A61F
FILTERS IMPLANTABLE INTO BLOOD VESSELS; PROSTHESES; DEVICES PROVIDING PATENCY TO, OR PREVENTING COLLAPSING OF, TUBULAR STRUCTURES OF THE BODY, e.g. STENTS; ORTHOPAEDIC, NURSING OR CONTRACEPTIVE DEVICES; FOMENTATION; TREATMENT OR PROTECTION OF EYES OR EARS; BANDAGES, DRESSINGS OR ABSORBENT PADS; FIRST-AID KITS (dental prosthetics A61C)

Definition statement

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

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

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

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

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

Specially adapted means for protecting prostheses;

Filters implantable into blood vessels;

Lengthening pieces for natural legs;

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

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

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

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

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

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

Devices for medical or hygienic care of living individuals that are worn by the individual or directly contact the body of the individual during their care:
Devices worn by the patient for reception of urine, faeces; colostomy devices;

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

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

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

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

Devices for inserting contact lenses.

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

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

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

**Relationships with other classification places**

If an apparatus, method, device, or material is usable for both humans and animals for the same purpose and in the same manner, and it is otherwise proper for this subclass, classification is made only in subclass A61F. Similar devices or processes to those covered by subclass A61F that are usable exclusively for animals or are used in animals in a different manner or for different purposes than for humans, are classified in subclass A01K or A61D.

Surgical apparatus or processes in general are covered by subclass A61B.

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

#### Limiting references

This place does not cover:

| Dental prostheses | A61C |

#### Informative references

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

| Undergarments | A41B 9/00 |
| Baby linen | A41B 13/00 |
| Corsets or girdles | A41C 1/00 |
| Brassieres | A41C 3/00 |
| Cosmetic articles, e.g. wigs, hair pieces | A41G |
| Caps with means for protecting the eyes or the ears | A42B 1/06 |
| Ordinary arch supports for shoes | A43B 7/14 |
| Artificial nails | A45D 31/00 |
| Heating or cooling means in connection with bedsteads or mattresses | A47C 21/00 |
| Surgical instruments | A61B 17/00 |
| Devices for closing wounds, or holding wounds closed | A61B 17/08 |
| Surgical drapes | A61B 46/00 |
| Chiropractic methods or devices | A61H 1/00 |
| Appliances for aiding patients or disabled persons to walk | A61H 3/00 |
| Massage of the genitals | A61H 19/00 |
| Chemical aspects of contraception | A61K |
| Transdermal drug delivery patches | A61K 9/70 |
| Chemical aspects of, or use of materials for, bandages, dressings or absorbent pads | A61L 15/00, A61L 26/00 |
| Adhesives for colostomy devices | A61L 24/00 |
| Surgical adhesives or cements | A61L 24/00 |
| Materials for prostheses | A61L 27/00 |
| Materials for colostomy devices | A61L 28/00 |
| Artificial hearts, kidneys | A61M 1/00 |
| Irrigators | A61M 3/02 |
| Balloon catheters | A61M 25/10 |
| Drainage appliances for wounds | A61M 27/00 |
| Dilators | A61M 29/00 |
| Valves specially adapted for medical use | A61M 39/00 |
| Exercising apparatus specially adapted for particular parts of the body | A63B 23/00 |
| Goggles for swimming | A63B 33/00 |
| Making artificial eyes from organic plastic material | B29C, B29D 11/02 |
Special rules of classification

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

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

Glossary of terms

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

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absorbent articles</td>
<td>Articles adapted to absorb liquid excreted by the body.</td>
</tr>
<tr>
<td>Dilator</td>
<td>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 dilatation, 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.</td>
</tr>
<tr>
<td>Disabled person</td>
<td>A human being that is unable to do certain basic physical tasks (e.g. walking) due to a physical or mental impairment/condition.</td>
</tr>
<tr>
<td>Patient</td>
<td>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.</td>
</tr>
<tr>
<td>Stent</td>
<td>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.</td>
</tr>
<tr>
<td>Stent graft</td>
<td>Stent with a tubular member made of a synthetic resin affixed to the inside or outside of the stent.</td>
</tr>
</tbody>
</table>

Synonyms and Keywords

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

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>device for fluid management</td>
<td>incontinence article.</td>
</tr>
</tbody>
</table>
A61F 2/00

Filters implantable into blood vessels; Prostheses, i.e. artificial substitutes or replacements for parts of the body; Appliances for connecting them with the body; Devices providing patency to, or preventing collapsing of, tubular structures of the body, e.g. stents (as cosmetic articles, see the relevant subclasses, e.g. wigs, hair pieces, A41G 3/00, A41G 5/00, artificial nails A45D 31/00; dental prostheses A61C 13/00; materials for prostheses A61L 27/00; artificial hearts A61M 1/10; artificial kidneys A61M 1/14)

References

Limiting references

This place does not cover:

| Cosmetic articles, e.g. wigs, hair pieces | A41G 3/00, A41G 5/00 |
| Artificial nails | A45D 31/00 |
| Dental prostheses | A61C 13/00 |
| Materials for prostheses | A61L 27/00 |
| Artificial hearts | A61M 1/10 |
| Artificial kidneys | A61M 1/14 |

Special rules of classification

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

The "orthogonal" Indexing Code symbols are also used.

Prostheses classified in groups A61F 2/00 - A61F 2/26 or A61F 2/82 or A61F 9/00 or A61F 11/00 or subgroups thereof:

A61F 2210/00 Particular material properties
A61F 2220/00 Fixations or connections
A61F 2230/00 Geometry of prostheses
A61F 2240/00 Manufacturing or designing of prostheses (specific manufacturing fields take precedence)
A61F 2250/00 Special features of prostheses

A61F 2/0004

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

Relationships with other classification places

Colostomy devices: A61F 5/445
Receptacles for taking up urine or feces: A61F 5/451
Drainage catheters: A61M 27/00

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Description</th>
<th>CPC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closure means for other lumina</td>
<td>A61B 17/12</td>
</tr>
<tr>
<td>Drainage of urine without closure</td>
<td>A61M 25/0017</td>
</tr>
<tr>
<td>Catheters for rectum</td>
<td>A61M 31/00</td>
</tr>
</tbody>
</table>

Informative references

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

<table>
<thead>
<tr>
<th>Description</th>
<th>CPC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare informatics</td>
<td>G16H</td>
</tr>
</tbody>
</table>

A61F 2/0009

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

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Description</th>
<th>CPC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plugging an opening in the wall of a hollow or tubular organ</td>
<td>A61B 17/0057</td>
</tr>
</tbody>
</table>
Special rules of classification
Illustrative example of subject matter classified in A61F 2/0009.
A61F 2/0013

{inflatable}

Special rules of classification

Illustrative example of subject matter classified in A61F 2/0013.
Fig. 3
A61F 2/0022

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

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Occluding blood vessels by internal devices</th>
<th>A61B 17/12022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urethral drainage stents</td>
<td>A61M 25/0017</td>
</tr>
</tbody>
</table>

Special rules of classification

Illustrative example of subject matter classified in A61F 2/0022

A61F 2/0036

{implantable (A61F 2/0018 takes precedence)}

Relationships with other classification places

Implanted gastrointestinal electrodes for the anal tract: A61N 1/0512

Implanted gastrointestinal electrodes for the urinary tract: A61N 1/0514
References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Description</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnetic closure means placed in or outside the body opening close to the</td>
<td>A61F 2/0018</td>
</tr>
<tr>
<td>surface of the body</td>
<td></td>
</tr>
<tr>
<td>Injectable solid implants</td>
<td>A61K 9/0024</td>
</tr>
<tr>
<td>Drainage implants in the urethral tract</td>
<td>A61M 27/008</td>
</tr>
<tr>
<td>Stimulation by electrodes</td>
<td>A61N 1/36007</td>
</tr>
</tbody>
</table>

A61F 2/004

{inflatable}

Relationships with other classification places

Means for transferring electromagnetic energy to implants: A61F 2250/0001

A61F 2/0045

{Support slings}

Definition statement

This place covers:

Slings or meshes for pelvic prolapse

Relationships with other classification places

Hernia repair meshes: A61F 2/0063

References

Informative references

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment of female stress incontinence, i.e. especially delivery devices or other devices</td>
<td>A61B 2017/00805</td>
</tr>
<tr>
<td>for implantation</td>
<td></td>
</tr>
<tr>
<td>Bone anchors for fixation of slings</td>
<td>A61B 17/0401</td>
</tr>
<tr>
<td>Suturing instruments</td>
<td>A61B 17/06</td>
</tr>
</tbody>
</table>

A61F 2/005

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

Relationships with other classification places

Tampons: A61F 13/20

Pessaries, i.e. devices worn in the vagina to support the uterus: A61F 6/08

Exercising apparatus for vaginal muscles: A63B 23/20
A61F 2/0054

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

Relationships with other classification places
Absorbent pads for male use: A61F 13/471
Penis implants: A61F 2/26

References

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

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

A61F 2/0059

(Cosmetic or alloplastic implants (A61F 2/10 - A61F 2/16, A61F 2/28 take precedence))

Definition statement
This place covers:
Implants are structurally confined; there are no uncontained fillers

Relationships with other classification places
Cosmetic fillers: A61K 8/02
Cosmetic materials containing animal cells: A61L 27/38

References

Limiting references
This place does not cover:

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

A61F 2/0063

(Implantable repair or support meshes, e.g. hernia meshes)

Relationships with other classification places
Knitting processes for the production of meshes: D04B 21/12
References

Limiting references

This place does not cover:

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

A61F 2/0077

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

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Reference</th>
<th>CPC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bone surfaces</td>
<td>A61F 2/30767</td>
</tr>
<tr>
<td>Materials for coating prostheses</td>
<td>A61L 27/28</td>
</tr>
<tr>
<td>Sand blasting</td>
<td>B24C 1/00 - B24C 11/00</td>
</tr>
<tr>
<td>Processes for functionalising a surface</td>
<td>B81C 1/00206</td>
</tr>
<tr>
<td>Inorganic coating processes</td>
<td>C23C 14/00</td>
</tr>
</tbody>
</table>

A61F 2/0095

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

Relationships with other classification places

Packages or dispensers for instruments: A61B 50/30

Packages in general: B65D 1/00 - B65D 90/00

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Reference</th>
<th>CPC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packages or dispensers for intraocular lenses</td>
<td>A61F 2/1691</td>
</tr>
<tr>
<td>Packages or dispensers for dental surgery</td>
<td>A61C 19/02</td>
</tr>
</tbody>
</table>
Special rules of classification

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

A61F 2/01

Filters implantable into blood vessels {{filters used as gripping instruments A61B 17/22031}}

Relationships with other classification places

Catheters for removing obstructions in lumina with perfusion capabilities: A61B 17/22

Aspiration catheters: A61M 1/008

Dilation catheters with perfusion capabilities: A61M 2025/1095

References

Limiting references

This place 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

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

Special rules of classification

Illustrative example of subject matter classified in A61F 2/013.
The other endovascular procedure in addition to the filtering device has to be classified in the appropriate groups such as for example:

Stent or stent-graft delivery devices: A61F 2/95
Balloon catheters: A61M 25/10

**A61F 2/02**

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

**References**

**Limiting references**

This place does not cover:

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

**A61F 2/022**

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

**Definition statement**

This place covers:

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

**References**

**Limiting references**

This place does not cover:

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

**Informative references**

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

| Bioreactors for enzymes | C12M 1/40 |
| Processes for producing enzymes | C12N 11/00 |
A61F 2/04

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

Relationships with other classification places

Urethral drainage stents: A61M 25/0017

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Internal ear or nose parts</th>
<th>A61F 2/18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epiglottis, Larynxes Tracheae</td>
<td>A61F 2/20</td>
</tr>
<tr>
<td>Stents</td>
<td>A61F 2/82</td>
</tr>
<tr>
<td>Bariatric or gastric sleeves</td>
<td>A61F 5/0076</td>
</tr>
<tr>
<td>Tear duct implants</td>
<td>A61F9/00T</td>
</tr>
</tbody>
</table>

Special rules of classification

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

{Urinary bladders}

Relationships with other classification places

Drainage implant: A61M 27/002
A61F 2/06

Blood vessels

Definition statement

This place covers:
Tubular structures that substitute natural blood vessels, e.g. bypass grafts

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Materials for artificial blood vessels</th>
<th>A61L 27/507</th>
</tr>
</thead>
<tbody>
<tr>
<td>Artificial blood vessels as access point for injections e.g. for repeated puncture</td>
<td>A61M 1/3655</td>
</tr>
<tr>
<td>Tracheal tubes</td>
<td>A61M 16/00</td>
</tr>
</tbody>
</table>

A61F 2/062

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

Definition statement

This place covers:
Devices for creating vascular grafts by mechanical means.

Relationships with other classification places

Materials containing animal cells: A61L 27/38

Cell culture and products made of cells: C12N 5/00

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Prostheses made from natural tissue or living cells</th>
<th>A61L 27/36</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioreactors for producing artificial tissue or for ex-vivo cultivation of tissue</td>
<td>C12M 21/08</td>
</tr>
</tbody>
</table>
**Special rules of classification**

Illustrative example of subject matter classified in **A61F 2/062**:

**A61F 2/064**

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

**Definition statement**

*This place covers:*

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

**References**

**Limiting references**

*This place does not cover:*

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

**A61F 2/07**

**Stent-grafts**

**Definition statement**

*This place covers:*

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

**Relationships with other classification places**

External clamps or sleeves around an aneurism: **A61B 17/12**

Reinforcement of blood vessels, e.g. for repeated puncture: **A61M 1/3655**
References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Description</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stent-grafts for tubular structures of the body other than blood vessels</td>
<td>A61F 2/04</td>
</tr>
<tr>
<td>Instruments for placement or removal</td>
<td>A61F 2/95</td>
</tr>
<tr>
<td>External stent or sleeve around aneurysm</td>
<td>A61B 17/12</td>
</tr>
</tbody>
</table>

A61F 2/08

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

Definition statement

This place covers:

Artificial muscles implanted in the body

Relationships with other classification places

Tendon anastomosis: A61B 17/1146

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Description</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sutures</td>
<td>A61B 17/04</td>
</tr>
</tbody>
</table>

Informative references

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Artificial muscles as exoprostheses, i.e. not implanted but outside the body</td>
<td>A61F 2/68 and</td>
</tr>
<tr>
<td></td>
<td>A61F 2002/5066</td>
</tr>
<tr>
<td>Programme-controlled manipulators with muscles or tendons</td>
<td>B25J 9/1075</td>
</tr>
</tbody>
</table>

A61F 2/0805

{Implements for inserting tendons or ligaments}

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Description</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guiding means for bone drills</td>
<td>A61B 17/17</td>
</tr>
</tbody>
</table>
A61F 2/0811
{Fixation devices for tendons or ligaments}

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Anchors</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suture anchors</td>
<td>A61B 17/0401</td>
</tr>
<tr>
<td>Staples for connecting tendon to bone</td>
<td>A61B 17/0642</td>
</tr>
</tbody>
</table>

Special rules of classification

Documents receiving a class in A61F 2/0811 have to receive a further class information, such as:

<table>
<thead>
<tr>
<th>Additional class information</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structure of the anchor</td>
<td>A61F 2002/0817</td>
</tr>
<tr>
<td>Modular anchors comprising a plurality of separate parts</td>
<td>A61F 2002/0823</td>
</tr>
<tr>
<td>without deformation of anchor parts, e.g. fixation screws on bone surface, extending barbs, cams, butterflies, spring-loaded pins</td>
<td>A61F 2002/0829</td>
</tr>
<tr>
<td>with deformation of anchor parts, e.g. expansion of dowel by set screw</td>
<td>A61F 2002/0835</td>
</tr>
<tr>
<td>Longitudinal channel for insertion tool running through the whole tendon anchor, e.g. for accommodating bone drill, guidewire</td>
<td>A61F 2002/0841</td>
</tr>
<tr>
<td>Mode of fixation of anchor to tendon or ligament</td>
<td>A61F 2002/0847</td>
</tr>
<tr>
<td>Fixation of a loop or U-turn, e.g. eyelets, anchor having multiple holes</td>
<td>A61F 2002/0852</td>
</tr>
<tr>
<td>Fixation of tendon or ligament between anchor and bone, e.g. interference screws, wedges</td>
<td>A61F 2002/0858</td>
</tr>
<tr>
<td>Fixation of tendon or ligament between anchor elements, e.g. by additional screws in the anchor, anchor crimped around tendon</td>
<td>A61F 2002/0864</td>
</tr>
<tr>
<td>Anchor integrated into tendons, e.g. bone blocks, integrated rings</td>
<td>A61F 2002/087</td>
</tr>
<tr>
<td>Position of anchor in respect to the bone</td>
<td>A61F 2002/0876</td>
</tr>
<tr>
<td>Anchor in or on top of a bone tunnel, i.e. a hole running through the entire bone</td>
<td>A61F 2002/0882</td>
</tr>
<tr>
<td>Anchor in or on a blind hole or on the bone surface without formation of a tunnel</td>
<td>A61F 2002/0888</td>
</tr>
</tbody>
</table>

A61F 2/10

Hair or skin implants

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Instruments for implanting hair follicles</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hair cells</td>
<td>A61B 17/3468</td>
</tr>
<tr>
<td></td>
<td>C12N 5/0627</td>
</tr>
</tbody>
</table>
Informative references

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

<table>
<thead>
<tr>
<th>Wigs</th>
<th>A41G 3/00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hair pieces</td>
<td>A41G 5/00</td>
</tr>
</tbody>
</table>

**A61F 2/105**

{Skin implants, e.g. artificial skin}

References

**Limiting references**

This place 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 and implants

Relationships with other classification places

External mammary prostheses: A61F 2/52

References

**Limiting references**

This place does not cover:

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

Illustrative example of subject matter classified in A61F 2/12

Example for mammary support implant: WO2007004214
A61F 2/14
Eye parts, e.g. lenses, corneal implants; {Implanting instruments specially adapted therefor}; Artificial eyes

Definition statement
This place covers:
All eye prostheses and replacement parts not provided for in the subclasses

Relationships with other classification places
Retinal electrodes: A61N 1/0526
Retinal implants: A61N 1/36046
Removable contact lenses: G02C 7/04

References

Limiting references
This place does not cover:

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

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

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

A61F 2/141
{Artificial eyes}

References

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

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

Illustrative example of subject matter classified in A61F 2/141
A61F 2/142
{Cornea, e.g. artificial corneae, keratoprosthesis or corneal implants for repair of defective corneal tissue}

Definition statement
This place covers:
Artificial or natural cornea replacement implant for repair of defective corneal tissue.

Relationships with other classification places
Implantation instruments therefor: A61F 2/148

References
Limiting references
This place does not cover:

| Corneal implants for refractive correction by alteration of the shape of the cornea | A61F 2/147 |
| Optically active corneal inlay or onlays for refractive correction | A61F 2/145 |
A61F 2/145
{Corneal inlays, onlays, or lenses for refractive correction}

Definition statement

This place covers:

Optically active elements inserted between corneal layers for refractive correction.
References

Limiting references

This place does not cover:

Corneal onlays and inlays for photoablative laser surgery
A61F 2/145 (continued)

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

<table>
<thead>
<tr>
<th>Description</th>
<th>CPC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corneal onlays and inlays for photodisruptive laser surgery</td>
<td>A61F 9/00834</td>
</tr>
<tr>
<td>Reshaping the cornea assisted by thermal and/or chemical treatment and the like</td>
<td>A61F9/012</td>
</tr>
</tbody>
</table>

**A61F 2/147**

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

**Definition statement**

This place covers:

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

**Relationships with other classification places**

Contact lenses for reshaping the cornea, i.e. orthokeratology: G02C 7/04
A61F 2/148
{Implantation instruments specially adapted therefor}

**Definition statement**

*This place covers:*

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

Limiting references

This place does not cover:

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

FIG. 10
**A61F 2/16**

**Intraocular lenses**

**Definition statement**

*This place covers:*

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

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

**References**

**Informative references**

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

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

**Glossary of terms**

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

<table>
<thead>
<tr>
<th>Phakia</th>
<th>the presence of the natural crystalline lens.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aphakia</td>
<td>the absence of the natural crystalline lens, either from natural causes or because it has been removed.</td>
</tr>
<tr>
<td>Pseudophakia</td>
<td>substitution of the natural crystalline lens with a synthetic lens.</td>
</tr>
<tr>
<td>Pseudophakic IOLs</td>
<td>are used in cataract surgery</td>
</tr>
</tbody>
</table>

**A61F 2/1602**

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

**Definition statement**

*This place covers:*

Corrective lenses for phakic or pseudophakic eyes.
References

Limiting references
This place does not cover:

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

Special rules of classification

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

Glossary of terms

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

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

A61F 2/1613

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

Definition statement

This place covers:

Having special lens configuration and particular optical properties, e.g. pseudo-accommodative, having variable focus, aberration correcting, multipart, diffractive, variably absorbing electromagnetic radiation.
### A61F 2/1616

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

**Definition statement**

*This place covers:*

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

**References**

**Limiting references**

*This place does not cover:*

| Accommodative IOL having variable focal power | A61F 2/1624 |
A61F 2/1618

{Multifocal lenses}

**Definition statement**

*This place covers:*

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

---

A61F 2/1621

{enabling correction for monovision}

**Definition statement**

*This place covers:*

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

[Image taken from WIKIPEDIA]

References

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

Monovision in general

A61F 2/1624

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

Definition statement

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

References

Limiting references
This place does not cover:
Pseudo-accommodative lenses simultaneously offering distinct foci to the brain

A61F 2/1616
**A61F 2/1627**

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

**Definition statement**

*This place covers:*

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

**References**

**Informative references**

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

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

**Special rules of classification**

Illustrative example of subject matter classified in A61F 2/1627

e.g. WO2009124231
For polymeric materials capable of changing focal power in response to crosslinking: A61F 2/1627 and A61F 2/1635 (or A61F 2/1635 and A61F 2/1627 depending on which effect is identified as dominant)
A61F 2/1629

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

Definition statement

This place covers:

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

References

Limiting references

This place does not cover:

Changing position perpendicularly to longitudinal axis A61F 2/1632

Special rules of classification

For more than one optically active element A61F 2/1629, A61F 2/1648

For one or more optically active element and one or more optically inactive additional elements like e.g. movement arms A61F 2/1629, A61F 2/1648
A61F 2/1632
{for changing radial position, i.e. perpendicularly to the visual axis when implanted}

Definition statement

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

Special rules of classification
For more than one optical element: A61F 2/1632 and A61F 2/1648
**A61F 2/1635**

{for changing shape}

**Definition statement**

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

**Special rules of classification**

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

---

**A61F 2/1637**

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

**Definition statement**

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

**Special rules of classification**

Aspheric IOL A61F 2/164
<table>
<thead>
<tr>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cylindrical IOL</td>
<td>A61F 2/1643</td>
</tr>
<tr>
<td>Toric IOL</td>
<td>A61F 2/1645</td>
</tr>
<tr>
<td>Special surface</td>
<td>A61F 2210/0076</td>
</tr>
</tbody>
</table>
A61F 2/1648
{Multipart lenses}

Definition statement

This place covers:
At least two optically active components.
Relationships with other classification places

Principle of different correction for the two eyes (far/near, colours, arrangement of power zones) in general: G02C
Special rules of classification

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

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

A61F 2/1654

{Diffractive lenses}

Definition statement

This place covers:

IOL having at least one diffractive element

Relationships with other classification places

Ophthalmic lenses having diffractive optical surfaces in general: G02C

IOL comprising a Fresnel lens, prism or plate: A61F 2/1656
Definition statement

This place covers:

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

DE 103 49 254 A1  2005.05.12
A61F 2/1659

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

Definition statement

This place covers:

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

Special rules of classification

| Radiopaque | K61F250/00W93 |

A61F 2/1662

{Instruments for inserting intraocular lenses into the eye}

Definition statement

This place covers:

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

Relationships with other classification places

Instruments for inserting mechanical ocular implants: A61F 2/148

Instruments for directly injecting therapeutic agents or drug eluting implants in an eye: A61F 9/0008
A61F 2/1664
{for manual insertion during surgery, e.g. forceps-like instruments}

Definition statement

This place covers:

Instruments for manually (folding) and inserting an IOL in an eye during surgery, e.g. forceps-like
For manual insertion during surgery, e.g. forceps-like instruments, tweezers
A61F 2/1667
{with rotatable plungers}

Definition statement

This place covers:
IOL insertion instrument having a plunger for moving and ejecting the IOL actuated by rotation

EP 1 972 306 A1

FIG. 1
A61F 2/167
{with pushable plungers}

Definition statement

This place covers:
Instruments for inserting an IOL in an eye during surgery, the plunger for moving and ejecting the IOL being actuated by being pushed
**A61F 2/1672**

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

**Definition statement**

*This place covers:*

Instruments for inserting an IOL in an eye having a plunger that allows for different kind of actuation e.g. for advancing and for ejecting the IOL
A61F 2/1675

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

Definition statement

This place covers:

Insertion instruments having a lubricated surface, e.g. of the barrel, the loading chamber, the folding section or the ejecting nozzle, for reducing friction
A61F 2/1678
{with a separate cartridge or other lens setting part for storage of a lens, e.g. preloadable for shipping}

Definition statement
This place covers:
Insertion device having a separate cartridge, e.g. for storing (pre-packing) or for compaction of lens in order to avoid contamination due to handling of the IOL during loading in the inserter.
Relationships with other classification places

Packages or dispensers for IOL: A61F 2/1691
A61F 2/1691

Packages or dispensers for intraocular lenses (for contact lenses A45C 11/005)

Definition statement

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

FIG. 1
Relationships with other classification places
IOL insertion instruments having a separate cartridge: A61F 2/1678

References
Limiting references
This place does not cover:

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

A61F 2/1694
{Capsular bag spreaders therefor}

Special rules of classification

| Implantable holder for an, e.g. exchangeable, IOL | A61F 2/1694, A61F 2/1648 |
Illustrative example of subject matter classified in A61F 2/1694.

For example ring-shaped elements for supporting or stretching the capsular bag for easier implantation of an IOL.
A61F 2/18
Internal ear or nose parts, e.g. ear-drums {(implants for middle ear ventilation or drainage A61F 11/002)}

Special rules of classification

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

A61F 2/186
{Nose parts}

Special rules of classification

Implants for plugging a hole in a nasal septum: A61B 17/0057
Orthopaedic devices for correcting deformities of the nose: A61F 5/08

A61F 2/20
{Epiglottis}; Larynxes; Tracheae combined with larynxes or for use therewith (tracheae, bronchi per se A61F 2/04 {; tracheostomy tubes A61M 16/0465})

Special rules of classification

Tracheae, bronchi per se: A61F 2/04
Tracheostomy tubes: A61M 16/0465

A61F 2/24
Heart valves {; Vascular valves, e.g. venous valves; Heart implants, e.g. passive devices for improving the function of the native valve or the heart muscle; Transmyocardial revascularisation [TMR] devices}

Definition statement

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

References

Limiting references

This place does not cover:

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

Special rules of classification

Lung/bronchial valves: A61F 2002/043

A61F 2/2403

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

References

Limiting references
This place does not cover:

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

A61F 2/2409

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

Definition statement
This place covers:
Sewing rings

References

Limiting references
This place does not cover:

Annuloplasty rings A61F 2/2442

A61F 2/2412

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

References

Limiting references
This place does not cover:

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

Special rules of classification

Two part valves with a docking frame into which a valve is mounted during surgery get both A61F 2/2418 and A61F 2250/006 (modular).
A61F 2/2415
{Manufacturing methods}

Definition statement
This place covers:
In particular cutting and forming of the prosthetic valve leaflets.

References
Limiting references
This place does not cover:

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

A61F 2/2418
{Scaffolds therefor, e.g. support stents}

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

WO2009094188 A2
References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Description</th>
<th>CPC Class Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annular rigid support rings</td>
<td>A61F 2/2409</td>
</tr>
<tr>
<td>Stents used for opening blocked vessels</td>
<td>A61F 2/82</td>
</tr>
</tbody>
</table>

Special rules of classification

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

Two part valves with a docking frame into which a valve is mounted during surgery get both A61F 2/2418 and A61F 2/250/006 (modular).

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

A61F 2/2427

{Devices for manipulating or deploying heart valves during implantation}

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Description</th>
<th>CPC Class Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>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</td>
<td>A61F 2/2466</td>
</tr>
</tbody>
</table>

Special rules of classification

<table>
<thead>
<tr>
<th>Description</th>
<th>CPC Class Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handle mechanisms</td>
<td>A61F 2002/9517</td>
</tr>
<tr>
<td>Heart valve crimping mechanisms</td>
<td>A61F 2002/9522</td>
</tr>
</tbody>
</table>
If an additional retractable sheath is mentioned also a code (additional information) is given A61F 2/2436.
A61F 2/2439

{Expansion controlled by filaments}

Special rules of classification

Illustrative example of subject matter classified in A61F 2/2439

A61F 2/2442

{Annuloplasty rings or inserts for correcting the valve shape; Implants for improving the function of a native heart valve}

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Description</th>
<th>CPC codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staples connected by a thread for plicating the annulus</td>
<td>A61B 17/064, A61B 2017/00783, A61B 2017/00243</td>
</tr>
<tr>
<td>Devices for joining two adjacent leaflets at a single point, e.g. clips</td>
<td>A61B 17/064, A61B 17/08</td>
</tr>
</tbody>
</table>

Informative references

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

<table>
<thead>
<tr>
<th>Description</th>
<th>CPC codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plugging a cardiac septal defect</td>
<td>A61B 17/0057</td>
</tr>
</tbody>
</table>
Special rules of classification

Illustrative example of subject matter classified in A61F 2/2442
A61F 2/2445
{Annuloplasty rings in direct contact with the valve annulus}

Special rules of classification
Illustrative example of subject matter classified in A61F 2/2445

Springs for tensioning or expanding the annulus:
**A61F 2/2451**

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

**Definition statement**

*This place covers:*

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

---

*Fig. 19.*

*Fig. 20.*
A61F 2/2454
{Means for preventing inversion of the valve leaflets, e.g. chordae tendineae prostheses}

Special rules of classification
Illustrative example of subject matter classified in A61F 2/2454

US2009132036 A1

WO2004014258 A
A61F 2/2457
{Chordae tendineae prostheses}

Special rules of classification
Illustrative example of subject matter classified in A61F 2/2457

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

A61F 2/246
{Devices for obstructing a leak through a native valve in a closed condition}

References
Limiting references
This place does not cover:

<table>
<thead>
<tr>
<th>Plugs per se</th>
<th>A61B 17/12022</th>
</tr>
</thead>
</table>

US2010179574 A1
Special rules of classification

Illustrative example of subject matter classified in **A61F 2/246**

Figure 11

**US2005038508 A1**
A61F 2/2463
{Implants forming part of the valve leaflets}

Special rules of classification
Illustrative example of subject matter classified in A61F 2/246

Fig. 4K
WO2008149355 A2
A61F 2/2469
{with resilient valve members, e.g. conical spiral}

Special rules of classification
Illustrative example of subject matter classified in A61F 2/2469

A61F 2/2472
{Devices for testing}

Definition statement
This place covers:
Devices for testing the proper functioning of the prosthetic valve in vivo or in vitro

A61F 2/2475
{Venous valves}

Definition statement
This place covers:
Also annuloplasty devices for venous valves and springs inside or outside the vein for reshaping the annulus.
Special rules of classification

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

A61F 2/2481

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

Definition statement

This place covers:

Bags outside the heart wall:

---

**FIG. 3 A**
Heart splints:

References

Limiting references
This place does not cover:

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

Special rules of classification

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

Devices for improving valve function being external to the heart wall adjacent to the valve annulus: A61B 2017/048

A61F 2/2487

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

Definition statement
This place covers:
Also internal heart bags/meshes that pull the heart wall inside (e.g. equipped with barbs).
**References**

*Limiting references*

*This place does not cover:*

<table>
<thead>
<tr>
<th>Membranes dividing the heart chamber volume into an active and a passive part</th>
<th>A61B 17/00234, A61B 17/12022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barbs, anchors per se</td>
<td>A61B 17/04</td>
</tr>
</tbody>
</table>

**Special rules of classification**

Illustrative example of subject matter classified in **A61F 2/2487**

---

**A61F 2/2493**

*{Transmyocardial revascularisation [TMR] devices}*

**Definition statement**

*This place covers:*

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

**References**

*Limiting references*

*This place does not cover:*

<table>
<thead>
<tr>
<th>By-pass connections, i.e. connections from heart chamber to blood vessel or from blood vessel to blood vessel</th>
<th>A61B 2017/00252</th>
</tr>
</thead>
</table>
Anastomosis

Side-to-side connections, i.e. shunts between vessels (clips without an elongate tubular middle part)

A61F 2/2496

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

Definition statement

This place covers:
Also templates for artificial heart valves, annuloplasty rings or other heart implants.

References

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

Measuring per se

A61F 2/26

Penis implants

References

Limiting references
This place does not cover:

External devices for promoting erection

A61F 2/28

Bones ((A61F 2/42 takes precedence); 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))

Definition statement

This place covers:
Prosthetic bones, i.e. implants for replacing bones or parts of bones.

Relationships with other classification places

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

A61F 2/28 contains implants for replacement of bones or parts of bones.
References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Reference</th>
<th>CPC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand or foot</td>
<td>A61F 2/42</td>
</tr>
<tr>
<td>Tarsal bones</td>
<td>A61F 2/4202</td>
</tr>
<tr>
<td>Carpal bones</td>
<td>A61F 2/4261</td>
</tr>
<tr>
<td>Vertebrae</td>
<td>A61F 2/44</td>
</tr>
<tr>
<td>Anatomical models for scientific, medical or mathematical purposes</td>
<td>G09B 23/30</td>
</tr>
</tbody>
</table>

Informative references

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

<table>
<thead>
<tr>
<th>Reference</th>
<th>CPC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joints</td>
<td>A61F 2/30</td>
</tr>
<tr>
<td>Means for introducing bone substitute or for implanting bone graft implants</td>
<td>A61F 2/4601</td>
</tr>
<tr>
<td>Devices for grinding or milling bone material</td>
<td>A61F 2/4644</td>
</tr>
</tbody>
</table>

Special rules of classification

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

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

References

Informative references

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

<table>
<thead>
<tr>
<th>Reference</th>
<th>CPC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skull or cranium</td>
<td>A61F 2/2875</td>
</tr>
<tr>
<td>Temporo-mandibular joints</td>
<td>A61F 2/3099</td>
</tr>
<tr>
<td>Bone plates for the jaw</td>
<td>A61B 17/8071</td>
</tr>
<tr>
<td>Periodontal bone regeneration for consolidating natural teeth</td>
<td>A61C 8/0006</td>
</tr>
</tbody>
</table>
Special rules of classification
Illustrative example of subject matter classified in A61F 2/2803

A61F 2/2814
{Bone stump caps}

Relationships with other classification places
Devices for attachment of external prostheses to bone stumps are classified in both A61F 2/2814 and A61F 2/78.

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

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

Special rules of classification
Illustrative example of subject matter classified in A61F 2/2814
A61F 2/2846

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

References

Informative references

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

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

Special rules of classification

Illustrative example of subject matter classified in A61F 2/2846

A61F 2/2857

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

References

Informative references

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

| Devices for autopsy | A61B 16/00 |
Special rules of classification
Illustrative example of subject matter classified in A61F 2/2857

A61F 2/2875
{Skull or cranium (A61F 2/2803 and A61F 2/3099 take precedence)}

References
Limiting references
This place does not cover:

<table>
<thead>
<tr>
<th>For mandibular reconstruction</th>
<th>A61F 2/2803</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temporo-mandibular joints</td>
<td>A61F 2/3099</td>
</tr>
</tbody>
</table>

Special rules of classification
Illustrative example of subject matter classified in A61F 2/2875

A61F 2/30
Joints

Definition statement
This place covers:
Prosthetic joints, i.e. implants for replacing joints or parts of joints. The classes A61F 2/30 - A61F 2/46 comprise:
Hip joints
Knee and elbow joints
Shoulder joints
Wrist, ankle, finger and toe joints
Vertebrae and vertebral joints
Tools for implanting or extracting prosthetic joints
Operating or control means
Accessories
Cartilage endoprostheses
Special articulating or bone contacting surfaces

**Relationships with other classification places**

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

A61F 2/30 contains implantable devices for replacing anatomical joints.

**Special rules of classification**

Additional information is classified under A61F 2/30 - A61F 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 endoprostheses is classified under A61F 2/30756.

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

Additional information concerning manufacturing of endoprostheses is classified under A61F 2/3094.

Additional information concerning anatomical joints not covered by A61F 2/32 - A61F 2/44 is classified under A61F 2/30988.

Further additional information applicable for joint or bone prostheses is classified under A61F 2002/30003 - A61F 2002/30667.

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

Additional information for which classes exist in neighbouring fields, is coded in said fields, e.g.
- Joint distractors: A61B 17/025
- Surgical staples for bones: A61B 17/0642
- Securing of bone screws: A61B 17/8033, A61B 17/8052
- Fastening to the bone by wires, bands or straps: A61B 17/842
- Fastening to the bone by screws or pins: A61B 17/86
- Packages for prostheses: A61F 2/0095
• Fixation devices for tendons or ligaments: A61F 2/08

**A61F 2/30723**

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

**References**

**Informative references**

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

<table>
<thead>
<tr>
<th>Tools for inserting plugs</th>
<th>A61F 2/4614</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sealing collars for use during cementing</td>
<td>A61B 17/8808</td>
</tr>
</tbody>
</table>

**Special rules of classification**

Illustrative example of subject matter classified in A61F 2/30723
A61F 2/30724

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

Special rules of classification

Illustrative example of subject matter classified in A61F 2/30724

A61F 2/30728

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

References

Limiting references

This place does not cover:

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

Informative references

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

| Sealing collars for use during cementing | A61B 17/8808 |
Special rules of classification
Illustrative example of subject matter classified in A61F 2/30728

A61F 2/30734
{Modular inserts, sleeves or augments, e.g. placed on proximal part of stem for fixation purposes or wedges for bridging a bone defect}

Special rules of classification
Illustrative example of subject matter classified in A61F 2/30734
A61F 2/30739
{Devices connected to the proximal part of an endoprosthetic femoral shaft for reinforcing or replacing the trochanters, e.g. the greater trochanter (proximal parts of endoprosthetic femoral shafts A61F 2/367; non-prosthetic trochanteric devices A61B 17/74)}

References

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

<table>
<thead>
<tr>
<th>Proximal parts of endoprosthetic femoral shafts</th>
<th>A61F 2/367</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-prosthetic trochanteric devices</td>
<td>A61F 2002/74</td>
</tr>
</tbody>
</table>

Special rules of classification
Illustrative example of subject matter classified in A61F 2/30739

A61F 2/30742
{Bellows or hose-like seals; Sealing membranes (A61B 17/8808 takes precedence; sealing membranes for retaining bone substitute A61F 2/2846)}

References

Limiting references
This place does not cover:

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

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

| Sealing membranes for retaining bone substitute | A61F 2/2846 |
Special rules of classification

Illustrative example of subject matter classified in **A61F 2/30742**

DE 10 2007 031 671 A1 2008.02.21

Anhängende Zeichnungen

![Fig. 1](image1.png)

![Fig. 2](image2.png)

**A61F 2/30744**

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

Special rules of classification

Illustrative example of subject matter classified in **A61F 2/30744**
A61F 2/30749
{Fixation appliances for connecting prostheses to the body}

References

Informative references

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

| Cartilage endoprostheses | A61F 2/30756 |

A61F 2/30756

{Cartilage endoprostheses (A61F 2/3603 takes precedence)}

References

Limiting references

This place does not cover:

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

Special rules of classification

Illustrative example of subject matter classified in A61F 2/30756

EP 0 505 633 A1

FIG. 1

![Diagram](image-url)
**A61F 2/30767**

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

**References**

**Informative references**

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

| Materials for coating prostheses | A61L 27/28 |

**A61F 2/30771**

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

**References**

**Informative references**

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

| Etched surface | A61F 2/30767 |
| Etched and electrolytic etching | A61F 2002/30925, A61F 2002/30927 |

**Special rules of classification**

Illustrative example of subject matter classified in A61F 2/30771

---

**A61F 2/3094**

{Designing or manufacturing processes (not used, see subgroups)}

**Special rules of classification**

Not used for invention information, see A61F 2/30942 or A61F 2/30965.
A61F 2/30942

{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)}

References

Informative references

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

<table>
<thead>
<tr>
<th>Computer-assisted sizing or machining of dental prostheses</th>
<th>A61C 13/0004</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD-CAM techniques per se</td>
<td>G05B 19/4202</td>
</tr>
</tbody>
</table>

A61F 2/3099

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

References

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

Illustrative example of subject matter classified in A61F 2/3099

A61F 2/34

Acetabular cups

Special rules of classification

Illustrative example of subject matter classified in A61F 2/34
A61F 2/36
Femoral heads {; Femoral endoprostheses}

Special rules of classification

Illustrative example of subject matter classified in A61F 2/36

A61F 2/3601
{for replacing only the epiphyseal or metaphyseal parts of the femur, e.g. 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)}

References

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
Illustrative example of subject matter classified in A61F 2/3601

A61F 2/3603
{implanted without ablation of the whole natural femoral head (endoprosthetic cartilage A61F 2/30756)}

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

| Endoprosthetic cartilage | A61F 2/30756 |
Special rules of classification
Illustrative example of subject matter classified in A61F 2/3603

A61F 2/3607
{including proximal or total replacement of the femur}

Special rules of classification
Illustrative example of subject matter classified in A61F 2/3607

A61F 2/3609
{Femoral heads or necks; Connections of endoprosthetic heads or necks to endoprosthetic femoral shafts (A61F 2/3601 takes precedence)}

References
Limiting references
This place does not cover:

Femoral endoprostheses for replacing only the epiphyseal or metaphyseal parts of the femur

A61F 2/3601
Special rules of classification

Illustrative example of subject matter classified in A61F 2/3609

A61F 2/3662

{Femoral shafts}

Special rules of classification

Illustrative example of subject matter classified in A61F 2/3662
A61F 2/367

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

References

Informative references

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

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

Special rules of classification

Illustrative example of subject matter classified in A61F 2/367

A61F 2/3672

{Intermediate parts of shafts}

Special rules of classification

Illustrative example of subject matter classified in A61F 2/3672
A61F 2/3676
{Distal or diaphyseal parts of shafts}

Special rules of classification
Illustrative example of subject matter classified in A61F 2/3676

A61F 2/38
for elbows or knees

Special rules of classification
Illustrative example of subject matter classified in A61F 2/38
A61F 2/3804
{for elbows}

Special rules of classification
Illustrative example of subject matter classified in **A61F 2/3804**

---

A61F 2/3859
{Femoral components}

Special rules of classification
Illustrative example of subject matter classified in **A61F 2/3859**
A61F 2/3868
{with sliding tibial bearing}

Special rules of classification
Illustrative example of subject matter classified in A61F 2/3868

A61F 2/3872
{Meniscus for implantation between the natural bone surfaces}

Special rules of classification
Illustrative example of subject matter classified in A61F 2/3872
A61F 2/3877
{Patellae or trochleae}

Special rules of classification
Illustrative example of subject matter classified in A61F 2/3877

References

Limiting references
This place does not cover:

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

Special rules of classification
Illustrative example of subject matter classified in A61F 2/3886
**A61F 2/389**

{Tibial components *(A61F 2/3868 takes precedence)*}

**References**

*Limiting references*

*This place does not cover:*

<table>
<thead>
<tr>
<th>Knee prostheses with sliding tibial bearing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A61F 2/3868</strong></td>
</tr>
</tbody>
</table>

**A61F 2/40**

for shoulders

**Special rules of classification**

Illustrative example of subject matter classified in **A61F 2/40**


**A61F 2/4003**

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

**References**

*Informative references*

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

<table>
<thead>
<tr>
<th>Replacing only the epiphyseal or metaphyseal parts of the femur</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A61F 2/3601</strong></td>
</tr>
</tbody>
</table>
A61F 2/4014
{Humeral heads or necks; Connections of endoprosthetic heads or necks to endoprosthetic humeral shafts}

Special rules of classification
Illustrative example of subject matter classified in A61F 2/4014
A61F 2/4059
{Humeral shafts}

Special rules of classification

Illustrative example of subject matter classified in A61F 2/4059
A61F 2/4081
{Glenoid components, e.g. cups}

Special rules of classification

Illustrative example of subject matter classified in A61F 2/4081

DE 10 2008 021 110 A1  2009.10.29
**A61F 2/44**

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

**Special rules of classification**

Illustrative example of subject matter classified in A61F 2/44

**A61F 2/4405**

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

**Definition statement**

This place covers:

- facet joint protheses,
- facet joint fusion implants, if the implant replaces the joint.
References

Informative references

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

| Devices implanted between spinous or transverse processes | A61B 17/7062 |
A61F 2/441
{made of inflatable pockets or chambers filled with fluid, e.g. with hydrogel}

Special rules of classification
Illustrative example of subject matter classified in A61F 2/441

A61F 2/442
{Intervertebral or spinal discs, e.g. resilient (non-disc-shaped intervertebral inflatable pockets A61F 2/441; non-disc-shaped intervertebral fusion implants A61F 2/4455)}

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

| Non-disc-shaped intervertebral inflatable pockets | A61F 2/441 |
Intervertebral fusion implants

Special rules of classification
Illustrative example of subject matter classified in A61F 2/442

A61F 2/4425
{made of articulated components}

Special rules of classification
Illustrative example of subject matter classified in A61F 2/4425
A61F 2/4455
{for the fusion of spinal bodies, e.g. intervertebral fusion of adjacent spinal bodies, e.g. fusion cages (intervertebral discs A61F 2/442)}

References

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

| Intervertebral discs | A61F 2/442 |

Special rules of classification
Illustrative example of subject matter classified in A61F 2/4455
**A61F 2/446**

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

**Special rules of classification**

Illustrative example of subject matter classified in **A61F 2/446**

**A61F 2/4465**

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

**Special rules of classification**

Illustrative example of subject matter classified in **A61F 2/4465**
A61F 2/447

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

Special rules of classification

Illustrative example of subject matter classified in A61F 2/447

A61F 2/46

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

References

Informative references

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

| Surgical instruments | A61B 17/00 |

A61F 2/4601

{for introducing bone substitute, for implanting bone graft implants or for compacting them in the bone cavity (for introducing bone cement A61B 17/8805)}

References

Informative references

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

| For introducing bone cement | A61B 17/8802 |
A61F 2/4605

{of elbows}

Special rules of classification

Illustrative example of subject matter classified in A61F 2/4605

Fig. 156
A61F 2/4607
{of hip femoral endoprostheses}

Special rules of classification
Illustrative example of subject matter classified in A61F 2/4607

A61F 2/4609
{of acetabular cups}

Special rules of classification
Illustrative example of subject matter classified in A61F 2/4609
A61F 2/461
{of knees}

Special rules of classification
Illustrative example of subject matter classified in A61F 2/461

A61F 2/4611

{of spinal prostheses}

Special rules of classification
Illustrative example of subject matter classified in A61F 2/4611
A61F 2/4612
{of shoulders}

Special rules of classification
Illustrative example of subject matter classified in A61F 2/4612

A61F 2/4614
{of plugs for sealing a cement-receiving space}

Special rules of classification
Illustrative example of subject matter classified in A61F 2/4614
A61F 2/4618

{of cartilage}

Special rules of classification

Illustrative example of subject matter classified in A61F 2/4618

A61F 2/4637

{for connecting or disconnecting two parts of a prosthesis}

Special rules of classification

Illustrative example of subject matter classified in A61F 2/4637

For the concerned anatomical joint, as additional information, a classification symbol in A61F 2/30 - A61F 2/44 is given.
A61F 2/4644
{Preparation of bone graft, bone plugs or bone dowels, e.g. grinding or milling bone material (bone material A61F 2/28; disintegrating or milling devices B02C)}

References

Limiting references
This place does not cover:

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

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

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

A61F 2/4657
{Measuring instruments used for implanting artificial joints (for surgical instruments A61B 90/06)}

References

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

| For surgical instruments | A61B 90/06 |

Special rules of classification
For the concerned anatomical joint, as additional information, a classification symbol in A61F 2/30 - A61F 2/44 is given.

A61F 2/4675
{for cleaning or coating bones, e.g. bone cavities, prior to endoprosthesis implantation or bone cement introduction (for cleaning teeth cavities A61C 17/00; irrigators A61M 3/02)}

References

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

| For cleaning teeth cavities | A61C 17/00 |
| Irrigators | A61M 3/02 |
**A61F 2/468**

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

**References**

*Informative references*

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

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

**Special rules of classification**

For the concerned anatomical joint, as additional information, a classification symbol in **A61F 2/30** - **A61F 2/44** is given.

**A61F 2/4684**

{Trial or dummy prostheses}

**Special rules of classification**

For the concerned anatomical joint, as additional information, a classification symbol in **A61F 2/30** - **A61F 2/44** is given.

**A61F 2002/482**

{electrical}

**References**

*Informative references*

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

| Detecting, measuring or recording bioelectric signals of the body or parts thereof; electromyography | A61B 5/0488 |

**A61F 2/50**

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

**Definition statement**

This place covers:

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

**Limiting references**

This place does not cover:

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

**Informative references**

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

| Implantable devices | A61F 2/01, A61F 2/02 |
| Bone stump | A61F 2/2814 |
| Orthopaedic devices | A61F 5/01 |
| Brassieres | A41C 3/00 |
| Programme-controlled manipulators | B25J 9/00 |
| Exoskeleton | B25J 9/0006 |
| Gripping heads | B25J 15/00 |
| Joints | B25J 17/00 |
| Arms | B25J 18/00 |

**Special rules of classification**

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

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

Operating or control means for such prostheses: A61F 2/68

Means for assembling, fitting or testing prostheses: A61F 2/76

Means for attaching such prostheses to the body: A61F 2/78

Note: Additional information is classified under A61F 2/50 - A61F 2/80.

**A61F 2/72**

Bioelectrical control, e.g. myoelectric

**References**

**Informative references**

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

| Detecting, measuring or recording bioelectric signals of the body or parts thereof; electromyography | A61B 5/0488 |
A61F 2/78
Means for protecting prostheses or for attaching them to the body, e.g. bandages, harnesses, straps, or stockings for the limb stump

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

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

Special rules of classification
Prosthetic liners or sockets with a heating or cooling function should also be classified under A61F 2007/0051 as Additional Information.

A61F 2/82
Devices providing patency to, or preventing collapsing of, tubular structures of the body, e.g. stents (stent-grafts for tubular structures of the body other than blood vessels A61F 2/04; stent-grafts for blood vessels A61F 2/07; instruments specially adapted for placement or removal of stents or stent-grafts A61F 2/95; for closing wounds, or holding wounds closed A61B 17/04 - A61B 17/115; dilators A61M 29/00)

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

Illustrative examples for classification:

<table>
<thead>
<tr>
<th>A61F 2/82 /low (specific stent class) A61F 2002/065, A61F 2002/828 (means for connecting a plurality of stents)</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>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</th>
</tr>
</thead>
</table>
Relationships with other classification places

Stent Manufacturing:

<table>
<thead>
<tr>
<th>Process</th>
<th>Classification Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laser cutting</td>
<td>B23K 26/00</td>
</tr>
<tr>
<td>Etching</td>
<td>C23F 1/00</td>
</tr>
<tr>
<td>Bending sheets of metals for making tubes</td>
<td>B21D 5/10</td>
</tr>
<tr>
<td>Injection Moulding</td>
<td>B29C 45/00</td>
</tr>
<tr>
<td>Moulds or cores</td>
<td>B29C 33/00</td>
</tr>
<tr>
<td>Wire-working in the manufacture of stents (e.g. bending around mandrel)</td>
<td>B21F 45/008</td>
</tr>
<tr>
<td>Stent braiding</td>
<td>D04C 1/00</td>
</tr>
<tr>
<td>Electroplating, tubes</td>
<td>C25D 7/04</td>
</tr>
<tr>
<td>Coating by spraying</td>
<td>B05B 17/00</td>
</tr>
<tr>
<td>Materials for stents</td>
<td>A61L 31/00</td>
</tr>
</tbody>
</table>

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Item</th>
<th>Classification Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stent-grafts for blood vessels</td>
<td>A61F 2/07</td>
</tr>
<tr>
<td>Instruments for placement or removal of stents or stent grafts</td>
<td>A61F 2/95</td>
</tr>
<tr>
<td>Closing wounds, or holding wounds closed</td>
<td>A61B 17/04 – A61B 17/115</td>
</tr>
<tr>
<td>Dilators</td>
<td>A61M 29/00</td>
</tr>
</tbody>
</table>

Informative references

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

<table>
<thead>
<tr>
<th>Item</th>
<th>Classification Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stent-grafts for tubular structures of the body other than blood vessels</td>
<td>A61F 2/04</td>
</tr>
<tr>
<td>Urinary catheters</td>
<td>A61M 25/0017</td>
</tr>
</tbody>
</table>

Special rules of classification

The following additional information is given to stents when appropriate:

<table>
<thead>
<tr>
<th>Item</th>
<th>Classification Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ostial stents</td>
<td>A61F 2002/821</td>
</tr>
<tr>
<td>Stents, different from stent-grafts, adapted to cover an aneurysm</td>
<td>A61F 2002/823</td>
</tr>
<tr>
<td>having longitudinal struts</td>
<td>A61F 2002/825</td>
</tr>
<tr>
<td>more than one stent being applied sequentially</td>
<td>A61F 2002/826</td>
</tr>
<tr>
<td>Means for connecting a plurality of stents allowing flexibility of the whole structure</td>
<td>A61F 2002/828</td>
</tr>
</tbody>
</table>
**A61F 2/844**

folded prior to deployment

**Special rules of classification**

Illustrative example of subject matter classified in **A61F 2/844**

**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:

<table>
<thead>
<tr>
<th>Barbs</th>
<th>A61F 2002/8483</th>
</tr>
</thead>
<tbody>
<tr>
<td>provided on at least one of the ends</td>
<td>A61F 2002/8486</td>
</tr>
</tbody>
</table>
A61F 2/852

Two or more distinct overlapping stents

Special rules of classification

Illustrative example of subject matter classified in A61F 2/852

FIG. 3a

FIG. 3b
**A61F 2/856**

Single tubular stent with a side portal passage

**Definition statement**

*This place covers:*

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

**References**

**Limiting references**

*This place does not cover:*

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

**A61F 2/88**

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

**References**

**Limiting references**

*This place does not cover:*

| Nets formed from intersecting coils | A61F 2/90 |
A61F 2/885
{comprising a coil including a plurality of spiral or helical sections with alternate directions around a central axis}

Special rules of classification
Illustrative example of subject matter classified in A61F 2/885

A61F 2/89
the wire-like elements comprising two or more adjacent rings flexibly connected by separate members

Definition statement
This place covers:
Single, discrete rings joined by a connector.
Stent rings which are connected in order to allow flexibility of the whole structure (see connectors (4) between stent rings (2) in the example drawing).

References

Limiting references

This place does not cover:

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

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

Special rules of classification

The following additional information is given to stents when appropriate:

<table>
<thead>
<tr>
<th>Frangible connectors</th>
<th>A61F 2250/0071</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biodegradable covering or connection</td>
<td>A61F 2210/0004</td>
</tr>
</tbody>
</table>
A61F 2/90
characterised by a net-like or mesh-like structure

References

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

| Woven tubular fabrics | D03D 3/02 |

Special rules of classification
Illustrative example of subject matter classified in A61F 2/90

Synonyms and Keywords

In patent documents, the following words/expressions are often used as synonyms:
- "net", "net-like", "mesh" and "mesh-like"
**A61F 2/91**

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

**Definition statement**

*This place covers:*

Stents made from perforated sheet material or tubes. Perforated sheet material or tubes are created by methods including, for example, laser cutting, etching or some other techniques.
**A61F 2/915**

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

**Definition statement**

*This place covers:*

Stents having a meander or wave-like pattern. The stent comprises several meander bands. Each meander band forms peaks and throughs. 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.

**Special rules of classification**

The meander structure receives further additional classification:

- The meander having a difference in amplitude along the band: A61F 2002/91508
- The meander having a change in frequency along the band: A61F 2002/91516
- Within the whole structure different bands showing different meander characteristics, e.g. frequency or amplitude: A61F 2002/91525
- Characterised by the phase between adjacent bands: A61F 2002/91533
- Adjacent bands are arranged out of phase: A61F 2002/91541
- Adjacent bands being connected to each other: A61F 2002/9155
- Adjacent bands being connected peak to peak, i.e. bridge with each end connected to a convex side of an apex: A61F 2002/91558
- Adjacent bands being connected trough to trough, i.e. bridge with each end connected to a concave side of an apex: A61F 2002/91566
- Adjacent bands being connected peak to trough, i.e. bridge with one end connected to a convex side of an apex and with the other end connected to a concave side of an apex: A61F 2002/91575
- Adjacent bands being connected by a bridge, whereby at least one of its ends is connected along the length of a strut between two consecutive apices within a band: A61F 2002/91583
Locking connectors, e.g. using male-female connections: A61F 2002/91591

Glossary of terms

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

An amplitude is:

Frequency:

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

A61F 2/92

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

Synonyms and Keywords

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

• "rolled-up" and "coiled"
A61F 2/93
circumferentially expandable by using ratcheting locks

Special rules of classification
Illustrative example of subject matter classified in A61F 2/93
A61F 2/94

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

Definition statement

This place covers:
**A61F 2/945**

hardenable, e.g. stents formed in situ

**Special rules of classification**

Illustrative example of subject matter classified in A61F 2/945

**A61F 2/95**

Instruments specially adapted for placement or removal of stents or stent-grafts

**References**

**Limiting references**

This place does not cover:

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instruments for occluding devices</td>
<td>A61B 17/12022</td>
</tr>
<tr>
<td>Handles for balloon inflation</td>
<td>A61M 25/1018</td>
</tr>
</tbody>
</table>

**Informative references**

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

<table>
<thead>
<tr>
<th>Issue</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closing wounds, or holding wounds closed</td>
<td>A61B17/03</td>
</tr>
<tr>
<td>Catheters; hollow probes</td>
<td>A61M 25/00</td>
</tr>
</tbody>
</table>

**Special rules of classification**

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

### A61F 2/954

for placing stents or stent-grafts in a bifurcation

### References

#### Limiting references

This place does not cover:

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

### Special rules of classification

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

and in particular to point out the differences between stents and their delivery devices having a secondary lumen or bifurcation:
WO 02/056799

<table>
<thead>
<tr>
<th>Image</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="71x308" alt="Image" /></td>
<td>A61F 2/856 only if stent is not described</td>
</tr>
<tr>
<td><img src="71x291" alt="Image" /></td>
<td>A61F 2/954 (class for delivery device for bifurcations)</td>
</tr>
<tr>
<td><img src="71x298" alt="Image" /></td>
<td>A61F 2/954, A61F 2/856, A61F 2250/006 modular if further stents are applied NEVER A61F 2002/065 These are not Y shaped</td>
</tr>
</tbody>
</table>

US2001/0003161

EP1031325 A
<table>
<thead>
<tr>
<th>Patent Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP0904746</td>
<td>A61F 2/954, A61F 2/856 eventually A61F 2250/0039 (differing in diameter)</td>
</tr>
<tr>
<td>WO2006/036319</td>
<td>A61F 2/856, A61F 2/82/low or A61F 2/82/low specific stent class or additional information A61F 2002/067. This additional information can be given in exceptional cases like this one, where the vessel is Y shaped even though there are no 3 distinctive stents present.</td>
</tr>
<tr>
<td></td>
<td>A61F 2/82/low (specific stent class) A61F 2002/065, A61F 2002/828 (means for connecting a plurality of stents)</td>
</tr>
</tbody>
</table>
### A61F 2/958

Inflatable balloons for placing stents or stent-grafts

**Special rules of classification**

<table>
<thead>
<tr>
<th>Means for holding the stent on the balloon, e.g. using protrusions, adhesives or an outer sleeve</th>
<th>A61F 2002/9583</th>
</tr>
</thead>
<tbody>
<tr>
<td>the means being inside the balloon</td>
<td>A61F 2002/9586</td>
</tr>
</tbody>
</table>

### A61F 2/966

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

**Definition statement**

*This place covers:*

Retractable outer sleeves

**Special rules of classification**

| with additional retaining means | A61F 2002/9665 |
**A61F 2/97**

the outer sleeve being splittable

**Definition statement**

*This place covers:*

**A61F 3/00**

Lengthening pieces for natural legs

**Definition statement**

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

**Relationships with other classification places**

Artificial legs or feet or parts thereof: A61F 2/60

Shoe-like orthopaedic devices for protecting the feet against injuries after operations: A61F 5/0195

**References**

**Limiting references**

*This place does not cover:*

| Internal fixation devices | A61B 17/68 |
A61F 4/00

Methods or devices enabling invalids to operate an apparatus or a device not forming part of the body (operating or control means for prostheses A61F 2/68; {serving devices for one-handed persons A47G 21/08})

Definition statement

This place covers:

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

Relationships with other classification places

Chairs or personal conveyances specially adapted for disabled persons, e.g. wheelchairs: A61G 5/00

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

References

Limiting references

This place does not cover:

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

Informative references

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

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

A61F 5/00

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

Definition statement

This place covers:

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

Relationships with other classification places

Prostheses not implantable in the body: A61F 2/50
References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Item</th>
<th>Class Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Penile implants</td>
<td>A61F 2/26</td>
</tr>
<tr>
<td>Pessaries</td>
<td>A61F 6/08</td>
</tr>
<tr>
<td>Plaster of Paris</td>
<td>A61F 13/04</td>
</tr>
<tr>
<td>Bandages for support of breasts or abdomen</td>
<td>A61F 13/14</td>
</tr>
<tr>
<td>Diapers</td>
<td>A61F 13/49</td>
</tr>
<tr>
<td>Insoles for arch support</td>
<td></td>
</tr>
<tr>
<td>Mattress underlays</td>
<td>A47C 21/06</td>
</tr>
<tr>
<td>Devices for taking faeces samples</td>
<td>A61B 10/0038</td>
</tr>
<tr>
<td>Devices for taking sperm samples</td>
<td>A61B 10/0058</td>
</tr>
<tr>
<td>Devices for taking urine samples</td>
<td>A61B 10/007</td>
</tr>
<tr>
<td>Surgical measures for treatment of obesity</td>
<td>A61B 17/00</td>
</tr>
<tr>
<td>Massage of genitals</td>
<td>A61H 19/00</td>
</tr>
<tr>
<td>Adhesive for colostomy devices</td>
<td>A61L 24/00</td>
</tr>
<tr>
<td>Devices for preventing snoring by gas treatment</td>
<td>A61M 16/00</td>
</tr>
<tr>
<td>Handcuffs</td>
<td>E05B 75/00</td>
</tr>
</tbody>
</table>

Informative references

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

<table>
<thead>
<tr>
<th>Item</th>
<th>Class Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closure means for urethra or rectum</td>
<td>A61F 2/0004</td>
</tr>
<tr>
<td>Operating or control means for external prostheses</td>
<td>A61F 2/68</td>
</tr>
</tbody>
</table>

Special rules of classification

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 (chemical aspects of contraception A61K)

Definition statement

This place covers:

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

Relationships with other classification places

Devices for promoting penis erection: A61F 5/41

Massage of genitals: A61H 19/00

Chemical aspects of contraception: A61K

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

References

Limiting references

This place does not cover:

| Chemical aspects of contraception | A61K |

Informative references

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

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

Special rules of classification

Packages or dispensers for contraceptive devices

A61F 6/005

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

A61F 6/04

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

A61F 6/08

Occluders for vas deferens or fallopian tubes

A61F 6/20

Note: Additional information is classified under A61F 6/00 - A61F 6/24.
A61F 7/00

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

Definition statement

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

References

Limiting references

This place does not cover:

| Heating or cooling for surgical purposes, such as tissue removal, ablation, coagulation etc. | A61B 18/00 - A61B 18/24 |
| Heating or cooling of tissue immediately around tissue treated by a surgical probe | A61B 2018/00005 |
| Temperature treatment of blood in bypass of the human or animal body | A61M 1/369 |
| Heating or cooling media before injection into the body | A61M 5/44 |
| Hyperthermia with electromagnetic fields | A61N 1/403 |
| Magnetotherapy | A61N 2/00 |
| Heating by radiation such as microwave, light or other electromagnetic waves | A61N 5/02, A61N 5/06, A61N 5/10 |

Informative references

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

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

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

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

As an exception in A61F 7/00, A61F 2007/0056 and A61F 2007/0063 also exclusively deal with cooling.

Further details of subgroups


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

A61F 2007/0054: “closed fluid circuit” refers to a device in which the circulating thermal medium, e.g. water, is not in direct contact with the treatment area;

A61F 2007/0059: “open fluid circuit” refers to a device in which the circulating thermal medium, e.g. water, is in direct contact with the treatment area;

A61F 7/007: Electrically heated or cooled devices.

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

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

A61F 7/02: Compresses, poultices or other pads for heating or cooling.

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

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

A61F 7/10: Cooling bags, pads etc. exclusively used for cooling.

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

A61F 7/12: Cooling devices for internal body cavities.

Glossary of terms

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

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hyperthermia</td>
<td>heating of tissue up to but not beyond the point of tissue damage</td>
</tr>
<tr>
<td>Hypothermia</td>
<td>cooling of tissue down to but not beyond the point of tissue damage</td>
</tr>
</tbody>
</table>
**A61F 2007/0054**

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

**Definition statement**

This place covers:

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

**A61F 7/03**

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

**Special rules of classification**

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

**A61F 9/00**

Methods or devices for treatment of the eyes; Devices for putting-in contact lenses; Devices to correct squinting; Apparatus to guide the blind; Protective devices for the eyes, carried on the body or in the hand (caps with means for protecting the eyes A42B 1/06; visors for helmets A42B 3/22; {retractors A61B 17/02; manipulators specially adapted for use in surgery A61B 34/70}; appliances to aid invalids to move about A61H 3/00; {exercisers for the eyes A61H 5/00}; eye baths A61H 35/02; sunglasses or goggles having the same features as spectacles G02C)

**References**

**Limiting references**

This place does not cover:

| Caps with means for protecting the eyes | A42B 1/06 |
| Visors for helmets | A42B 3/22 |
| Retractors | A61B 17/02 |
| Manipulators specially adapted for use in surgery | A61B 34/70 |
| Appliances to aid invalids to move about | A61H 3/00 |
| Exercisers for the eyes | A61H 5/00 |
| Eye baths | A61H 35/02 |
| Sunglasses or goggles having the same features as spectacles | G02C |

**Special rules of classification**

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

The "orthogonal" Indexing Code symbols are also used.
The symbols in A61B 17/00 and A61B 18/00 are to be used for classifying additional information in case there is no appropriate symbol in A61F 9/00736, A61F 9/0079 or A61F 9/008.

A61F 9/0008

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

Definition statement

This place covers:

Eye droppers

Relationships with other classification places

Baths for the eyes : A61H 35/02

Containers with means for dispensing liquid medicaments : A61J 1/1443

Droppers : B65D 47/18

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Putting in contact lenses</th>
<th>A61F 9/0061</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introducing or retaining media in cavities of the body in general</td>
<td>A61M 31/00</td>
</tr>
</tbody>
</table>

A61F 9/0017

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

Definition statement

This place covers:

Ocular inserts for drug delivery

Fig. 5
**References**

**Limiting references**

*This place does not cover:*

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

**A61F 9/0061**

{Devices for putting-in contact lenses}

**References**

**Limiting references**

*This place does not cover:*

<table>
<thead>
<tr>
<th>Topic</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact lens cases</td>
<td>A45C 11/005</td>
</tr>
</tbody>
</table>
Special rules of classification
Illustrative example of subject matter classified in A61F 9/0061

A61F 9/007
Methods or devices for eye surgery

Definition statement
This place covers:
Devices particular for surgical interventions on the eye

References
Limiting references
This place does not cover:

<table>
<thead>
<tr>
<th>Devices for general mechanical surgery</th>
<th>A61B 17/00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Devices for general non-mechanical surgery</td>
<td>A61B 18/00</td>
</tr>
<tr>
<td>Devices for therapy with ultrasound</td>
<td>A61N 7/00</td>
</tr>
</tbody>
</table>
A61F 9/00709
{Instruments for removing foreign bodies (for removal of intra-ocular material A61F 9/00736)}

References

Limiting references
This place does not cover:

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

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 form the human body | A61B 17/50 |

A61F 9/00718
{Restoration of lid function}

Definition statement
This place covers:
Instruments to help restore the lid function

A61F 9/00736
{Instruments for removal of intra-ocular material or intra-ocular injection, e.g. cataract instruments (A61F 9/008 takes precedence)}

Relationships with other classification places
Devices using ultrasonic vibrations therefore: A61F 9/00745
Capsulotomes: A61F 9/00754
Instruments with rotating or reciprocating (other than ultrasonically) elements: A61F 9/00763

References

Limiting references
This place does not cover:

| Invasive laser devices to remove intra-ocular material | A61F 9/008 |
| Lasers to remove corneal material | A61F9/01 |
| Ultrasonic cutters for general surgery | A61B 17/320068 |
| Devices using focused ultrasound for general tissue removal | A61N 7/02 |
A61F 9/00772
{Apparatus for restoration of tear ducts}

References

Informative references

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

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

Special rules of classification

Illustrative example of subject matter classified in A61F 9/00772

---

**FIG. 3**

[Diagram of eye and tear ducts]
Example for correcting occluded lacrimal pathways (Jones tube):

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

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

References

Limiting references

This place does not cover:

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

Illustrative example of subject matter classified in A61F 9/00781

Treatment of outflow of aqueous humor.

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

A61F 9/0079

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

Definition statement

This place covers:

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

References

Limiting references

This place does not cover:

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

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

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

Special rules of classification

A61F 9/0079

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

A61F 9/008

using laser

Definition statement

This place covers:

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

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical eye surgery</td>
<td>A61F 9/007 -</td>
</tr>
<tr>
<td></td>
<td>A61F 9/00781,</td>
</tr>
<tr>
<td></td>
<td>A61F 9/013</td>
</tr>
<tr>
<td>Radiation therapy</td>
<td>A61N 5/00</td>
</tr>
</tbody>
</table>

Informative references

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

<table>
<thead>
<tr>
<th>Topic</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implants of eye parts in general</td>
<td>A61F 2/14</td>
</tr>
<tr>
<td>Instruments for examination of the eyes</td>
<td>A61B 3/00</td>
</tr>
<tr>
<td>Surgery with non mechanical forms of energy in general</td>
<td>A61B 18/00</td>
</tr>
<tr>
<td>Laser surgery in general</td>
<td>A61B 18/20</td>
</tr>
<tr>
<td>Accessories for surgery or diagnosis</td>
<td>A61B 90/00</td>
</tr>
<tr>
<td>Photodynamic therapy</td>
<td>A61N 5/062, A61N 5/062</td>
</tr>
</tbody>
</table>
Special rules of classification

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 9/013

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

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Laser eye surgery</th>
<th>A61F 9/008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instruments for use in cornea removal, for reshaping or performing incisions in the cornea</td>
<td>A61F9/01</td>
</tr>
</tbody>
</table>
Special rules of classification

Illustrative example of subject matter classified in A61F 9/013

A61F 9/0133

{Knives or scalpels specially adapted therefor}

References

Limiting references

This place does not cover:

| Surgical scalpels and knives | A61B 17/3211 |

A61F 9/02

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

References

Limiting references

This place does not cover:

| Breathing masks | A62B 18/00 |
| Swimming goggles | A63B 33/002 |
| Diving masks | B63C 11/12 |
A61F 9/022

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

References

Limiting references

This place does not cover:

| Optical filters per se | G02B 5/20 |

A61F 9/023

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

References

Limiting references

This place does not cover:

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

A61F 9/04

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

Definition statement

This place covers:

Sleep masks
Masks for protecting the eye after ophtalmic surgery

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Eye-bandages</th>
<th>A61F 13/12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protective face-masks</td>
<td>A41D 13/11</td>
</tr>
<tr>
<td>Protectors for shampooing</td>
<td>A45D, A45D 44/12</td>
</tr>
</tbody>
</table>

A61F 9/045

{Eye-shades or visors; Shields beside, between or below the eyes (caps with means for protecting the eyes A42B 1/06)}

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Caps with means for protecting the eyes</th>
<th>A42B 1/06</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glasses combined with shades or shields</td>
<td>G02C 7/16</td>
</tr>
</tbody>
</table>
A61F 9/06
Masks, shields or hoods for welders (safety devices for welding in general F16P 1/00)

References
Limiting references
This place does not cover:

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

A61F 9/065
{use of particular optical filters (A61F 9/022, A61F 9/062 take precedence)}

References
Limiting references
This place does not cover:

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

A61F 9/08
Devices or methods enabling eye-patients to replace direct visual perception by another kind of perception

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

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

A61F 11/00
Methods or devices for treatment of the ears, e.g. surgical; Protective devices for the ears, carried on the body or in the hand; {Non-electric hearing aids}

Definition statement
This place covers:

Tinnitus treatment
A61F 11/00 (continued)

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Description</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tinnitus treatment by psychotherapy and hypnosis based methods, i.e. changing the state of mind</td>
<td>A61M 21/00</td>
</tr>
<tr>
<td>Wearable tinnitus maskers</td>
<td>H04R 25/00</td>
</tr>
</tbody>
</table>

A61F 11/002

{Surgical middle ear ventilation or drainage, e.g. permanent; Implants therefor (drainage implants in general A61M 27/002)}

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Description</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drainage implants in general</td>
<td>A61M 27/002</td>
</tr>
</tbody>
</table>

A61F 11/004

{Ear surgery (A61F 11/002 takes precedence)}

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Description</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgical middle ear ventilation or drainage</td>
<td>A61F 11/002</td>
</tr>
</tbody>
</table>

A61F 11/006

{Ear cleaners, e.g. curettes (cotton tips A61F 13/38; cleaning by suction A61M 1/0023, by irrigation A61M 3/02)}

References

Limiting references

This place does not cover:

<table>
<thead>
<tr>
<th>Description</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cotton tips</td>
<td>A61F 13/38</td>
</tr>
<tr>
<td>Cleaning by suction</td>
<td>A61M 1/0023</td>
</tr>
<tr>
<td>Cleaning by irrigation</td>
<td>A61M 3/02</td>
</tr>
</tbody>
</table>
A61F 11/008

{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

Limiting references

This place 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 {(electronic stimulation of auditory nerves A61N 1/36036)}

References

Limiting references

This place does not cover:

| Cochlear implants, i.e. electronic stimulation of auditory nerves | A61N 1/36036 |

A61F 11/045

{using mechanical stimulation of nerves (acting directly on the ear H04R 25/00)}

Definition statement

This place covers:

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

References

Limiting references

This place 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 | H04R 25/606 |

Special rules of classification

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).)

\[ \frac{3}{4} \text{FIG. 1} \]

\[ \frac{1}{4} \text{FIG. 2} \]

\[ \frac{1}{4} \text{FIG. 3} \]

A61F 11/08

internal, e.g. earplugs

Special rules of classification

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, {for hairdresser's rooms A45D 44/12; for sports A63B 71/10; headphones H04R 1/10})

Definition statement

This place covers:

only acoustic protection.
References

Limiting references

This place does not cover:

| Other external protector                        | A61F 11/06 |
| 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 2011/145

{electric, e.g. for active noise reduction}

Definition statement

This place covers:

Earmuff with active noise reduction.

References

Limiting references

This place 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  | H04R 2460/01 |

A61F 13/00

Bandages or dressings (suspensoary bandages A61F 5/40; {contact-avoiding wound protectors A61F 15/008; bandages or dressings with incorporated medicaments A61L 15/44, A61M 35/006; radioactive dressings A61N 5/1029}); Absorbent pads (chemical aspects of, or use of materials for, bandages, dressings or absorbent pads A61L 15/00; {absorbent pads for tracheostomy A61M 16/047})

Definition statement

This place 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 indented 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.

**Relationships with other classification places**

**A61F 5/01 - A61F 5/40** cover stiffening bandages for immobilizing extremities. The difference with **A61F 13/04-A61F 13/14** is that (with the exception of **A61F 13/04**) in **A61F 13/06-A61F 13/14** no rigid parts are used. If rigid parts are used, then **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**

**Limiting references**

This place does not cover:

<table>
<thead>
<tr>
<th>Description</th>
<th>CPC Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any type of undergarment without any specific means intended to absorb excretions per see</td>
<td>A41B</td>
</tr>
<tr>
<td>Articles intended to absorb sweat</td>
<td>A42C 5/02, A41D 20/00, A41D 27/13</td>
</tr>
<tr>
<td>Clean the skin (e.g. wet wipes)</td>
<td>A61K 8/0208</td>
</tr>
</tbody>
</table>

**Informative references**

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

<table>
<thead>
<tr>
<th>Description</th>
<th>CPC Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suspensory bandages</td>
<td>A61F 5/40</td>
</tr>
<tr>
<td>For veterinary purposes</td>
<td>A61D 9/00</td>
</tr>
<tr>
<td>Chemical aspects of, or use of materials for, bandages, dressings or absorbent pads</td>
<td>A61L 15/00</td>
</tr>
<tr>
<td>Bandages or dressings with incorporated medicaments</td>
<td>A61L 15/44, A61M 35/006</td>
</tr>
<tr>
<td>Absorbent pads for tracheostomy</td>
<td>A61M 16/047</td>
</tr>
<tr>
<td>Radioactive dressings</td>
<td>A61N 5/1029</td>
</tr>
</tbody>
</table>

**A61F 13/0203**

{having a fluid handling member}

**References**

**Informative references**

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

<table>
<thead>
<tr>
<th>Description</th>
<th>CPC Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transdermal patches having a drug layer or reservoir</td>
<td>A61K 9/7084</td>
</tr>
<tr>
<td>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</td>
<td>A61M 1/0088</td>
</tr>
</tbody>
</table>
**A61F 13/0269**

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

**References**

*Informative references*

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

<table>
<thead>
<tr>
<th>Item</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tapes for stoma bags</td>
<td>A61F 5/443</td>
</tr>
<tr>
<td>Wound closure tapes</td>
<td>A61B 17/085</td>
</tr>
<tr>
<td>Surgical drapes</td>
<td>A61B 46/00</td>
</tr>
<tr>
<td>Attaching catheters</td>
<td>A61M 25/02</td>
</tr>
</tbody>
</table>

**A61F 13/04**

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

**References**

*Informative references*

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

<table>
<thead>
<tr>
<th>Item</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthopaedic devices, e.g. splints, casts or braces</td>
<td>A61F 5/01</td>
</tr>
<tr>
<td>Ortheses</td>
<td>A61F 5/0102</td>
</tr>
<tr>
<td>Shoe-like orthopaedic devices for protecting the feet against injuries after operations</td>
<td>A61F 5/0195</td>
</tr>
<tr>
<td>Chemical aspect of orthopaedic devices</td>
<td>A61L 15/07, A61L 15/08</td>
</tr>
</tbody>
</table>

**A61F 13/08**

Elastic stockings; for contracting aneurisms

**References**

*Informative references*

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

<table>
<thead>
<tr>
<th>Item</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Devices for domestic use for assisting in putting-on or pulling-off clothing, e.g. stockings or socks</td>
<td>A47G 25/907</td>
</tr>
<tr>
<td>For ligaturing or otherwise compressing tubular parts of the body, e.g. blood vessels, umbilical cord</td>
<td>A61B 17/12</td>
</tr>
<tr>
<td>Active massage of limbs</td>
<td>A61H 2205/06 &amp; A61H 2205/10</td>
</tr>
<tr>
<td>Weft knitting processes for the production of stockings</td>
<td>D04B 1/00, D04B 9/52, D04B 1/26</td>
</tr>
</tbody>
</table>
A61F 13/10
specially adapted for fingers, hands, or arms; Finger-stalls; Nail-protectors
{(restraining devices for arms A61F 5/37; shoulder bandages A61F 13/14)}

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

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

A61F 13/12
specially adapted for the head or neck

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

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

A61F 13/14
specially adapted for the breast or abdomen (corsets or bandages for support of breast or abdomen A61F 5/03)

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

| Braces for providing support to the lower back, e.g. lumbo-sacral supports | A61F 5/028 |
| Corsets or bandages for abdomen, teat or breast support | A61F 5/03 |
| Brassieres for medical use or surgery | A41C 3/0064 |
A61F 13/15

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

Definition statement

This place covers:

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

References

Limiting references

This place does not cover:

| non-absorbent catamenial | A61F 5/44 |

Application-oriented references

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

| Articles for absorbing wound excretions | A61F 13/00 - A61F 13/14 |

Informative references

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

| Pessaries | A61F 6/08 |
| Underwear | A41B 9/00 |
| Absorption of sweat | A42C 5/00, A43B 17/00, A41D 20/00 |
| Wet wipes | A61K 8/0208 |

A61F 13/15203

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

Relationships with other classification places

Investigating or analysing materials by determining their chemical or physical properties G01N.
A61F 13/1568
{Forming continuous, e.g. composite, fibrous webs, e.g. involving the application of pulverulent material on parts thereof}

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

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

A61F 13/15707
{Mechanical treatment, e.g. notching, twisting, compressing, shaping}

Relationships with other classification places
Joining or sealing of preformed parts, welding of plastics materials and apparatus therefore:
B29C 65/00

Corrugating in general: B31F 1/20

A61F 13/15731
{Treating webs, e.g. for giving them a fibrelike appearance, e.g. by embossing}

Relationships with other classification places

A61F 13/15739
{Sealing, e.g. involving cutting}

Relationships with other classification places
Bonding B29C 45/00.

A61F 13/20
Tampons, e.g. catamenial tampons; Accessories therefor

Definition statement
This place covers:
All articles intended to be inserted within a natural opening e.g. nose plugs, dental absorbent tampons, catamenial tampons, anal plugs, ear plugs.

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

| A wound opening is not considered as a natural opening and articles related to wound healing | A61F 13/00- A61F 13/14 |
The swabs for cleaning wounds or absorbing wound liquids during surgery

| A61F 13/20 | A61F 13/36, A61F 13/38 |

### A61F 13/42
with wetness indicator or alarm

**Definition statement**

*This place covers:*

All articles having means for indicating the article is wet, independently of the kind of absorbent article (napkins, diapers, tampons, wound dressings) or indicator (chemical, electrical, tactile etc.).

**Relationships with other classification places**

For determining moisture content, e.g. humidity, of the fluid by the use of electric, electro-chemical, or magnetic means **G01N 27/00**.

### A61F 13/45
characterised by the shape (cup-shaped type tampons **A61F 13/2045**)

**Definition statement**

*This place covers:*

The two- or three- dimensional shape of articles or the shape of details thereof, and is intended as a head group to branch down to either articles needing another article or adhesive to be held against the body (**A61F 13/47**) or articles that are self-supporting e.g. diapers (**A61F 13/49**).

### A61F 13/47
Sanitary towels, incontinence pads or napkins (**A61F 13/49** takes precedence)

**Definition statement**

*This place covers:*

Absorbent articles that need another article or adhesive to be held against the body or articles which are held in place by the specific female or male anatomy.

### A61F 13/4702
{having a reinforcing member}

**Definition statement**

*This place covers:*

Articles of the feminine hygiene napkin type having a reinforcing member to keep the shape in a desired form.
**A61F 13/4704**

{having preferential bending zones, e.g. fold lines or grooves}

**Definition statement**

*This place covers:*

Articles of the feminine hygiene napkin type where the fold lines or grooves are intended for allowing the article to fold or bent around them rather than being a barrier.

**References**

**Informative references**

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

<table>
<thead>
<tr>
<th>Foldable male incontinence devices</th>
<th>A61F 13/471</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foldable interlabial articles</td>
<td>A61F 13/47209</td>
</tr>
</tbody>
</table>

**A61F 13/47209**

{having only interlabial part, i.e. with no extralabial parts}

**Definition statement**

*This place covers:*

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

**References**

**Limiting references**

*This place does not cover:*

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

**A61F 13/47218**

{with a raised crotch region, e.g. hump}

**Definition statement**

*This place covers:*

Articles of the feminine hygiene napkin type having a portion which is elevated in relation to the rest of the article with the intention to be in close contact with the source of excretions for acquiring easily the fluids.

**A61F 13/47227**

{for interlabial use}

**Definition statement**

*This place covers:*

Articles of which the dimension of the elevated portion permits the elevated portion to be inserted between the labia majora or deeper in the vagina.
A61F 13/47263
{with activating means, e.g. elastic, heat or chemical activatable means}

Definition statement
This place covers:
Articles of the feminine hygiene napkin type which have means that are in a latent state. During use or just before the use of the article the means are activated to perform a function so that the shape of the article is altered, e.g. elastics that stay inactive until they become wet in order to have a flat article before use and once wet their elastic properties become active and the shape of the article changes to a curved form.

References

Limiting references
This place does not cover:

| Means which upon activation perform another function than changing the shape | A61F 13/8405 |
| Skin enhancers | A61F 13/8405, A61F 13/51113 |

A61F 13/474
adjustable

Definition statement
This place covers:
Articles of the feminine hygiene napkin type which are manually or elastically adjustable to fit the body shape or to increase or decrease their absorbency

A61F 13/475
characterised by edge leakage prevention means

Definition statement
This place covers:
Articles of the feminine hygiene napkin type having a kind of barrier to prevent the liquid from leaking out of the article and soil the underwear.

References

Limiting references
This place 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 place covers:
Articles of the feminine hygiene napkin type having wings or flaps for being wrapped over the edge of the underwear. However the primary function of the flaps should be the prevention of leakage or soiling the undergarment.

References
Limiting references
This place does not cover:
Flaps intended for fastening the article on the underwear the groups A61F 13/5605

A61F 13/49
Absorbent articles specially adapted to be worn around the waist, e.g. diapers

Definition statement
This place covers:
Articles which due to their form are self sustained around the waist, e.g. diapers, or pant form diapers.

A61F 13/49003
{Reusable, washable fabric diapers}

Definition statement
This place covers:
Absorbent articles that are washable and as such reusable. If a part mostly the outer cover/chassis is washable and has an exchangeable insert but the invention relies in the washable part then this document is to be classified in this subgroup and get an Indexing Code in A61F 13/505. If however only the exchangeability of parts is disclosed so that they are to be reused several times without being of a special fabric having the possibility to be washed then this document is classified in A61F 13/505.

A61F 13/49004
{with fastening means}

References
Limiting references
This place does not cover:
Fastening means per se A61F 13/56, A61F 13/58
A61F 13/4907
{Form-fitting, self-adjusting disposable diapers}

**Definition statement**

*This place covers:*

Diapers or pants type diapers where the invention relies in the elastic or stretchable features intended to aid the article to conform to the body of the wearer.

**References**

*Limiting references*

*This place does not cover:*

- Elastic barriers which are covered by the edge leaking prevention

A61F 13/4902

{characterised by the elastic material}

**Relationships with other classification places**

Extensible layered products B32B 5/04, B32B 5/26, B32B 27/12, B32B 37/144

**References**

*Informative references*

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

<table>
<thead>
<tr>
<th>Layered products characterised by the non-homogeneity or physical structure characterised by structural features of a layer specified as extensible</th>
<th>B32B 5/04</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layered products characterised by the non-homogeneity, or physical structure characterised by features of foamed layer material with fibrous or filamentary layers</td>
<td>B32B 5/26</td>
</tr>
<tr>
<td>Layered products comprising synthetic resin layer next to a fibrous or filamentary layer</td>
<td>B32B 27/12</td>
</tr>
<tr>
<td>Methods or apparatus for laminating characterised by layer properties having differing mechanical properties</td>
<td>B32B 37/144</td>
</tr>
</tbody>
</table>

A61F 13/493

adjustable {by adding or removing material, e.g. umbilical cord arrangements (adjustable by the fastening A61F 13/5638, A61F 13/5655)}

**Definition statement**

*This place covers:*

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

Limiting references

This place does not cover:

The fastening means or the adjustability of the article through the fastening means

A61F 13/58

A61F 13/4946

{the edge leakage prevention means being an absorbent medium (A61F 13/49426 takes precedence)}

Definition statement

This place covers:

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

References

Limiting references

This place 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 {(wicking or transfer layers A61F 13/537)}

Definition statement

This place covers:

The outer layers of the absorbent articles whether feminine napkin tape or diapers. A backsheet is understood as the layer or composite layer that is intended to inhibit the liquid from flowing down of the article. A topsheet is understood as the layer which is in close contact with the skin for receiving the liquid.

A61F 13/511

Topsheet, i.e. the permeable cover or layer facing the skin

References

Limiting references

This place does not cover:

If the layer immediately under the topsheet is a separate layer, i.e. not laminated to the topsheet and has the function of spreading the liquid in the X-Y direction

A61F 13/537
A61F 13/514
Backsheet, i.e. the impermeable cover or layer furthest from the skin
\{(A61F 13/15211, A61F 13/15252 take precedence)\}

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

| If the inner layer immediately adjacent but not laminated to the backsheet is intended to distribute the liquid in the X-Y direction | A61F 13/537 |

A61F 13/51466
\{providing stretchability without the use of elastic material\}

Definition statement
This place covers:
The material is, e.g. corrugated SELF or ring rolled so as to impart to the backsheet stretchability without being elastic.

A61F 13/51478
\{being a laminate, e.g. multi-layered or with several layers\}

References
Limiting references
This place does not cover:

| If the inner layer immediately adjacent but not laminated to the backsheet is intended to distribute the liquid in the X-Y direction | A61F 13/537 |

A61F 13/53
characterised by the absorbing medium (A61F 13/20 takes precedence)

Definition statement
This place covers:
The absorbent core of the absorbent articles. If the structure of the core is intended for conforming the body fit or the leakage prevention then this is covered by the corresponding subgroups A61F 13/47, A61F 13/475 or A61F 13/49, A61F 13/494.

Relationships with other classification places
Chemical composition: A61L 15/16
**A61F 13/533**

having discontinuous areas of compression

**References**

*Limiting references*

This place does not cover:

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

**A61F 13/551**

Packaging before or after use {general packaging of absorbent pads B65D 85/00}

**Relationships with other classification places**

Foldable baby changing mats/supports: A47D 15/00, A47D 5/00.

**References**

*Limiting references*

This place does not cover:

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

**A61F 13/56**

Supporting or fastening means

**Definition statement**

This place covers:

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

**References**

*Limiting references*

This place does not cover:

| Fastening means for wound appliances |
| A61F 13/00 - A61F 13/14 |
A61F 13/5616
{using flaps, e.g. adhesive, for attachment to the undergarment (leakage prevention means encircling the crotch portion A61F 13/476)}

References
Limiting references
This place does not cover:
If the flaps are indented to prevent leakage soiling of the undergarment A61F 13/476

A61F 13/62
{Mechanical fastening means, (A61F 13/5611, A61F 13/5616, A61F 13/581, A61F 13/66 take precedence);} Fabric strip fastener elements, e.g. hook and loop

Relationships with other classification places
Hook and loop in general and the manufacturing thereof: A44B 18/00

A61F 13/82
with means for attaching to the body

Definition statement
This place covers:
Articles that have means (mostly adhesive) to attached the article to the skin of the user in order to keep it in place.

References
Limiting references
This place does not cover:
Adhesive attachment of wound dressings A61F 13/02

A61F 15/00
Auxiliary appliances for wound dressings; Dispensing containers for dressings or bandages {packaging of absorbent articles such as diapers, feminine hygiene absorbing pads or tampons A61F 13/551; packaging of wound dressings A61F 13/00072}

References
Limiting references
This place does not cover:
Individual wrapped articles before or after use A61F 13/551
A61F 17/00

First-aid kits

Definition statement

This place covers:
Packs, bags, packages, cases to be carried by a person and having items to be used under first aid circumstances. The items as such are not of importance.

References

Informative references

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

<table>
<thead>
<tr>
<th>Bags in general</th>
<th>A45C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bags for midwives</td>
<td>A61B 17/48</td>
</tr>
<tr>
<td>Carrying bags, cases, trusses e.g. doctor bags</td>
<td>A61B 50/31</td>
</tr>
</tbody>
</table>