

A61F

**FILTERS IMPLANTABLE INTO BLOOD VESSELS;
PROSTHESES; 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 subclass/group 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.

Relationship between large subject matter areas

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 [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 utilization 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 relevant to classification in this subclass

This subclass/group does not cover:

| | |
|--|----------------------------|
| Brassieres | A41C 3/00 |
| Cosmetic articles, e.g. wigs, hair pieces | A41G |
| Caps with means for protecting the eyes or the ears | A42B 1/06 |
| Ordinary arch supports for shoes | A43B 7/14 |
| Artificial nails | A45D 31/00 |
| Heating or cooling means in connection with bedsteads or | A47C 21/00 |

| | |
|---|---|
| mattresses | |
| Surgical instruments | A61B 17/00 |
| Devices for closing wounds, or holding wounds closed | A61B17/03 |
| Dental prostheses | A61C 13/00 |
| 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 |
| 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 |
| Drainage appliances for wounds | A61M 27/00 |
| Dilators | A61M 29/00 |
| Valves specially adapted for medical use | A61M 39/00 |
| 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 |
| Safety devices for welding in general | F16P 1/06 |
| Removable contact lenses | G02C 7/04 |
| Sunglasses or goggles having the same features as spectacles | G02C |
| Electric heating elements | H05B |

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 |
| Surgical drapes | A61B 19/08 |
| Transdermal drug delivery patches | A61K 9/70 |
| Exercising apparatus specially adapted for particular parts of the body | A63B 23/00 |
| Goggles for swimming | A63B 33/00 |
| Diving masks | B63C 11/12 |
| Materials for prostheses | A61L 27/00 |
| Balloon catheters | A61M 25/10 |
| Dilators | A61M 29/00 |

Glossary of terms

In this subclass/group, 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 expression "device for fluid management" is often

used with the meaning " incontinence article".

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 (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 1/10](#); artificial kidneys [A61M 1/14](#))

References relevant to classification in this group

This subclass/group 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 hearts | A61M 1/10 |
| Artificial kidneys | A61M 1/14 |

Special rules of classification within this group

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 **A61F2/00** to **A61F2/26** or [A61F 2/82](#) or [A61F9](#) or [A61F11](#) 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

[N: Closure means for urethra or rectum, i.e. anti-incontinence devices or support slings against pelvic prolapse]

Relationship between large subject matter areas

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

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

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

Medical informatics for controlling closure devices: **G06F19/00M**

References relevant to classification in this group

This subclass/group 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 |

A61F 2/0009

[N: 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 relevant to classification in this group

This subclass/group does not cover:

| | |
|--|------------------------------|
| Plugging an opening in the wall of a hollow or tubular organ | A61B 17/0057 |
|--|------------------------------|

Special rules of classification within this group

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

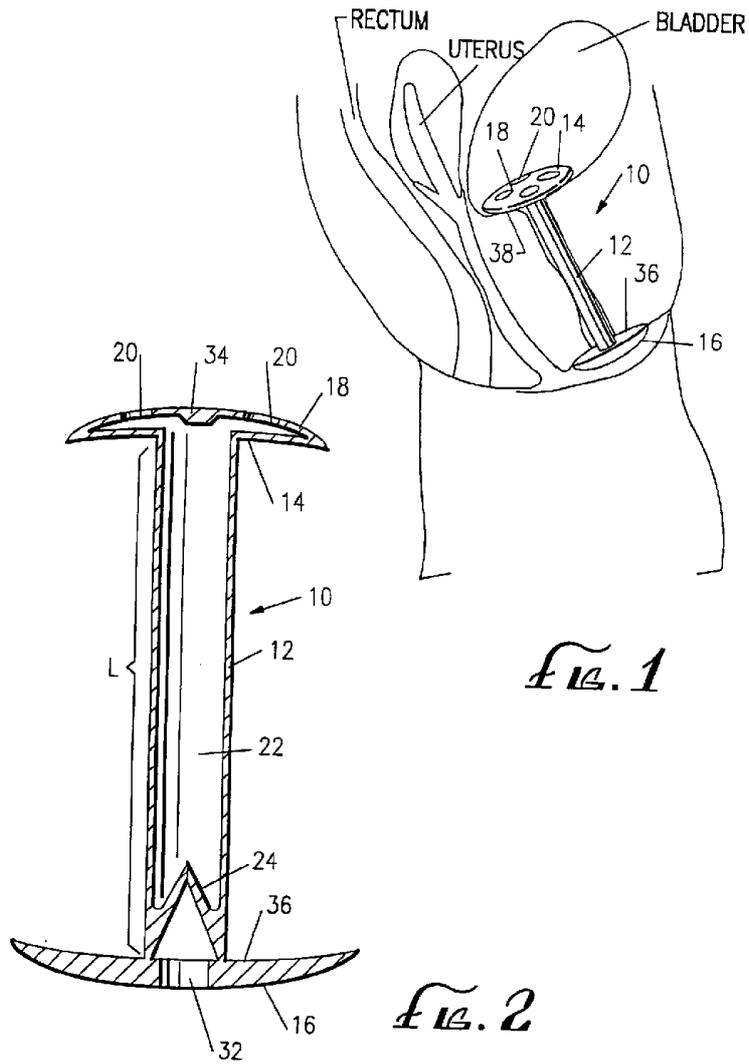


Fig. 1

Fig. 2

A61F 2/0013

[N: inflatable]

A61F 2/0022

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

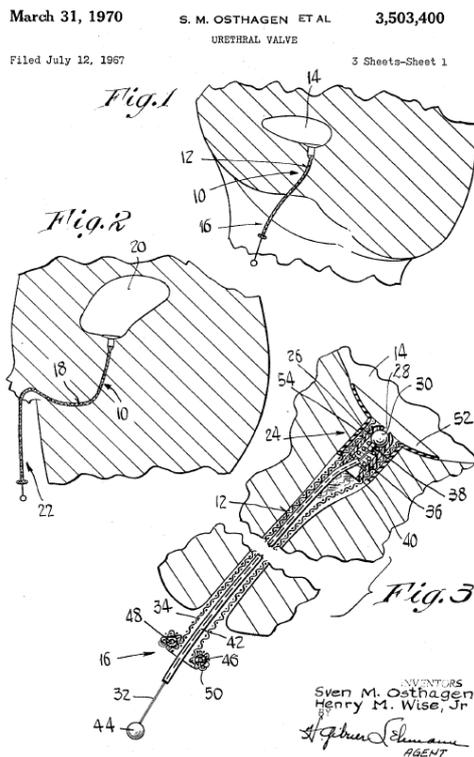
References relevant to classification in this group

This subclass/group does not cover:

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

Special rules of classification within this group

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



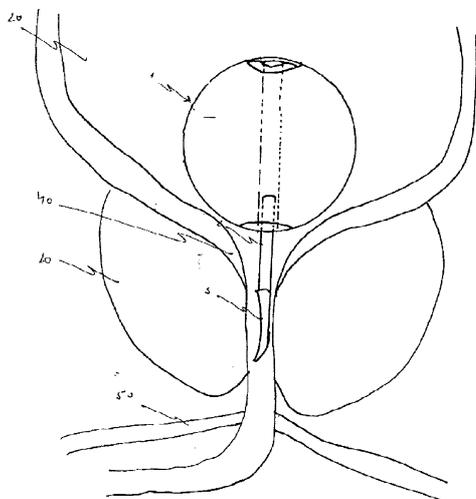


Fig 34

A61F 2/0036

[N: implantable ([A61F 2/0018](#) takes precedence)]

Relationship between large subject matter areas

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

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

References relevant to classification in this group

This subclass/group 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

[N: inflatable]

Relationship between large subject matter areas

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

A61F 2/0045

[N: Support slings]

Definition statement

This subclass/group covers:

Slings or meshes for pelvic prolapse

Relationship between large subject matter areas

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

Informative references

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

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

A61F 2/005

[N: with pressure applied to urethra by an element placed in the vagina]

Relationship between large subject matter areas

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

[N: with pressure applied to urethra by an element placed around the penis, e.g. penis clamp]

Relationship between large subject matter areas

Absorbent pads for male use: [A61F13/15B1A](#)

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

Informative references

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

| | |
|----------------------------|-----------------------------|
| Clamps or clips in general | A61B 17/122 |
|----------------------------|-----------------------------|

A61F 2/0059

[N: Cosmetic or alloplastic implants ([A61F 2/10](#) to [A61F 2/16](#) and [A61F 2/28](#) take precedence)]

Definition statement

This subclass/group covers:

Implants are structurally confined; there are no uncontained fillers

Relationship between large subject matter areas

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

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

References relevant to classification in this group

This subclass/group 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

[N: Implantable repair or support meshes, e.g. hernia meshes]

Relationship between large subject matter areas

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

References relevant to classification in this group

This subclass/group does not cover:

| | |
|---|------------------------------|
| Implants for closing a vessel puncture or a septal defect | A61B 17/0057 |
| Bandages | A61F 13/00 |
| 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 |
| Mesh patterns and the fabrication thereof | D04B 21/00 |

A61F 2/0077

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

References relevant to classification in this group

This subclass/group 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

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

Relationship between large subject matter areas

Packages or dispensers for instruments: [A61B 19/026](#)

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

References relevant to classification in this group

This subclass/group does not cover:

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

Special rules of classification within this group

Implants receive their particular Indexing Code-code together with the class [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 [N: (filters used as gripping instruments [A61B 17/22031](#))]

Relationship between large subject matter areas

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

Aspiration catheters: [A61M 1/008](#)

Dilation catheters with perfusion capabilities: **[K61M29/02F2](#)**

References relevant to classification in this group

This subclass/group does not cover:

| | |
|--------------------------------------|-------------------------------|
| Filters used as gripping instruments | A61B 17/22031 |
|--------------------------------------|-------------------------------|

Informative references

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

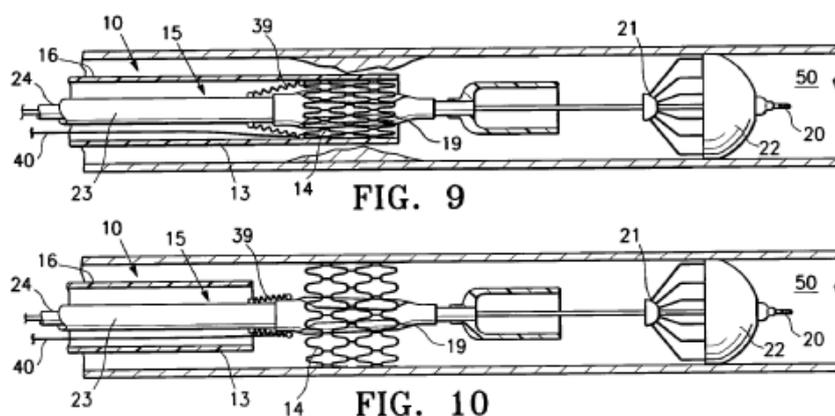
| | |
|----------------------------|-------------------------------|
| Internal occluding devices | A61B 17/12022 |
| Snare instruments | A61B 17/32056 |

A61F 2/013

[N: Distal protection devices, i.e. devices placed distally in combination with another endovascular procedure, e.g. angioplasty or stenting]

Special rules of classification within this group

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: **A61F2/84**

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

A61F 2/02

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

References relevant to classification in this group

This subclass/group does not cover:

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

A61F 2/022

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

Definition statement

This subclass/group covers:

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

References relevant to classification in this group

This subclass/group 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, bile ducts ([A61F 2/18](#), [A61F 2/20](#), [N: [A61F 2/82](#), [A61F9/00T](#)] take precedence)

Relationship between large subject matter areas

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

References relevant to classification in this group

This subclass/group does not cover:

| | |
|-------------------------------|-----------------------------|
| Internal ear or nose parts | A61F 2/18 |
| Epiglottis, Larynxes Tracheae | A61F 2/20 |
| Stents | A61F 2/82 |
| Bariatric or gastric sleeves | A61F 5/0076 |
| Tear duct implants | A61F9/00T |

Special rules of classification within this group

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

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

Bronchi: [A61F 2002/043](#)

Esophageal 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

[N: Urinary bladders]

Relationship between large subject matter areas

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

A61F 2/06

Blood vessels

Definition statement

This subclass/group covers:

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

References relevant to classification in this group

This subclass/group 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

[N: 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 27/36](#) and [A61L 27/38](#))]

Definition statement

This subclass/group covers:

Devices for creating vascular grafts by mechanical means.

Relationship between large subject matter areas

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

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

References relevant to classification in this group

This subclass/group does not cover:

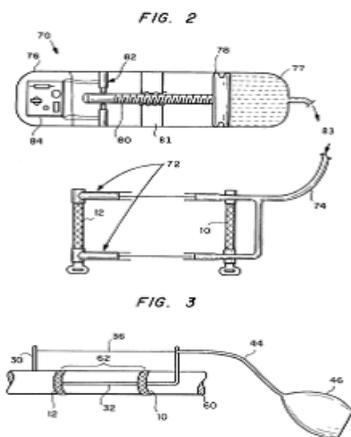
| | |
|------------------------------------|----------------------------|
| Protheses made from natural tissue | A61L 27/36 |
|------------------------------------|----------------------------|

| | |
|--|----------------------------|
| or living cells | |
| Bioreactors for producing artificial tissue or for ex-vivo cultivation of tissue | C12M 21/08 |

Special rules of classification within this group

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

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A61F 2/064

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

Definition statement

This subclass/group covers:

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

References relevant to classification in this group

This subclass/group does not cover:

| | |
|--|----------------------------|
| Anastomosis in general; Anastomosis of natural blood vessels | A61B 17/11 |
|--|----------------------------|

A61F 2/07

Stent-grafts

Definition statement

This subclass/group 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

Relationship between large subject matter areas

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

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

References relevant to classification in this group

This subclass/group does not cover:

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

A61F 2/08

Muscles; Tendons; Ligaments [N: (sutures [A61B 17/04](#))]

Definition statement

This subclass/group covers:

Artificial muscles implanted in the body

Relationship between large subject matter areas

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

References relevant to classification in this group

This subclass/group does not cover:

| | |
|---------|----------------------------|
| Sutures | A61B 17/04 |
|---------|----------------------------|

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

[N: Implements for inserting tendons or ligaments]

References relevant to classification in this group

This subclass/group does not cover:

| | |
|-------------------------------|----------------------------|
| Guiding means for bone drills | A61B 17/17 |
|-------------------------------|----------------------------|

A61F 2/0811

[N: Fixation devices for tendons or ligaments]

References relevant to classification in this group

This subclass/group does not cover:

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

Special rules of classification within this group

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 | A61F 2002/0823 |

| | |
|---|--------------------------------|
| plurality of separate parts | |
| 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 |

Hair or skin implants

References relevant to classification in this group

This subclass/group does not cover:

| | |
|---|------------------------------|
| Instruments for implanting hair follicles | A61B 17/3468 |
| Hair cells | C12N5/06B12B |

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

[N: Skin implants, e.g. artificial skin]

References relevant to classification in this group

This subclass/group does not cover:

| | |
|------------|-----------------------------|
| Skin cells | C12N 5/0698 |
|------------|-----------------------------|

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 |
|--------------------------------------|----------------------------|

A61F 2/12

Mammary prostheses

Relationship between large subject matter areas

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

References relevant to classification in this group

This subclass/group does not cover:

| | |
|------------------------------|-------------------|
| Devices for expanding tissue | A61B19/00T |
|------------------------------|-------------------|

Special rules of classification within this group

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

WO 2007/092385

PCT/US2007/003043

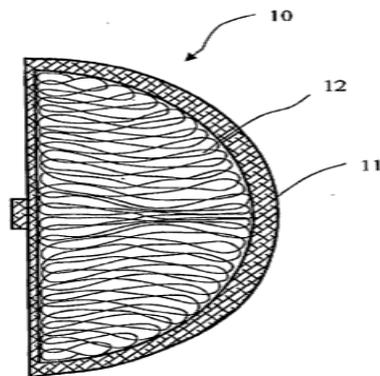
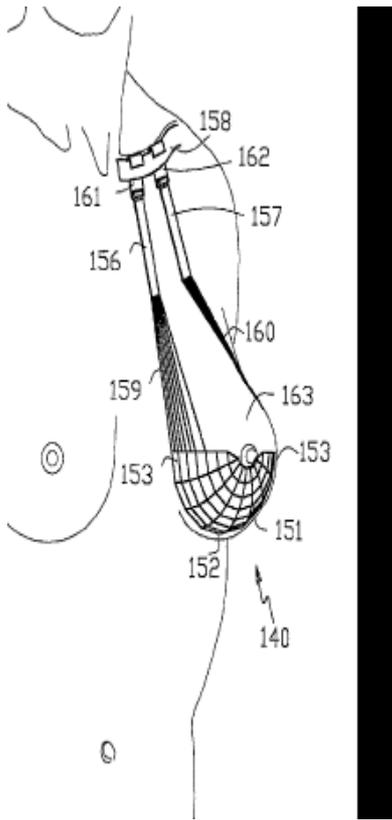


FIG. 2

Example for mammary support implant: WO2007004214



A61F 2/14

Eye parts, e.g. lenses, corneal implants (removable contact lenses [G02C 7/04](#)); Artificial eyes (making thereof from organic plastic material [B29C](#), [B29D 11/02](#)))

Definition statement

This subclass/group covers:

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

Relationship between large subject matter areas

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

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

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

References relevant to classification in this group

This subclass/group does not cover:

| | |
|--|---------------------------------|
| Artificial eyes (making thereof from organic plastic material) | B29C B29D 11/02 |
|--|---------------------------------|

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

[N: Artificial eyes]

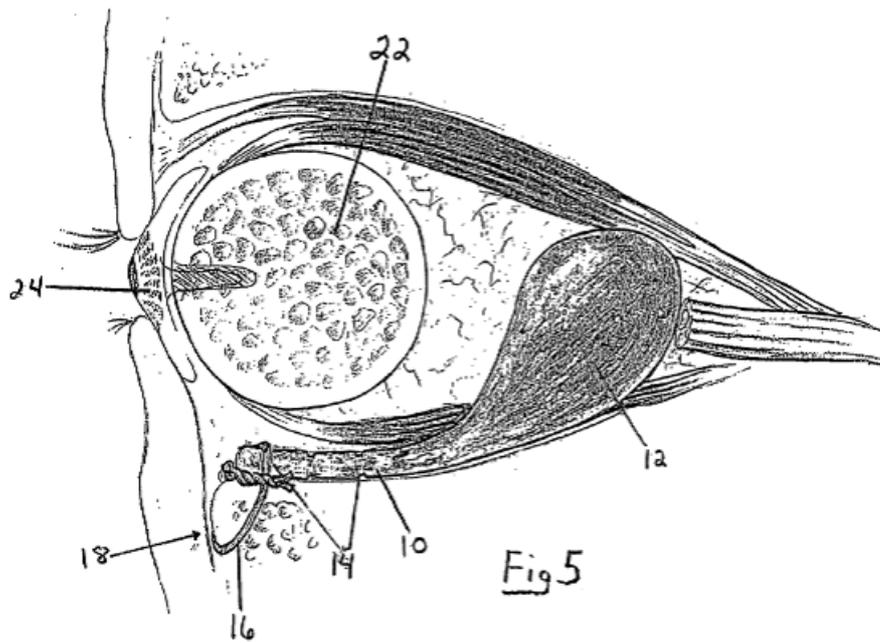
Informative references

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

| | |
|---|------------------------------|
| Surgical instruments for osteosynthesis of orbital bone | A61B 17/6433 |
|---|------------------------------|

Special rules of classification within this group

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



A61F 2/142

[N: Cornea, e.g. artificial cornea, keratoprotheses or corneal implants for repair of defective corneal tissue]

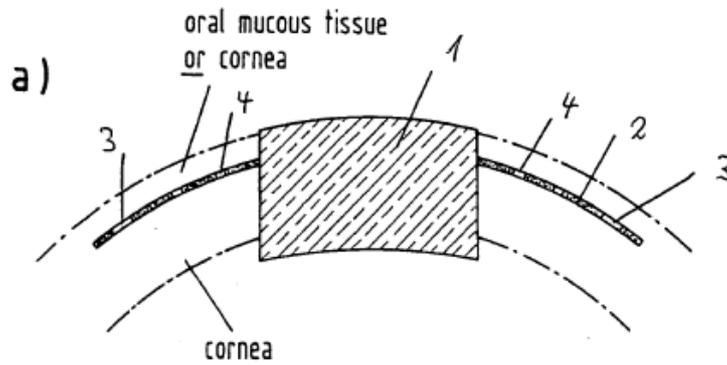
Definition statement

This subclass/group covers:

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

Fig. 5

A - A



Relationship between large subject matter areas

Implantation instruments therefor: [A61F 2/143](#)

References relevant to classification in this group

This subclass/group 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 2/143

[N: Implantation instruments therefor]

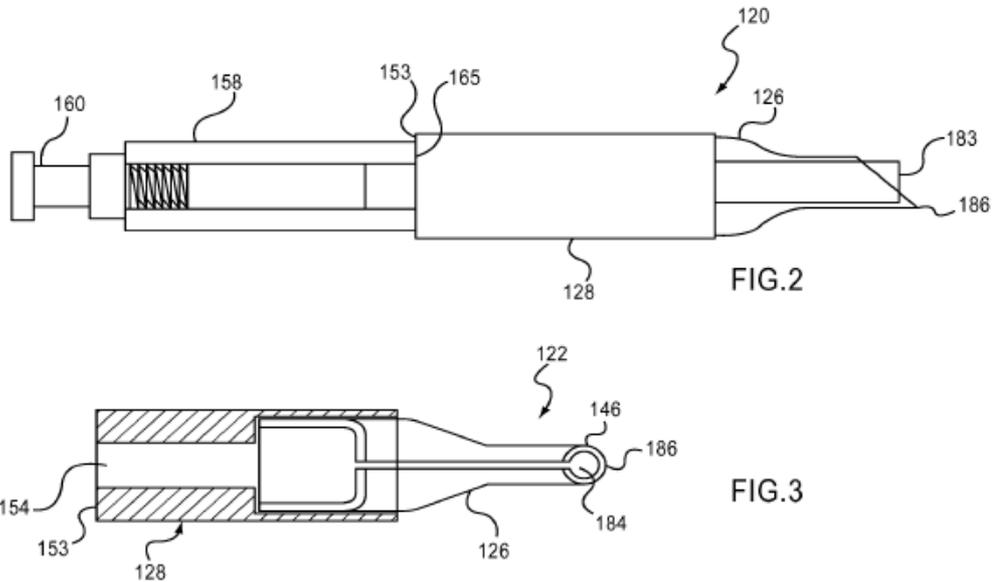
Informative references

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 |
|--|-----------------------------|

Special rules of classification within this group

Illustrative example of subject matter classified in [A61F 2/143](#)



A61F 2/145

[N: Corneal inlays and onlays for refractive correction]

Definition statement

This subclass/group covers:

Optically active elements inserted between corneal layers for refractive correction.

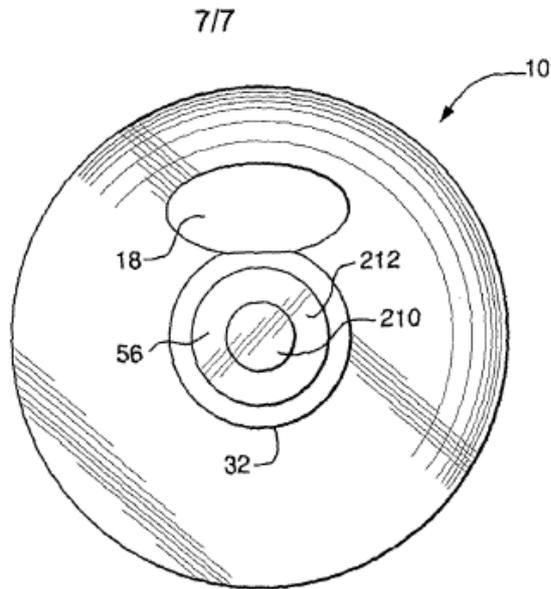


FIG. 24

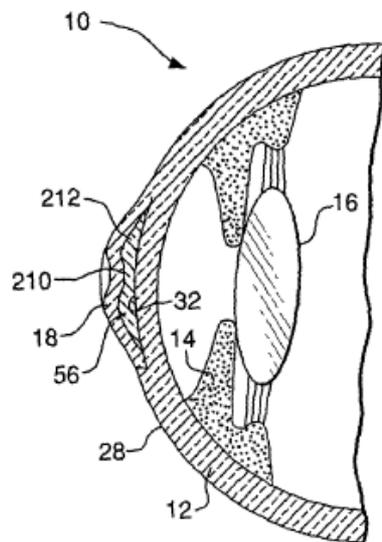


FIG. 25

References relevant to classification in this group

This subclass/group does not cover:

| | |
|-------------------------------|------------------------------|
| Corneal onlays and inlays for | A61F 9/00812 |
|-------------------------------|------------------------------|

| | |
|---|------------------------------|
| photoablative laser surgery | |
| 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 |
|---|---------------------------|

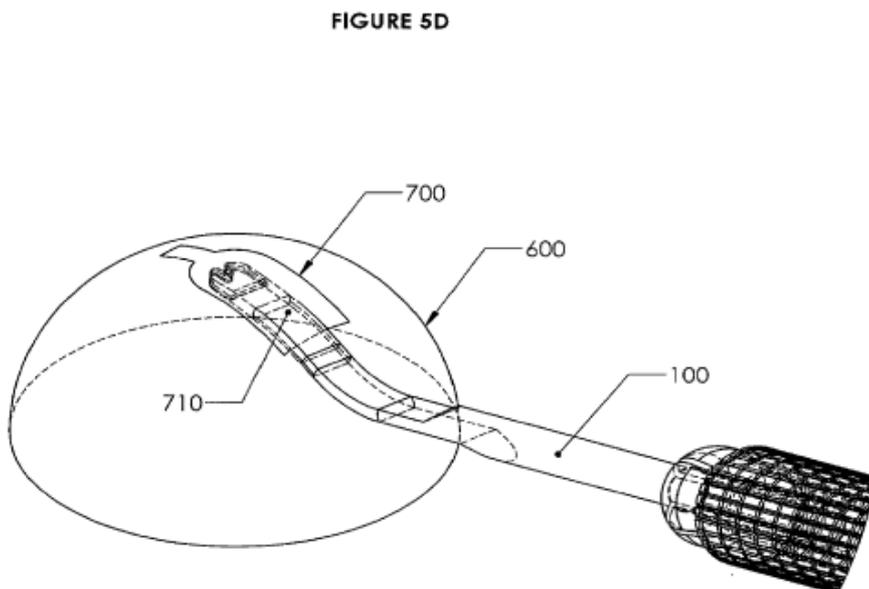
A61F 2/146

[N: Implantation instruments therefor]

Definition statement

This subclass/group covers:

Implantation instruments for corneal lenses



A61F 2/147

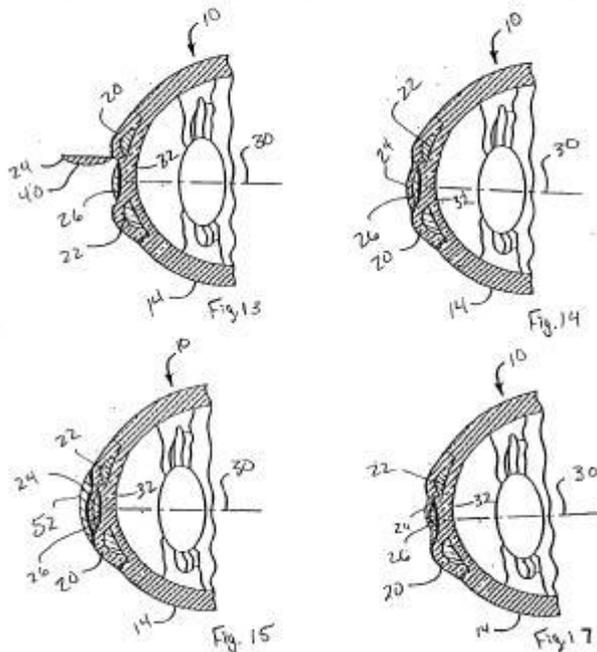
[N: Implants to be inserted in the stroma for refractive correction, e.g. ring-like implants]

Definition statement

This subclass/group 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



Relationship between large subject matter areas

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

A61F 2/148

[N: Implantation instruments therefor]

Definition statement

This subclass/group covers:

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

9/16

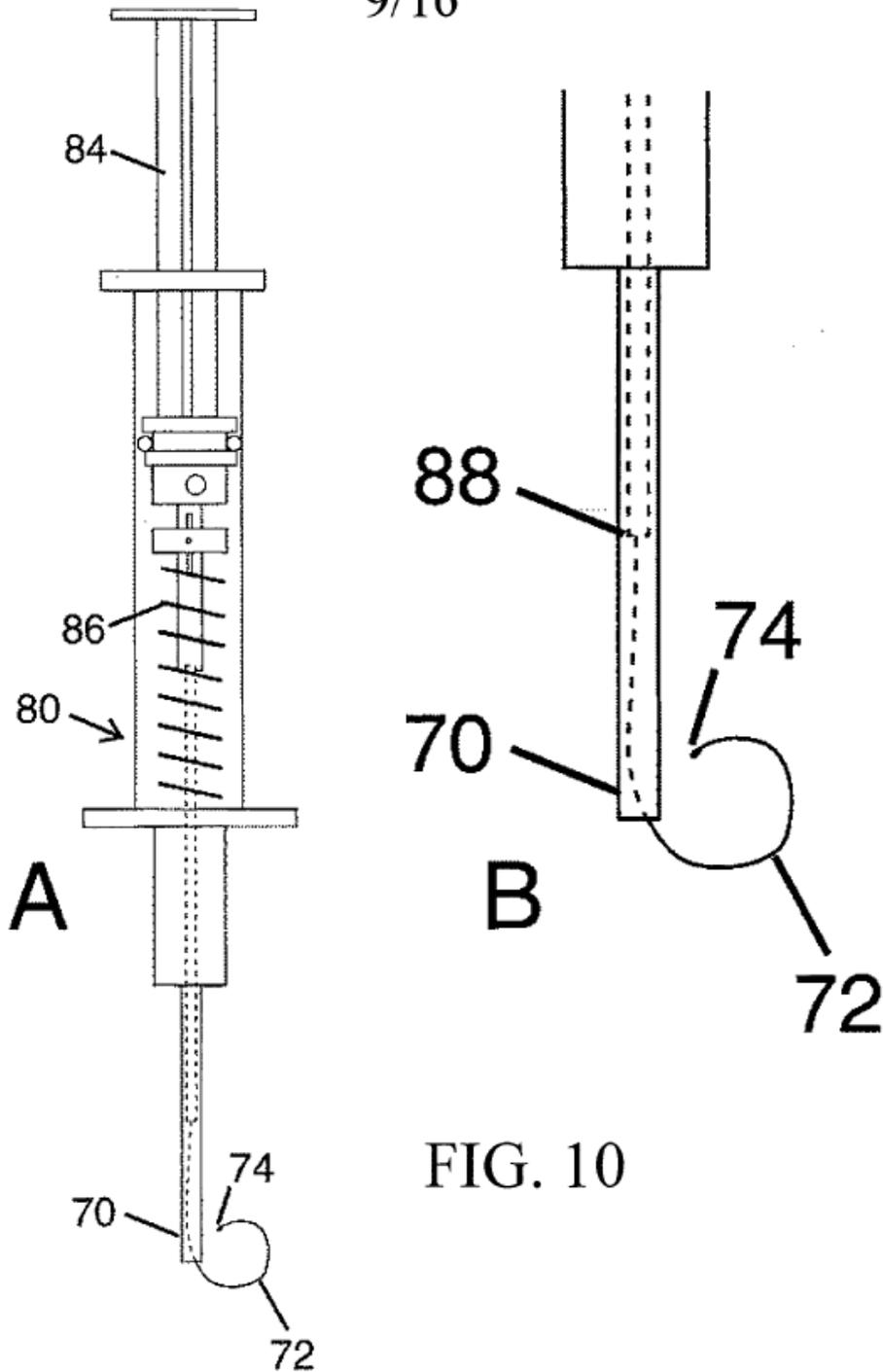


FIG. 10

References relevant to classification in this group

This subclass/group does not cover:

| | |
|--|----------------------------|
| Implantation instruments for corneal repair prostheses | A61F 2/143 |
|--|----------------------------|

| | |
|--|-----------------------------|
| Implantation instruments for optically active corneal inlays or onlays | A61F 2/146 |
| Implantation instruments for intraocular lenses | A61F 2/1662 |

A61F 2/16

Intraocular lenses

Definition statement

This subclass/group 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.

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 subclass/group, 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

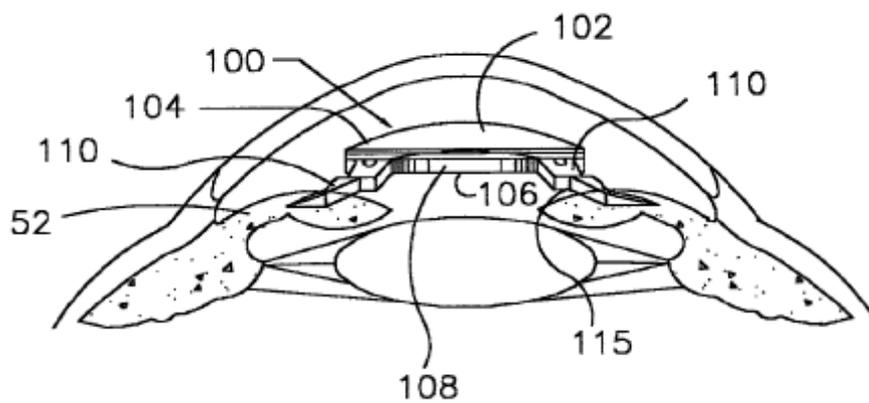
[N: Corrective lenses for use in addition to the natural lenses of the eyes]

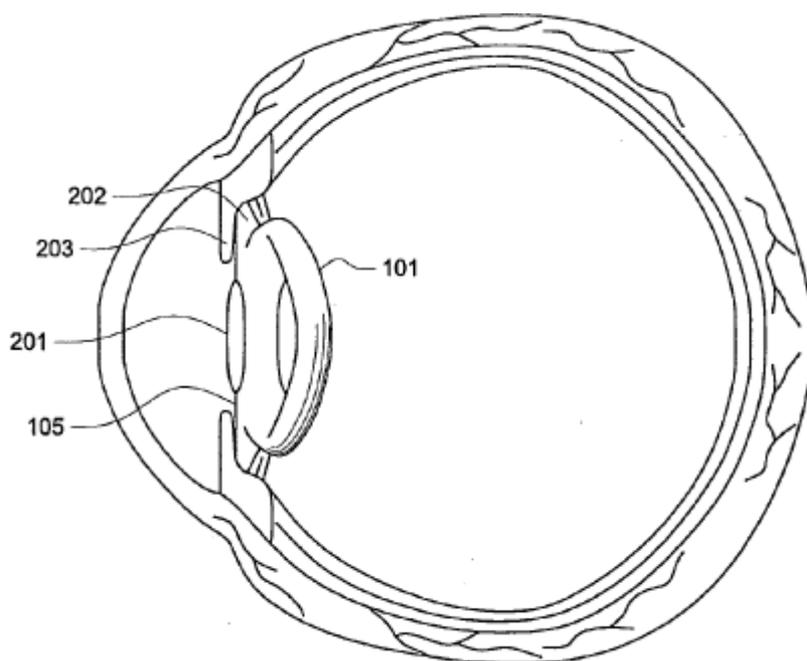
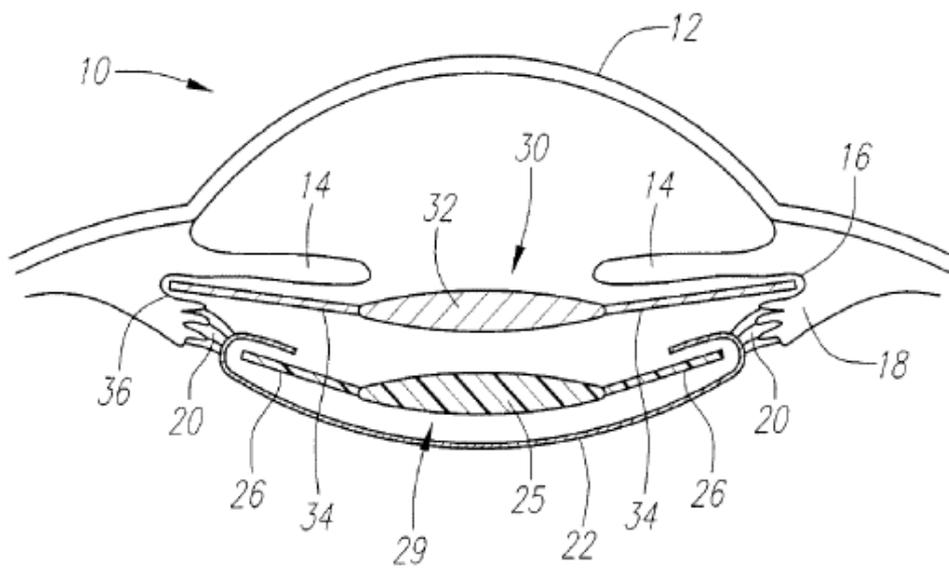
Definition statement

This subclass/group covers:

Corrective lenses for phakic or pseudophakic eyes.

PN - US2002103537 A1 20020801





References relevant to classification in this group

This subclass/group does not cover:

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

Special rules of classification within this group

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 subclass/group, 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

[N: having special lens configuration, e.g. bifocal lenses, having layers]

Definition statement

This subclass/group 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

[N: having variable configuration to facilitate implantation, e.g. multipart or foldable lenses]

Definition statement

This subclass/group covers:

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

References relevant to classification in this group

This subclass/group does not cover:

| | |
|---|-------------------|
| Accommodative IOL having variable focal power | A16F2/16B4 |
|---|-------------------|

A61F 2/1618

[N: Multifocal]

Definition statement

This subclass/group covers:

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

2/4

FIG. 4.

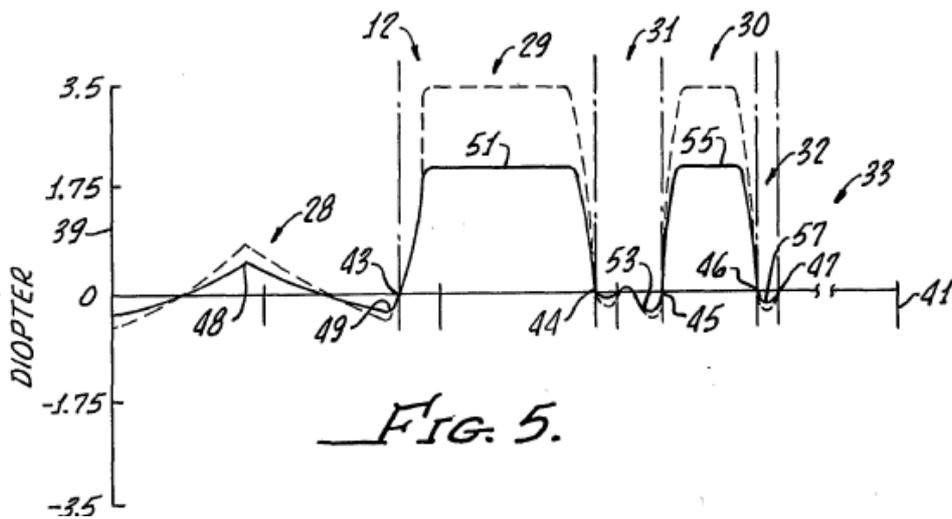
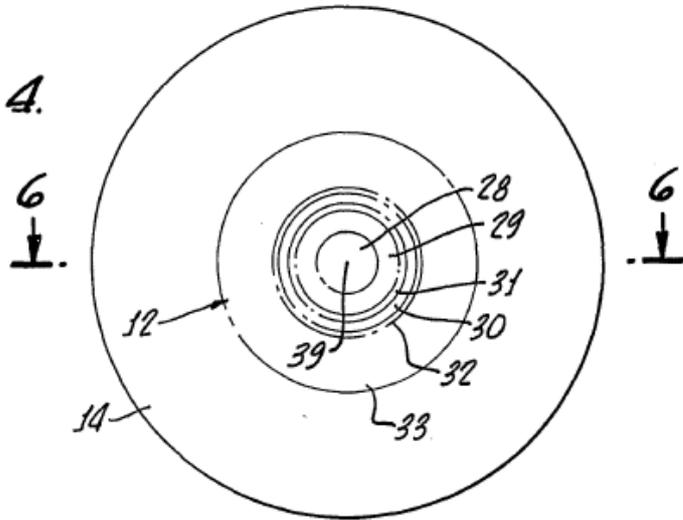


FIG. 5.

A61F 2/1621

[N: Enabling correction for monovision]

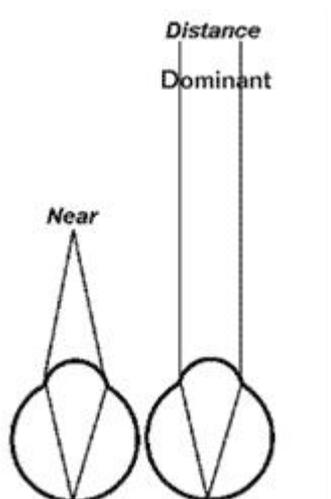
Definition statement

This subclass/group covers:

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

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]



Informative references

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

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

A61F 2/1624

[N: Having adjustable focus or variable power, activated e.g. mechanically or electrically by the ciliary muscle or from the outside]

Definition statement

This subclass/group 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 relevant to classification in this group

This subclass/group does not cover:

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

A61F 2/1627

[N: Changing index of refraction e.g. by external means or by tilting]

Definition statement

This subclass/group covers:

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

Informative references

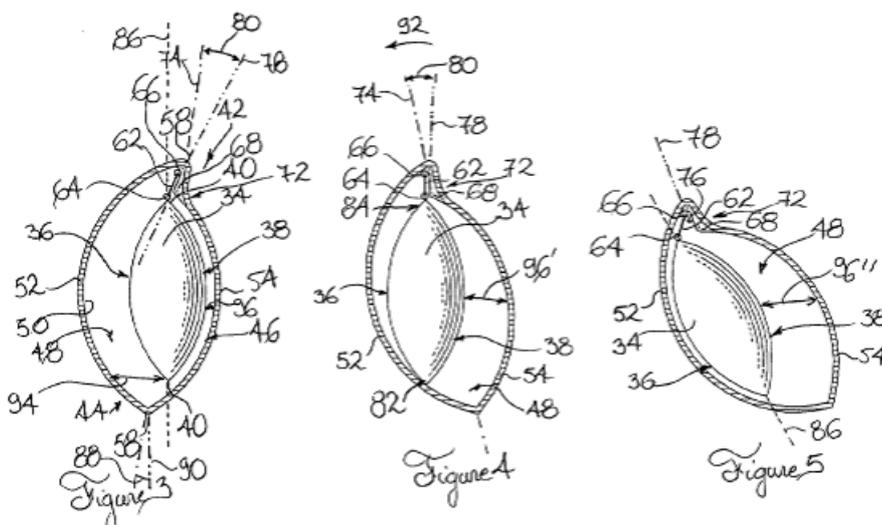
Attention is drawn to the following places, which may be of interest for search:

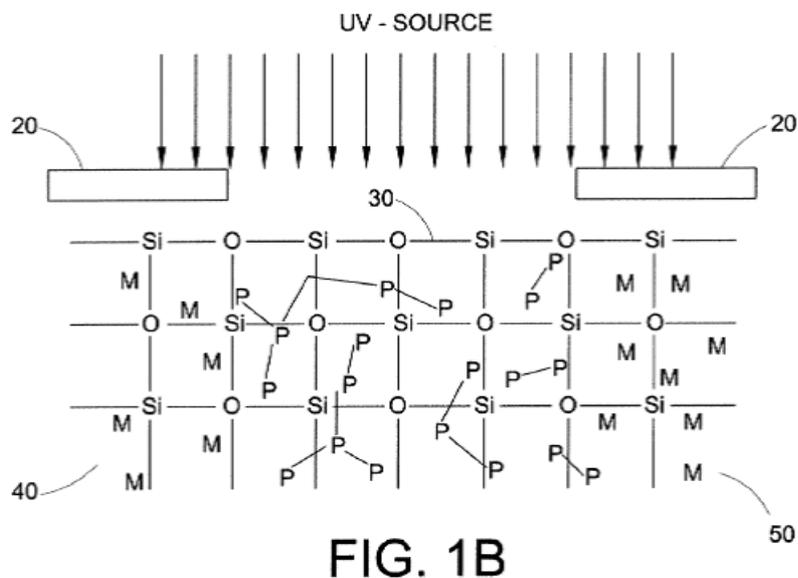
| | |
|--|----------------------------|
| Photosensitive materials with macromolecular compounds as photosensing material in general | G03C 1/733 |
|--|----------------------------|

Special rules of classification within this group

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

e.g. WO2009124231





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)

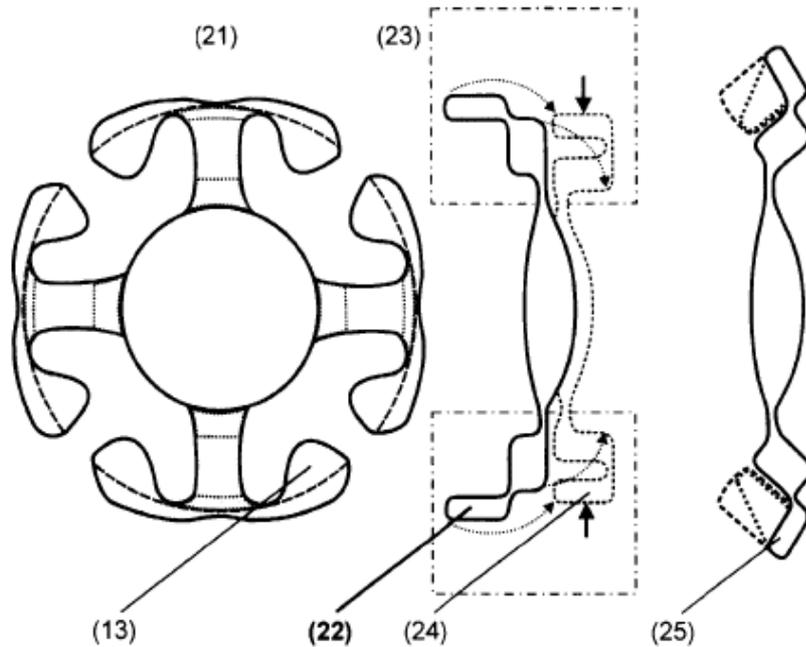
A61F 2/1629

[N: Changing longitudinal position, i.e. along the visual axis when implanted]

Definition statement

This subclass/group 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.



References relevant to classification in this group

This subclass/group does not cover:

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

Special rules of classification within this group

| | |
|---|---|
| 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 |

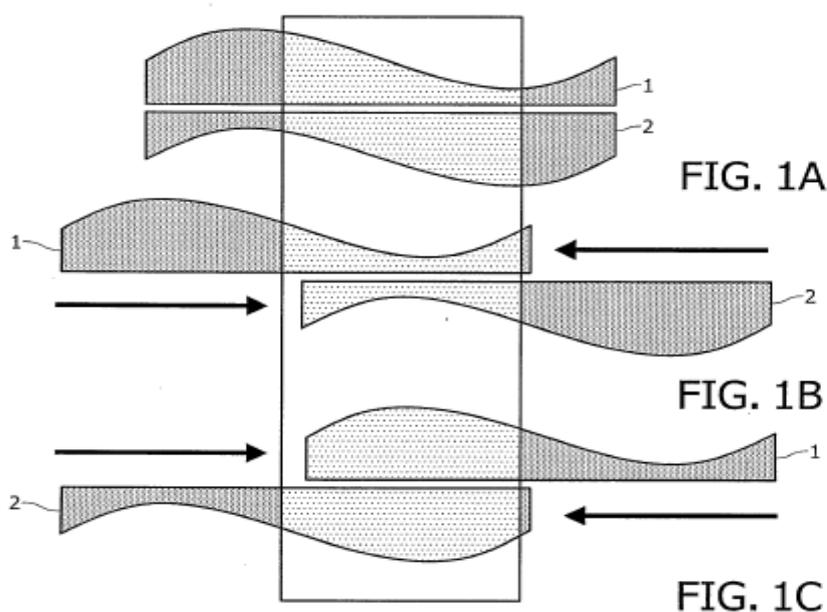
A61F 2/1632

[N: Changing radial position, i.e. perpendicularly to the visual axis when implanted]

Definition statement

This subclass/group 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/NL2015/00153

Special rules of classification within this group

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

A61F 2/1635

[N: Changing shape]

Definition statement

This subclass/group covers:

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

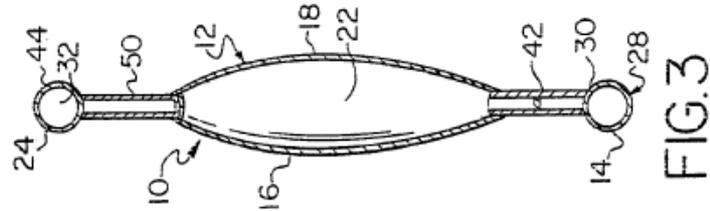


FIG. 3

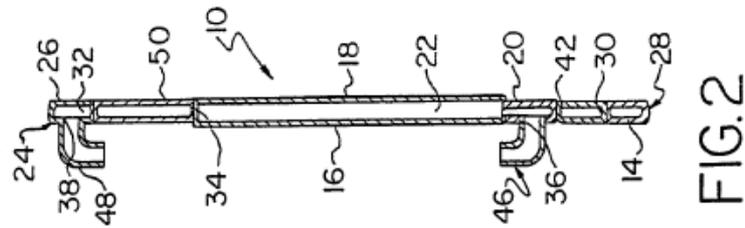


FIG. 2

Special rules of classification within this group

Two media having different optical properties (e.g. refractive index):

K61F210/00N32

A61F 2/1637

[N: Correcting aberrations caused by inhomogeneities of the cornea or the surface of the natural lens, or correcting intrinsic aberrations, e.g. cylindrical, toric and aspheric lenses]

Definition statement

This subclass/group 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 within this group

| | |
|-----------------|--------------------------------|
| Aspheric IOL | A61F 2002/164 |
| Cylindrical IOL | A61F 2002/1643 |

| | |
|-----------------|--------------------------------|
| Toric IOL | A61F 2002/1645 |
| Special surface | A61F 2210/0076 |

A61F 2/1648

[N: Multipart lenses]

Definition statement

This subclass/group covers:

At least two optically active components.

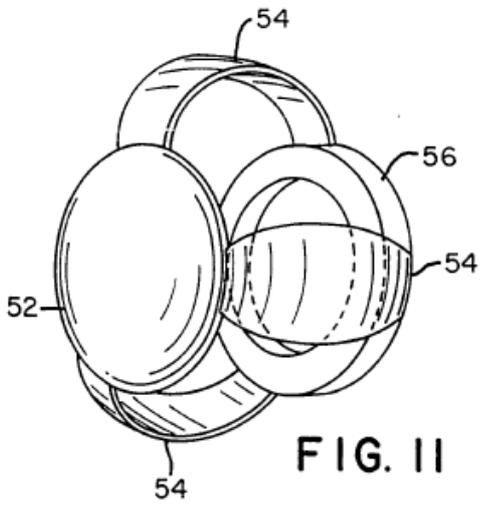


FIG. 11

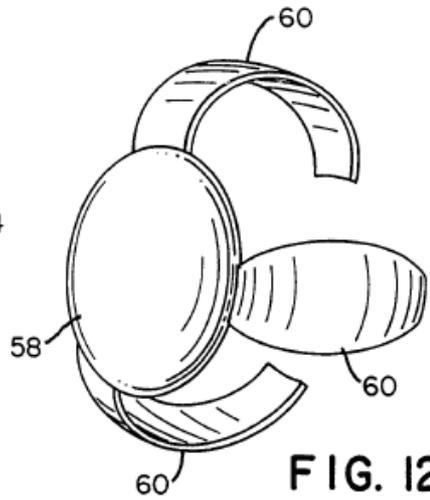


FIG. 12

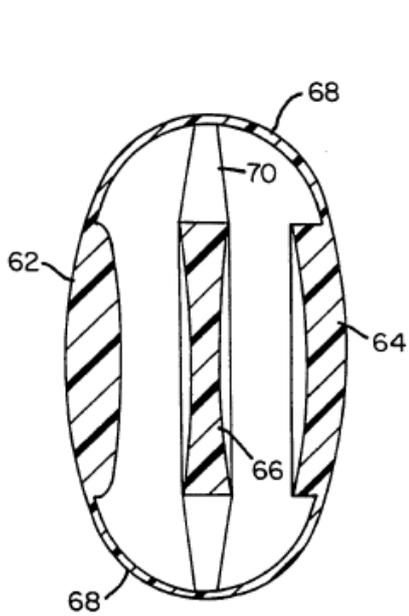


FIG. 14

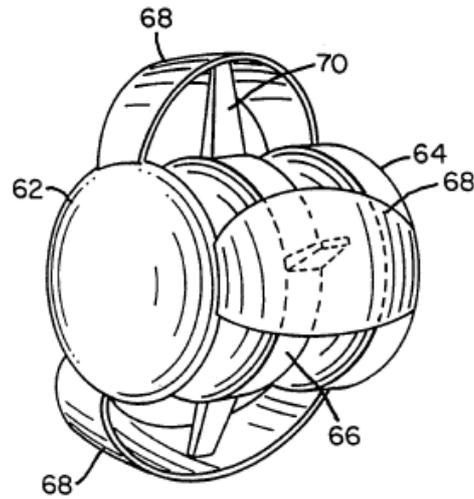


FIG. 13

Relationship between large subject matter areas

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

Special rules of classification within this group

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) : **K61F210/00N32**

A61F 2/1654

[N: Diffractive lenses]

Definition statement

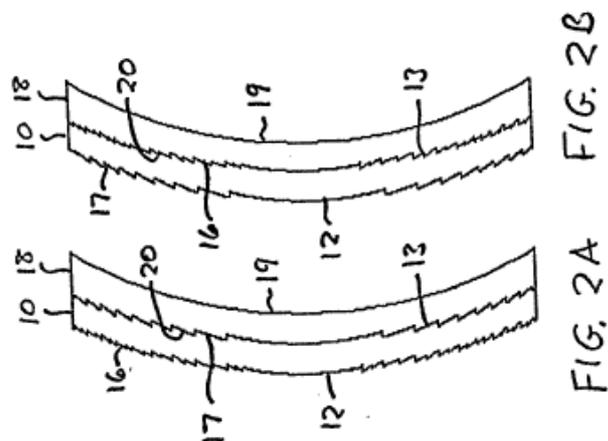
This subclass/group covers:

IOL having at least one diffractive element

WO 2006/023404

PCT/US2005/028848

3/19



Relationship between large subject matter areas

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

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

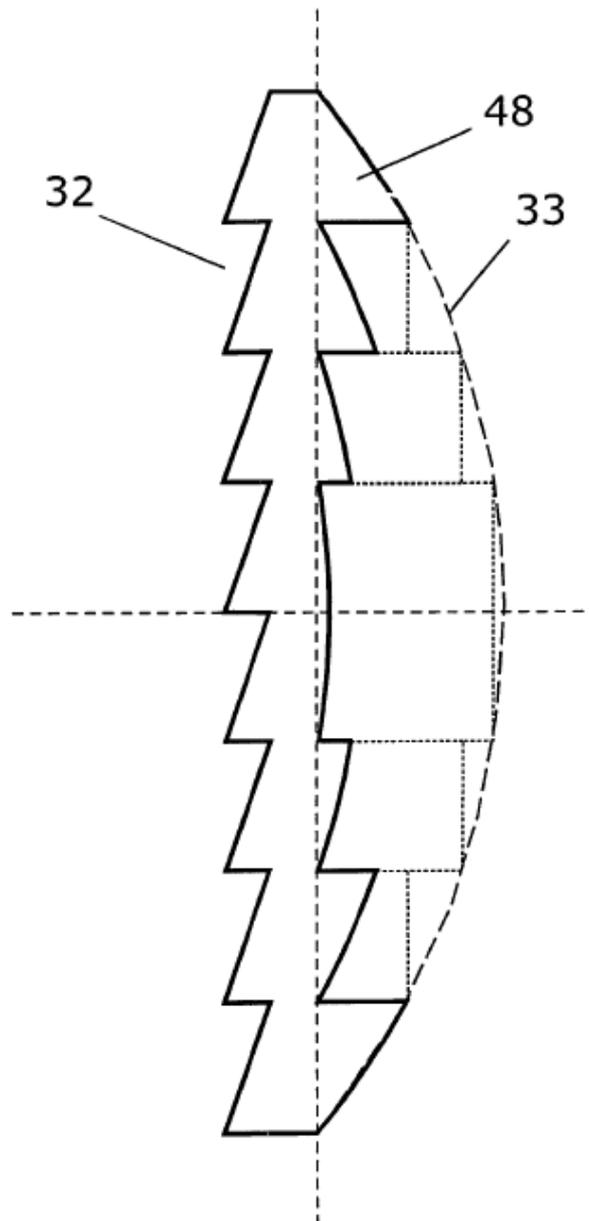
A61F 2/1656

[N: Fresnel lenses, prisms and plates]

Definition statement

This subclass/group 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.



A61F 2/1659

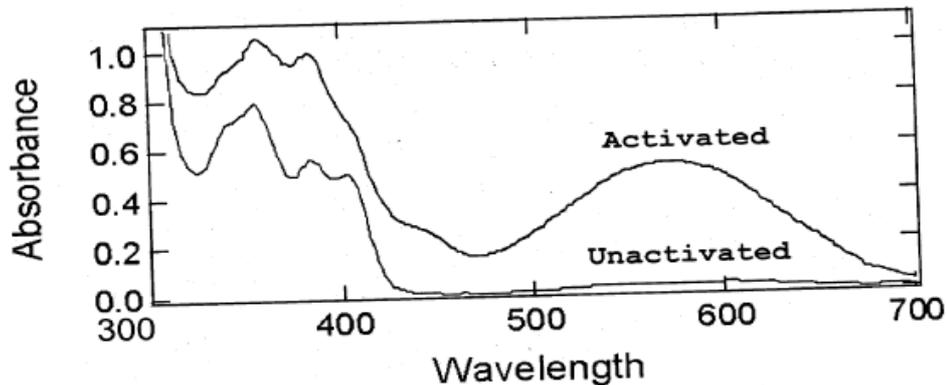
[N: Having variable absorption coefficient for electromagnetic radiation, e.g. photochromic lenses]

Definition statement

This subclass/group 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 within this group

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

A61F 2/1662

[N: Instruments for inserting intraocular lenses into the eye]

Definition statement

This subclass/group covers:

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

Relationship between large subject matter areas

Instruments for inserting mechanical ocular implants : [A61F 2/143](#)

[A61F 2/146](#), [A61F 2/148](#)

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

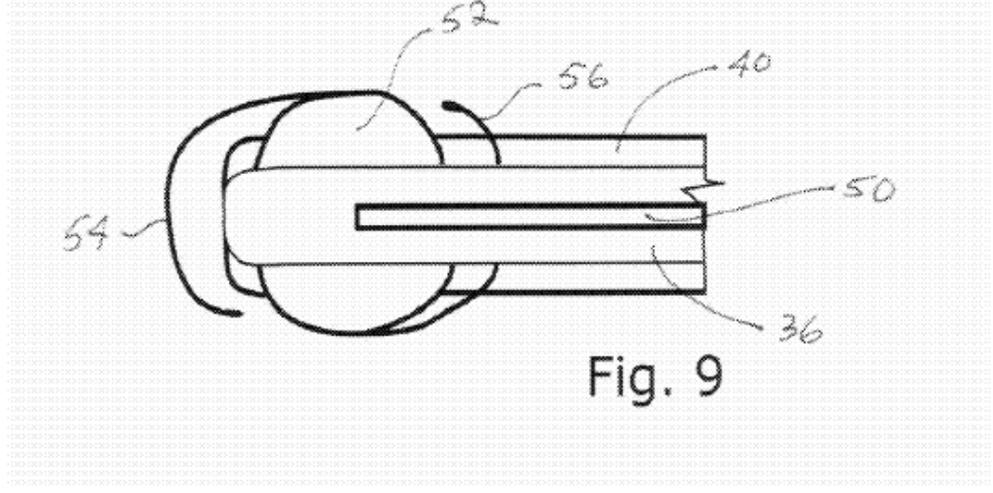
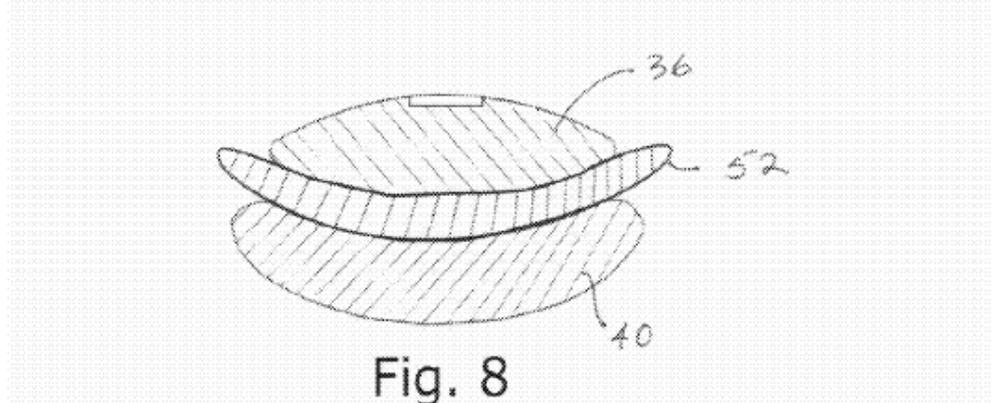
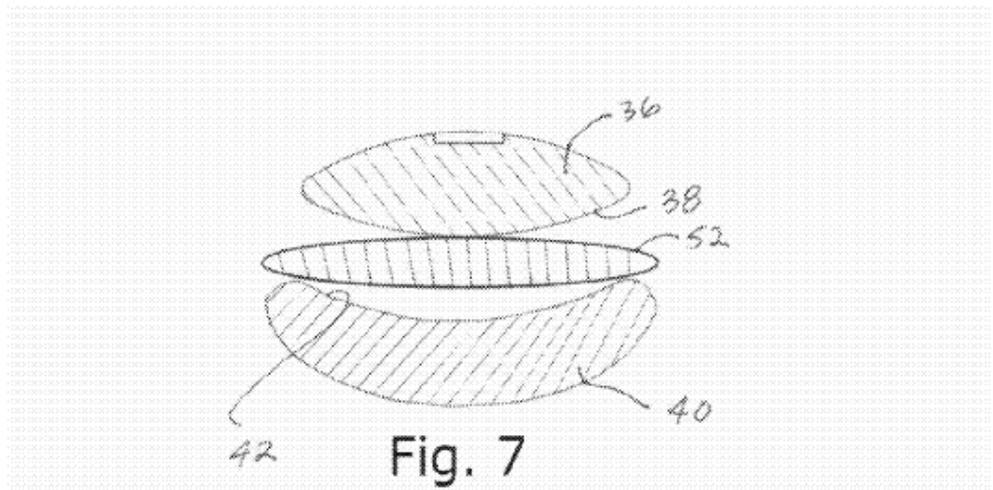
A61F 2/1664

[N: for deformable lenses]

Definition statement

This subclass/group covers:

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



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

A61F 2/1667

[N: Having rotatable plunger]

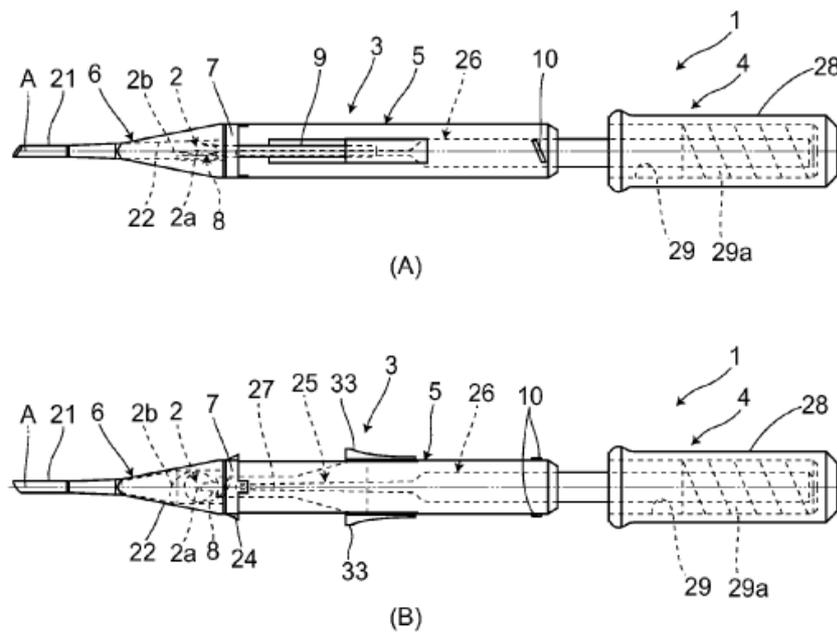
Definition statement

This subclass/group covers:

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

EP 1 972 306 A1

FIG.1



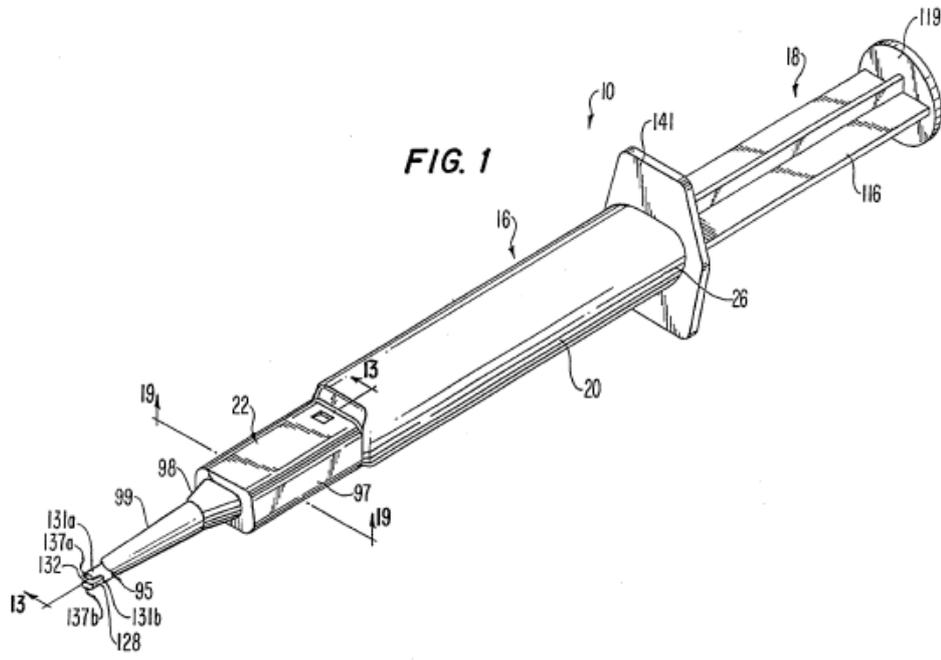
A61F 2/167

[N: Having pushable plunger]

Definition statement

This subclass/group covers:

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



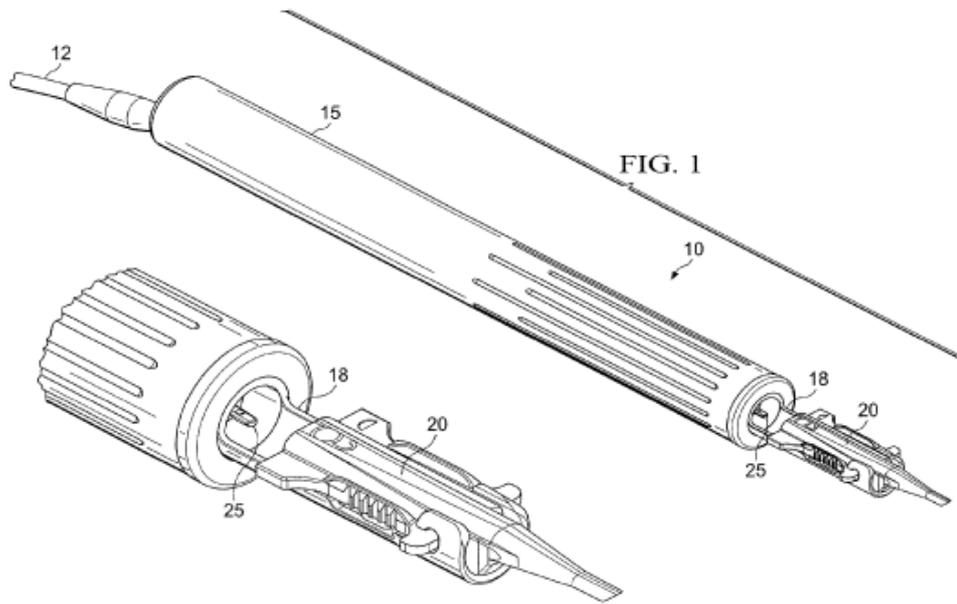
A61F 2/1672

[N: Having a two-stage plunger, e.g. rotatable and pushable or rotatable at different speeds]

Definition statement

This subclass/group 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



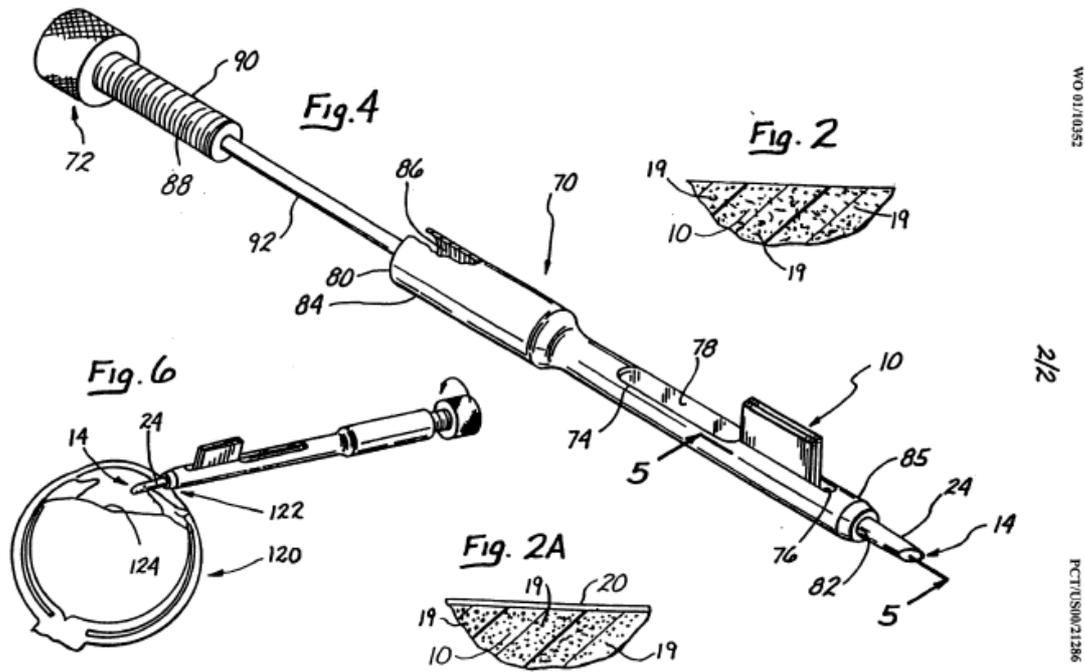
A61F 2/1675

[N: Having a lubricated inner surface, e.g. the lubricant being coated on the inner surface or being injected through a port]

Definition statement

This subclass/group 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



WO 01/0352

2/2

PCT/US01/2186

A61F 2/1678

[N: Having a separate cartridge or other lens setting part for storage of a lens, e.g. pre-loadable for shipping]

Definition statement

This subclass/group 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.

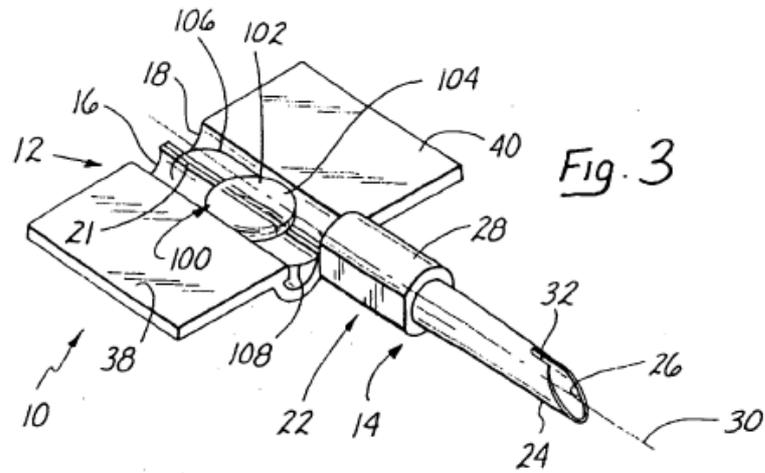


Fig. 3

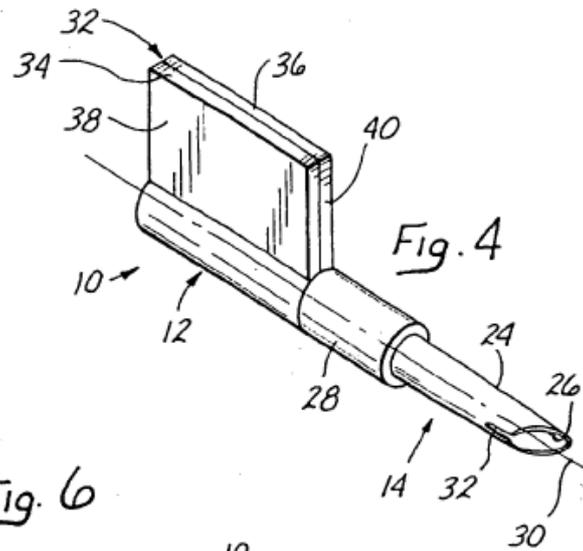


Fig. 4

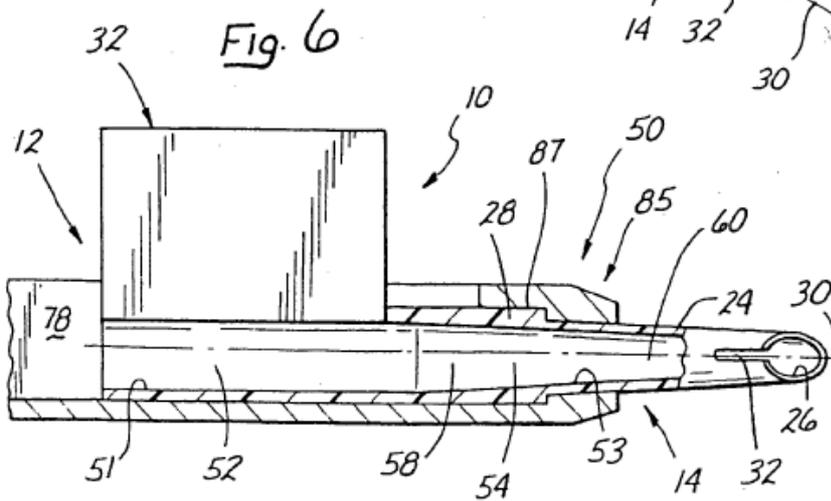


Fig. 6

Relationship between large subject matter areas

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

A61F 2/1691

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

Definition statement

This subclass/group 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

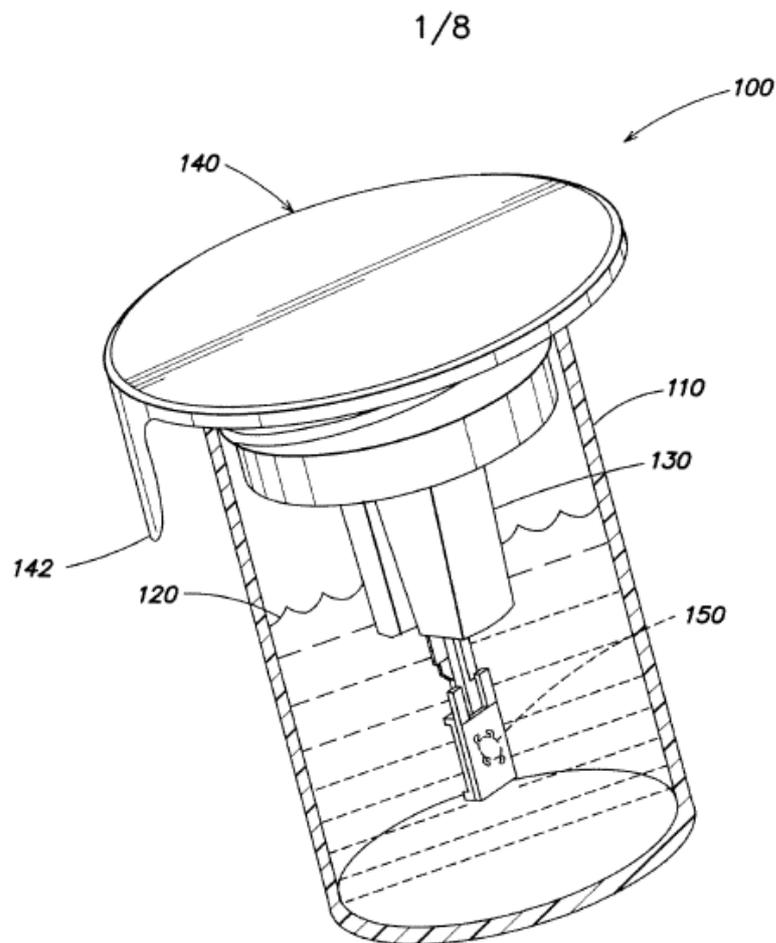


FIG. 1

Relationship between large subject matter areas

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

References relevant to classification in this group

This subclass/group does not cover:

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

A61F 2/1694

[N: Capsular bag spreaders therefor]

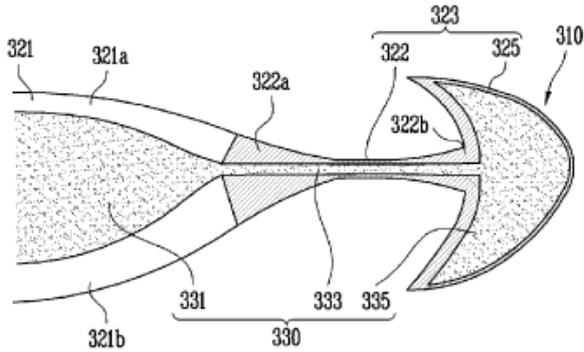
Special rules of classification within this group

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

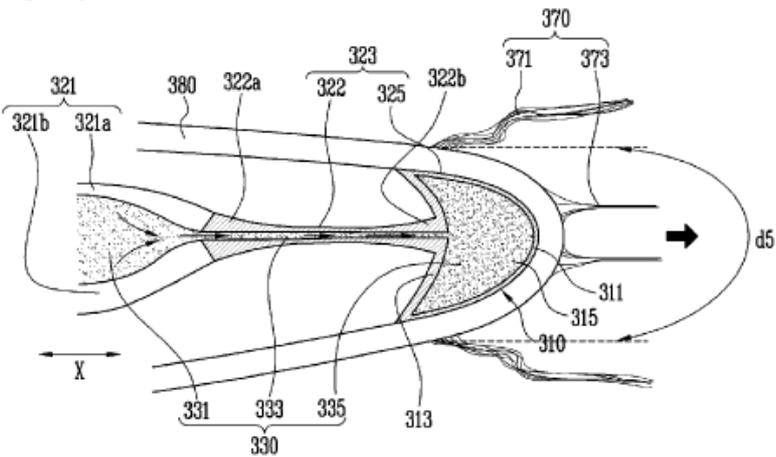
Illustrative example of subject matter classified in [A61F 2/1694](#).

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

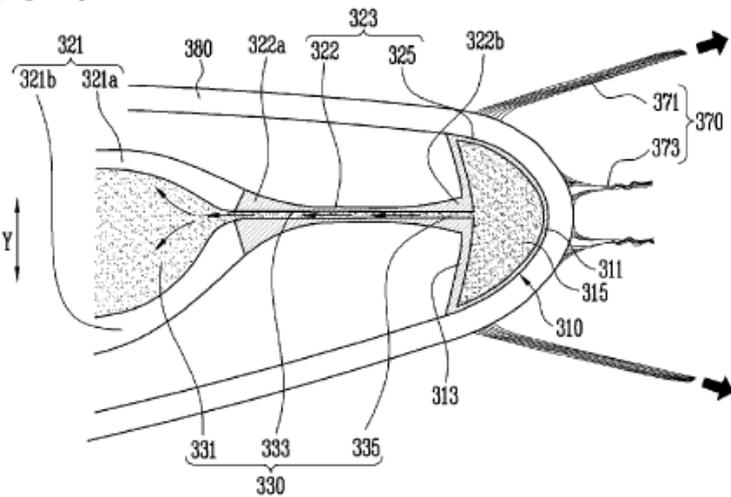
[Fig. 12]



[Fig. 13]



[Fig. 14]



A61F 2/18

Internal ear or nose parts, e.g. ear-drums [N: (implants for middle ear ventilation or drainage [A61F 11/002](#))]

Special rules of classification within this group

| | |
|---|-----------------------------|
| Implants for middle ear ventilation or drainage | A61F 11/002 |
| Cochlear electrodes | A61N 1/0541 |

A61F 2/186

Nose parts

Special rules of classification within this group

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

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

Special rules of classification within this group

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

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

A61F 2/24

Heart valves; [N: 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]

Definition statement

This subclass/group 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 relevant to classification in this group

This subclass/group does not cover:

| | |
|---|---|
| Plugging a cardiac septal defect; Dividing the heart volume into a passive and an active section, e.g. umbrella shaped | A61B 17/0057 |
| Esophageal valves | A61F 2/04 and A61F 2002/044 |
| Motor for/with heart valve | A61M 1/127 |
| Valvuloplasty | A61B 2017/00783 |
| Apical access devices/heart ports | A61B 2017/3425 |

Special rules of classification within this group

Lung/bronchial valves: [A61F 2002/043](#)

A61F 2/2403

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

References relevant to classification in this group

This subclass/group does not cover:

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

A61F 2/2409

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

Definition statement

This subclass/group covers:

Sewing rings

References relevant to classification in this group

This subclass/group does not cover:

This group does not cover

| | |
|--------------------|-----------------------------|
| Annuloplasty rings | A61F 2/2442 |
|--------------------|-----------------------------|

A61F 2/2412

[N: 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 relevant to classification in this group

This subclass/group does not cover:

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

Special rules of classification within this group

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

[N: Manufacturing methods]

Definition statement

This subclass/group covers:

In particular cutting and forming of the prosthetic valve leaflets.

References relevant to classification in this group

This subclass/group does not cover:

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

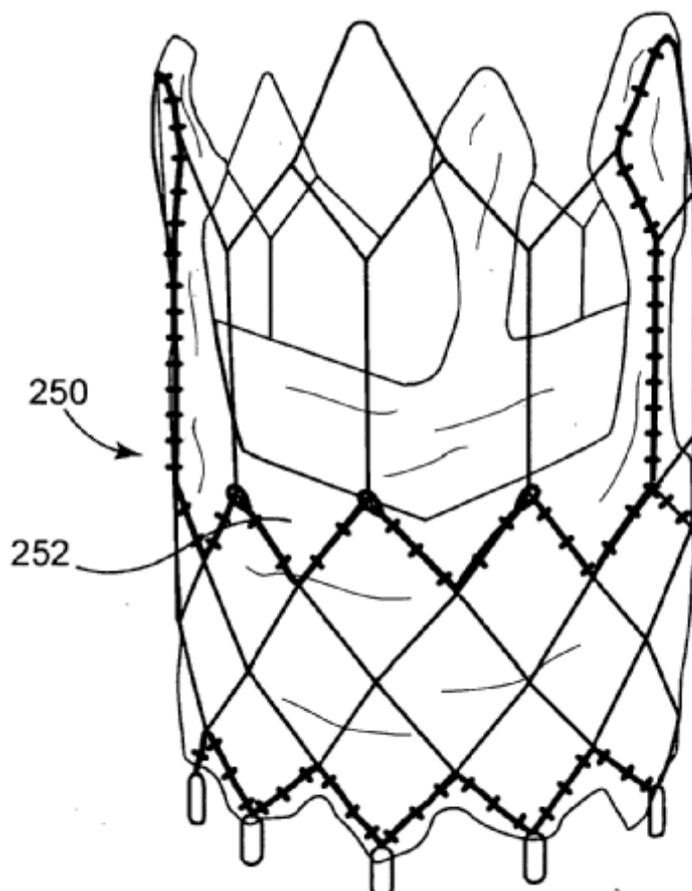
A61F 2/2418

[N: Scaffolds therefor, e.g. support stents]

Definition statement

This subclass/group covers:

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



WO2009094188 A2

References relevant to classification in this group

This subclass/group does not cover:

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

Special rules of classification within this group

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

[N: Devices for manipulating or deploying heart valves during implantation]

References relevant to classification in this group

This subclass/group does not cover:

| | |
|---|-----------------------------|
| 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 |
|---|-----------------------------|

Special rules of classification within this group

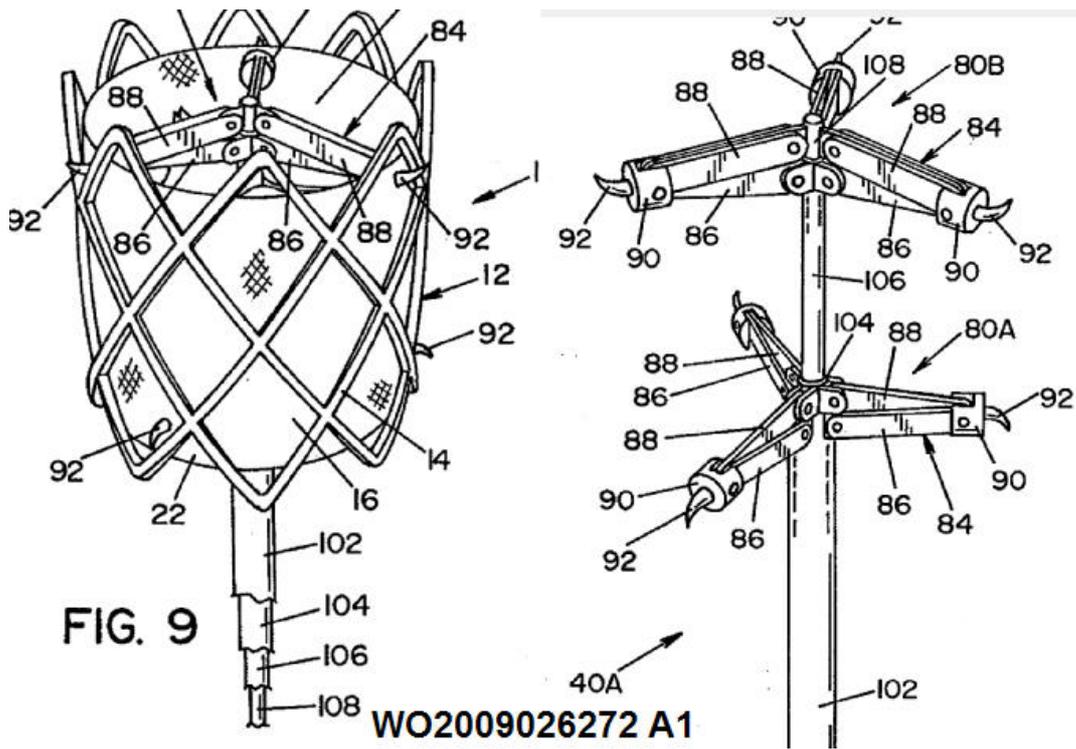
| | |
|---------------------------------|--------------------------------|
| Handle mechanisms | A61F 2002/9517 |
| Heart valve crimping mechanisms | A61F 2002/9522 |

A61F 2/243

[N: Deployment by mechanical expansion]

Special rules of classification within this group

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



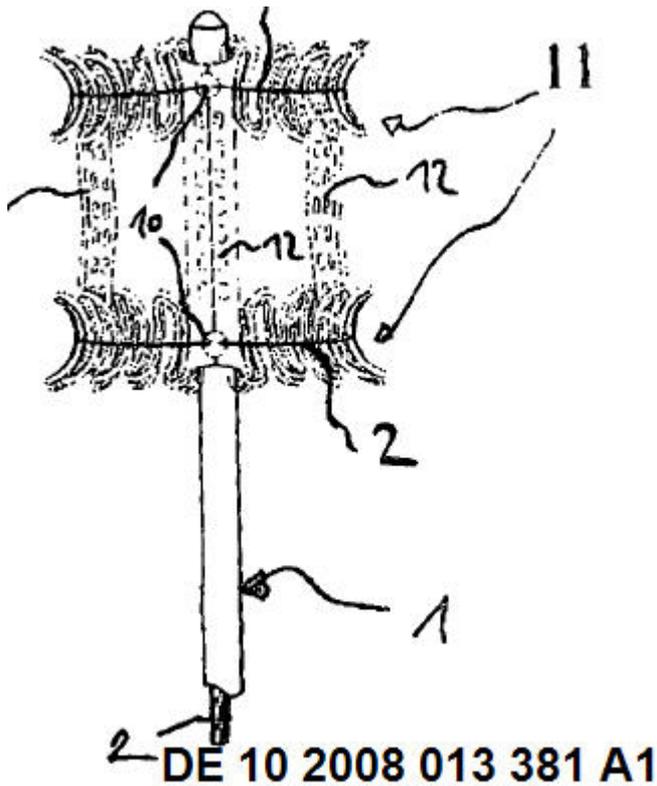
If an additional retractable sheath is mentioned also a code (additional information) is given [A61F 2/2436](#).

A61F 2/2439

[N: Expansion controlled by filaments]

Special rules of classification within this group

Illustrative example of subject matter classified in [A61F 2/2439](#)



A61F 2/2442

[N: Annuloplasty rings or inserts for correcting the valve shape; Implants for improving the function of a native heart valve]

References relevant to classification in this group

This subclass/group 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 |

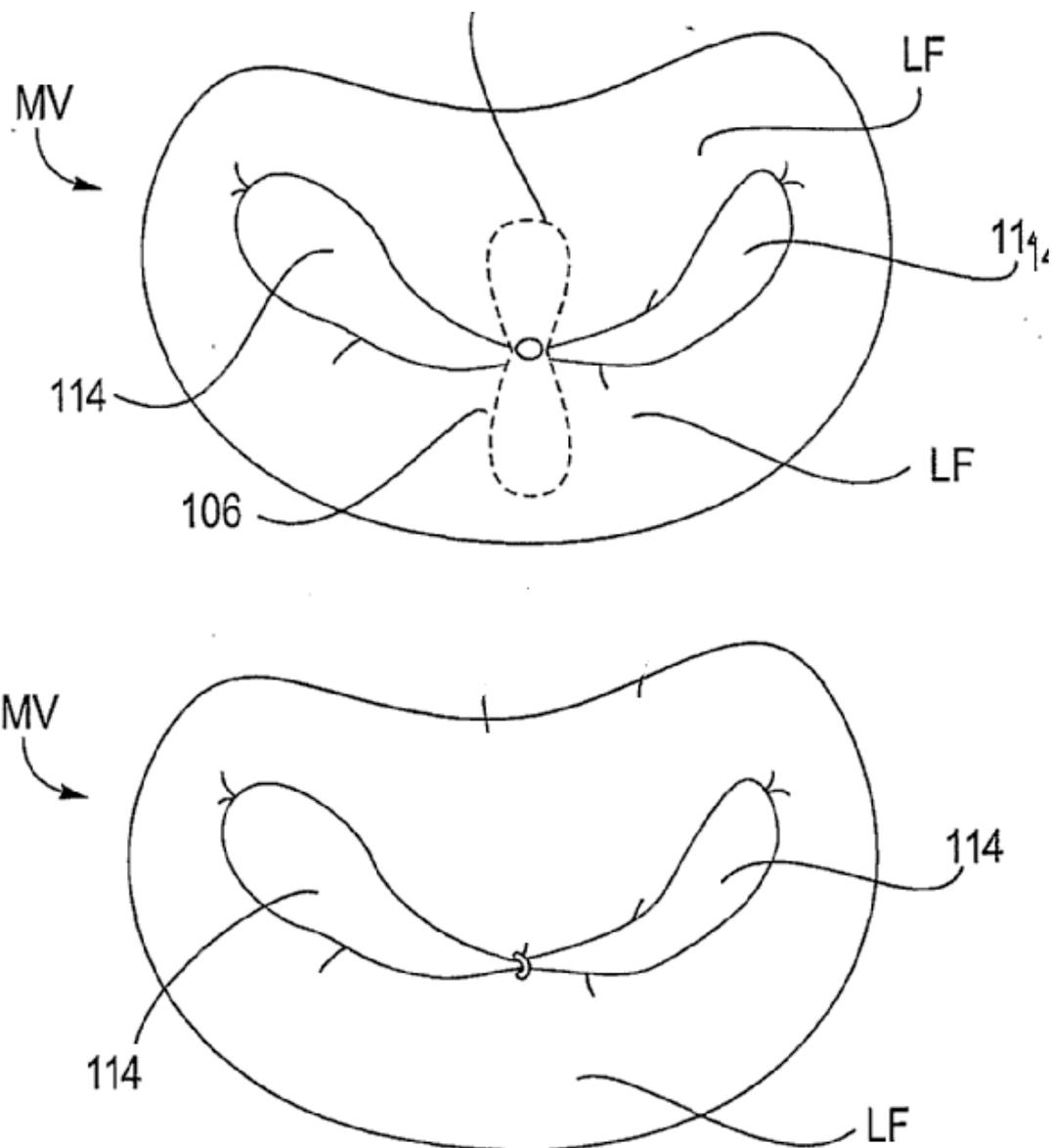
Informative references

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

| | |
|----------------------------------|------------------------------|
| Plugging a cardiac septal defect | A61B 17/0057 |
|----------------------------------|------------------------------|

Special rules of classification within this group

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



WO03001893 A2

A61F 2/2445

[N: Annuloplasty rings in direct contact with the valve annulus]

Special rules of classification within this group

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

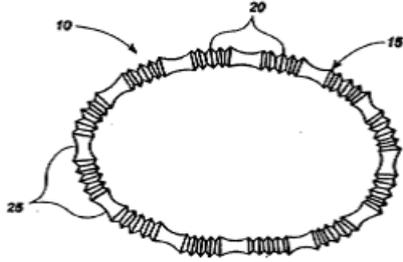


Fig. 1

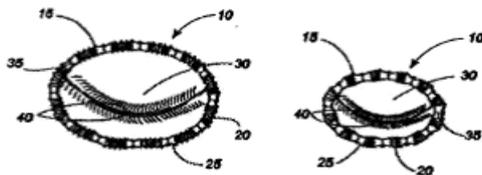


Fig. 2

Fig. 3

Springs for tensioning or expanding the annulus:

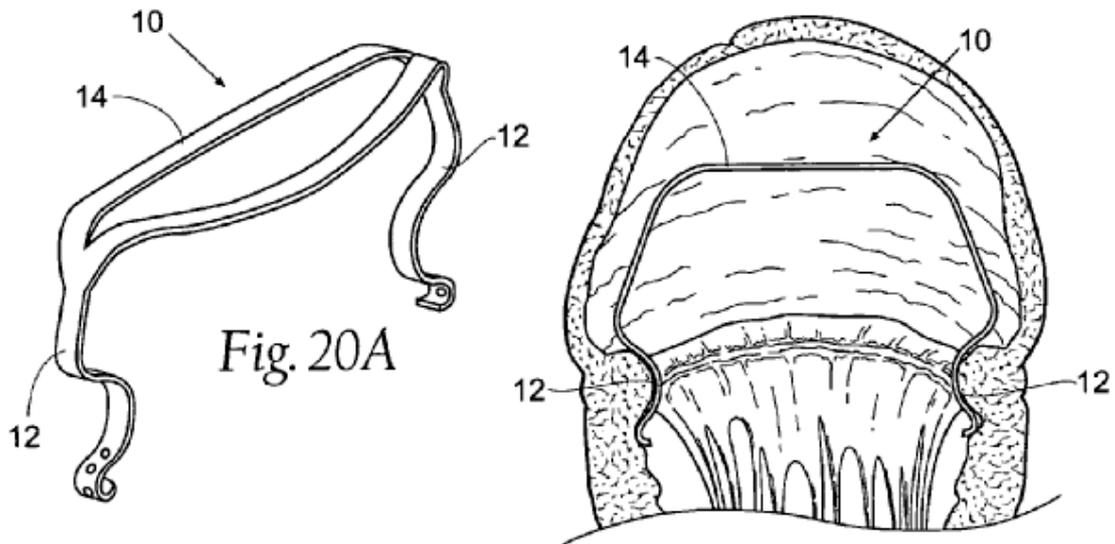


Fig. 20A

US2004127982 A1

A61F 2/2451

[N: Inserts in the coronary sinus for correcting the valve shape]

Definition statement

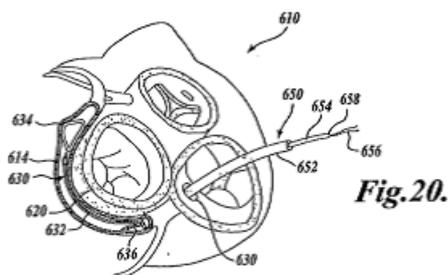
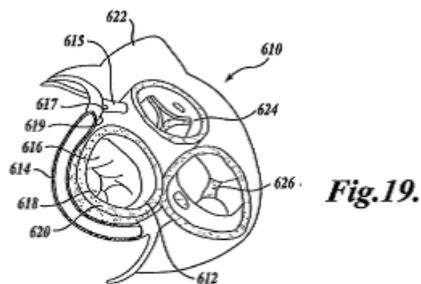
This subclass/group covers:

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

WO 03/094801

PCT/US03/14007

16/24

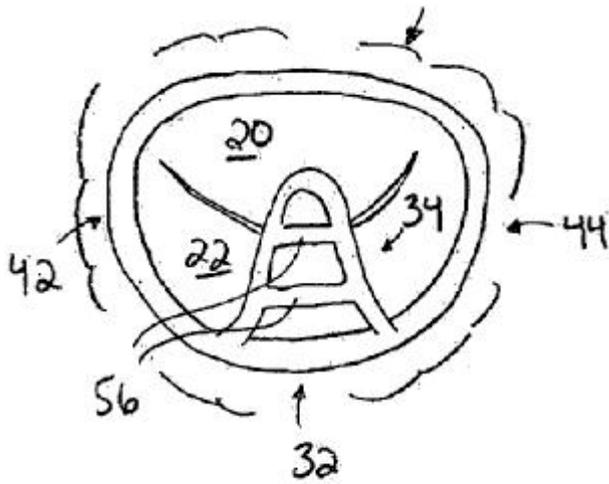


A61F 2/2454

[N: Means for preventing inversion of the valve leaflets, e.g. chordae tendineae prostheses]

Special rules of classification within this group

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



US2009132036 A1

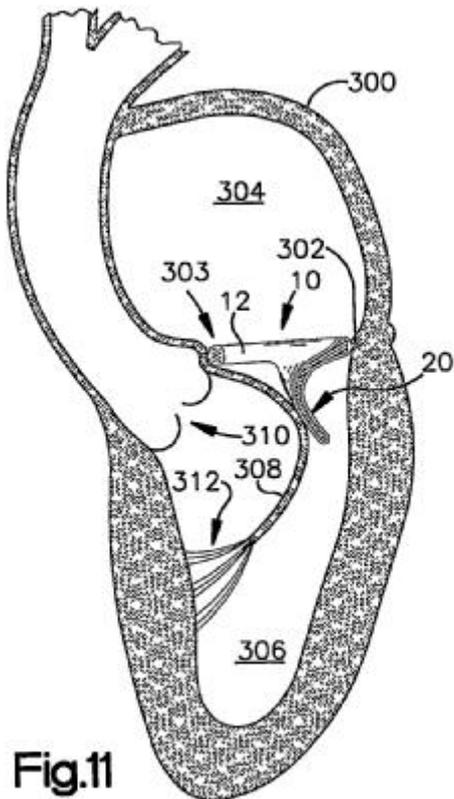


Fig.11

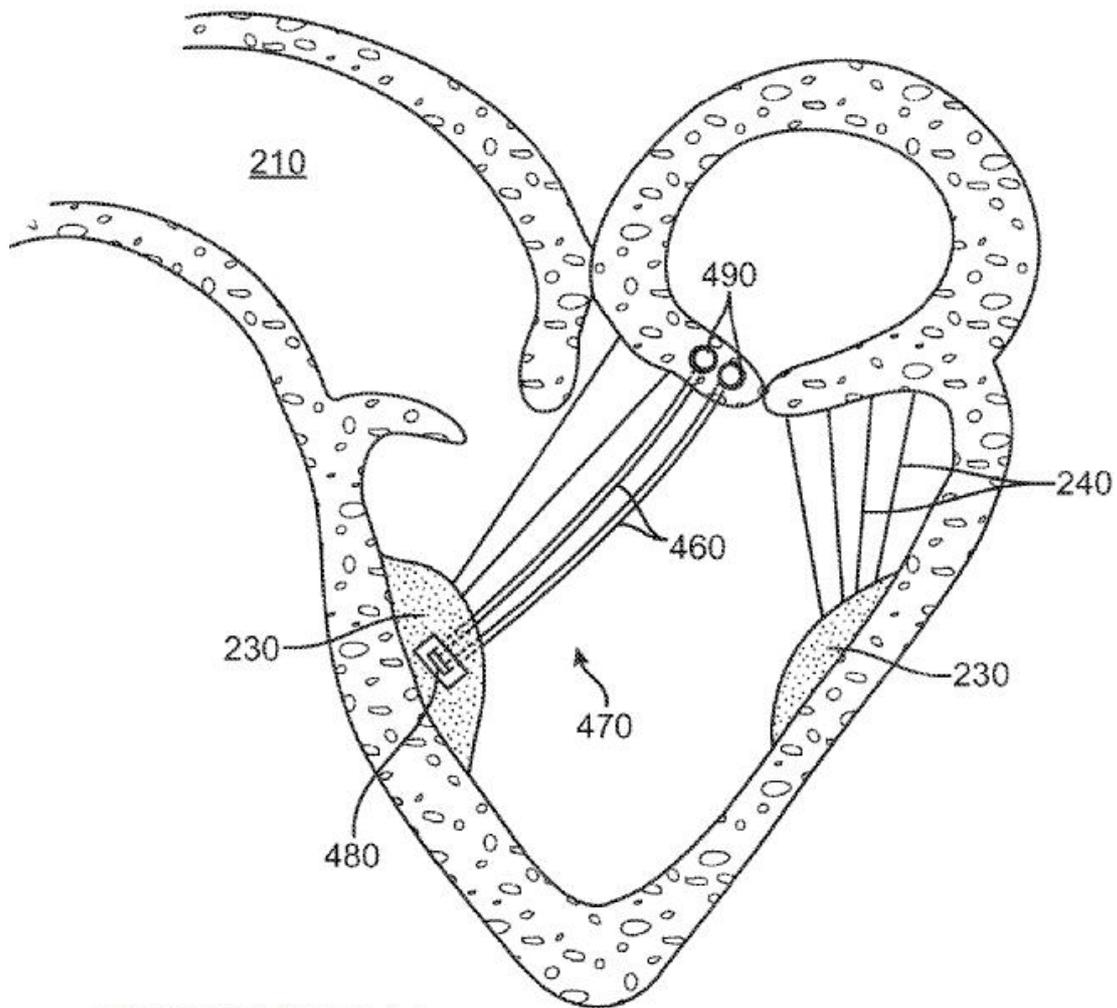
WO2004014258 A

A61F 2/2457

[N: Chordae tendineae prostheses]

Special rules of classification within this group

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

[N: Devices for obstructing a leak through a native valve in a closed condition]

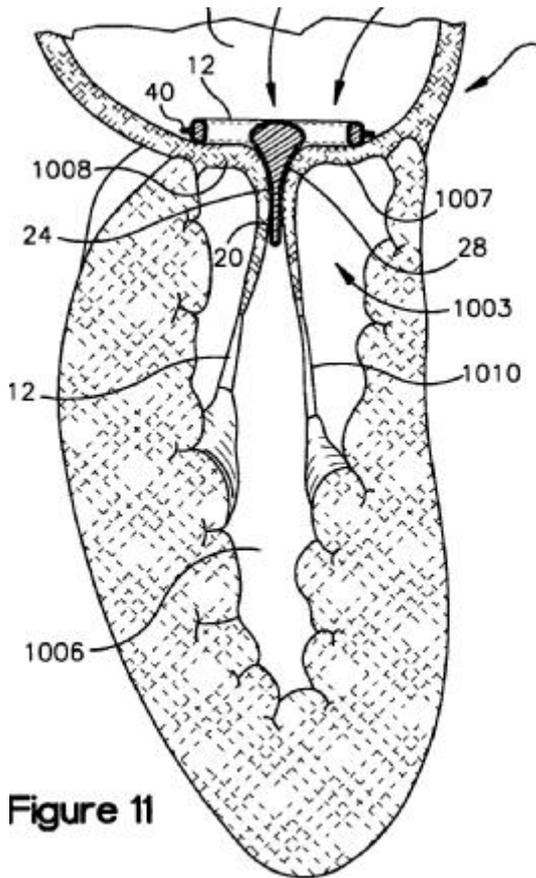
References relevant to classification in this group

This subclass/group does not cover:

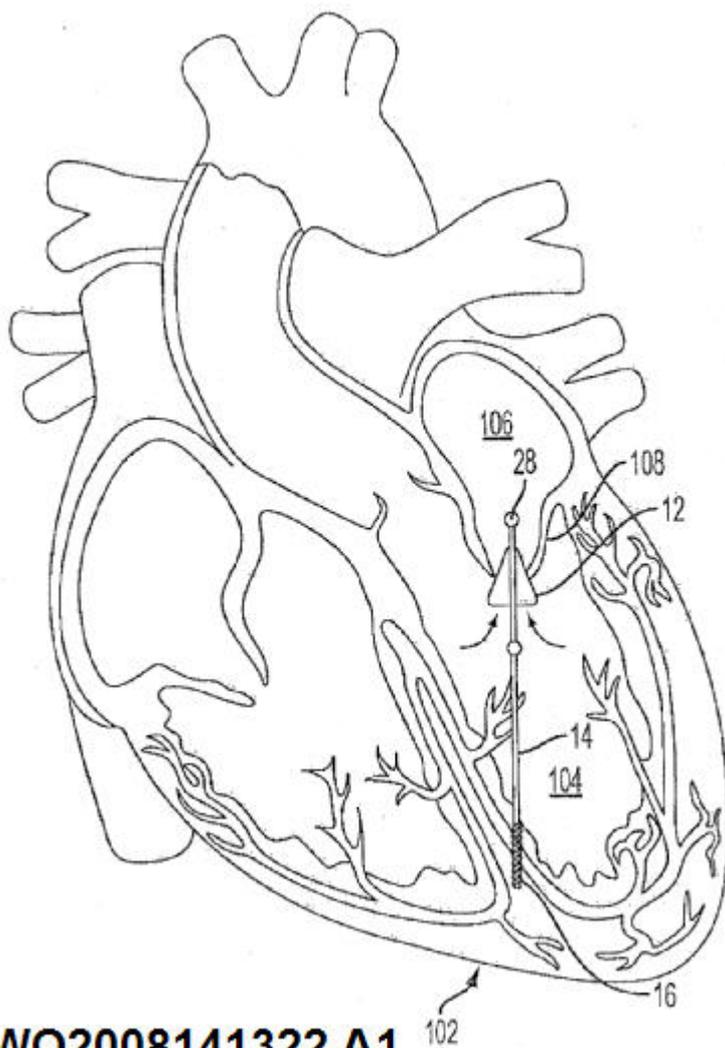
| | |
|--------------|-------------------------------|
| Plugs per se | A61B 17/12022 |
|--------------|-------------------------------|

Special rules of classification within this group

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



US2005038508 A1



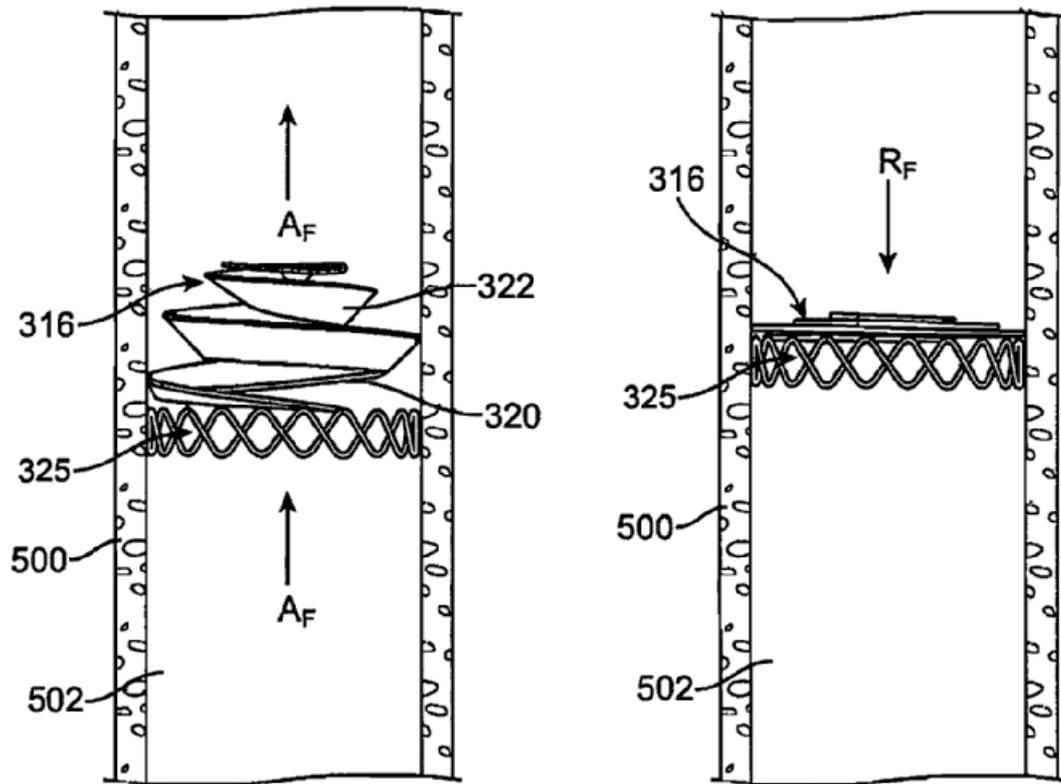
WO2008141322 A1

A61F 2/2463

[N: Implants forming part of the valve leaflets]

Special rules of classification within this group

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



WO2011059863 A1

A61F 2/2472

[N: Devices for testing]

Definition statement

This subclass/group covers:

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

A61F 2/2475

[N: Venous valves]

Definition statement

This subclass/group covers:

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

Special rules of classification within this group

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](#)

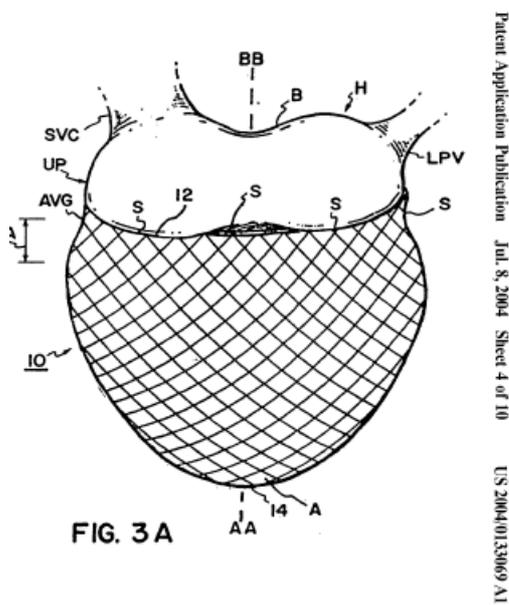
A61F 2/2481

[N: Devices outside the heart wall, e.g. bags, strips or bands]

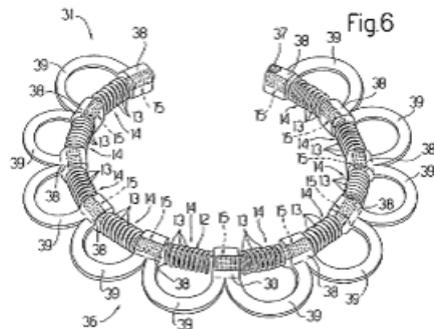
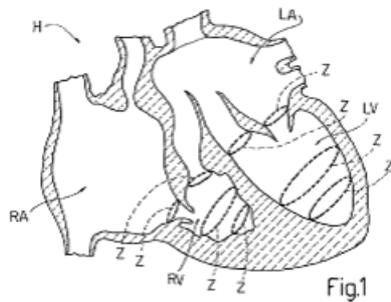
Definition statement

This subclass/group covers:

Bags outside the heart wall:



Heart splints:



References relevant to classification in this group

This subclass/group does not cover:

| | |
|--|-----------------------------|
| Active ventricular assist devices, i.e. heartbags with motor | A61M 1/1068 |
|--|-----------------------------|

Special rules of classification within this group

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

[N: Devices within the heart chamber, e.g. splints]

Definition statement

This subclass/group covers:

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

References relevant to classification in this group

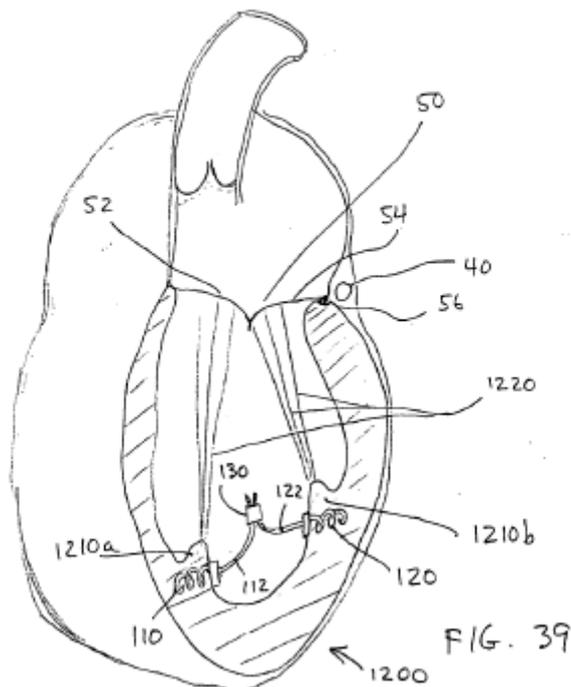
This subclass/group does not cover:

| | |
|---|---|
| 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 within this group

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

[N: Transmyocardial revascularisation [TMR] devices]

Definition statement

This subclass/group covers:

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

References relevant to classification in this group

This subclass/group does not cover:

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

A61F 2/2496

[N: Devices for determining the dimensions of the prosthetic valve to be implanted, e.g. templates, sizers]

Definition statement

This subclass/group covers:

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

Informative references

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

| | |
|------------------|----------------------------|
| Measuring per se | A61B 5/107 |
|------------------|----------------------------|

A61F 2/26

Penis implants

References relevant to classification in this group

This subclass/group does not cover:

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

Special rules of classification within this group

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

A61F 2/28

Bones ([N: [A61F 2/42](#) takes precedence]; joints [A61F 2/30](#); [N: means for introducing bone substitute or for implanting bone graft implants [A61F 2/4601](#); devices for grinding or milling bone material [A61F 2/4644](#)])

Definition statement

This subclass/group covers:

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

Relationship between large subject matter areas

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.

[A61F 2/28](#) contains implants for replacement of bones or parts of bones.

References relevant to classification in this group

This subclass/group does not cover:

| | |
|--|-----------------------------|
| Hand or foot | A61F 2/42 |
| Tarsal bones | A61F 2/4202 |
| Carpal bones | A61F 2/4261 |
| Vertebrae | A61F 2/44 |
| Anatomical models for scientific, medical or mathematical purposes | G09B 23/30 |

Informative references

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

| | |
|---|-----------------------------|
| Joints | A61F 2/30 |
| Means for introducing bone substitute or for implanting bone graft implants | A61F 2/4601 |

| | |
|---|-----------------------------|
| Devices for grinding or milling bone material | A61F 2/4644 |
|---|-----------------------------|

Special rules of classification within this group

Additional information is classified under [A61F 2/28](#) and [A61F 2/30](#) - [A61F 2002/48](#) and [A61F 2310/00](#). Any additional information which may be useful for search must be completely classified.

A61F 2/2803

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

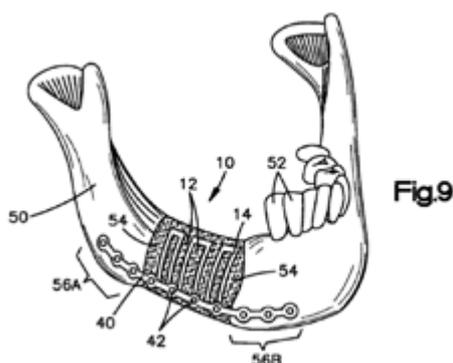
Informative references

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

| | |
|---|------------------------------|
| Bone plates for the jaw | A61B 17/8071 |
| Periodontal bone regeneration for consolidating natural teeth | A61C8/00A1 |
| Skull or cranium | A61F 2/2875 |
| Temporo-mandibular joints | A61F 2/3099 |

Special rules of classification within this group

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



A61F 2/2814

[N: Bone stump caps]

Relationship between large subject matter areas

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

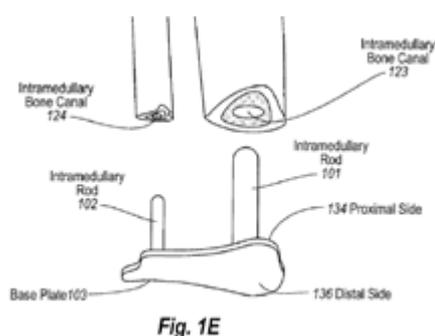
Informative references

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 within this group

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



A61 F2/28H

[N: 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](#))]

Informative references

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

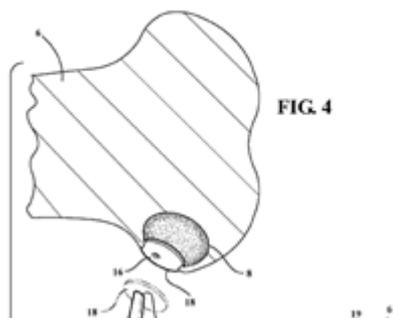
| | |
|---------------------------------------|------------------------------|
| Bone plates | A61B 17/80 |
| Bone regeneration in dental surgery | A61C 8/0006 |
| Nets or sleeves applied to surface of | A61F 2/30907 |

| | |
|----------------|--|
| endoprostheses | |
|----------------|--|

Special rules of classification within this group

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

Patent Application Publication Dec. 16, 2010 Sheet 3 of 3 US 2010/0318991 A1



A61F 2/2857

[N: for cadavers (devices for autopsy [A61B 16/00](#))]

Informative references

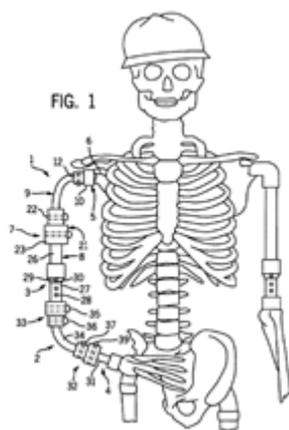
Attention is drawn to the following places, which may be of interest for search:

| | |
|---------------------|----------------------------|
| Devices for autopsy | A61B 16/00 |
|---------------------|----------------------------|

Special rules of classification within this group

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

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



A61F 2/2875

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

References relevant to classification in this group

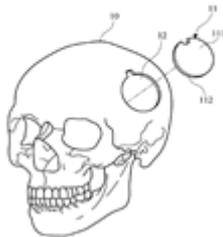
This subclass/group does not cover:

| | |
|-------------------------------|-----------------------------|
| For mandibular reconstruction | A61F 2/2803 |
| Temporo-mandibular joints | A61F 2/3099 |

Special rules of classification within this group

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

Patent Application Publication Jul 3, 2009 Sheet 1 of 07 US 2009/048875 A1



A61F 2/30

Joints

Definition statement

This subclass/group covers:

Prosthetic joints, i.e. implants for replacing joints or parts of joints. The classes [A61F 2/30](#) to [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 endoprosthesis

Special articulating or bone contacting surfaces

Relationship between large subject matter areas

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 within this group

Additional information is classified under [A61F 2/30](#) - [A61F 2002/48](#). 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 2002/48](#)).

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

Additional information concerning cartilage endoprosthesis 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 endoprosthesis 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: **K61F2/08B**

A61F 2/30723

[N: Plugs or restrictors for sealing a cement-receiving space (tools for inserting plugs [A61F 2/4614](#); sealing collars for use during cementing **A61F2/46C2A)]**

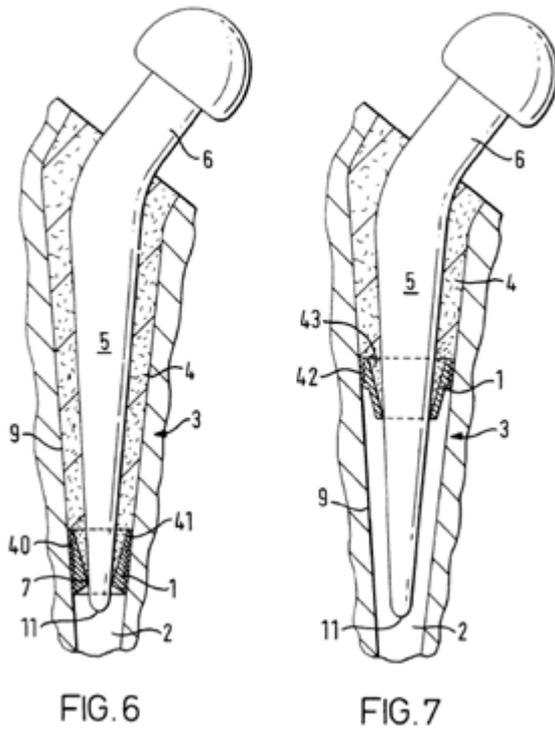
Informative references

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 | A61F2/46C2A |

Special rules of classification within this group

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



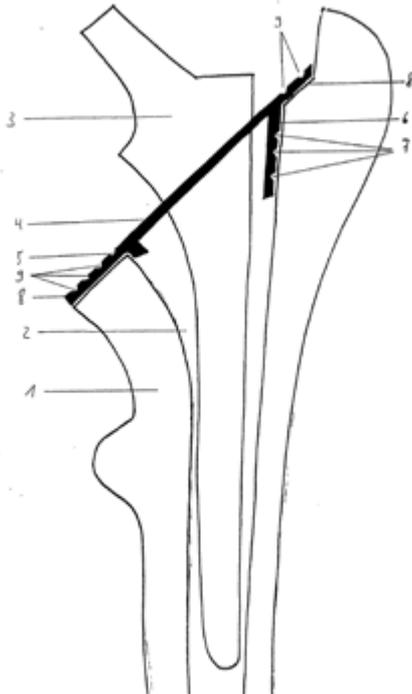
A61 F2/30B2

[N: Spacers for centering an implant in a bone cavity, e.g. in a cement-receiving cavity]

Special rules of classification within this group

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

ABBILDUNG I



A61F 2/30728

[N: Collars; Bone edge protectors ([A61F 2/30734](#) takes precedence; sealing collars for use during cementing [A61F2/46C2A](#))]

References relevant to classification in this subclass/group

This subclass/group does not cover:

| | |
|--------------------------------------|------------------------------|
| Modular inserts, sleeves or augments | A61F 2/30734 |
|--------------------------------------|------------------------------|

Informative references

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

| | |
|--|-----------------------------|
| Sealing collars for use during cementing | A61F2/46C2A |
|--|-----------------------------|

Special rules of classification within this group

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

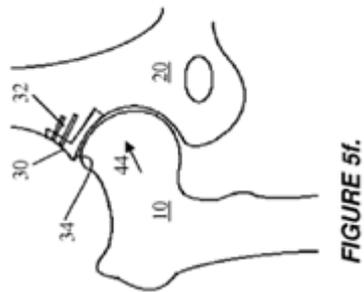


FIGURE 5I.

U.S. Patent Sep. 13, 1988 Sheet 1 of 2 4,770,660

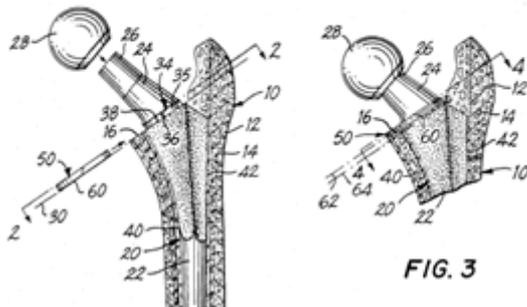


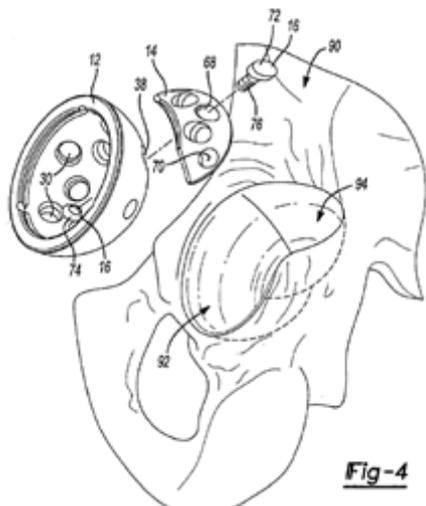
FIG. 3

A61F 2/30734

[N: 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 within this group

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



A61F 2/30739

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

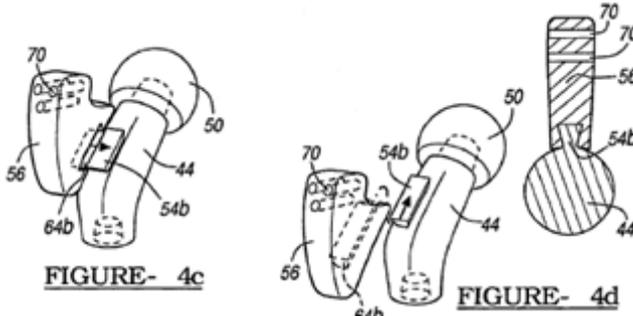
Informative references

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

| | |
|---|----------------------------|
| Proximal parts of endoprosthesis femoral shafts | A61F 2/367 |
| Non-prosthetic trochanteric devices | A61F2/74 |

Special rules of classification within this group

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



A61 F2/30B8

[N: Bellows or hose-like seals; Sealing membranes (**A61F2/46C2A** takes precedence; sealing membranes for retaining bone substitute [A61F 2/2846](#))]

References relevant to classification in this group

This subclass/group does not cover:

| | |
|--|--------------------|
| Tool for implantation with bone cement and with sealing collar for bone cavity | A61F2/46C2A |
|--|--------------------|

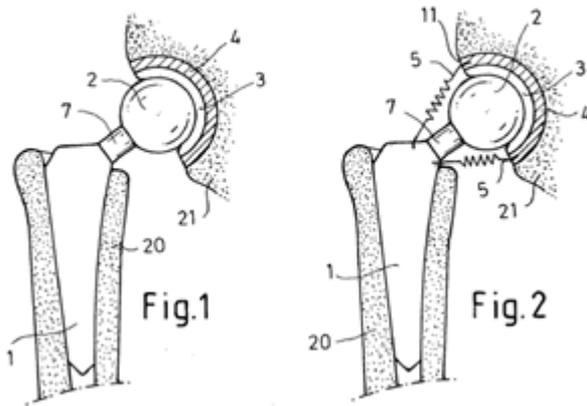
Informative references

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 within this group

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

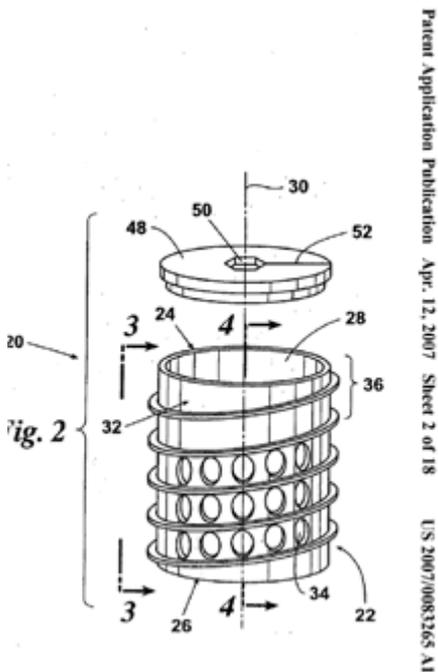


A61F 2/30744

[N: End caps, e.g. for closing an endoprosthesis cavity]

Special rules of classification within this group

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



A61F 2/30749

[N: Fixation appliances for connecting prostheses to the body]

Informative references

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

| | |
|--------------------------|------------------------------|
| Cartilage endoprostheses | A61F 2/30756 |
|--------------------------|------------------------------|

A61 F2/30C

[N: Cartilage endoprostheses ([A61F 2/3603](#) takes precedence)]

References relevant to classification in this group

This subclass/group does not cover:

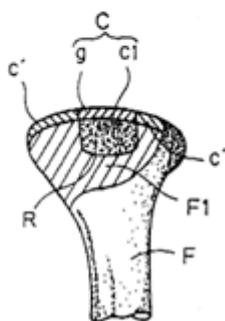
| | |
|--|-----------------------------|
| Femoral heads implanted without ablation of the whole natural femoral head | A61F 2/3603 |
|--|-----------------------------|

Special rules of classification within this group

Illustrative example of subject matter classified in [A61F 2/30756](#)

EP 0 505 634 A1

FIG. 1



A61 F2/30L

[N: Special external and/or bone-contacting surfaces, e.g. coating for improving bone ingrowth (materials for coating prostheses [A61L 27/28](#))]

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

[N: applied in original prostheses, e.g. holes, grooves (etching the surface [A61F 2/30767](#))]

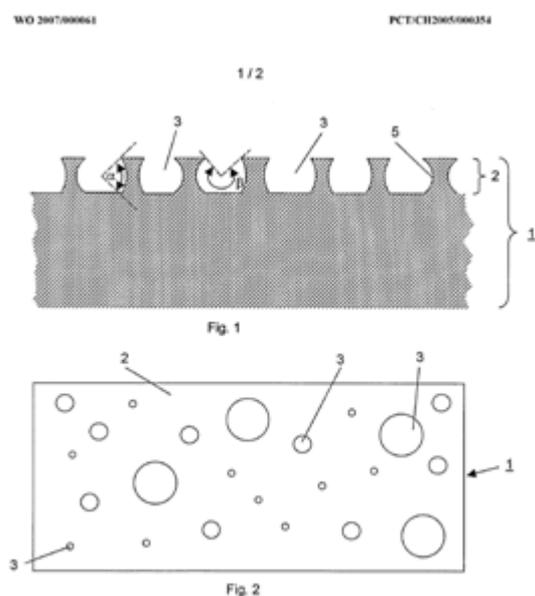
Informative references

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

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

Special rules of classification within this group

Illustrative example of subject matter classified in [A61F 2/30771](#)



A61 F2/30M

[N: Designing or manufacturing processes (not used, see subgroups)]

Special rules of classification within this group

Not used for invention information, see [A61F 2/30942](#) or [A61F 2/30965](#).

A61F 2/30942

[N: for designing or making customized prostheses, e.g. using templates, CT or NMR scans, finite-element analysis or CAD-CAM techniques (computer-assisted sizing or machining of dental prostheses [A61C 13/0004](#); CAD-CAM techniques per se [G05B 19/4202](#))]

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 19/4202 |

A61 F2/30Y1

[N: for temporo-mandibular [TM, TMJ] joints (endoprostheses for mandibular reconstruction [A61F 2/2803](#))]

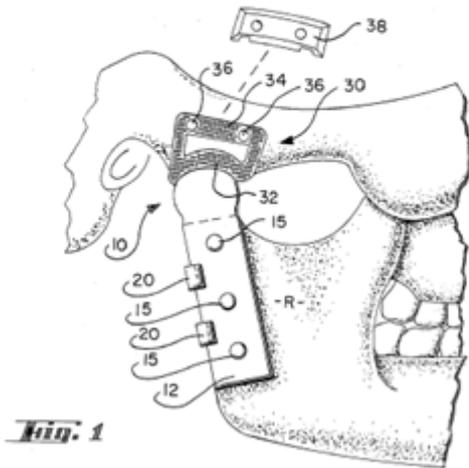
Informative references

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

| | |
|--|-----------------------------|
| Endoprostheses for mandibular reconstruction | A61F 2/2803 |
|--|-----------------------------|

Special rules of classification within this group

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



A61F 2/34

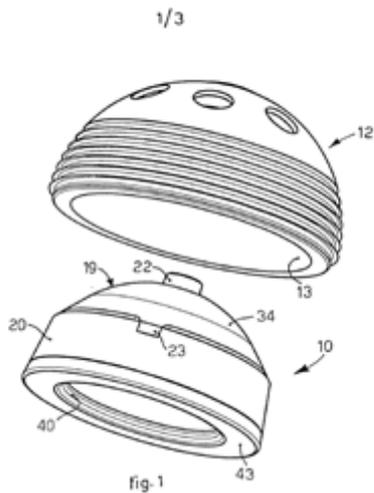
Acetabular cups

Special rules of classification within this group

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

WO 2008/146121

PCT/BR2008/001209

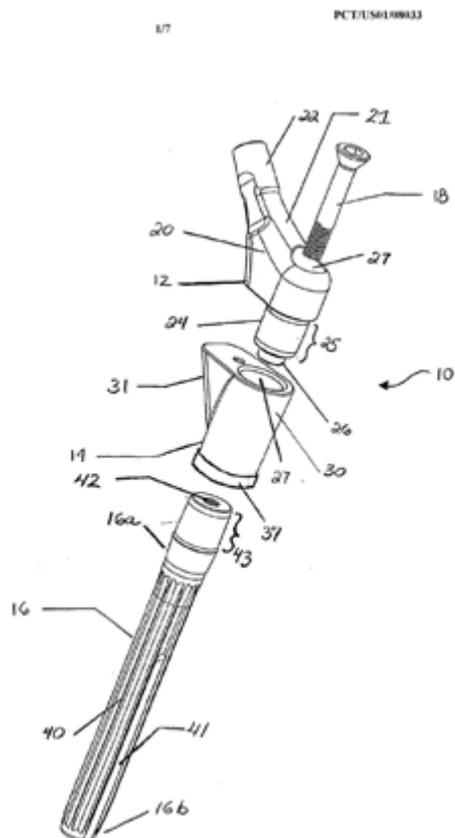


A61F 2/36

Femoral heads; [N: Femoral endoprotheses]

Special rules of classification within this group

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



A61F 2/3601

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

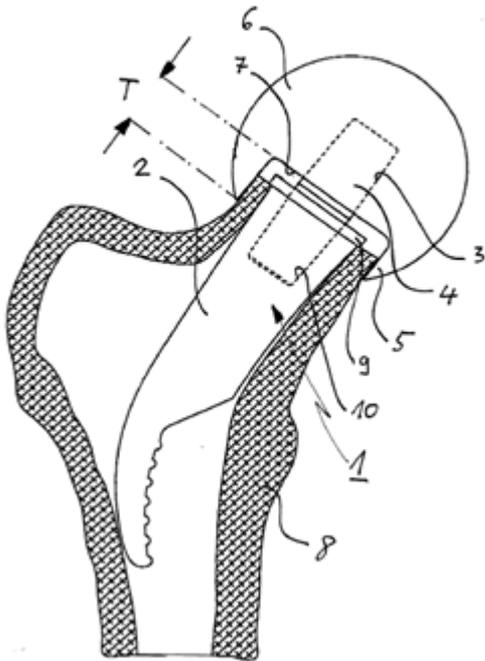
Informative references

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

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

Special rules of classification within this group

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



A61F 2/3603

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

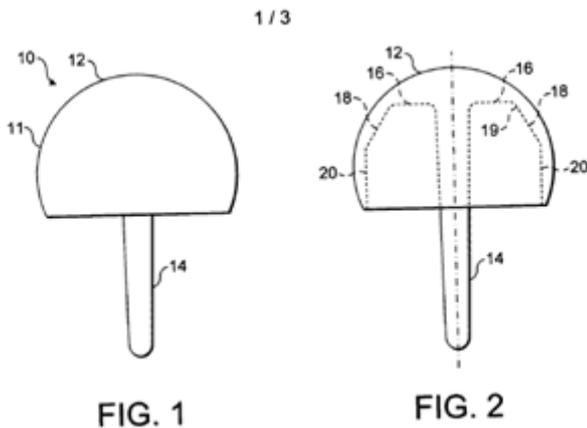
Informative references

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

| | |
|--------------------------|------------------------------|
| Endoprosthetic cartilage | A61F 2/30756 |
|--------------------------|------------------------------|

Special rules of classification within this group

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

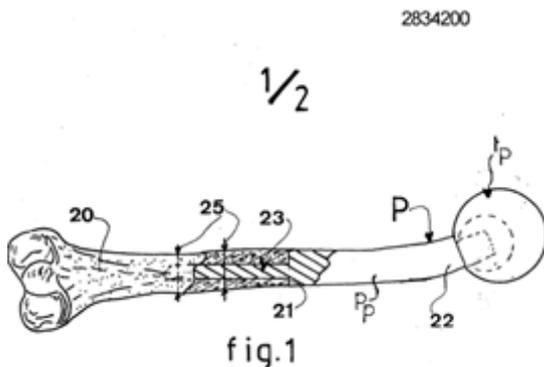


A61 F2/36B

[N: including proximal or total replacement of the femur]

Special rules of classification within this group

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



A61F 2/3609

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

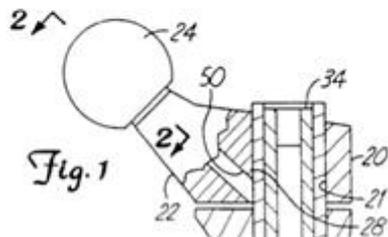
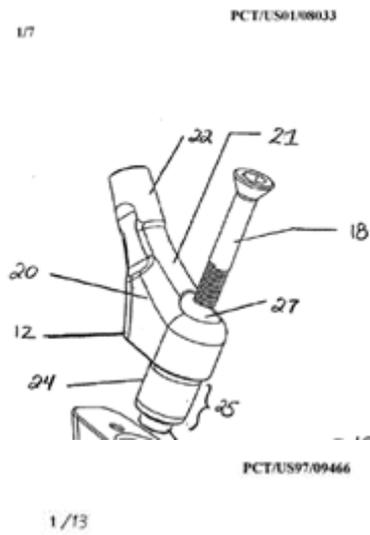
References relevant to classification in this group

This subclass/group does not cover:

| | |
|---|-----------------------------|
| Femoral endoprostheses for replacing only the epiphyseal or metahpysal parts of the femur | A61F 2/3601 |
|---|-----------------------------|

Special rules of classification within this group

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

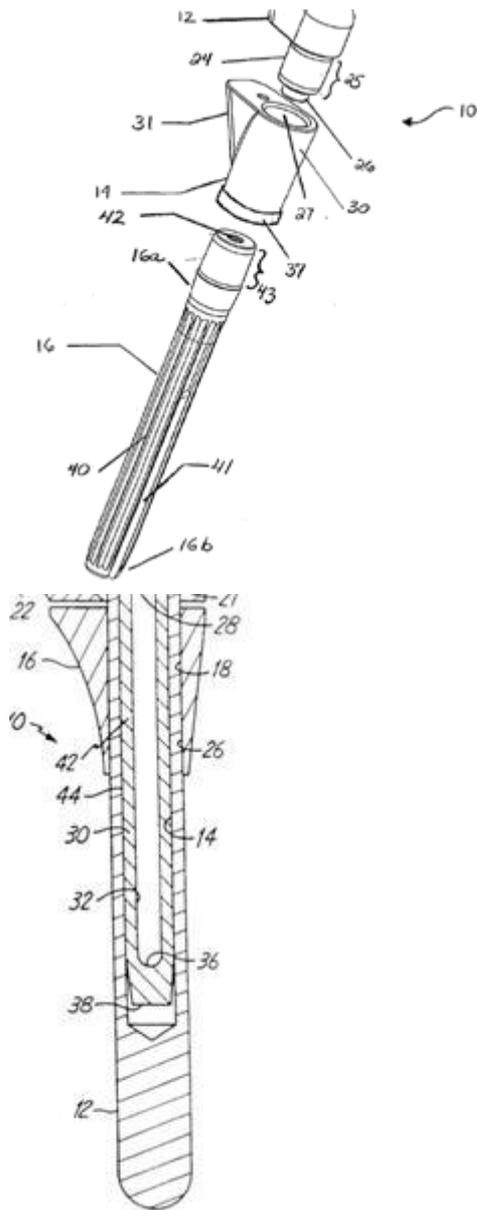


A61 F2/36D

[N: Femoral shafts]

Special rules of classification within this group

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

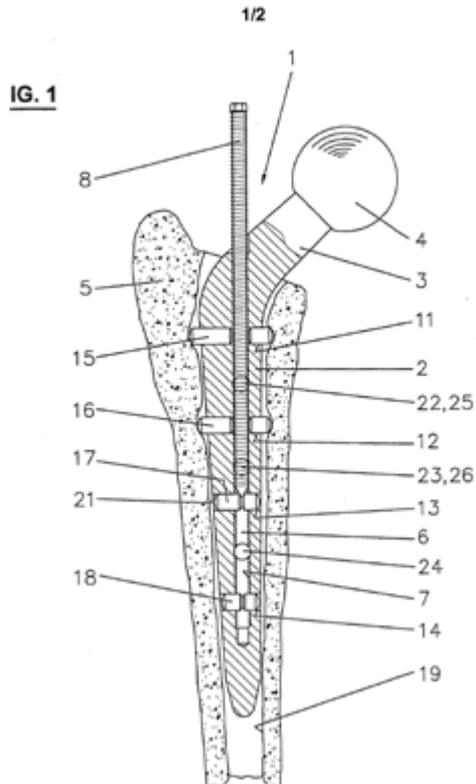


A61F 2/36D2

[N: with expanding fixation devices]

Special rules of classification within this group

Illustrative example of subject matter classified in **A61F2/36D2**



A61F 2/367

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

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 within this group

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

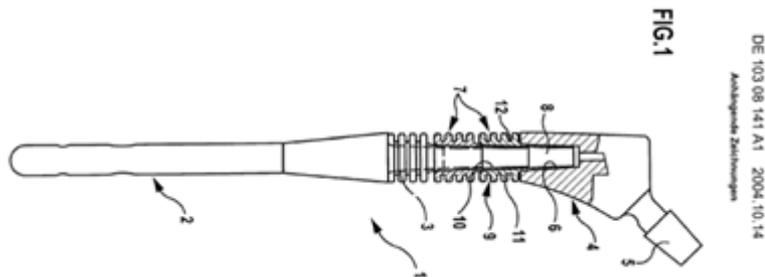


A61F 2/3672

[N: Intermediate parts of shafts]

Special rules of classification within this group

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

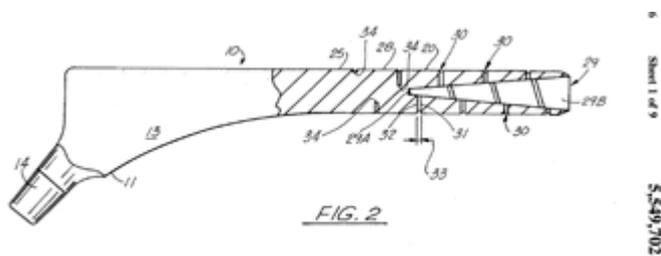


A61F 2/3676

[N: Distal or diaphyseal parts of shafts]

Special rules of classification within this group

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



A61F 2/38

for elbows or knees

Special rules of classification within this group

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

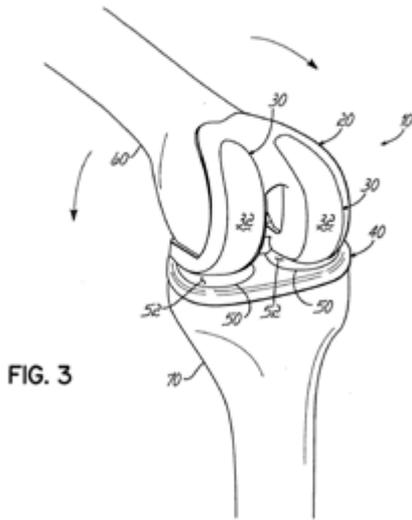


FIG. 3

A61F 2/3804

[N: for elbows]

Special rules of classification within this group

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

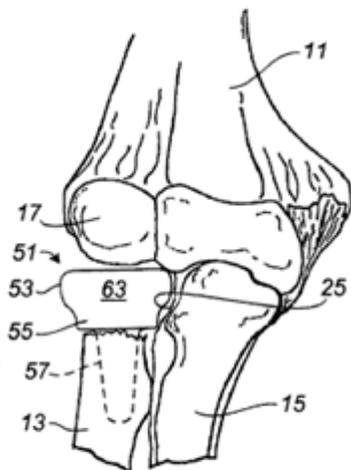


FIGURE 10

A61F 2/3859

[N: Femoral components]

Special rules of classification within this group

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

2934770

1 / 1

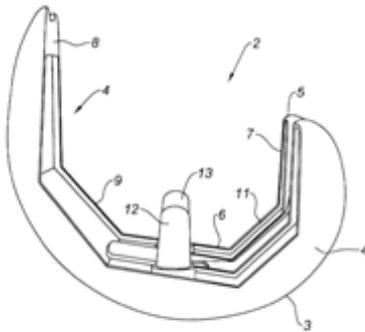


Fig. 1

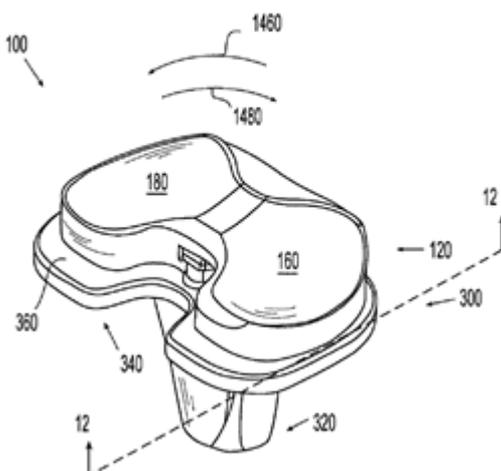
A61F 2/3868

[N: with sliding tibial bearing]

Special rules of classification within this group

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

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



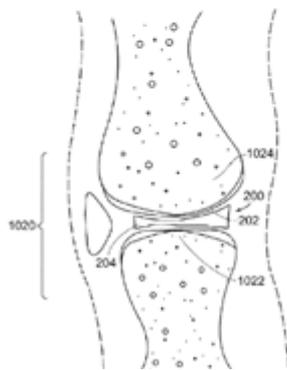
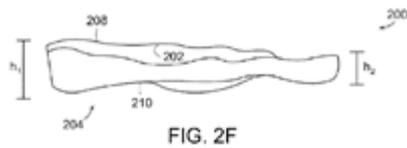
A61F 2/3872

[N: Meniscus for implantation between the natural bone surfaces]

Special rules of classification within this group

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

Patent Application Publication Oct. 4, 2007 Sheet 6 of 12 US 2007/0233269 A1



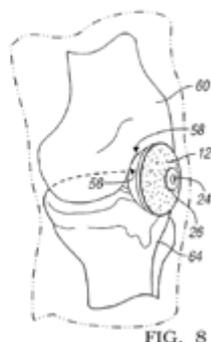
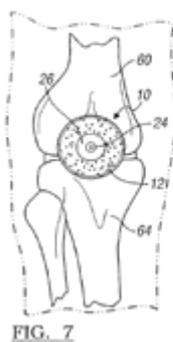
A61F 2/3877

[N: Patellae or trochleae]

Special rules of classification within this group

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

EP 2 161 007 A1



A61F 2/3886

[N: for stabilising knees against anterior or lateral dislocations]

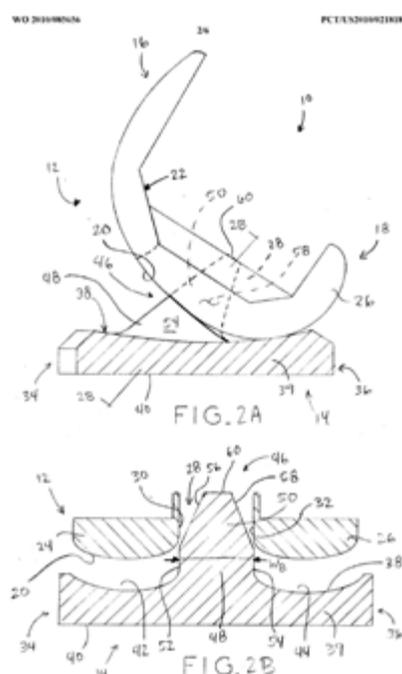
References relevant to classification in this group

This subclass/group does not cover:

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

Special rules of classification within this group

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



A61F 2/389

[N: Tibial components ([A61F 2/3868](#) takes precedence)]

References relevant to classification in this group

This subclass/group does not cover:

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

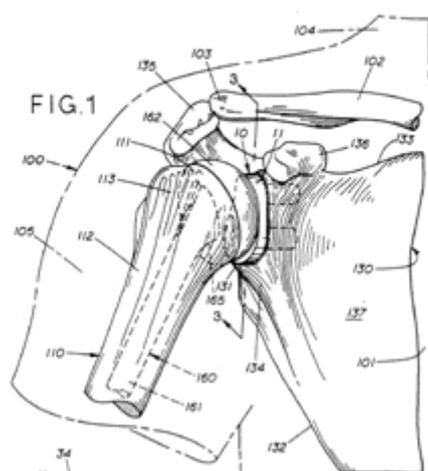
A61 F2/40

for shoulders

Special rules of classification within this group

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

[N: 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](#))]

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 |
|---|-----------------------------|

A61 F2/40C

[N: Humeral heads or necks; Connections of endoprosthetic heads or necks to endoprosthetic humeral shafts]

Special rules of classification within this group

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

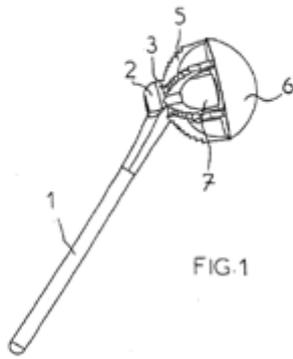


FIG. 1



A61F 2/4059

[N: Humeral shafts]

Special rules of classification within this group

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

Fig.1

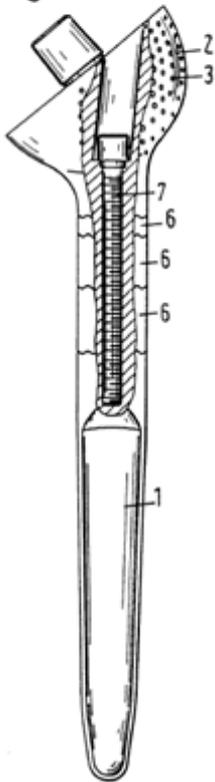
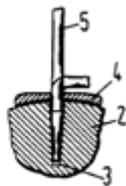


Fig.2

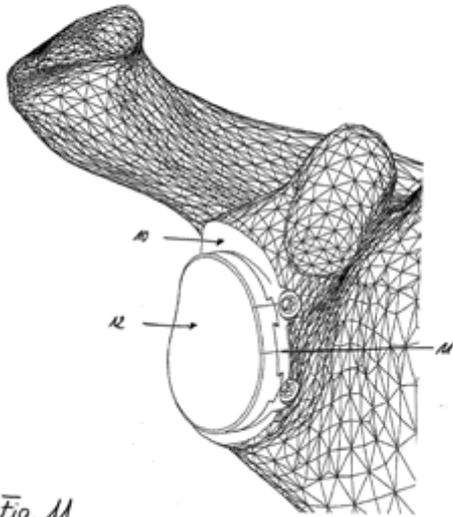


A61F 2/4081

[N: Glenoid components, e.g. cups]

Special rules of classification within this group

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

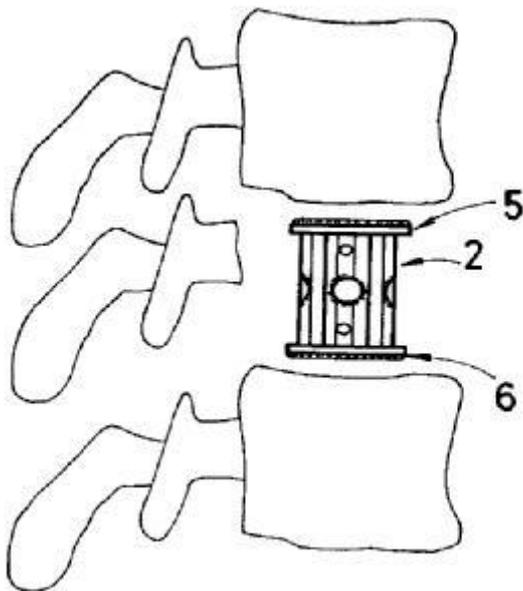
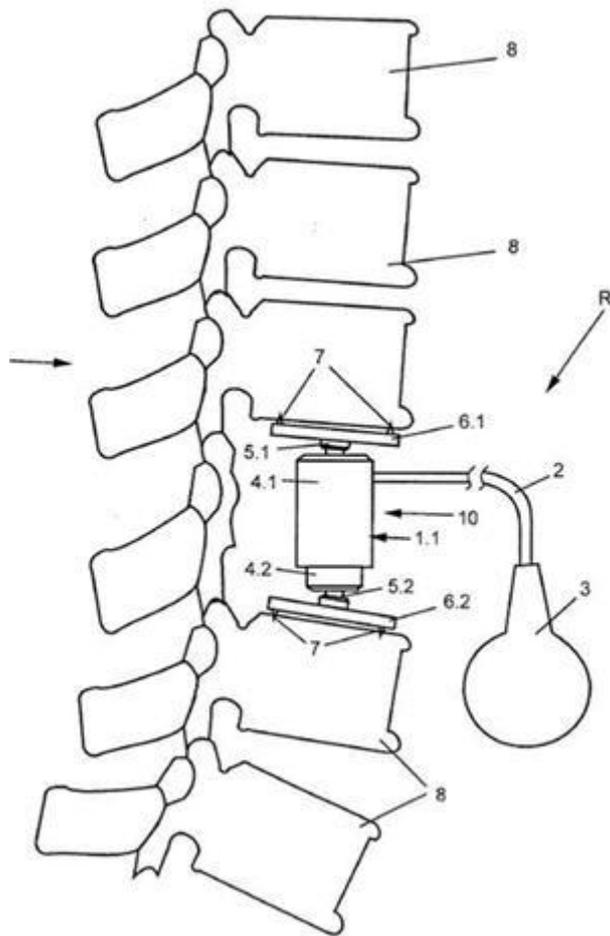


A61F 2/44

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

Special rules of classification within this group

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



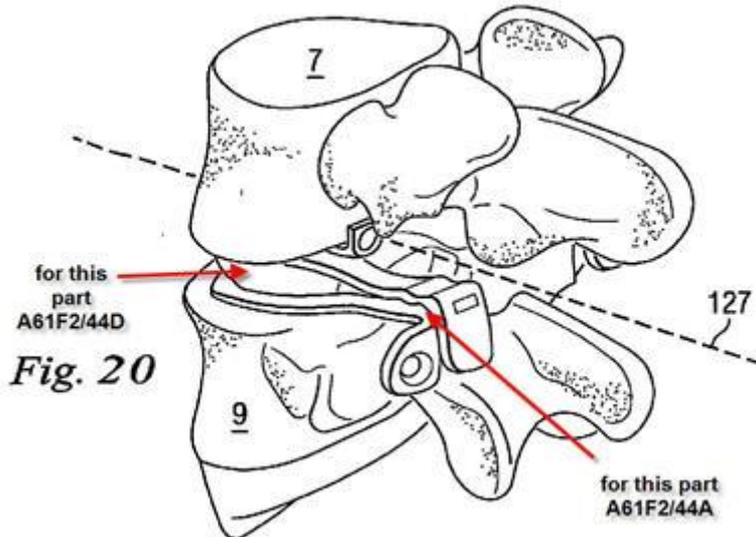
A61F 2/4405

[N: 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 subclass/group covers:

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



Informative references

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

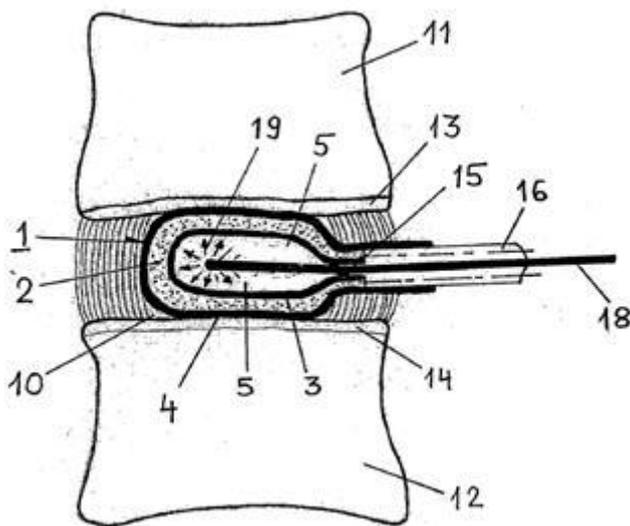
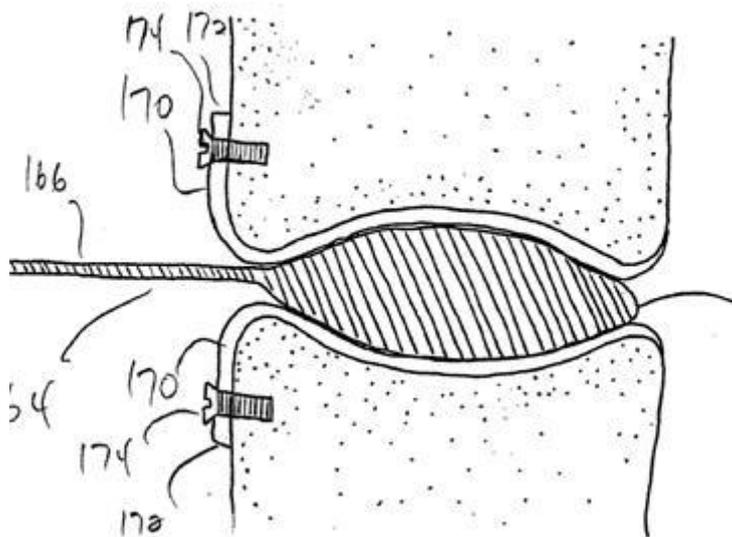
| | |
|---|------------------------------|
| Devices implanted between spinous or transverse processes | A61B 17/7062 |
|---|------------------------------|

A61 F2/44B

[N: made of inflatable pockets or chambers filled with fluid, e.g. with hydrogel]

Special rules of classification within this group

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



A61F 2/442

[N: 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](#))]

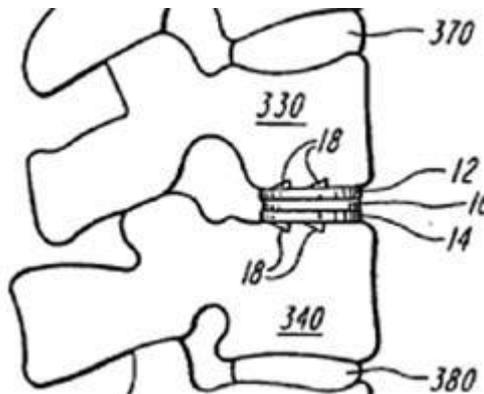
Informative references

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 2/4455 |

Special rules of classification within this group

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

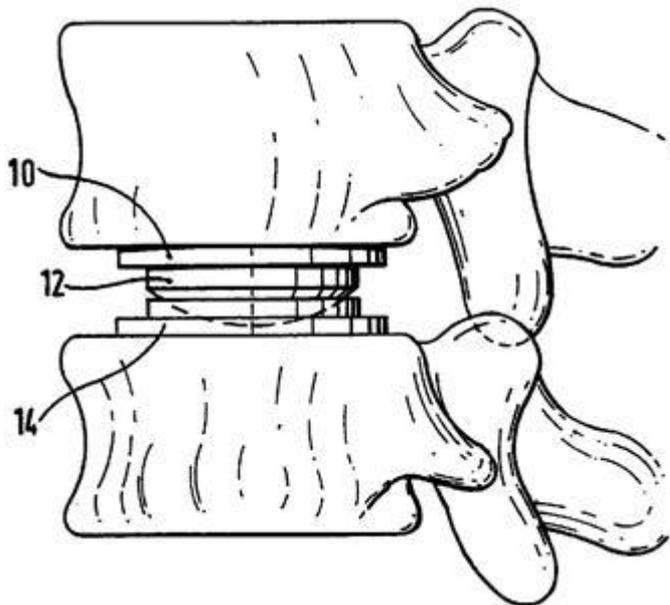


A61F 2/4425

[N: made of articulated components]

Special rules of classification within this group

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



A61F 2/4455

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

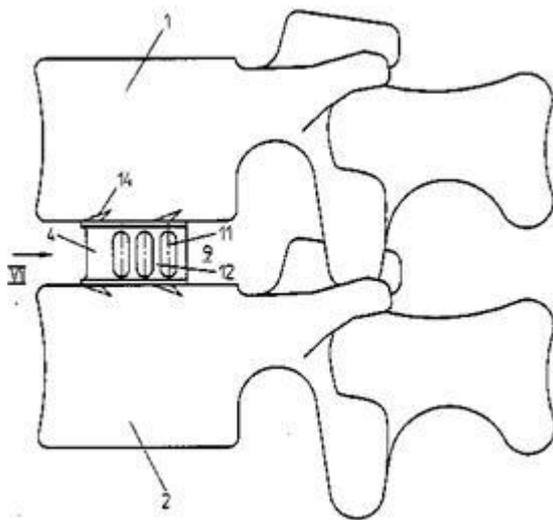
Informative references

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

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

Special rules of classification within this group

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

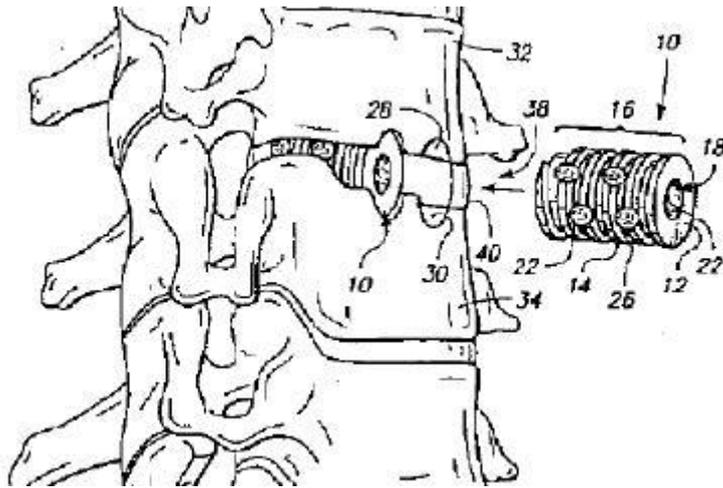


A61F 2/446

[N: having a circular or elliptical cross-section substantially parallel to the axis of the spine, e.g. cylinders or frustocones]

Special rules of classification within this group

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

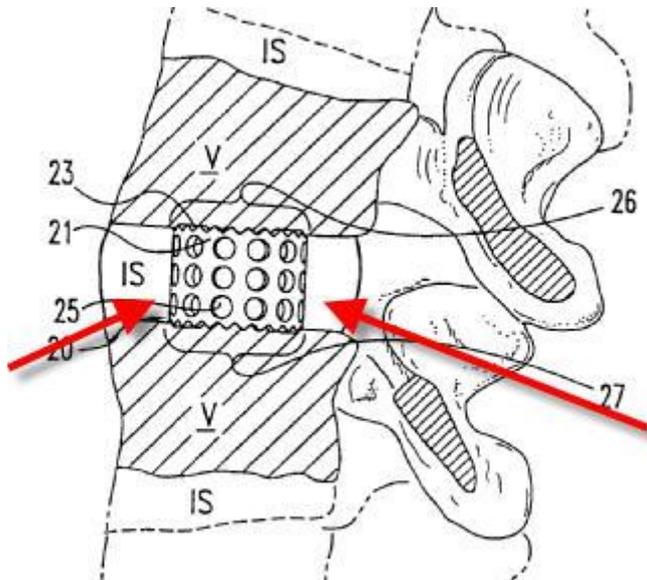


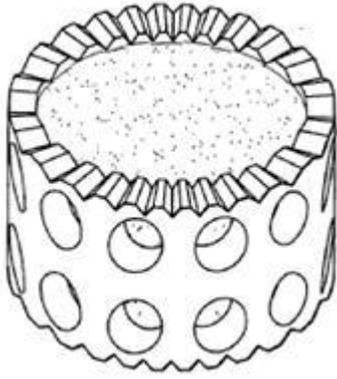
A61F 2/4465

[N: having a circular or kidney shaped cross-section substantially perpendicular to the axis of the spine]

Special rules of classification within this group

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



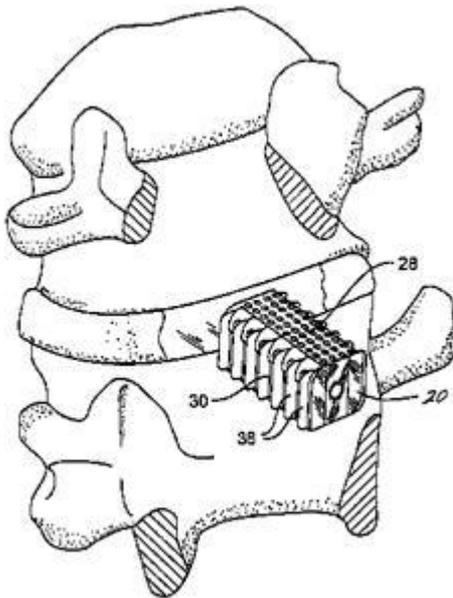


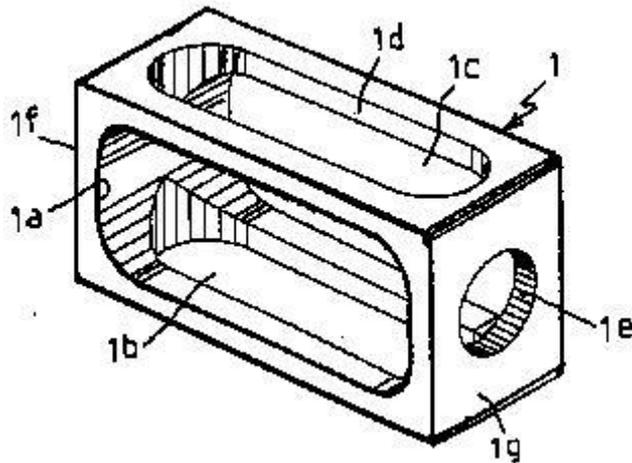
A61F 2/447

[N: substantially parallelepipedal, e.g. having a rectangular or trapezoidal cross-section]

Special rules of classification within this group

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





A61F 2/46

Special tools for implanting [N: or extracting] artificial joints, [N: accessories or bone cement] (surgical instruments [A61B 17/00](#))

Informative references

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

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

A61 F2/46A

[N: for introducing bone substitute, for implanting bone graft implants or for compacting them in the bone cavity (for introducing bone cement [A61B 17/8805](#))]

Informative references

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

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

A61 F2/46B

[N: for insertion or extraction of endoprosthetic joints or of accessories thereof]

Special rules of classification within this group

A classification symbol for invention information is given as soon as the instrument is shown in the figures of the document.

A61F 2/4605

[N: of elbows]

Special rules of classification within this group

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

WO 2011/017520

PCT/US2010/04719

17 / 19

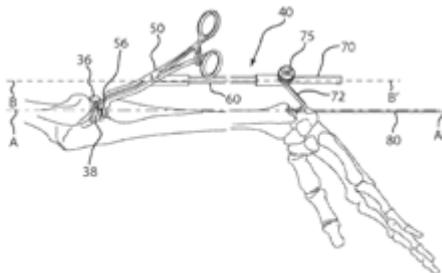


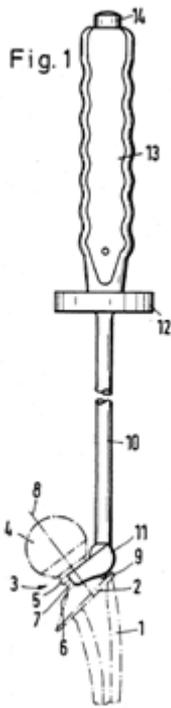
Fig. 15B

A61F 2/4607

[N: of hip femoral endoprostheses]

Special rules of classification within this group

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



A61F 2/4609

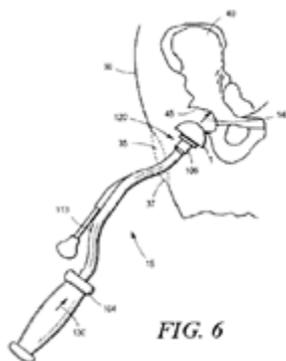
[N: of acetabular cups]

Special rules of classification within this group

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

2900328

8 / 12

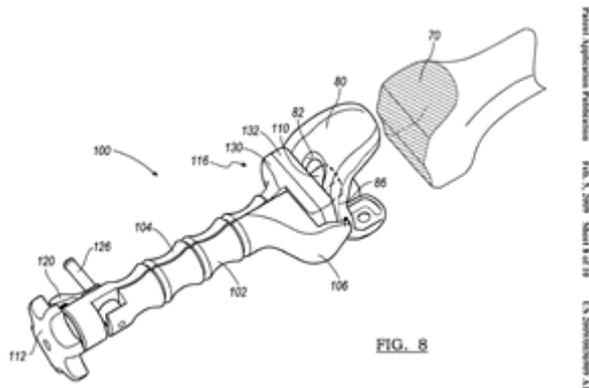


A61F 2/461

[N: of knees]

Special rules of classification within this group

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

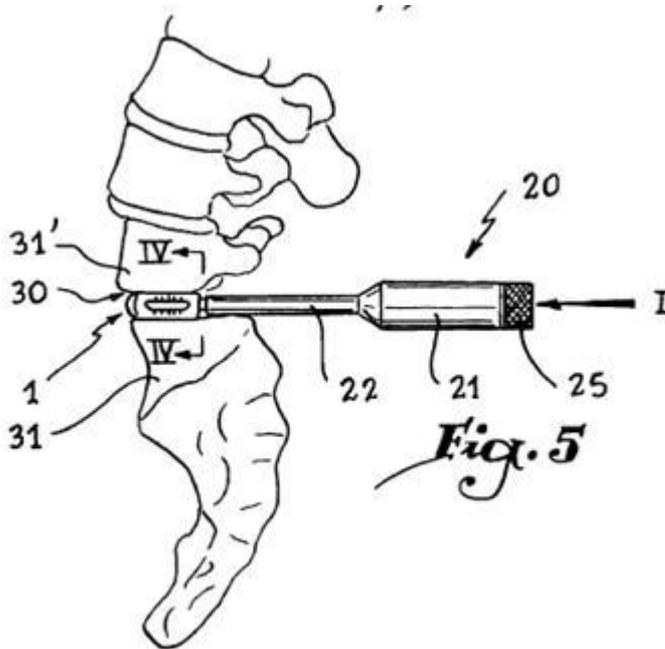


A61F 2/4611

[N: of spinal prostheses]

Special rules of classification within this group

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

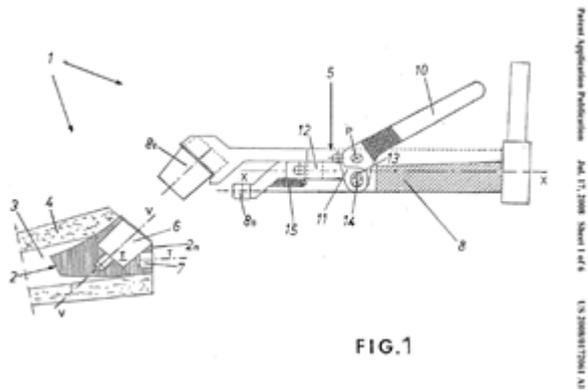


A61F 2/4612

[N: of shoulders]

Special rules of classification within this group

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



A61F 2/4614

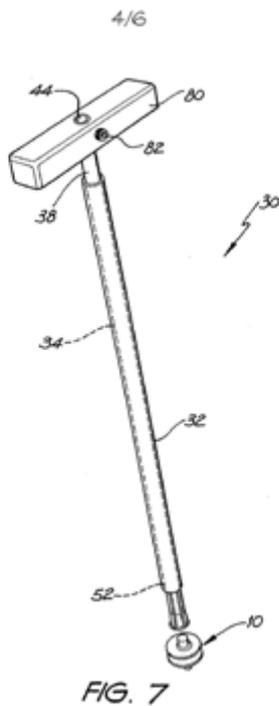
[N: of plugs for sealing a cement-receiving space]

Special rules of classification within this group

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

WO 03/065941

PCT/NZ03/00013



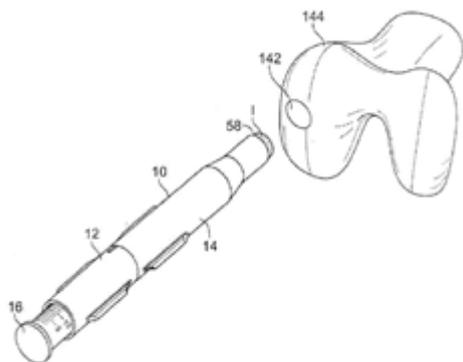
A61F 2/4618

[N: of cartilage]

Special rules of classification within this group

Illustrative example of subject matter classified in [A61F 2/4618](#)

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

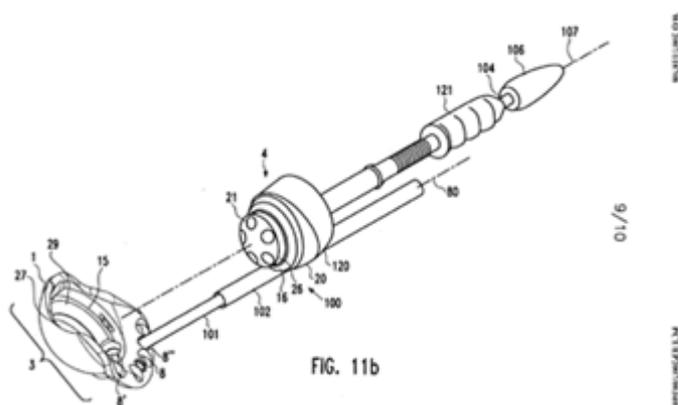


A61F 2/4637

[N: for connecting or disconnecting two parts of a prosthesis]

Special rules of classification within this group

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

[N: 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 relevant to classification in this group

This subclass/group does not cover:

| | |
|---|------------------------------|
| Surgical bone cutting instruments for harvesting bone graft | A61B 17/1635 |
|---|------------------------------|

Informative references

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

| | |
|-----------------------------------|---------------------------|
| Bone prostheses | A61F 2/28 |
| Disintegrating or milling devices | B02C |
| Cutting in general | B26D |
| Bone as a prosthesis material | K61F2/30A1A28 |

A61 F2/46M

[N: Measuring instruments used for implanting artificial joints (for surgical instruments **A61B19/00G**)]

Informative references

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

| | |
|--------------------------|-------------------|
| For surgical instruments | A61B19/00G |
|--------------------------|-------------------|

Special rules of classification within this group

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

A61F 2/4675

[N: 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](#))]

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

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

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 within this group

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

A61F 2/4684

[N: Trial or dummy prostheses]

Special rules of classification within this group

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

Definition statement

This subclass/group covers:

This group 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.

Relationship between large subject matter areas

Bone stump caps: [A61F 2/2814](#)

Orthopaedic devices: [A61F 5/01](#)

References relevant to classification in this group

This subclass/group does not cover:

| | |
|--|---|
| Brassieres | A41C 3/00 |
| Implantable devices | A61F 2/01 , A61F 2/02 |
| Orthopaedic devices adapted for correcting deformities of the limbs or for supporting them | A61F 5/0102 |
| Exoskeleton | B25J 9/0006 |

Informative references

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

| | |
|---|--|
| Closure means for urethra or rectum or for artificial body openings therefor | A61F 2/0004 |
| Orthopaedic devices with articulation, e.g. for the knees, the feet or the arms, hands or fingers | A61F 5/0123 , A61F 5/0127 , A61F 5/013 |
| Programme-controlled manipulators | B25J 9/00 |
| Gripping heads | B25J 15/00 |
| Joints | B25J 17/00 |
| Arms | B25J 18/00 |

Special rules of classification within this group

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 2/82

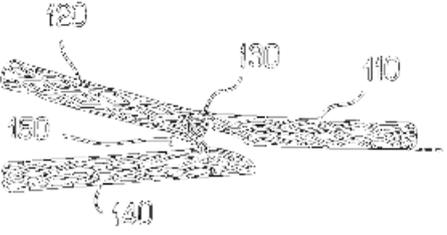
Devices providing patency to, or preventing collapsing of, tubular structures of the body, e.g. stents (stent-grafts for blood vessels [A61F 2/07](#) ; stent-grafts for tubular structures of the body other than blood vessels [A61F 2/04](#) ; instruments specially adapted for placement or removal of stents or stent-grafts [A61F 2/95](#) ; for closing wounds, or holding wounds closed [A61B17/03](#); dilators [A61M 29/00](#))

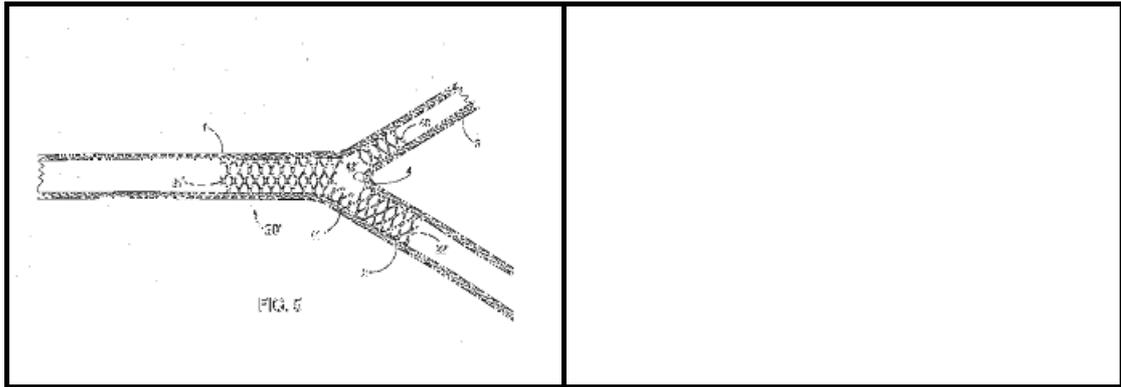
Definition statement

This subclass/group 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>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> |



Relationship between large subject matter areas

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

References relevant to classification in this group

This subclass/group does not cover:

| | |
|--|------------------|
| Closing wounds, or holding wounds closed | A61B17/03 |
|--|------------------|

| | |
|--|------------------------------|
| Stent-grafts for blood vessels | A61F 2/07 |
| Instruments for placement or removal of stents or stent grafts | A61F 2/95 |
| Urethral drainage stents | A61M 25/0017 |
| Dilators | A61M 29/00 |

Special rules of classification within this subclass/group

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

[N: folded prior to deployment]

Special rules of classification within this group

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

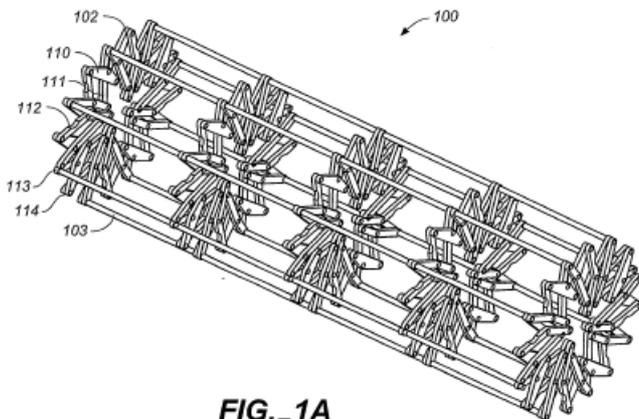


FIG. 1A

WO/03/018100

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

[N: Two or more distinct overlapping stents]

Special rules of classification within this group

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

References relevant to classification in this subclass/group

This subclass/group does not cover:

This subclass/group 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 relevant to classification in this subclass/group

This subclass/group does not cover:

This subclass/group does not cover:

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

A61F 2/885

[N: comprising a coil including a plurality of spiral or helical sections with alternate directions around a central axis]

Special rules of classification within this group

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

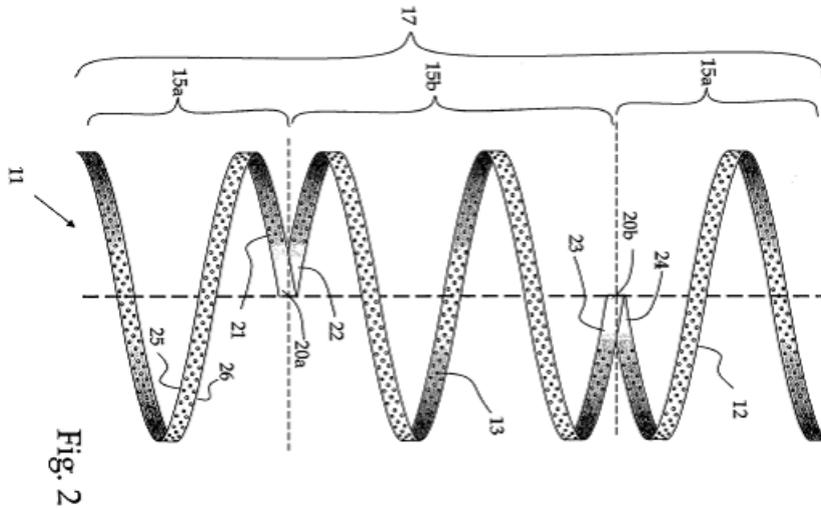


Fig. 2

A61F 2/89

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

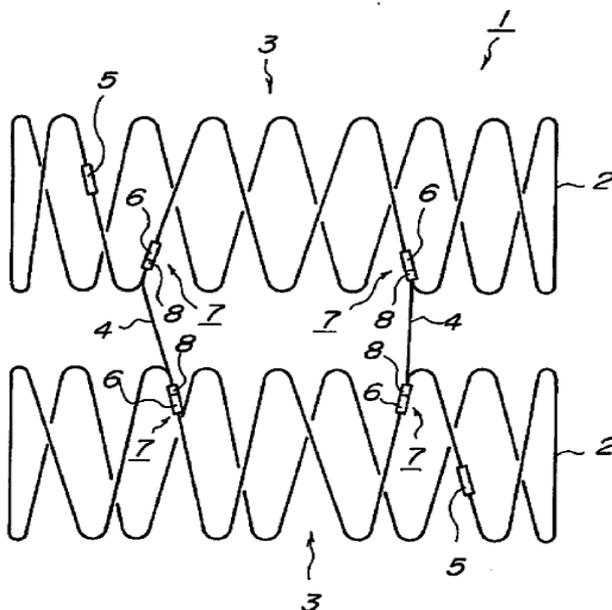
Definition statement

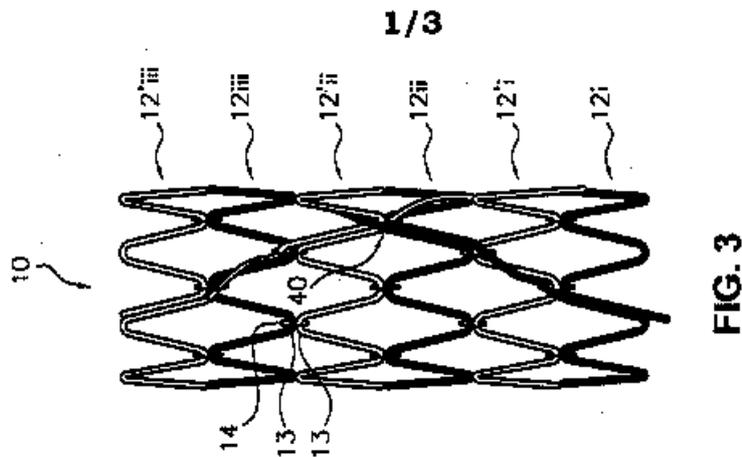
This subclass/group covers:

This subclass/group 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).





References relevant to classification in this subclass/group

This subclass/group does not cover:

This subclass/group does not cover:

| | |
|--|-------------------------------|
| 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 |
| Stent-grafts | A61F 2/07 |

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

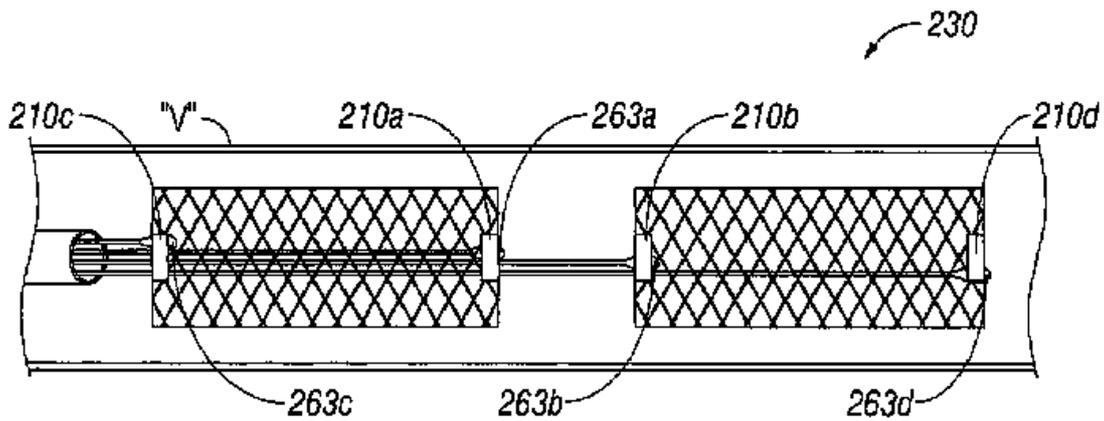


FIG. 9B

[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

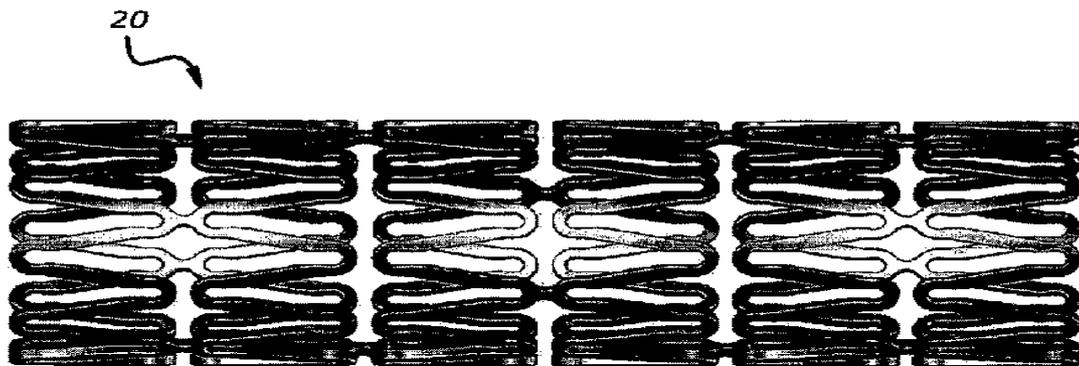


FIG. 1C

Special rules of classification within this subclass/group

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

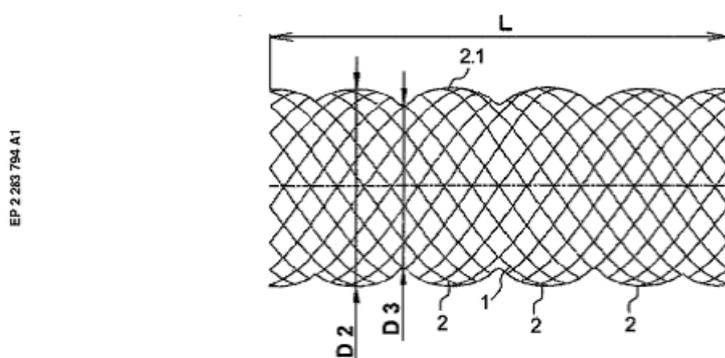
Informative references

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

| | |
|-----------------------|---------------------------|
| Woven tubular fabrics | D03D 3/02 |
|-----------------------|---------------------------|

Special rules of classification within this group

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



Synonyms and Keywords

In patent documents the words “net”, “net-like”, “mesh” and “mesh-like” are often used as synonyms.

A61F 2/91

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

Definition statement

This subclass/group 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.

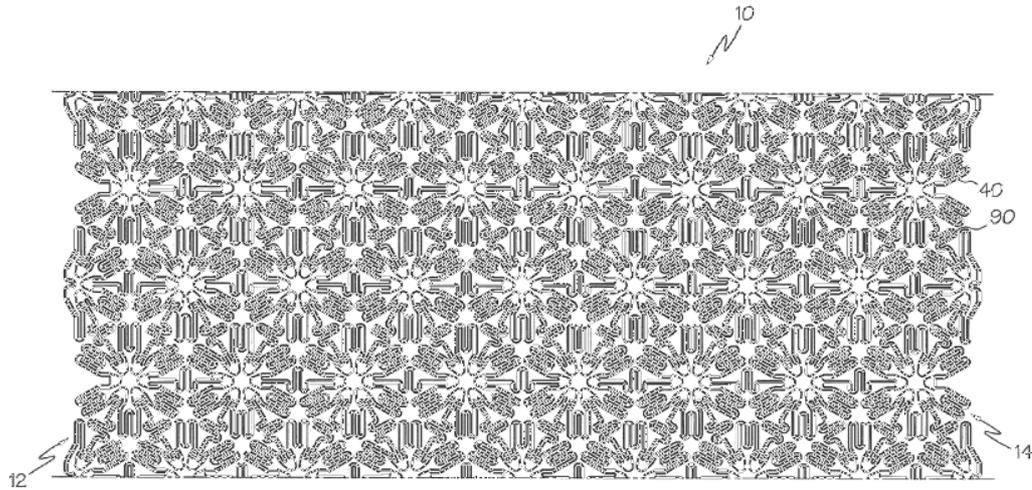


FIG. 2

W/O: 2009/108822
 2 / 16
 PCT/DUS2009/004593

A61F 2/915

[N: with bands having a meander structure, adjacent bands being connected to each other]

Definition statement

This subclass/group 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.

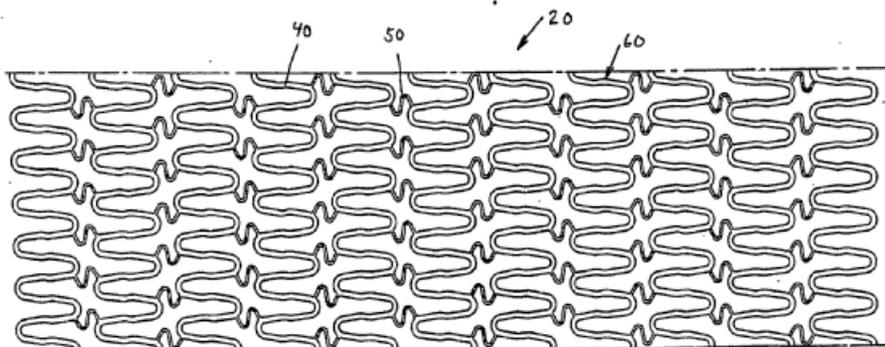


FIG. 10

Special rules of classification within this group

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](#)

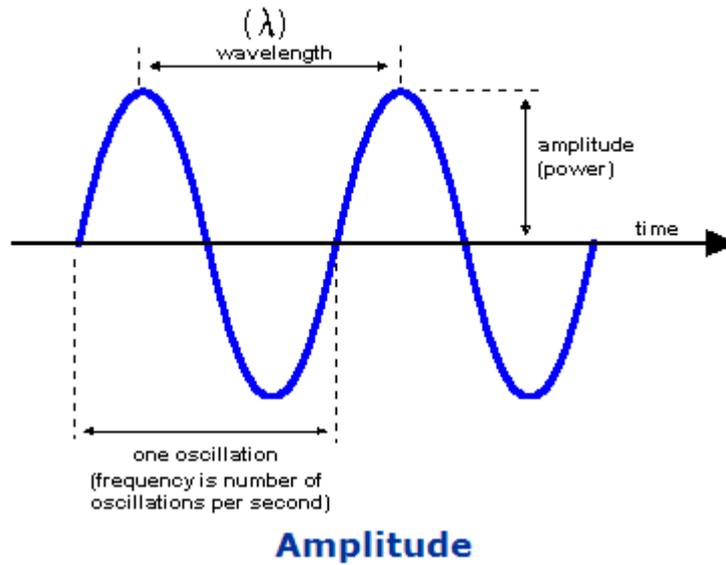
Adjacent bands being connected by a bridge, whereby at least one of its ends is connected along the length of a strut between two consecutive apices within a band: [A61F 2002/91583](#)

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

Glossary of terms

In this subclass/group, the following terms (or expressions) are used with the meaning indicated:

An amplitude is:

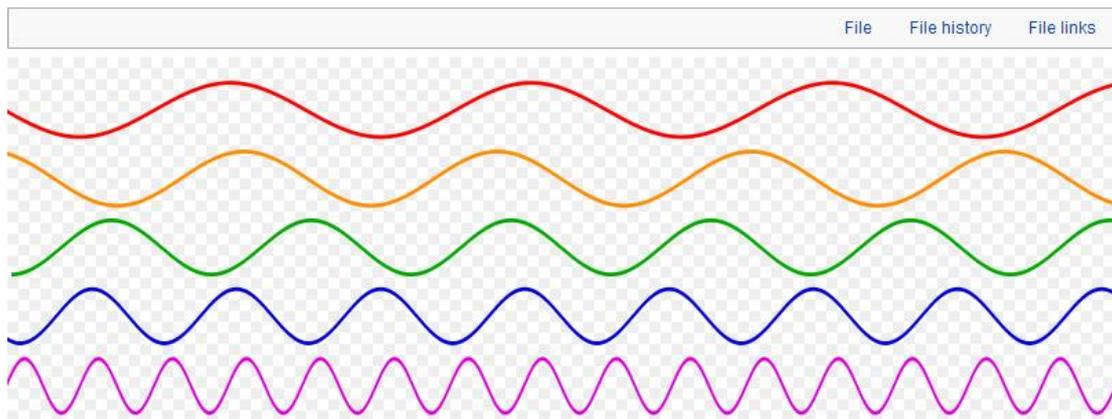


Frequency:

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 words "rolled-up" and "coiled" are often used as synonyms.

A61F 2/93

[N: circumferentially expandable by using ratcheting locks]

Special rules of classification within this group

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

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

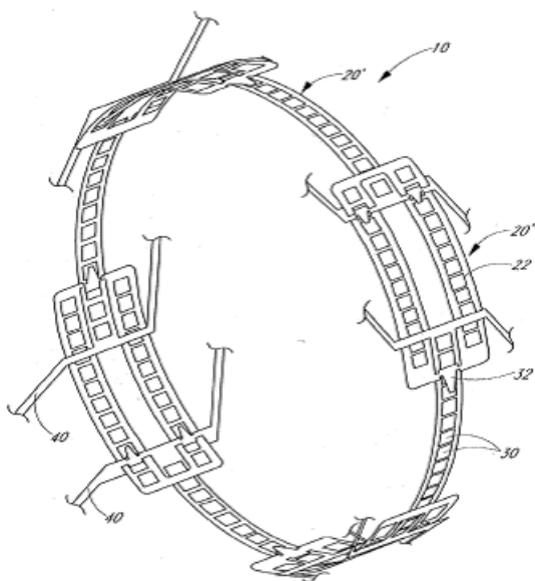


FIG. 3

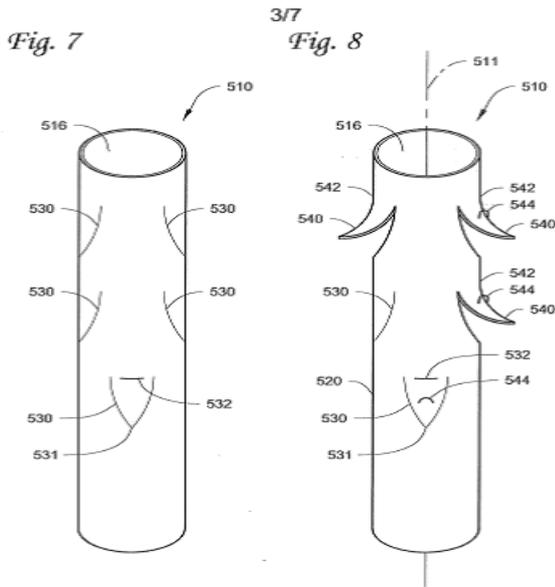
A61F 2/94

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

Definition statement

This subclass/group covers:

This subclass/group covers:



A61F 2/945

[N: hardenable, e.g. stents formed in situ]

Special rules of classification within this group

Illustrative example of subject matter classified in [A61F 2/945](#)

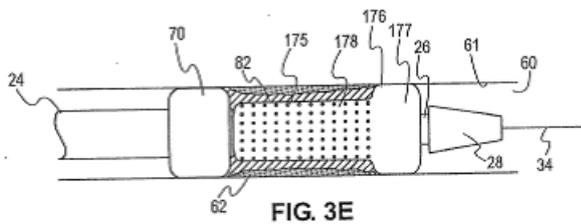


FIG. 3E

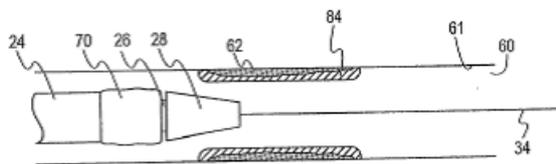


FIG. 3F

9/20

WO 2016/130336

PCT/US2016/018385

A61F 2/95

Instruments specially adapted for their placement or removal

References relevant to classification in this subclass/group

This subclass/group does not cover:

This subclass/group does not cover:

| | |
|-----------------------------------|-------------------------------|
| Instruments for occluding devices | A61B 17/12022 |
| Handles for balloon inflation | A61M 25/1018 |

Informative references

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

| | |
|--|----------------------------|
| Closing wounds, or holding wounds closed | A61B17/03 |
| Catheters; hollow probes | A61M 25/00 |

Special rules of classification within this subclass/group

| | |
|--|--------------------------------|
| having retaining means other than an outer sleeve, e.g. male-female connector between stent and instrument | A61F 2002/9505 |
| the retaining means being filaments or wires | A61F 2002/9511 |
| Handle assemblies therefor | A61F 2002/9517 |
| Means for mounting a stent onto the placement instrument, i.e. stent crimping devices | A61F 2002/9522 |
| for retrieval of stents | A61F 2002/9528 |
| for repositioning of stents | A61F 2002/9534 |

Special rules of classification within this subclass/group

| | |
|--|--------------------------------|
| having retaining means other than an outer sleeve, e.g. male-female connector between stent and instrument | A61F 2002/9505 |
| the retaining means being filaments or wires | A61F 2002/9511 |
| Handle assemblies therefor | A61F 2002/9517 |
| Means for mounting a stent onto the placement instrument, i.e. stent crimping devices | A61F 2002/9522 |
| for retrieval of stents | A61F 2002/9528 |
| for repositioning of stents | A61F 2002/9534 |

A61F 2/954

for placing stents or stent-grafts in a bifurcation

References relevant to classification in this subclass/group

This subclass/group does not cover:

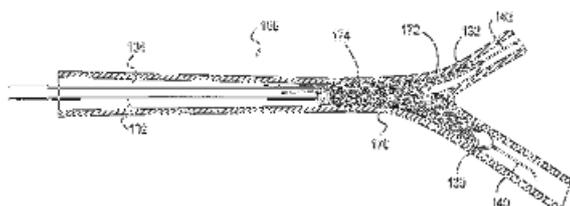
This subclass/group does not cover:

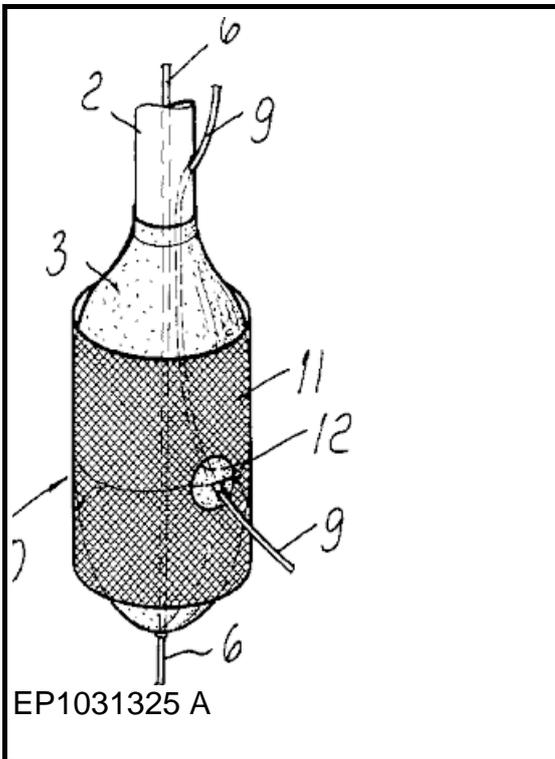
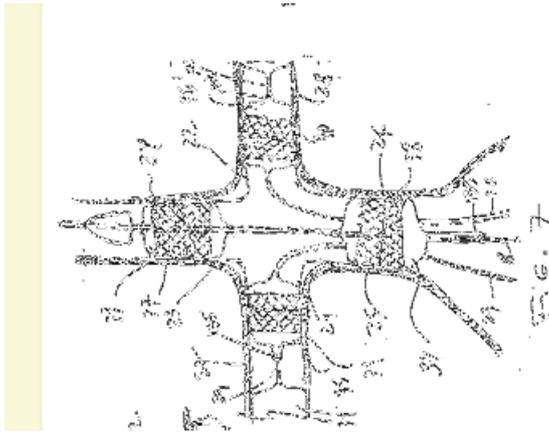
| | |
|---|-------------------------------|
| Stents or stent-grafts having a Y-shape | A61F 2002/065 |
|---|-------------------------------|

Special rules of classification within this group

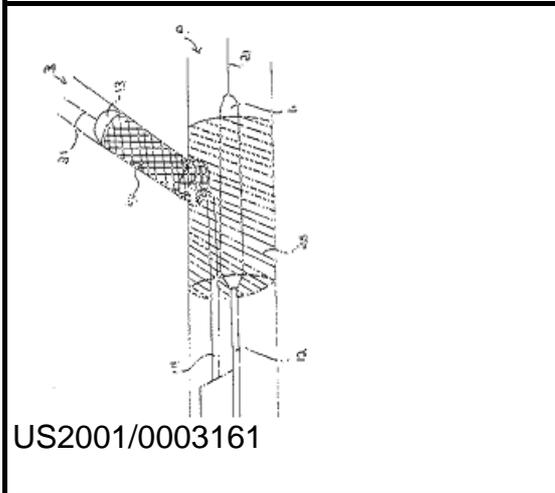
Illustrative examples of subject matter classified in [A61F 2/954](#)

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





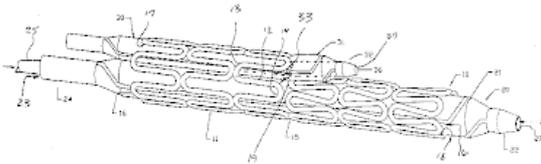
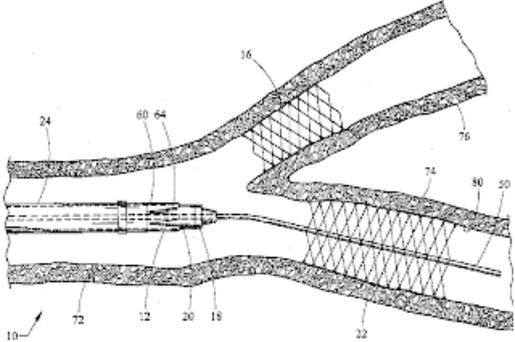
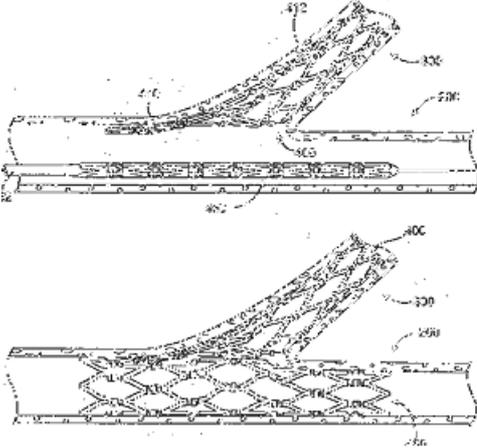
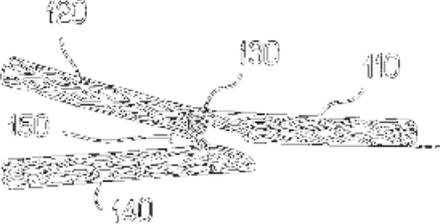
[A61F 2/856](#) only if stent is not described [A61F 2/954](#) (class for delivery device for bifurcations)

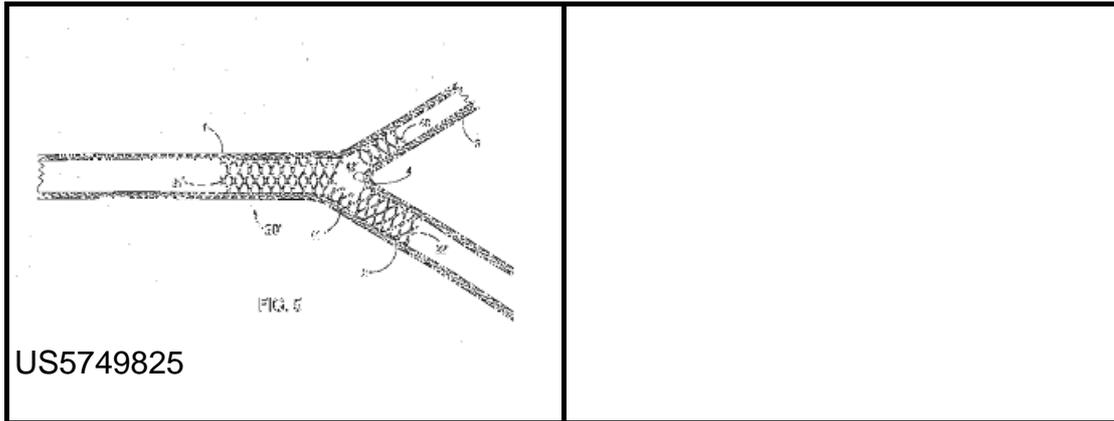


[A61F 2/954](#) [A61F 2/856](#) [A61F 2250/006](#) modular if further stents are applied NEVER [A61F 2002/065](#)
These are not Y shaped

EP0904746

[A61F 2/954](#) [A61F 2/856](#) eventually

| | |
|---|---|
|  | <p>A61F 2250/0039 (differing in diameter)</p> |
|  | <p>A61F 2/954 A61F 2/82/low or A61F 2/82 /lowspecific 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> |
| | <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> |



A61F 2/958

Inflatable balloons for placing stents or stent-grafts

Special rules of classification within this subclass/group

| | |
|--|--------------------------------|
| 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 |

Special rules of classification within this subclass/group

| | |
|--|--------------------------------|
| 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 subclass/group covers:

This subclass/group covers:

Retractable outer sleeves

Special rules of classification within this subclass/group

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

Special rules of classification within this subclass/group

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

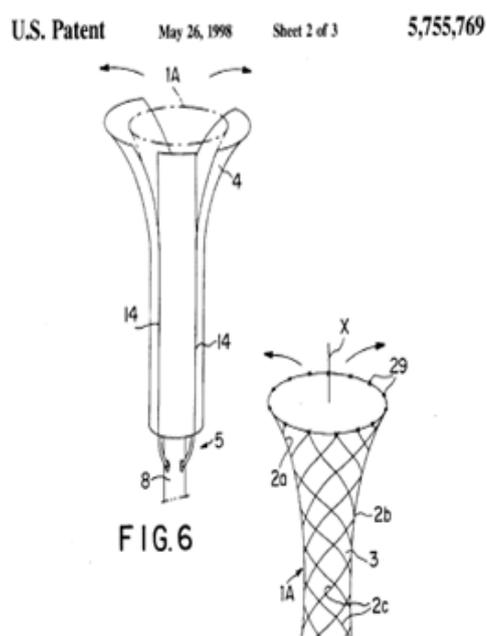
A61F 2/97

the outer sleeve being splittable

Definition statement

This subclass/group covers:

This subclass/group covers:



A61F 3/00

Lengthening pieces for natural legs

Definition statement

This subclass/group 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.

Relationship between large subject matter areas

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 relevant to classification in this group

This subclass/group does not cover:

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

A61F 4/00

Methods or devices enabling invalids to operate an apparatus or a device not forming part of the body

Definition statement

This subclass/group 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.

Relationship between large subject matter areas

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 relevant to classification in this group

This subclass/group does not cover:

| | |
|---|---------------------------|
| Operating or control means for prostheses | 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 | G06F 3/01 |
|--|---------------------------|

| | |
|---------------------------------------|--|
| interaction between user and computer | |
|---------------------------------------|--|

A61F 5/00

Orthopaedic methods or devices for non-surgical treatment of bones or joints

Definition statement

This subclass/group covers:

This group 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.

Relationship between large subject matter areas

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

References relevant to classification in this group

This subclass/group does not cover:

| | |
|--|----------------------------|
| Surgical measures for treatment of obesity | A61B 17/00 |
| Bandages for support of breasts or abdomen | A61F 13/14 |
| Plaster of Paris | A61F 13/04 |
| Handcuffs | E05B 75/00 |
| Insoles for arch support | A43B 7/14 |
| Penile implants | A61F 2/26 |
| Massage of genitals | A61H 19/00 |
| Adhesive for colostomy devices | A61L 24/00 |

| | |
|---|------------------------------|
| Diapers | A61F13/15D |
| Devices for taking faeces samples | A61B 10/0038 |
| Devices for taking urine samples | A61B 10/007 |
| Devices for taking sperm samples | A61B 10/0058 |
| Pessaries | A61F 6/08 |
| Mattress underlays | A47C 21/06 |
| Devices for preventing snoring by gas treatment | A61M 16/00 |

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 |
| Operating or control means for external prostheses | A61F 2/68 |

Special rules of classification within this group

Apparatus for the treatment of obesity; Anti-eating devices: [A61F 5/0003](#)

Rectal devices, e.g. for the treatment of haemorrhoids: [A61F 5/0093](#)

Anti-rape devices: [A61F 5/0096](#)

Orthopaedic devices, e.g. splints, casts or braces: [A61F 5/0102](#)

Restraining devices for the body or body parts, e.g. slings or restraining shirts: [A61F 5/37](#)

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

Devices worn by subjects for reception of urine, faeces, catamenial or other discharge; portable urination aids: [A61F 5/44](#)

Devices for preventing wetting or pollution of the bed: [A61F 5/48](#)

Devices for preventing finger sucking: [A61F 5/50](#)

Devices for preventing snoring: [A61F 5/56](#)

Apparatus for correcting stammering or stuttering: [A61F 5/58](#)

Note: Additional information is classified under [A61F 5/00](#) - [A61F 2005/563](#).
Classification under [A61F 2005/0132](#) relates to articulated knee orthoses.

A61F 6/00

Contraceptive devices; Pessaries; Applicators therefor

Definition statement

This subclass/group covers:

This group 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.

Relationship between large subject matter areas

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 relevant to classification in this group

This subclass/group does not cover:

| | |
|-----------------------------------|----------------------|
| Chemical aspects of contraception | A61K |
|-----------------------------------|----------------------|

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 within this group

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

Definition statement

This subclass/group covers:

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

References relevant to classification in this group

This subclass/group 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 | A61B18/00A |
| 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 |

| | |
|--|----------------------------|
| 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 |

Informative references

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

| | |
|---|---|
| Electrical heating means | H05B 1/00 |
| Massage and therapeutic baths | A61H 1/00 |
| Therapeutic heating with ultrasound | A61N 7/02 |
| 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 |
| 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 |

Special rules of classification within this group

Documents using heating alone or both heating and cooling should be classified in [A61F 7/00](#) - [A61F 7/08](#) or [A61F 7/12](#), documents exclusively using cooling should be classified in [A61F 7/10](#). As an exception **A61F7/00C2** and **A61F7/00D2** also exclusively deal with cooling.

Further details of subgroups

A61F7/00A: locations on the human body for heating and cooling. Not for

invention information. Headgroup **A61F7/00A** 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 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 subclass/group, 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 9/00

Method 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 1/06](#); visors for helmets [A42B 3/22](#); [N: retractors [A61B 17/02](#); manipulators specially adapted for use in surgery [A61B19/00M](#)]; appliances to aid invalids to move about [A61H 3/00](#); [N: exercisers for the eyes [A61H 5/00](#)]; eye baths [A61H 35/02](#); sunglasses or goggles having the same features as spectacles [G02C](#)))

References relevant to classification in this group

This subclass/group does not cover:

| | |
|--|----------------------------|
| Caps with means for protecting the eyes | A42B 1/06 |
| Visors for helmets | A42B 3/22 |
| Retractors | A61B 17/02 |
| Manipulators specially adapted for use in surgery | A61B19/00M |
| Appliances to aid invalids to move about | A61H 3/00 |
| Eye baths | A61H 35/02 |
| Exercisers for the eyes | A61H 5/00 |
| Sunglasses or goggles having the same features as spectacles | G02C |

Special rules of classification within this group

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.

[A61F 9/0008](#)

[N: 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 subclass/group covers:

Eye droppers

Relationship between large subject matter areas

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

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

Droppers : [B65D 47/18](#)

References relevant to classification in this group

This subclass/group 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

[N: implantable in, or in contact with, the eye, e.g. ocular inserts]

Definition statement

This subclass/group covers:

Ocular inserts for drug delivery

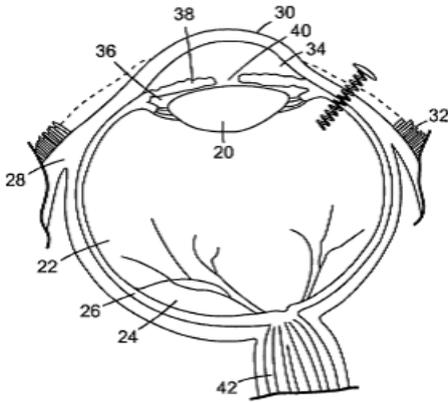


Fig. 5

References relevant to classification in this group

This subclass/group does not cover:

| | |
|---|-----------------------------|
| Cornea implants for repair of corneal tissue | A61F 2/142 |
| Implantation instruments for cornea implants for repair of corneal tissue | A61F 2/143 |
| Corneal inlays or onlays for refractive correction | A61F 2/145 |
| Implantation instruments for corneal inlays or onlays for refractive correction | A61F 2/146 |
| Stromal implants for refractive correction | A61F 2/147 |
| Implantation instruments for stromal implants for refractive correction | 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 | G02C 7/04 |

| | |
|--------|--|
| cornea | |
|--------|--|

A61F 9/0061

[N: Devices for putting-in contact lenses]

References relevant to classification in this group

This subclass/group does not cover:

| | |
|--------------------|-----------------------------|
| Contact lens cases | A45C 11/005 |
|--------------------|-----------------------------|

Special rules of classification within this group

Illustrative example of subject matter classified in [A61F 9/0061](#)

DE 20 2009 015 583 U1 2010.04.08

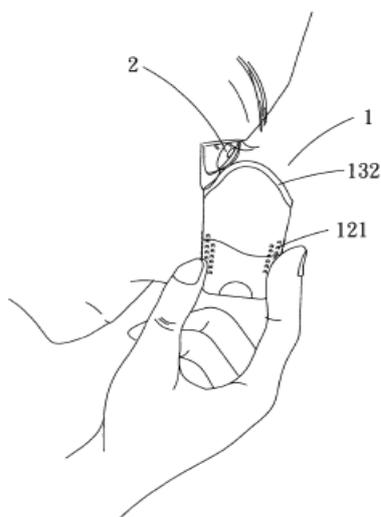


FIG. 4

A61F 9/007

[N: Methods or devices for eye surgery]

Definition statement

This subclass/group covers:

Devices particular for surgical interventions on the eye

References relevant to classification in this group

This subclass/group 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 |

A61F 9/00709

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

References relevant to classification in this group

This subclass/group does not cover:

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

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 |
|---|----------------------------|

A61F 9/00718

[N: Restoration of lid function]

Definition statement

This subclass/group covers:

Instruments to help restore the lid function

A61F 9/00736

[N: Instruments for removal of intra-ocular material]

Relationship between large subject matter areas

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 relevant to classification in this group

This subclass/group does not cover:

| | |
|---|--------------------------------|
| Ultrasonic cutters for general surgery | A61B 17/320068 |
| Invasive laser devices to remove intra-ocular material | A61F9/011R |
| Lasers to remove corneal material | A61F9/01 |
| Devices using focused ultrasound for general tissue removal | A61N 7/02 |

A61F 9/00772

[N: Apparatus for restoration of tear ducts]

Informative references

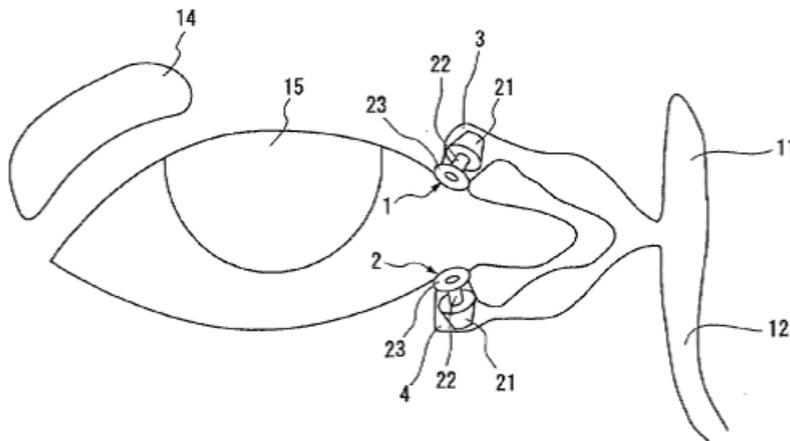
Attention is drawn to the following places, which may be of interest for search:

| | |
|---------------------------------|-------------------------------|
| Plugs implanted in body vessels | A61B 17/12022 |
|---------------------------------|-------------------------------|

Special rules of classification within this group

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

FIG. 3



Example for correcting occluded lacrimal pathways (Jones tube):

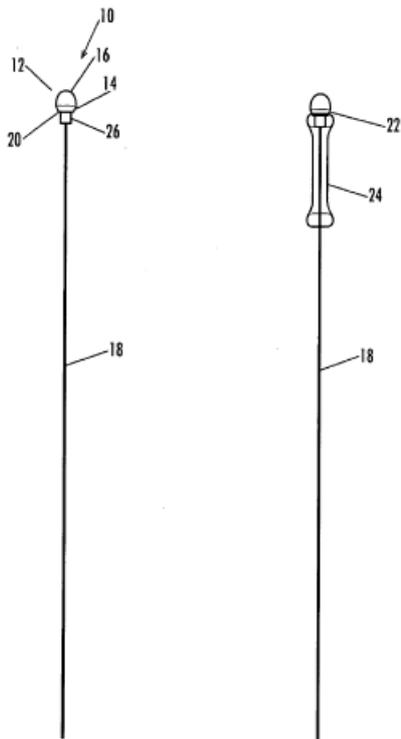


Fig. 1

Fig. 2

Synonyms and Keywords

In patent documents the following abbreviations are often used:

| | |
|--------------|---|
| Punctum plug | Plug, implant or instrument for the lacrimal duct |
|--------------|---|

A61F 9/00781

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

References relevant to classification in this group

This subclass/group does not cover:

| | |
|------------------------------|-----------------------------|
| Drainage implants in general | A61M 27/002 |
|------------------------------|-----------------------------|

Special rules of classification within this group

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

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

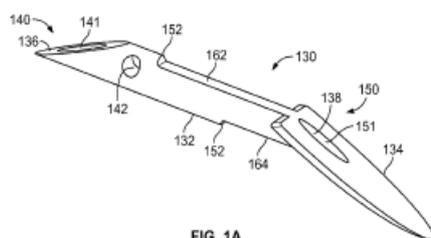


FIG. 1A

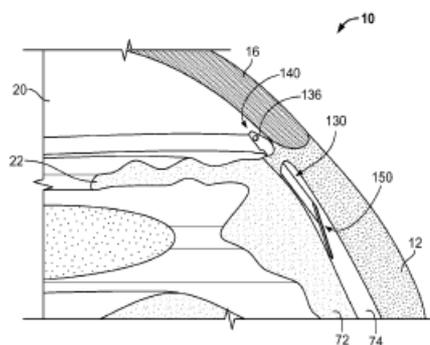


FIG. 1B

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 9/013

[N: Instruments] for compensation of ocular refraction ([A61F 9/008](#) takes precedence); [N: Instruments for use in cornea removal, for reshaping or performing incisions in the cornea ([A61F9/01](#) takes precedence)]

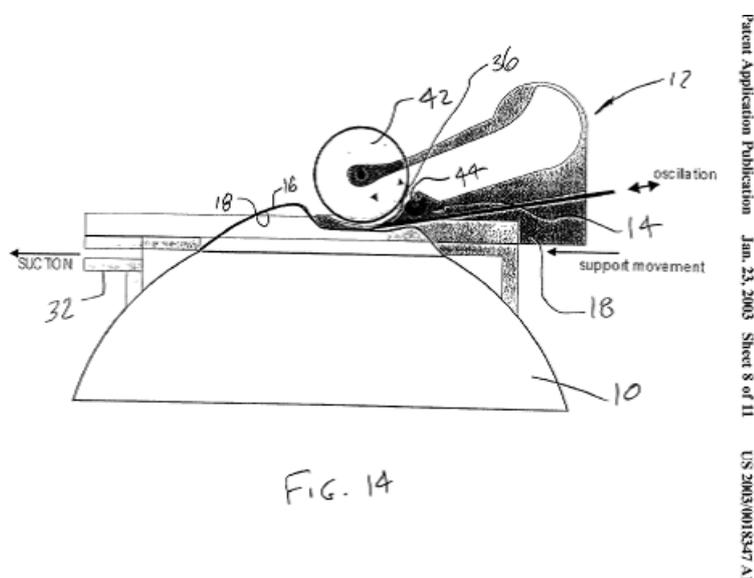
References relevant to classification in this group

This subclass/group does not cover:

| | |
|--|----------------------------|
| Laser eye surgery | A61F 9/008 |
| Instruments for use in cornea removal, for reshaping or performing incisions in the cornea | A61F9/01 |

Special rules of classification within this group

Illustrative example of subject matter classified in [A61F 9/013](#)



A61F 9/0133

[N: Knives or scalpels specially adapted therefor]

References relevant to classification in this group

This subclass/group does not cover:

| | |
|------------------------------|------------------------------|
| Surgical scalpels and knives | A61B 17/3211 |
|------------------------------|------------------------------|

A61F 9/02

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

References relevant to classification in this group

This subclass/group does not cover:

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

A61F 9/022

[N: 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 relevant to classification in this group

This subclass/group does not cover:

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

A61F 9/023

[N: with variable transmission, e.g. photochromic (for welding [9/06F2](#))]

References relevant to classification in this group

This subclass/group does not cover:

| | |
|--|----------------------------|
| Welding masks with variable transmission | A61F 9/067 |
|--|----------------------------|

A61F 9/04

Eye-masks; [N: 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](#))]

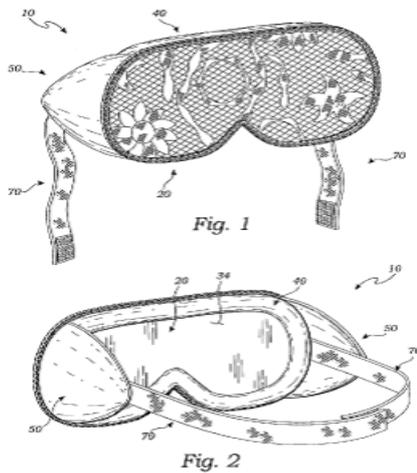
Definition statement

This subclass/group covers:

Sleep masks

Masks for protecting the eye after ophtalmic surgery

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References relevant to classification in this group

This subclass/group does not cover:

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

A61F 9/045

[N: Eye-shades or visors; Shields beside, between or below the eyes (caps with means for protecting the eyes [A42B 1/06](#))]

References relevant to classification in this group

This subclass/group 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 relevant to classification in this group

This subclass/group does not cover:

| | |
|---------------------------------------|---------------------------|
| Safety devices for welding in general | F16P 1/00 |
|---------------------------------------|---------------------------|

A61F 9/065

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

References relevant to classification in this group

This subclass/group 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[N: (walking or guiding aids for blinds [A61H 3/06](#); teaching or communicating with blinds [G09B 21/00](#) promoting of eye function by stimulation with electric currents using contact electrodes

[A61N 1/36046](#)]]]

References relevant to classification in this group

This subclass/group does not cover:

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

A61F 9/0079

using non-laser electromagnetic radiation

Definition statement

This subclass/group 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 relevant to classification in this group

This subclass/group 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:

| | |
|---|----------------------------|
| Instruments for examination of the eyes | A61B 3/00 |
| Accessories for surgery or diagnosis | A61B 19/00 |
| Lasers in general | H01S 3/00 |

| | |
|--|--|
| Surgery with non mechanical forms of energy in general | A61B 18/00 |
| Laser surgery in general | A61B 18/20 |
| Implants of eye parts in general | A61F 2/14 |
| Optical components | G02C 7/00 |
| Contact lenses | G02C 7/04 |
| Photodynamic therapy | A61N5/06B2 , A61N 5/062 |

Special rules of classification within this group

[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 subclass/group covers:

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

References relevant to classification in this group

This subclass/group 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:

| | |
|--|---|
| Instruments for examination of the eyes | A61B 3/00 |
| Accessories for surgery or diagnosis | A61B 19/00 |
| Lasers in general | H01S 3/00 |
| Surgery with non mechanical forms of energy in general | A61B 18/00 |
| Laser surgery in general | A61B 18/20 |
| Implants of eye parts in general | A61F 2/14 |
| Optical components | G02C 7/00 |
| Contact lenses | G02C 7/04 |
| Photodynamic therapy | A61N5/06B2 , A61N 5/062 |

Special rules of classification within this group

The IPC groups **A61F9/01** and **A61F9/011** are not used.

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 11/00

Methods or devices for treatment of the ears, e.g. surgical; Protective devices for the ears, carried on the body or in the hand; [N: Non-electric hearing aids]

Definition statement

This subclass/group covers:

Tinnitus treatment

References relevant to classification in this group

This subclass/group does not cover:

| | |
|---|----------------------------|
| Tinnitus treatment by psychotherapy and hypnosis based methods, i.e. changing the state of mind | A61M 21/00 |
| Wearable tinnitus maskers | H04R 25/00 |

A61F 11/002

[N: Surgical middle ear ventilation or drainage, e.g. permanent; Implants therefor (drainage implants in general [A61M 27/002](#))]

References relevant to classification in this group

This subclass/group does not cover:

| | |
|------------------------------|-----------------------------|
| Drainage implants in general | A61M 27/002 |
|------------------------------|-----------------------------|

A61F 11/004

[N: Ear surgery ([A61F 11/002](#) takes precedence)]

References relevant to classification in this group

This subclass/group does not cover:

| | |
|---|-----------------------------|
| Surgical middle ear ventilation or drainage | A61F 11/002 |
|---|-----------------------------|

A61F 11/006

[N: Ear cleaners, e.g. cures (cotton tips [A61F 13/38](#); cleaning by suction [A61M 1/0023](#), by irrigation [A61M 3/02](#))]

References relevant to classification in this group

This subclass/group does not cover:

| | |
|------------------------|-----------------------------|
| Cotton tips | A61F 13/38 |
| Cleaning by suction | A61M 1/0023 |
| Cleaning by irrigation | A61M 3/02 |

A61F 11/008

[N: Non-electric hearing aids, e.g. ear trumpets, sound amplifiers, ear-shells (non-electric sound-amplifying devices in general [G10K 11/08](#); sound-focusing or directing using reflection in general [G10K 11/28](#))]

References relevant to classification in this group

This subclass/group does not cover:

| | |
|---|----------------------------|
| Non-electric sound-amplifying devices in general | G10K 11/08 |
| Sound-focusing or directing using reflection in general | G10K 11/28 |

A61F 11/04

Devices or methods enabling ear patients to replace direct auditory perception by another kind of perception [N: (electronic stimulation of auditory nerves [A61N 1/36032](#))]

References relevant to classification in this group

This subclass/group does not cover:

| | |
|---|------------------------------|
| Cochlear implants, i.e. electronic stimulation of auditory nerves | A61N 1/36032 |
|---|------------------------------|

A61F 11/045

[N: using mechanical stimulation of nerves (acting directly on the ear [H04R 25/00](#))]

Definition statement

This subclass/group 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).

References relevant to classification in this group

This subclass/group does not cover:

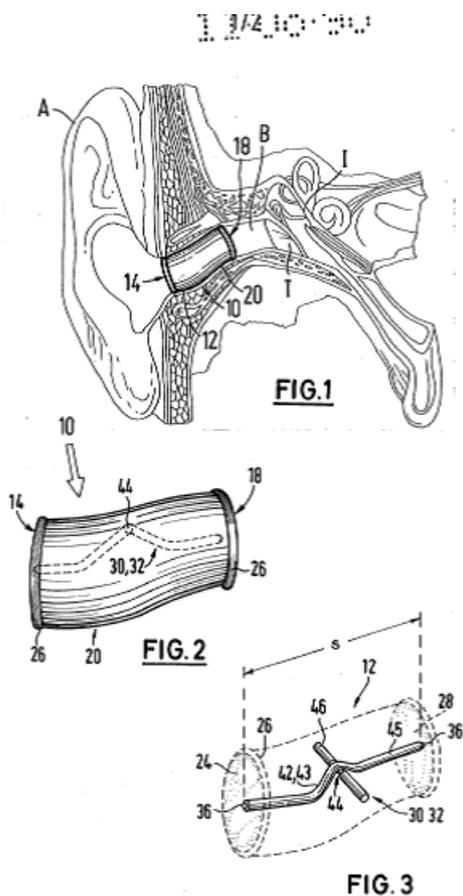
| | |
|--|----------------------------|
| Mechanical stimulation of nerves acting directly on the ear | H04R 25/00 |
| Vibratory stimulation of the jaw and teeth intended to cause vibrations in the cochlea | H04R25/00M4 |

Special rules of classification within this group

Illustrative example of subject matter classified in [A61F 11/045](#)

Example DE29814386U (The hearing aid is provided by a hearing capsule (10) inserted in the outer ear passage, in the shape of a tapered hollow body

(12) with an elastically flexible mantle, provided with a membrane at either end (14,18).)



A61F 11/08

internal, e.g. earplugs

Special rules of classification within this group

Earplugs including an inner channel: [A61F 2011/085](#)

A61F 11/14

external, e.g. earcaps or earmuffs (headwear, e.g. caps or helmets, with means for protecting the ears [A42B 1/06](#), [A42B 3/16](#), [N: for hairdresser's rooms [A45D 44/12](#); for sports [A63B 71/10](#); headphones [H04R 1/10](#)])

References relevant to classification in this group

This subclass/group does not cover:

| | |
|--|---|
| Headwear, e.g. caps or helmets, with means for protecting the ears | A42B 1/06 , A42B 3/16 |
|--|---|

| | |
|---|----------------------------|
| Earcaps or earmuffs for hairdresser's rooms | A45D 44/12 |
| Earcaps or earmuffs for sports | A63B 71/10 |
| Headphones | H04R 1/10 |

A61F 11/14E

[N: electric, e.g. for active noise reduction (active noise reduction in general [G10K 11/175](#))]

Definition statement

This subclass/group covers:

Earmuff with active noise reduction.

References relevant to classification in this group

This subclass/group does not cover:

| | |
|--|------------------------------|
| Active noise reduction in general | G10K 11/175 |
| Hearing protectors with an electronic communication function | H04R 1/1083 |
| Headphone with active noise reduction | H04R 1/1083 |
| Reduction of ambient noise in earphones for communication | H04R 1/1083 |
| Hearing devices using active noise cancellation (e.g. US6661901) | H04R 2460/01 |

A61F 13/00

Bandages or dressings (suspensory bandages [A61F 5/40](#); [N: contact-avoiding wound protectors [A61F 15/008](#); bandages or dressings with incorporated medicaments [A61L 15/44](#), [A61M35/00C](#); radioactive dressings [A61N5/12](#)]); Absorbent pads (chemical aspects of, or use of materials for, bandages,

dressings or absorbent pads [A61L 15/00](#); [N: absorbent pads for tracheostomy [A61M 16/047](#)]

Definition statement

This subclass/group covers:

Articles intended to be in contact with the human skin and absorb fluids excreted by the human body, 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 any natural opening (genital, anal, nose, mouth, ear) and during surgery.

Method and apparatuses of manufacturing these articles.

Relationship between large subject matter areas

[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 **A61F15/01** 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 relevant to classification in this group

This subclass/group does not cover:

| | |
|--|---|
| Any type of undergarment without any specific means intended to absorb excretions per se | A41B |
| Articles intended to absorb sweat | A42C 5/02 , A41D 20/00 , A41D 27/13 |
| Clean the skin (e.g. wet wipes) | A61K 8/0208 |

Informative references

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

| | |
|---------------------|---------------------------|
| Suspensory bandages | A61F 5/40 |
|---------------------|---------------------------|

| | |
|---|--|
| Bandages or dressings with incorporated medicaments | A61L 15/44 , A61M35/00C |
| Radioactive dressings | A61N5/12 |
| Chemical aspects of, or use of materials for, bandages, dressings or absorbent pads | A61L 15/00 |
| Absorbent pads for tracheostomy | A61M 16/047 |
| For veterinary purposes | A61D 9/00 |

A61F 13/0203

[N: having a fluid handling member]

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 1/0088 |

A61F 13/0269

[N: 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 19/08](#); attaching catheters [A61M 25/02](#))]

Informative references

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

| | |
|---------------------|-----------------------------|
| Wound closure tapes | A61B 17/085 |
| Surgical drapes | A61B 19/08 |

| | |
|----------------------|----------------------------|
| Tapes for stoma bags | A61F 5/443 |
| Attaching catheters | A61M 25/02 |

A61F 13/04

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

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 13/08

Elastic stockings; for contracting aneurisms

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 | A61H13/04B |

| | |
|---|---|
| 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 [N: (restraining devices for arms [A61F 5/37](#); shoulder bandages [A61F 13/14](#))]

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

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](#))

Informative references

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

| | |
|---------------------------------------|-----------------------------|
| Brassieres for medical use or surgery | A41C 3/0064 |
| Braces for providing support to the | A61F 5/028 |

| | |
|---|---------------------------|
| lower back, e.g. lumbo- sacral supports | |
| Corsets or bandages for abdomen, teat or breast support | A61F 5/03 |

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](#)); Supporting or fastening means therefor; Tampon applicators

Definition statement

This subclass/group covers:

Articles intended to be worn or held against the human body for absorbing excretions from natural openings except from wounds or breasts which are covered by [A61F 13/00](#), [A61F 13/02](#) or [A61F 13/14](#).

References relevant to classification in this group

This subclass/group does not cover:

articles for absorbing wound excretions

articles intended for cleaning the human body or skin, e.g. wet-tissues
wet-wipes

any article intended to be used as underwear without having any specific feature for absorbing excretions

any article intended to be inserted into the human body for other purpose than for absorbing, e.g. pessaries

any article for absorbing sweat.

A61F 13/15203

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

Relationship between large subject matter areas

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

A61F 13/15658

[N: Forming continuous, e.g. composite, fibrous webs, e.g. involving the application of pulverulent material on parts thereof]

Informative references

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

| | |
|----------|--|
| Spraying | B05C 19/04 , B05B 7/14 |
|----------|--|

A61F 13/15707

[N: Mechanical treatment, e.g. notching, twisting, compressing, shaping]

Relationship between large subject matter areas

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

[N: Treating webs, e.g. for giving them a fibrelike appearance, e.g. by embossing]

Relationship between large subject matter areas

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

[N: Sealing, e.g. involving cutting]

Relationship between large subject matter areas

Bonding [B29C 45/00](#).

A61F 13/20

Tampons, e.g. catamenial tampons; Accessories therefor

Definition statement

This subclass/group covers:

All articles intended to be inserted within a natural opening e.g. nose plugs, dental absorbent tampons, catamenial tampons, anal plugs, era plugs.

References relevant to classification in this group

This subclass/group does not cover:

| | |
|--|---|
| 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 subclass/group 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.).

Relationship between large subject matter areas

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
A61F13/24)**

Definition statement

This subclass/group 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 subclass/group 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

[N: having a reinforcing member]

Definition statement

This subclass/group covers:

Articles of the feminine hygiene napkin type having a reinforcing member to keep the shape in a desired form.

A61F 13/4704

[N: having preferential bending zones, e.g. fold lines or grooves]

Definition statement

This subclass/group 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.

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

[N: having only interlabial part, i.e. with no extralabial parts]

Definition statement

This subclass/group covers:

Articles which are intended to be placed against and to be hold by the labiae of the female anatomy.

References relevant to classification in this group

This subclass/group does not cover:

| | |
|---|------------------------------|
| Articles intended to be worn inside the vagina e.g. tampons | A61F 13/2051 |
|---|------------------------------|

A61F 13/47218

[N: with a raised crotch region, e.g. hump]

Definition statement

This subclass/group 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

N: for interlabial use]

Definition statement

This subclass/group 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

[N: with activating means, e.g. elastic, heat or chemical activatable means]

Definition statement

This subclass/group 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 relevant to classification in this group

This subclass/group 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 subclass/group 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 subclass/group 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 relevant to classification in this group

This subclass/group does not cover:

| | |
|--|-----------------------------|
| The liquid impermeable backsheet per see | A61F 13/514 |
|--|-----------------------------|

A61F 13/476

characterised by encircling the crotch region of the undergarment

Definition statement

This subclass/group 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 relevant to classification in this group

This subclass/group does not cover:

| | |
|--|------------------------------|
| Flaps intended for fastening the article on the underwear the groups | A61F 13/5605 |
|--|------------------------------|

A61F 13/49

Absorbent articles specially adapted to be worn around the waist, e.g. diapers

Definition statement

This subclass/group covers:

Articles which due to their form are self sustained around the waist, e.g. diapers, or pant form diapers.

A61F 13/49003

[N: Reusable, washable fabric diapers]

Definition statement

This subclass/group 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

[N: with fastening means]

References relevant to classification in this group

This subclass/group does not cover:

| | |
|------------------------|---|
| Fastening means per se | A61F 13/56 , A61F 13/58 |
|------------------------|---|

A61F 13/49007

[N: Form-fitting, self-adjusting disposable diapers]

Definition statement

This subclass/group 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 relevant to classification in this group

This subclass/group does not cover:

| | |
|---|-------------------------------|
| Elastic barriers which are covered by the edge leaking prevention | A61F 13/49413 |
|---|-------------------------------|

A61F 13/4902

[N: characterised by the elastic material]

Relationship between large subject matter areas

Extensible layered products [B32B 5/04](#), [B32B 5/26](#), [B32B 27/12](#), [B32B 37/144](#)

A61F 13/493

adjustable [N: by adding or removing material e.g. umbilical cord arrangements (adjustable by the fastening **A61F13/59B4**, **A61F13/59D4**)]

Definition statement

This subclass/group covers:

Articles that are manually adjustable to conform the body shape or size.

References relevant to classification in this group

This subclass/group does not cover:

| | |
|---|----------------------------|
| The fastening means or the adjustability of the article through the | A61F 13/58 |
|---|----------------------------|

| | |
|-----------------|--|
| fastening means | |
|-----------------|--|

A61F 13/4946

[N: the edge leakage prevention means being an absorbent medium ([A61F 13/49426](#) takes precedence)]

Definition statement

This subclass/group covers:

Articles that have secondary absorbent material located at the side edges of the article, mostly next to the main absorbent core. If the secondary absorbent material is located at the end edges then this is covered by [A61F 13/49466](#).

References relevant to classification in this group

This subclass/group does not cover:

| | |
|--|---|
| The difference of absorbency of the absorbent core in the X-Y direction per se | A61F 13/532 , A61F131/535 |
|--|---|

A61F 13/51

characterised by the outer layers [N: (wicking or transfer layers [A61F 13/537](#))]

Definition statement

This subclass/group 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 relevant to classification in this group

This subclass/group does not cover:

| | |
|------------------------------------|-----------------------------|
| If the layer immediately under the | A61F 13/537 |
|------------------------------------|-----------------------------|

| | |
|--|--|
| 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 13/514

backsheet, i.e. the impermeable cover or layer furthest from the skin [N: ([A61F 13/15211](#), [A61F 13/15252](#) take precedence)]

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 |
|--|-----------------------------|

A61F 13/51466

[N: providing stretchability without the use of elastic material]

Definition statement

This subclass/group 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

[N: being a laminate, e.g. multi-layered or with several layers]

References relevant to classification in this group

This subclass/group 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 |
|--|-----------------------------|

A61F 13/53

characterised by the absorbing medium ([A61F 13/20](#) takes precedence)

Definition statement

This subclass/group 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](#).

Relationship between large subject matter areas

Chemical composition: [A61F13/15L](#)

A61F 13/533

having discontinuous areas of compression

References relevant to classification in this group

This subclass/group does not cover:

| | |
|---|---|
| Grooves which are intended for leakage prevention per se or for folding | A61F 13/4756 , A61F 13/4704 , A61F 13/49001 |
|---|---|

A61F 13/551

Packaging before or after use [N: (general packaging of absorbent pads [B65D 85/00](#))]

Relationship between large subject matter areas

Foldable baby changing mats/supports: [A47D 15/00](#), [A47D 5/00](#).

References relevant to classification in this group

This subclass/group does not cover:

| | |
|--|----------------------|
| If the package or packaging is not directly related to the absorbent article | B65D |
|--|----------------------|

A61F 13/56

Supporting or fastening means

Definition statement

This subclass/group covers:

All means for holding in their position the absorbent articles covered by the subgroups [A61F 13/45-A61F 13/51](#).

References relevant to classification in this group

This subclass/group does not cover:

| | |
|--------------------------------------|---|
| Fastening means for wound appliances | A61F 13/00 - A61F 13/14 |
|--------------------------------------|---|

A61F 13/5616

[N: using flaps, e.g. adhesive, for attachment to the undergarment (leakage prevention means encircling the crotch portion **A61F13/15B1M**)

References relevant to classification in this group

This subclass/group does not cover:

| | |
|--|-----------------------------|
| If the flaps are indented to prevent leakage soiling of the undergarment | A61F 13/476 |
|--|-----------------------------|

A61F 13/62

[N: 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

Relationship between large subject matter areas

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 subclass/group 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 relevant to classification in this group

This subclass/group does not cover:

| | |
|--|----------------------------|
| Adhesive attachment of wound dressings | A61F 13/02 |
|--|----------------------------|

A61F 15/00

Auxiliary appliances for wound dressings; Dispensing containers for dressings or bandages [N: (packaging of absorbent articles such as diapers, feminine hygiene absorbing pads or tampons [A61F 13/551](#); packaging of wound dressings [A61F 13/00072](#))]

References relevant to classification in this group

This subclass/group does not cover:

| | |
|---|-----------------------------|
| Individual wrapped articles before or after use | A61F 13/551 |
|---|-----------------------------|

A61F 17/00

First-aid kits

Definition statement

This subclass/group 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.

Informative references

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

| | |
|--|------------------------------|
| Carrying bags, cases, trusses e.g. doctor bags | A61B 19/0264 |
| Bags for midwives | A61B 17/48 |

| | |
|-----------------|----------------------|
| Bags in general | A45C |
|-----------------|----------------------|