulating thermal medium, e.g. water, is in direct contact with the treatment area;

[A61F 7/007](#): Electrically heated or cooled devices.

[A61F 7/0085](#): Devices for generating hot or cold treatment fluids, the devices not being in direct contact with the patient. Only the fluid is transported from the device to a separate patient heating or cooling device.

[A61F 7/0097](#): Heating blankets. Only blankets with an active heating or cooling source, no ordinary blankets keeping warm by insulation only (to be classified in [A47G 9/0207](#)).

[A61F 7/02](#): Compresses, poultices or other pads for heating or cooling.

[A61F 7/03](#): Chemical heating devices. Not the chemicals as such (to be classified in [C09K 5/00](#)), only as part of a device to be used on the body for therapy.

[A61F 7/08](#): hot water bottles for heating, refillable with a non-circulating hot or cold fluid.

[A61F 7/10](#): Cooling bags, pads etc. exclusively used for cooling.

[A61F 7/106](#): Chemical cooling devices. Not the chemicals as such (to be classified in [C09K 5/00](#)), only as part of a cooling device used on the body.

[A61F 7/12](#): Cooling devices for internal body cavities.

Glossary of terms

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

Hyperthermia	heating of tissue up to but not beyond the point of tissue damage
Hypothermia	cooling of tissue down to but not beyond the point of tissue damage

A61F 2007/0054

{with a closed fluid circuit, e.g. hot water}

Definition statement

This place covers:

"closed fluid circuit" refers to a device in which the circulating thermal medium, e.g. water, is not in direct contact with the treatment area.

A61F 7/03

thermophore, i.e. self-heating, {e.g. using a chemical reaction}

Special rules of classification

Documents with self-cooling as well as self-heating devices are classified here, even though the title covers only self-heating devices

A61F 9/00

Methods or devices for treatment of the eyes; Devices for putting-in contact lenses; Devices to correct squinting; Apparatus to guide the blind; Protective devices for the eyes, carried on the body or in the hand (caps with means for protecting the eyes [A42B 1/018](#); visors for helmets [A42B 3/22](#); {retractors [A61B 17/02](#); manipulators specially adapted for use in surgery [A61B 34/70](#)}; appliances to aid invalids to move about [A61H 3/00](#); {exercisers for the eyes [A61H 5/00](#)}; eye baths [A61H 35/02](#); sunglasses or goggles having the same features as spectacles [G02C](#))

References

Limiting references

This place does not cover:

Caps with means for protecting the eyes	A42B 1/018
Visors for helmets	A42B 3/22
Retractors	A61B 17/02
Manipulators specially adapted for use in surgery	A61B 34/70
Appliances to aid invalids to move about	A61H 3/00
Exercisers for the eyes	A61H 5/00
Eye baths	A61H 35/02
Sunglasses or goggles having the same features as spectacles	G02C

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.

The symbols in [A61B 17/00](#) and [A61B 18/00](#) are to be used for classifying additional information in case there is no appropriate symbol in [A61F 9/00736](#), [A61F 9/0079](#) or [A61F 9/008](#).

A61F 9/0008

{Introducing ophthalmic products into the ocular cavity or retaining products therein (putting in contact lenses [A61F 9/0061](#); introducing or retaining media in cavities of the body in general [A61M 31/00](#))}

Definition statement

This place covers:

Eye droppers

Relationships with other classification places

Baths for the eyes : [A61H 35/02](#)

Containers with means for dispensing liquid medicaments : [A61J 1/1443](#)

Droppers : [B65D 47/18](#)

References

Limiting references

This place does not cover:

Putting in contact lenses	A61F 9/0061
Introducing or retaining media in cavities of the body in general	A61M 31/00

A61F 9/0017

{implantable in, or in contact with, the eye, e.g. ocular inserts}

Definition statement

This place covers:

Ocular inserts for drug delivery

Patent Application Publication May 25, 2006 Sheet 2 of 22 US 2006/0110428 A1

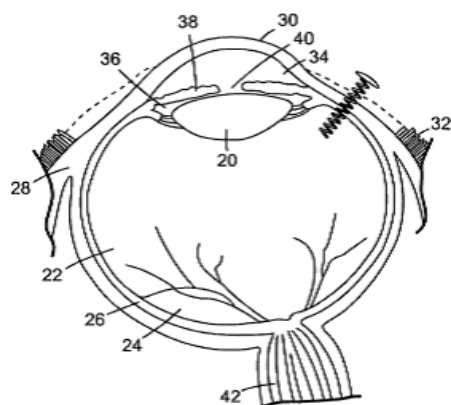


Fig. 5

References

Limiting references

This place does not cover:

Cornea implants for repair of corneal tissue	A61F 2/142
Corneal inlays or onlays for refractive correction	A61F 2/145
Stromal implants for refractive correction	A61F 2/147
Implantation instruments specially adapted therefor	A61F 2/148
Intraocular lenses	A61F 2/16
Implantation instruments for intraocular lenses	A61F 2/1662
Pharmaceutical compositions of ocular inserts or implants	A61K 9/0051
Contact lenses for reshaping the cornea	G02C 7/04

A61F 9/0061**{Devices for putting-in contact lenses}****References****Limiting references***This place does not cover:*

Contact lens cases	A45C 11/005
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Special rules of classificationIllustrative example of subject matter classified in [A61F 9/0061](#)

DE 20 2009 015 583 U1 2010.04.08

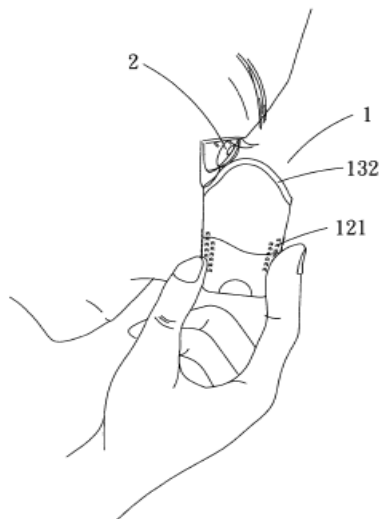


FIG. 4

A61F 9/007**Methods or devices for eye surgery****Definition statement***This place covers:*

Devices particular for surgical interventions on the eye

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

Devices for general mechanical surgery	A61B 17/00
Devices for general non-mechanical surgery	A61B 18/00

Devices for therapy with ultrasound	A61N 7/00
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A61F 9/00709

{Instruments for removing foreign bodies (for removal of intra-ocular material [A61F 9/00736](#))}

References

Limiting references

This place does not cover:

Instruments for removal of intra-ocular material	A61F 9/00736
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Informative references

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

Instruments other than toothpicks and pincettes for removing foreign bodies from the human body	A61B 17/50
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A61F 9/00718

{Restoration of lid function}

Definition statement

This place covers:

Instruments to help restore the lid function

A61F 9/00736

{Instruments for removal of intra-ocular material or intra-ocular injection, e.g. cataract instruments ([A61F 9/008](#) takes precedence)}

Relationships with other classification places

Devices using ultrasonic vibrations therefore: [A61F 9/00745](#)

Capsulotomes: [A61F 9/00754](#)

Instruments with rotating or reciprocating (other than ultrasonically) elements: [A61F 9/00763](#)

References

Limiting references

This place does not cover:

Invasive laser devices to remove intra-ocular material	A61F 9/008
Lasers to remove corneal material	A61F9/01
Ultrasonic cutters for general surgery	A61B 17/320068
Devices using focused ultrasound for general tissue removal	A61N 7/02

A61F 9/00772**{Apparatus for restoration of tear ducts}****References*****Informative references***

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

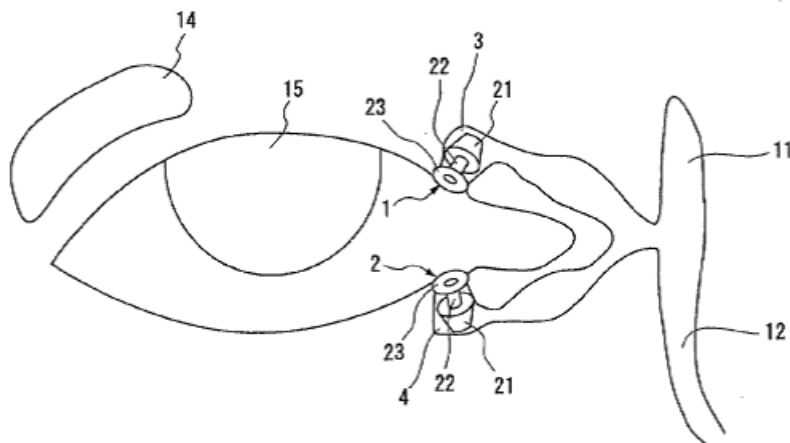
Plugs implanted in body vessels	A61B 17/12022
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Special rules of classification

Illustrative example of subject matter classified in [A61F 9/00772](#)

EP 1 629 800 A1

F I G. 3



Example for correcting occluded lacrimal pathways (Jones tube):

Patent Application Publication Feb. 25, 2010 Sheet 1 of 2 US 2010/0049207 A1

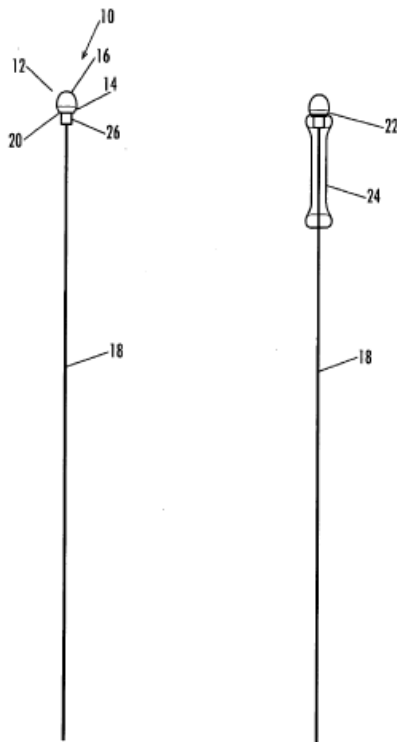


Fig. 1

Fig. 2

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

Punctum plug	Plug, implant or instrument for the lacrimal duct
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A61F 9/00781

{Apparatus for modifying intraocular pressure, e.g. for glaucoma treatment (drainage implants in general [A61M 27/002](#))}

References

Limiting references

This place does not cover:

Drainage implants in general	A61M 27/002
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Special rules of classification

Illustrative example of subject matter classified in [A61F 9/00781](#)

Patent Application Publication Oct. 28, 2010 Sheet 1 of 37 US 2010/0274259 A1

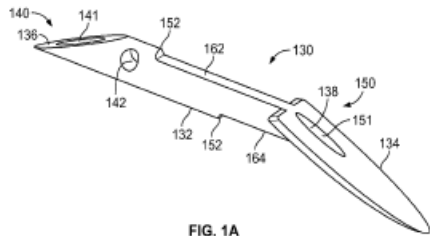


FIG. 1A

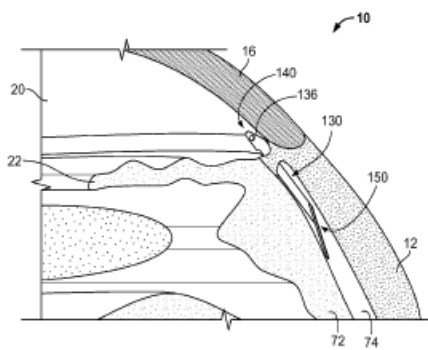


FIG. 1B

Treatment of outflow of aqueous humor.

The most practiced surgery intended to reduce aqueous humor production is the cyclodestruction technique. When cyclodestruction is performed with a laser, it is called cyclophotocoagulation. High Intensity focused Ultrasound can be used to obtain a cyclodestruction.

A61F 9/0079

{using non-laser electromagnetic radiation, e.g. non-coherent light or microwaves}

Definition statement

This place covers:

Methods or devices for eye surgery (i.e. destruction, modification or removal of tissue) using electromagnetic radiation other than laser, e.g. non-coherent light or microwaves.

References

Limiting references

This place does not cover:

Mechanical eye surgery	A61F 9/007 - A61F 9/00781 , A61F 9/013
Radiation therapy	A61N 5/00

Informative references

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

Implants of eye parts in general	A61F 2/14
Instruments for examination of the eyes	A61B 3/00
Surgery with non mechanical forms of energy in general	A61B 18/00
Laser surgery in general	A61B 18/20
Accessories for surgery or diagnosis	A61B 90/00
Photodynamic therapy	A61N 5/062 , A61N 5/062
Optical components	G02C 7/00
Contact lenses	G02C 7/04
Lasers in general	H01S 3/00

Special rules of classification[A61F 9/0079](#)

The application of non-laser electromagnetic radiation for surgical purposes covers, inter alia, applications whereby infrared or microwave radiation is applied to heat the cornea in order facilitate its shaping by a mold. The relevant information here is the application of the electromagnetic radiation, not the mold. Contact lenses in general, including orthokeratology lenses, are covered by [G02C 7/04](#).

A61F 9/008**using laser****Definition statement**

This place covers:

Methods or devices for eye surgery (i.e. destruction, modification or removal of tissue) using laser.

References**Limiting references**

This place does not cover:

Mechanical eye surgery	A61F 9/007 - A61F 9/00781 , A61F 9/013
Radiation therapy	A61N 5/00

Informative references

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

Implants of eye parts in general	A61F 2/14
Instruments for examination of the eyes	A61B 3/00
Surgery with non mechanical forms of energy in general	A61B 18/00
Laser surgery in general	A61B 18/20
Accessories for surgery or diagnosis	A61B 90/00
Photodynamic therapy	A61N 5/062 , A61N 5/062

Optical components	G02C 7/00
Contact lenses	G02C 7/04
Lasers in general	H01S 3/00

Special rules of classification

The scheme in [A61F 9/008](#) contains several independent classification trees covering different aspects of a laser system for eye surgery.

The effect produced by the laser beam in the tissue should be classified in [A61F 9/00802](#), [A61F 9/00821](#), [A61F 9/00825](#), or [A61F 2009/00842](#) and lower hierarchical groups thereof

Auxiliary devices contacting the eyeball like for coupling in the surgical laser light are classified in [A61F 9/009](#)

Further aspects are then classified in codes according to:

The control or steering of the laser beam during the treatment (subgroups of [A61F 2009/00844](#))

The calibration of any component in the laser system ([A61F 2009/00855](#) and subgroups thereof)

The part of the eye to be treated (subgroups of [A61F 2009/00861](#)),

The planning of the irradiation before the treatment, like based on particular information or measurements ([A61F 2009/00878](#) and subgroups thereof)

The disease to be treated (subgroups of [A61F 2009/00885](#)),

Particular algorithms or mechanisms for scanning the beam ([A61F 2009/00897](#))

[A61F 9/00812](#) and [A61F 9/00834](#)

This groups cover inlays, onlays and intraocular lenses for implantation but specially adapted to be molded by a photoablative or photodisruptive beam. Implantable corneal inlays and onlays and for direct refractive correction and intraocular lenses in general are covered by [A61F 2/145](#) and [A61F 2/16](#).

A61F 9/013

{Instruments} for compensation of ocular refraction ([A61F 9/008](#) takes precedence); Instruments for use in cornea removal, for reshaping or performing incisions in the cornea}

Definition statement

This place covers:

Illustrative example of subject matter classified in this group:

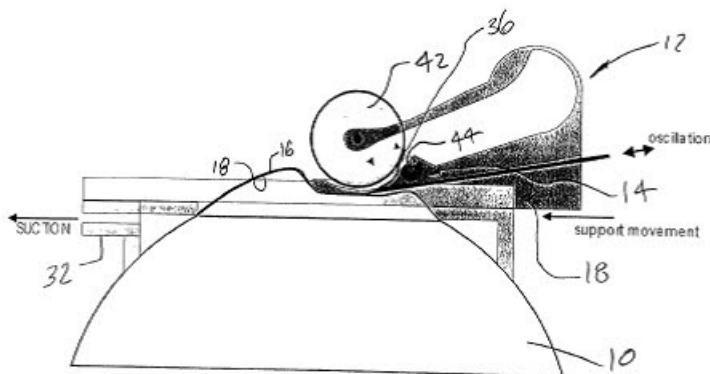


FIG. 14

References**Limiting references**

This place does not cover:

Laser eye surgery	A61F 9/008
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Informative references

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

Methods or devices for eye surgery	A61F 9/007
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A61F 9/0133

{Knives or scalpels specially adapted therefor}

References**Limiting references**

This place does not cover:

Surgical scalpels and knives	A61B 17/3211
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A61F 9/02

Goggles {(breathing masks [A62B 18/00](#); swimming goggles [A63B 33/002](#); diving masks [B63C 11/12](#))}

References**Limiting references**

This place does not cover:

Breathing masks	A62B 18/00
Swimming goggles	A63B 33/002
Diving masks	B63C 11/12

A61F 9/022

{Use of special optical filters, e.g. multiple layers, filters for protection against laser light or light from nuclear explosions, screens with different filter properties on different parts of the screen; Rotating slit-discs (optical filters per se [G02B 5/20](#))}

References**Limiting references**

This place does not cover:

Optical filters per se	G02B 5/20
------------------------	---------------------------

A61F 9/023

{with variable transmission, e.g. photochromic (for welding [A61F 9/067](#))}

References**Limiting references**

This place does not cover:

Welding masks with variable transmission	A61F 9/067
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A61F 9/04

Eye-masks {; Devices to be worn on the face, not intended for looking through; Eye-pads for sunbathing (eye-bandages [A61F 13/12](#); protective face-masks [A41D 13/11](#); protectors for shampooing [A45D](#))}

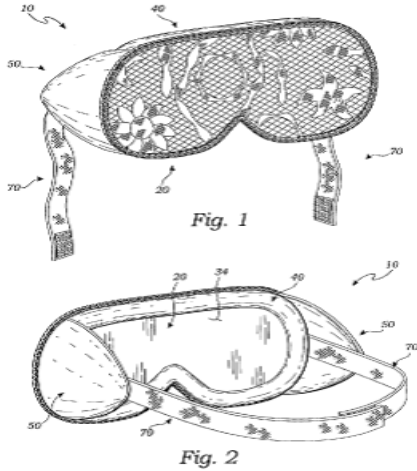
Definition statement

This place covers:

Sleep masks

Masks for protecting the eye after ophtalmic surgery

Patent Application Publication May 20, 2010 Sheet 1 of 4 US 2010/0122398 A1



References

Limiting references

This place does not cover:

Eye-bandages	A61F 13/12
Protective face-masks	A41D 13/11
Protectors for shampooing	A45D , A45D 44/12

A61F 9/045

{Eye-shades or visors; Shields beside, between or below the eyes (caps with means for protecting the eyes [A42B 1/018](#))}

References

Limiting references

This place does not cover:

Caps with means for protecting the eyes	A42B 1/06
Glasses combined with shades or shields	G02C 7/16

A61F 9/06

Masks, shields or hoods for welders (safety devices for welding in general [F16P 1/00](#))

References**Limiting references**

This place does not cover:

Safety devices for welding in general	F16P 1/00
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A61F 9/065

{use of particular optical filters ([A61F 9/022](#), [A61F 9/062](#) take precedence)}

References**Limiting references**

This place does not cover:

Goggles comprising special optical filters	A61F 9/022
Masks with movable polarising filter discs	A61F 9/062

A61F 9/08

Devices or methods enabling eye-patients to replace direct visual perception by another kind of perception

References**Informative references**

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

Walking or guiding aids for blind	A61H 3/06
Replacing visual perception by electrode stimulation	A61N 1/36046
Teaching or communicating with the blind	G09B 21/00

A61F 11/00

Methods or devices for treatment of the ears or hearing sense (implantable prostheses that substitute or replace internal ear parts, e.g. ear-drums, [A61F 2/18](#); methods or devices to cause a change in the state of auditory consciousness [A61M 21/00](#); electrotherapy applying electrical stimulation of the auditory system, or circuits therefor [A61N 1/36](#); radiotherapy using optical stimulation of the auditory system [A61N 5/06](#); electro-acoustic hearing aids [H04R 25/00](#)); Non-electric hearing aids; Methods or devices for enabling ear patients to achieve auditory perception through physiological senses other than hearing sense; Protective devices for the ears, carried on the body or in the hand (headwear, e.g. caps or helmets, with means for protecting the ears [A42B 1/0188](#), [A42B 3/16](#))

Definition statement

This place covers:

Methods or devices for surgical or non-surgical treatment of ears.

Apparatus or devices surgically implanted into the ear.

References

Limiting references

This place does not cover:

Implantable prostheses that substitute or replace internal ear parts, e.g. ear drums	A61F 2/18
Headwear, e.g. caps or helmets, with means for protecting the ears	A42B 1/0188 , A42B 3/16
Methods or devices to cause a change in the state of auditory consciousness	A61M 21/00
Electrotherapy applying electrical stimulation of the auditory system, or circuits therefor	A61N 1/36
Radiotherapy using optical stimulation of the auditory system	A61N 5/06
Electro-acoustic hearing aids	H04R 25/00

Glossary of terms

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

Auditory perception	the ability to detect and interpret sounds
Hearing sense	the ability to perceive sounds by detecting vibrations or changes in the pressure of the surrounding medium through time using the auditory parts of the sensory system

A61F 11/006

{Ear cleaners, e.g. cures (cotton tips [A61F 13/38](#); cleaning by suction [A61M 1/71](#), by irrigation [A61M 3/02](#))}

References**Limiting references**

This place does not cover:

Cotton tips	A61F 13/38
Cleaning by suction	A61M 1/71
Cleaning by irrigation	A61M 3/02

A61F 11/04

Methods or devices for enabling ear patients to achieve auditory perception through physiological senses other than hearing sense, e.g. through the touch sense {(electronic stimulation of auditory nerves [A61N 1/36036](#))}

Definition statement

This place covers:

Processes or use of devices implanted or attached to the body not limited to the ear to stimulate the body to cause an auditory perception, i.e. vibratory devices.

References**Limiting references**

This place does not cover:

Cochlear implants, i.e. electronic stimulation of auditory nerves	A61N 1/36036
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A61F 11/045

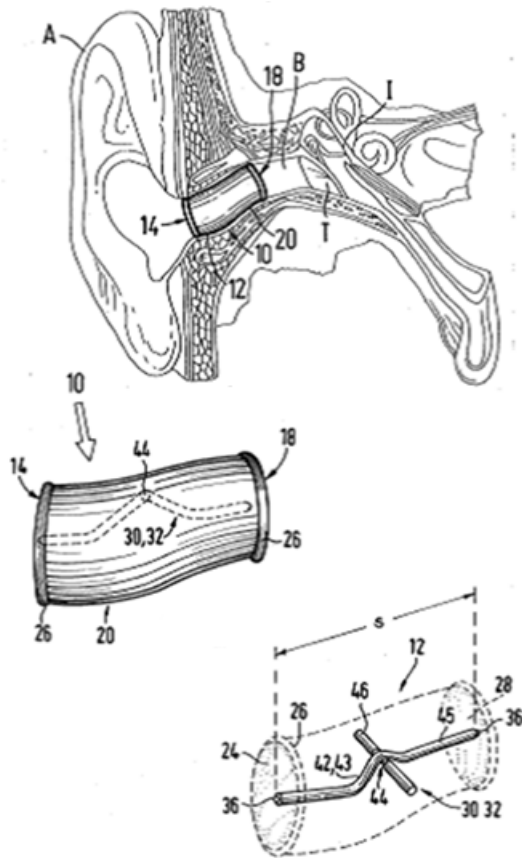
{using mechanical stimulation of nerves}

Definition statement

This place covers:

Any kind of stimulation of the auditory system (outer ear, middle ear, inner ear, and auditory nerve) causes "auditory perception." Usually, application of vibration on the skull (like as in so called bone anchored hearing aids) causes vibrations in the cochlea that lead to auditory perception. Therefore, vibro-stimulation does not replace the auditory perception with another kind of reception (e.g. visual or tactile perception).

Illustrative example of subject matter.



A61F 11/08

internal, e.g. earplugs

Special rules of classification

Earplugs including an inner channel: [A61F 11/085](#)

A61F 11/14

external, e.g. earcaps or earmuffs

Definition statement

This place covers:

Only acoustic protection.

References

Informative references

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

Other external protector	A61F 11/06
Earcaps or earmuffs for hairdresser's rooms	A45D 44/12
Earcaps or earmuffs for sports	A63B 71/10
Headphones	H04R 1/10

A61F 11/20

Ear surgery

Definition statement

This place covers:

Methods of surgically placing or implanting a device or apparatus into the ear using either invasive or minimally invasive procedures.

A61F 11/30

Non-electric hearing aids, e.g. ear trumpets, sound amplifiers or ear-shells

Definition statement

This place covers:

Devices used with the ear to assist the ear in the ability to hear without the use of any electric power source.

References

Informative references

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

Non-electric sound-amplifying devices, e.g. non-electric megaphones	G10K 11/08
Methods or devices for sound-focusing or directing sound using reflection, e.g. parabolic reflectors	G10K 11/28

A61F 13/00

Bandages or dressings (radioactive dressings {[A61N 5/1029](#)}); Absorbent pads

Definition statement

This place covers:

Articles intended to be in contact with the human skin and absorb fluids excreted by the human body other than sweat, i.e. wound dressings and bandages adapted to be attached to the injured skin or to be held against the injured place. In addition to the wound dressings, this group covers also articles which are intended to be used for injured parts of the body, e.g. plaster of Paris and any kind of stiffening bandage.

Articles intended to be attached to the body or worn in conjunction with another garment or being held in place by their shape and intended to absorb excretions from a natural opening (genital, anal, nose, mouth, ear) and during surgery.

Method and apparatuses of manufacturing these articles.

Relationships with other classification places

[A61F 5/01](#) - [A61F 5/40](#) cover stiffening bandages for immobilizing extremities. The difference with [A61F 13/04](#) - [A61F 13/14](#) is that (with the exception of [A61F 13/04](#)) in [A61F 13/06](#) - [A61F 13/14](#) no rigid parts are used. If rigid parts are used, then [A61F 5/01](#) should be taken into consideration. [A61F 5/44](#) covers devices worn by the patient for reception of urine, faeces, catamenial or other discharge which are rather receptacles or bags other than diapers or absorbent pads.

References

Limiting references

This place does not cover:

Radioactive dressings	A61N 5/1029
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Informative references

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

Suspensory bandages	A61F 5/40
Contact avoiding wound protectors	A61F 15/008
Undergarments, e.g. garments that do not absorb excretions from a natural opening	A41B 9/00
Articles intended to absorb sweat	A42C 5/02 , A41D 20/00 , A41D 27/13
Bandages, poultices, compresses special adapted for veterinary purposes	A61D 9/00
Tissues, wipes or patches for cleaning the skin (e.g. wet wipes)	A61K 8/0208
Chemical aspects of, or use of materials for, bandages, dressings or absorbent pads	A61L 15/00
Bandages or dressings with incorporated medicaments	A61L 15/44 , A61M 35/006
Chemical aspects of, or use of materials for, liquid, gel or powder form wound dressings or bandages	A61L 26/00
Absorbent pads for tracheostomy	A61M 16/047

A61F 13/02

Adhesive bandages or dressings

References

Informative references

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

Bandages or dressings or absorbent pads specially adapted for feet or legs; Corn-pads; Corn-rings	A61F 13/06
Bandages or dressings or absorbent pads specially adapted for fingers, hands or arms; Finger-stalls; Nail-protectors	A61F 13/10
Bandages or dressings or absorbent pads specially adapted for the head or neck	A61F 13/12
Bandages or dressings or absorbent pads specially adapted for the breast or abdomen	A61F 13/14
Absorbent pads, e.g. sanitary towels, swabs or tampons for external or internal application to the body; Supporting or fastening means therefor; Tampon applicators	A61F 13/15
Vaccination diagnosis other than by injuring the skin, e.g. allergy test patches	A61B 10/0035

Surgical adhesives or cements; Adhesives for colostomy devices	A61L 24/00
Devices for applying media, e.g. remedies, on the human body	A61M 35/00

A61F 13/0203

with fluid retention members

References

Informative references

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

Transdermal patches having a drug layer or reservoir	A61K 9/7084
Seal, e.g. to apply around a wound, for isolating the treatment area in combination with an absorbent pad for irrigating or draining the wound	A61M 1/90

A61F 13/0269

{Tapes for dressing attachment (for stoma bags [A61F 5/443](#); for nappies or sanitary towels [A61F 13/58](#); wound closure tapes [A61B 17/085](#); for surgical drapes [A61B 46/00](#); attaching catheters [A61M 25/02](#))}

References

Informative references

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

Tapes for stoma bags	A61F 5/443
Wound closure tapes	A61B 17/085
Surgical drapes	A61B 46/00
Attaching catheters	A61M 25/02

A61F 13/04

Plaster of Paris bandages; Other stiffening bandages ([A61F 13/06](#) - [A61F 13/15](#) take precedence)

References

Informative references

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

Orthopaedic devices, e.g. splints, casts or braces	A61F 5/01
Ortheses	A61F 5/0102
Shoe-like orthopaedic devices for protecting the feet against injuries after operations	A61F 5/0195
Chemical aspect of orthopaedic devices	A61L 15/07 , A61L 15/08

A61F 13/05

especially 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]

References**Informative references**

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

Negative pressure wound therapy devices, i.e. devices for applying suction to a wound to promote healing, e.g. including a vacuum dressing	A61M 1/90
Drainage appliances for wounds in general	A61M 27/00

A61F 13/08

Elastic stockings; for contracting aneurisms

References**Informative references**

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

Devices for domestic use for assisting in putting-on or pulling-off clothing, e.g. stockings or socks	A47G 25/907
For ligaturing or otherwise compressing tubular parts of the body, e.g. blood vessels, umbilical cord	A61B 17/12
Active massage of limbs	A61H 2205/06& A61H 2205/10
Weft knitting processes for the production of stockings	D04B 1/00 , D04B 9/52 , D04B 1/26

A61F 13/10

especially adapted for fingers, hands, or arms; Finger-stalls; Nail-protectors {(restraining devices for arms [A61F 5/37](#); shoulder bandages [A61F 13/14](#))}

References**Informative references**

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

Orthopaedic methods or devices for non-surgical treatment of bones or joints	A61F 5/00 , A61F 5/0118
Slings	A61F 5/3738

A61F 13/12

especially adapted for the head or neck

References

Informative references

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

Ear, face, or lip protectors	A45D 44/12
Preparations for care of the skin	A61Q 19/00

A61F 13/14

especially adapted for the breast or abdomen (corsets or bandages for support of breast or abdomen [A61F 5/03](#))

References

Informative references

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

Braces for providing support to the lower back, e.g. lumbo- sacral supports	A61F 5/028
Corsets or bandages for abdomen, teat or breast support	A61F 5/03
Brassieres for medical use or surgery	A41C 3/0064

A61F 13/15

Absorbent pads, e.g. sanitary towels, swabs or tampons for external or internal application to the body (non-absorbent catamenial receptacles [A61F 5/44](#)); Supporting or fastening means therefor; Tampon applicators

Definition statement

This place covers:

Articles intended to be worn or held against the human body for absorbing excretions from natural openings.

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:

Articles for absorbing wound excretions	A61F 13/00 - A61F 13/02
Bandages or dressings specially adapted for absorbing wound excretions for feet or legs	A61F 13/06
Bandages or dressings specially adapted for absorbing wound excretions for fingers, hands or arms	A61F 13/10
Bandages or dressings specially adapted for absorbing wound excretions for head or neck	A61F 13/12

Bandages or dressings specially adapted for absorbing wound excretions for breast or abdomen	A61F 13/14
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Informative references

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

Non-absorbent catamenial devices	A61F 5/44
Pessaries	A61F 6/08
Underwear	A41B 9/00
Absorption of sweat	A42C 5/00 , A43B 17/00 , A41D 20/00
Tissues, wipes or patches for cleaning the skin (e.g. wet wipes)	A61K 8/0208

Special rules of classification

Looping references between [A61F 5/44](#) and [A61F 13/15](#) have been identified. Until this inconsistency is resolved in IPC, the current classification practice in CPC is as follows:

[A61F 13/15](#) and [A61F 5/44](#) are informative references to each other. The title of [A61F 13/15](#) will be updated once this inconsistency is resolved in IPC.

A61F 13/15203

{Properties of the article, e.g. stiffness or absorbency (chemical aspects [A61L 15/00](#))}

Relationships with other classification places

Investigating or analysing materials by determining their chemical or physical properties [G01N](#).

A61F 13/15658

{Forming continuous, e.g. composite, fibrous webs, e.g. involving the application of pulverulent material on parts thereof}

References

Informative references

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

Spraying	B05C 19/04 , B05B 7/14
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A61F 13/15707

{Mechanical treatment, e.g. notching, twisting, compressing, shaping}

Relationships with other classification places

Joining or sealing of preformed parts, welding of plastics materials and apparatus therefore: [B29C 65/00](#)

Corrugating in general: [B31F 1/20](#)

A61F 13/15731**{Treating webs, e.g. for giving them a fibre-like appearance, e.g. by embossing}****Relationships with other classification places**

Vacuum drums for perforating: [B26F 1/26](#), [D06C 23/00](#), [D04H 1/465](#), [B29C 59/06](#), [B29C 59/022](#), [B29C 59/025](#), [B29C 51/225](#), [B29C 59/043](#), [B29C 51/225](#).

A61F 13/15739**{Sealing, e.g. involving cutting}****Relationships with other classification places**

Bonding [B29C 45/00](#).

A61F 13/20**Tampons, e.g. catamenial tampons; Accessories therefor****Definition statement**

This place covers:

All articles intended to be inserted within a natural opening e.g. nose plugs, dental absorbent tampons, catamenial tampons, anal plugs, ear plugs.

References**Informative references**

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

A wound opening is not considered as a natural opening and articles related to wound healing	A61F 13/00 - A61F 13/14
The swabs for cleaning wounds or absorbing wound liquids during surgery	A61F 13/36 , A61F 13/38

A61F 13/42**with wetness indicator or alarm****Definition statement**

This place covers:

All articles having means for indicating the article is wet, independently of the kind of absorbent article (napkins, diapers, tampons, wound dressings) or indicator (chemical, electrical, tactile etc.).

Relationships with other classification places

For determining moisture content, e.g. humidity, of the fluid by the use of electric, electro-chemical, or magnetic means [G01N 27/00](#).

A61F 13/45

characterised by the shape (cup-shaped type tampons [A61F 13/2045](#))

Definition statement

This place covers:

The two- or three- dimensional shape of articles or the shape of details thereof, and is intended as a head group to branch down to either articles needing another article or adhesive to be held against the body ([A61F 13/47](#)) or articles that are self-supporting e.g. diapers ([A61F 13/49](#)).

A61F 13/47

Sanitary towels, incontinence pads or napkins ([A61F 13/49](#) takes precedence)

Definition statement

This place covers:

Absorbent articles that need another article or adhesive to be held against the body or articles which are held in place by the specific female or male anatomy.

A61F 13/4702

{having a reinforcing member}

Definition statement

This place covers:

Articles of the feminine hygiene napkin type having a reinforcing member to keep the shape in a desired form.

A61F 13/4704

{having preferential bending zones, e.g. fold lines or grooves}

Definition statement

This place covers:

Articles of the feminine hygiene napkin type where the fold lines or grooves are intended for allowing the article to fold or bent around them rather than being a barrier.

References**Informative references**

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

Foldable male incontinence devices	A61F 13/471
Foldable interlabial articles	A61F 13/47209

A61F 13/47209**{having only interlabial part, i.e. with no extralabial parts}****Definition statement***This place covers:*

Articles which are intended to be placed against and to be hold by the labiae of the female anatomy.

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

Articles intended to be worn inside the vagina e.g. tampons	A61F 13/2051
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A61F 13/47218**{with a raised crotch region, e.g. hump}****Definition statement***This place covers:*

Articles of the feminine hygiene napkin type having a portion which is elevated in relation to the rest of the article with the intention to be in close contact with the source of excretions for acquiring easily the fluids.

A61F 13/47227**{for interlabial use}****Definition statement***This place covers:*

Articles of which the dimension of the elevated portion permits the elevated portion to be inserted between the labia majora or deeper in the vagina.

A61F 13/47263**{with activating means, e.g. elastic, heat or chemical activatable means}****Definition statement***This place covers:*

Articles of the feminine hygiene napkin type which have means that are in a latent state. During use or just before the use of the article the means are activated to perform a function so that the shape of the article is altered, e.g. elastics that stay inactive until they become wet in order to have a flat article before use and once wet their elastic properties become active and the shape of the article changes to a curved form.

References

Limiting references

This place does not cover:

Means which upon activation perform another function than changing the shape	A61F 13/8405
Skin enhancers	A61F 13/8405 , A61F 13/51113

A61F 13/474

adjustable

Definition statement

This place covers:

Articles of the feminine hygiene napkin type which are manually or elastically adjustable to fit the body shape or to increase or decrease their absorbency

A61F 13/475

characterised by edge leakage prevention means

Definition statement

This place covers:

Articles of the feminine hygiene napkin type having a kind of barrier to prevent the liquid from leaking out of the article and soil the underwear.

References

Informative references

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

The liquid impermeable backsheet per se	A61F 13/514
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A61F 13/476

characterised by encircling the crotch region of the undergarment

Definition statement

This place covers:

Articles of the feminine hygiene napkin type having wings or flaps for being wrapped over the edge of the underwear. However the primary function of the flaps should be the prevention of leakage or soiling the undergarment.

References

Limiting references

This place does not cover:

Flaps intended for fastening the article on the underwear the groups	A61F 13/5605
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A61F 13/49**Absorbent articles specially adapted to be worn around the waist, e.g. diapers****Definition statement***This place covers:*

Articles which due to their form are self sustained around the waist, e.g. diapers, or pant form diapers.

A61F 13/49003**{Reusable, washable fabric diapers}****Definition statement***This place covers:*

Absorbent articles that are washable and as such reusable. If a part mostly the outer cover/chassis is washable and has an exchangeable insert but the invention relies in the washable part then this document is to be classified in this subgroup and get an Indexing Code in [A61F 13/505](#). If however only the exchangeability of parts is disclosed so that they are to be reused several times without being of a special fabric having the possibility to be washed then this document is classified in [A61F 13/505](#).

A61F 13/49004**{with fastening means}****References****Limiting references***This place does not cover:*

Fastening means per se	A61F 13/56 , A61F 13/58
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A61F 13/49007**{Form-fitting, self-adjusting disposable diapers}****Definition statement***This place covers:*

Diapers or pants type diapers where the invention relies in the elastic or stretchable features intended to aid the article to conform to the body of the wearer.

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

Elastic barriers which are covered by the edge leaking prevention	A61F 13/49413
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A61F 13/4902**{characterised by the elastic material}****Relationships with other classification places**Extensible layered products [B32B 5/04](#), [B32B 5/26](#) – [B32B 5/2795](#), [B32B 27/12](#), [B32B 37/144](#)**References****Informative references***Attention is drawn to the following places, which may be of interest for search:*

Layered products characterised by the non- homogeneity or physical structure characterised by structural features of a layer specified as extensible	B32B 5/04
Layered products characterised by the non- homogeneity, or physical structure characterised by features of foamed layer material with fibrous or filamentary layers	B32B 5/26 – B32B 5/2795
Layered products comprising synthetic resin layer next to a fibrous or filamentary layer	B32B 27/12
Methods or apparatus for laminating characterised by layer properties having differing mechanical properties	B32B 37/144

A61F 13/493**adjustable {by adding or removing material, e.g. umbilical cord arrangements (adjustable by the fastening [A61F 13/5638](#), [A61F 13/5655](#))}****Definition statement***This place covers:*

Articles that are manually adjustable to conform the body shape or size.

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

The fastening means or the adjustability of the article through the fastening means	A61F 13/58
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A61F 13/4946**{the edge leakage prevention means being an absorbent medium ([A61F 13/49426](#) takes precedence)}****Definition statement***This place covers:*

Articles that have secondary absorbent material located at the side edges of the article, mostly next to the main absorbent core.

References

Limiting references

This place does not cover:

Edge leakage prevention means with the barrier having an absorbent medium	A61F 13/49426
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Informative references

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

The difference of absorbency of the absorbent core in the X-Y direction per se	A61F 13/532 , A61F 13/535
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Special rules of classification

If the secondary absorbent material is located at the end edges, then this is covered by [A61F 13/49466](#).

A61F 13/51

characterised by the outer layers {(wicking or transfer layers [A61F 13/537](#))}

Definition statement

This place covers:

The outer layers of the absorbent articles whether feminine napkin tape or diapers. A backsheet is understood as the layer or composite layer that is intended to inhibit the liquid from flowing down of the article. A topsheet is understood as the layer which is in close contact with the skin for receiving the liquid.

A61F 13/511

Topsheet, i.e. the permeable cover or layer facing the skin

References

Limiting references

This place does not cover:

If the layer immediately under the topsheet is a separate layer, i.e. not laminated to the topsheet and has the function of spreading the liquid in the X-Y direction	A61F 13/537
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A61F 13/514

Backsheet, i.e. the impermeable cover or layer furthest from the skin
{([A61F 13/15211](#), [A61F 13/15252](#) take precedence)}

References

Informative references

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

If the inner layer immediately adjacent but not laminated to the backsheet is intended to distribute the liquid in the X-Y direction	A61F 13/537
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A61F 13/51466

{providing stretchability without the use of elastic material}

Definition statement

This place covers:

The material is. e.g. corrugated SELF or ring rolled so as to impart to the backsheet stretchability without being elastic.

A61F 13/51478

{being a laminate, e.g. multi-layered or with several layers}

References

Limiting references

This place does not cover:

If the inner layer immediately adjacent but not laminated to the backsheet is intended to distribute the liquid in the X-Y direction	A61F 13/537
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A61F 13/53

characterised by the absorbing medium ([A61F 13/20](#) takes precedence)

Definition statement

This place covers:

The absorbent core of the absorbent articles. If the structure of the core is intended for conforming the body fit or the leakage prevention then this is covered by the corresponding subgroups [A61F 13/47](#), [A61F 13/475](#) or [A61F 13/49](#), [A61F 13/494](#).

Relationships with other classification places

Chemical composition: [A61L 15/16](#)

A61F 13/533**having discontinuous areas of compression****References****Limiting references***This place does not cover:*

Grooves which are intended for leakage prevention per se or for folding	A61F 13/4756 , A61F 13/4704 , A61F 13/49001
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A61F 13/551**Packaging before or after use {(general packaging of absorbent pads
[B65D 85/00](#))}****Relationships with other classification places**Foldable baby changing mats/supports: [A47D 15/00](#), [A47D 5/00](#).**References****Limiting references***This place does not cover:*

If the package or packaging is not directly related to the absorbent article	B65D
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A61F 13/56**Supporting or fastening means****Definition statement***This place covers:*All means for holding in their position the absorbent articles covered by the subgroups [A61F 13/45](#)-[A61F 13/51](#).**References****Limiting references***This place does not cover:*

Fastening means for wound appliances	A61F 13/00 - A61F 13/14
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A61F 13/5616

{using flaps, e.g. adhesive, for attachment to the undergarment (leakage prevention means encircling the crotch portion [A61F 13/476](#))}

References**Limiting references**

This place does not cover:

If the flaps are indented to prevent leakage soiling of the undergarment	A61F 13/476
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A61F 13/62

{Mechanical fastening means, ([A61F 13/5611](#), [A61F 13/5616](#), [A61F 13/581](#), [A61F 13/66](#) take precedence);} Fabric strip fastener elements, e.g. hook and loop

Relationships with other classification places

Hook and loop in general and the manufacturing thereof: [A44B 18/00](#)

A61F 13/82

with means for attaching to the body

Definition statement

This place covers:

Articles that have means (mostly adhesive) to attached the article to the skin of the user in order to keep it in place.

References**Limiting references**

This place does not cover:

Adhesive attachment of wound dressings	A61F 13/02
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A61F 15/00

Auxiliary appliances for wound dressings; Dispensing containers for dressings or bandages {(packaging of absorbent articles such as diapers, feminine hygiene absorbing pads or tampons [A61F 13/551](#); packaging of wound dressings [A61F 13/00072](#))}

References**Limiting references**

This place does not cover:

Individual wrapped articles before or after use	A61F 13/551
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A61F 17/00

First-aid kits

Definition statement

This place covers:

Packs, bags, packages, cases to be carried by a person and having items to be used under first aid circumstances. The items as such are not of importance.

References

Informative references

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

Bags in general	A45C
Bags for midwives	A61B 17/48
Carrying bags, cases, trusses e.g. doctor bags	A61B 50/31