CLASS 606, SURGERY

SUBCLASSES

1 INSTRUMENTS:

This subclass is indented under the class definition. Subject matter of Class 128, including devices or appliance for use in operative surgery upon the body or in preparation for operative surgery, together with devices designed to assist in operative surgery.

SEE OR SEARCH THIS CLASS, SUBCLASS:

2+, for light application to the body.
20+, for cryogenic application to the body.
27+, for heat application to the body.
32+, for electrical application to the body.
53+, for orthopedic instruments.
119+, for obstetrical instruments.
127+, for concretion removal.
135+, for mammalian sterilization instruments.
139+, for suture ligature, elastic band or clip appliers.

SEE OR SEARCH CLASS:

128, Surgery, subclasses 830+ and 842+ for female and male birth control devices.
600, Surgery, subclasses 33+ for reproduction and fertilization techniques, subclass 36 for blood vessel or graft preparation and subclass 37 for internal organ support or slings.
604, Surgery, subclasses 11+ for means to insert fibrous or resident packing receptor or medicament into a body orifice.

2 Light application:

This subclass is indented under subclass 1. Subject matter wherein the instrument has combined therewith means for applying light or analogous rays to the body.

SEE OR SEARCH CLASS:

607, Surgery: Light, Thermal, and Electrical Application, subclasses 88+ for other light applying devices which are limited to therapeutic use.

2.5 Lithotripsy:

This subclass is indented under subclass 2. Subject matter for fragmenting a calculus or stone (e.g., kidney stone, bladder stone, etc.) by use of light energy applied thereto.

SEE OR SEARCH THIS CLASS, SUBCLASS:

128, for subject matter relating to fragmenting a calculus or stone by use of mechanical energy.

SEE OR SEARCH CLASS:

219, Electric Heating, subclasses 600+ for inductive heating, subclasses 678+ for microwave heating, and subclasses 764+ for capacitive dielectric heating.
241, Solid Material Comminution or Disintegration, subclass 1 for a process of disintegrating solid material by means other than mechanical energy.
250, Radiant Energy, subclasses 492.1+ for irradiation of objects.
313, Electric Lamp and Discharge Devices, subclasses 578+ for incandescent filament lamp structure.
359, Optics: Systems (Including Communication) and Elements, appropriate subclasses for an optical combination or subcombination, per se (e.g., lens, mirror, ocular, etc.).
362, Illumination, appropriate subclasses for lighting means, or supports.
372, Coherent Light Generators, appropriate subclasses for a laser, per se.
385, Optical Waveguides, appropriate subclasses for a device for conducting light energy, per se.
600, Surgery, subclasses 101+ and, in particular, subclasses 160+, 179+, 191, 200, 224, and 249 for an illuminated endoscope used to view body stones
601, Surgery: Kinesitherapy, subclass 4 for massaging means to crush body stones by the application of external force.
604, Surgery, subclasses 20+ for medicating, irrigating, or aspirating material other than a calculus from the body combined with light application.

3 **With particular wavelength:**
This subclass is indented under subclass 2. Subject matter wherein the light or analogous rays are of a wavelength particularly adapted to effect a surgical procedure.

4 **Ophthalmic:**
This subclass is indented under subclass 2. Subject matter designed to be used upon the eye.

SEE OR SEARCH THIS CLASS, SUBCLASS:
107, for means for inserting or removing eye lens material.
166, for corneal cutter or guide therefor.

5 **Recurving or reshaping of the eye:**
This subclass is indented under subclass 4. Subject matter designed to remove portions of the eye to effect an alteration of the curvature or shape thereof.

SEE OR SEARCH THIS CLASS, SUBCLASS:
107, for means for inserting or removing eye lens material.
166, for corneal cutter or guide therefor.

6 **Cataracts or glaucoma:**
This subclass is indented under subclass 4. Subject matter designed to be used in the treatment of opacity of the eye lens or capsule or to heat intravocular pressure.

SEE OR SEARCH THIS CLASS, SUBCLASS:
107, for means to manipulate the natural eye lens.

7 **Angioplasty:**
This subclass is indented under subclass 2. Subject matter designed to be used in the removal of blood vessel obstructions.

SEE OR SEARCH THIS CLASS, SUBCLASS:
159, for blood vessel, duct, test cutters, scraper or abrader.
200, for mechanical embolic traps or filters in general.

8 **Anastomosis:**
This subclass is indented under subclass 2. Subject matter having means used in the joining together of various tissues of the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
151+, for various devices used to join body tissue together.

9 **Dermatological:**
This subclass is indented under subclass 2. Subject matter designed to be used in treatment of the skin by removing hair, lesions or other extraneous matter from the skin.

SEE OR SEARCH THIS CLASS, SUBCLASS:
131+, for removal of skin or material therefrom, in particular subclasses 133 for the physical removal of hair by tweezers and other devices and subclass 134 for the removal of hair by the application of wax or adhesives.

SEE OR SEARCH CLASS:
604, Surgery, subclasses 289+ for treating material applied to or removed from external body surface or certaneous layer of skin.
607, Surgery: Light, Thermal, and Electrical Application, subclasses 88+ for chambers and cabinets used to irradiate some portion of the body with light rays.

10 **Systems:**
This subclass is indented under subclass 2. Subject matter for supplying light or analogous rays to light applicators by means in combination with conventional applicators or by means limited to a surgical purpose.

SEE OR SEARCH THIS CLASS, SUBCLASS:
13, for methods and systems combined with particular light applicator structure.

SEE OR SEARCH CLASS:
219, Electric Heating, subclasses 121.6+ for methods and systems employing lasers.

372, Coherent Light Generators, appropriate subclasses, for systems directed to lasers.

11 Beam energy control or monitoring:
This subclass is indented under subclass 10. Subject matter including means for controlling or monitoring the output power of the light or analogous rays.

SEE OR SEARCH CLASS:
219, Electric Heating, subclasses 121.6+ for beam energy control systems for lasers; 121.6+, for laser monitoring.
372, Coherent Light Generators, subclasses 9+ for particular beam control devices.

12 Condition responsive:
This subclass is indented under subclass 11. Subject matter wherein a sensed condition of the output power or treatment area is used to control the output power of the light or analogous rays.

SEE OR SEARCH CLASS:
219, Electric Heating, subclasses 121.6+ for condition responsive laser control systems.

13 Applicators:
This subclass is indented under subclass 2. Subject matter including particular applicator structure or light application means in combination with such structure.

SEE OR SEARCH THIS CLASS, SUBCLASS:
10, for methods and systems including the light applicator without any particular applicator structure.

14 Placed in body:
This subclass is indented under subclass 13. Subject matter wherein the applicator is devised for placement within the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
170, for cutting devices used in microsurgery.

SEE OR SEARCH CLASS:
600, Surgery, subclasses 101+ for endoscopes, per se.

15 With optical fiber:
This subclass is indented under subclass 14. Subject matter wherein the applicator includes flexible, optically transparent fiber material for directing a light or analogous rays along a restricted path.

SEE OR SEARCH THIS CLASS, SUBCLASS:
17, for other light applicators utilizing optical fibers.

SEE OR SEARCH CLASS:
385, Optical Waveguides, appropriate subclasses for particular structural features relating to optical fibers.
607, Surgery: Light, Thermal, and Electrical Application, subclasses 88+ for other light applicators utilizing optical fibers.

16 With optical fiber:
This subclass is indented under subclass 13. Methods and apparatus wherein the applicator includes flexible, optically transparent fiber material for directing a light or analogous rays along a restricted path.

SEE OR SEARCH THIS CLASS, SUBCLASS:
15, for other light applicators utilizing optical fibers.

SEE OR SEARCH CLASS:
385, Optical Waveguides, appropriate subclasses for particular structural features relating to optical fibers.
607, Surgery: Light, Thermal, and Electrical Application, subclass 92 for other light applicators utilizing optical fibers.

17 With beam shaping or redirecting (e.g., lens):
This subclass is indented under subclass 13. Subject matter including devices for shaping, such as focusing, or altering the path of the light or analogous rays.

SEE OR SEARCH CLASS:
219, Electric Heating, subclasses 121.12+, for particular beam shaping devices.

18 Mirror:
This subclass is indented under subclass 17. Subject matter including a surface which will reflect light or analogous rays.

SEE OR SEARCH CLASS:
219, Electric Heating, subclasses 121.12+ for beam shaping with a mirror.
359, Optics: Systems (Including Communication) and Elements, subclasses 838+ for particular mirror structure and means for supporting and moving mirrors.

19 Articulated arm:
This subclass is indented under subclass 18. Subject matter including a plurality of light transmitting conduits, rotatably connected, having reflective surfaces at the intersection of the conduits.

20 Cryogenic application:
This subclass is indented under subclass 1. Subject matter wherein the instrument has combined therewith means for cooling contacted body tissue to extremely low temperatures.

(1) Note. Cryogenics is the study, production, and utilization of extremely low temperatures. To precisely define the cryogenic range is difficult since the literature ambiguously defines the upper limit to be from 220 degrees to 400 R (-240 to -60 F). For the purposes of this class, the cryogenic temperature range will be construed to vary between absolute zero and about 400 R.

SEE OR SEARCH CLASS:
62, Refrigeration, appropriate subclasses, for cooling means, particularly subclass 293 for hand manipulable tools.
607, Surgery: Light, Thermal, and Electrical Application, subclasses 96+ for noncryogenic instruments for cooling the body which are limited to therapeutic use.

21 Internal application:
This subclass is indented under subclass 20. Subject matter designed for application within the natural orifices of the body.

SEE OR SEARCH CLASS:
607, Surgery: Light, Thermal, and Electrical Application, subclass 113 for noncryogenic internal cooling applicators.

22 With coolant supply:
This subclass is indented under subclass 20. Subject matter including means for providing a cooling fluid to the tissue contacting means.

SEE OR SEARCH CLASS:
607, Surgery: Light, Thermal, and Electrical Application, subclasses 104+ for other noncryogenic instruments having means for supplying a cooling fluid.

23 Tip or other cooling concentration means:
This subclass is indented under subclass 22. Methods and apparatus wherein a projecting extremity or other concentrated area of the instrument is cooled.

24 With heating means (e.g., defroster):
This subclass is indented under subclass 23. Subject matter wherein the instrument includes means for warming a previously cooled tip or other concentrated area to effect removal of the instrument from the body.

25 Self-contained coolant supply:
This subclass is indented under subclass 23. Subject matter , wherein the instrument has combined therewith means to provide a fluid supply to the cooling concentration means.

(1) Note. This subclass is limited to the application of energy internally to a body. Lithotripsy fragmentation by the application of energy from an external source is found in Class 601, Surgery: Kinesitherapy, subclass 4.

26 With hand manipulable coolant control:
This subclass is indented under subclass 23. Subject matter which includes manually moved input means on the instrument to regulate the

supply of cooling fluid to the cooling concentration means.

27 Heat application:
This subclass is indented under subclass 1. Subject matter wherein the instrument has means for converting energy which provides means for warming localized body tissue with a hot object or warmed material.

(1) Note. This subclass does not include instruments which cause a heating of the body by direct passage of electricity or electrical energy through the body. Such instruments are located in subclasses 32+.

SEE OR SEARCH THIS CLASS, SUBCLASS:
192+, for dilators in which the dilation is produced by an inflatable member which may be inflated by a hot or cold fluid.

SEE OR SEARCH CLASS:
30, Cutlery, subclass 140, for cutting instruments of general utility combined with a heater.
219, Electric Heating, subclasses 221+, for heating tools or instruments of general utility.
607, Surgery: Light, Thermal, and Electrical Application, subclasses 96+ for other instruments for heating the body which are limited to therapeutic use; and subclass 113 for internal thermal applicators.

28 Tip or other heat concentration means:
This subclass is indented under subclass 27. Subject matter wherein only the extremity or other localized area of the instrument is heated.

SEE OR SEARCH CLASS:
219, Electric Heating, subclasses 229+, for hand-manipulative tools or instruments with a heated tip or other heat concentration area.

29 Tip in electrical circuit:
This subclass is indented under subclass 28. Subject matter wherein the localized area is contained within an electrical circuit and is either fashioned from a highly resistive material or is a protruding portion of an element which is fashioned from a highly resistive material.

SEE OR SEARCH CLASS:
219, Electric Heating, subclasses 233+, for hand-manipulative tools or instruments having a heated tip in an electrical circuit.

30 Self-contained power supply:
This subclass is indented under subclass 29. Subject matter wherein the instrument contains its own power supply for the electrical heater.

31 With thermal control means:
This subclass is indented under subclass 29. Subject matter including means for regulating the temperature of the heated tip.

SEE OR SEARCH CLASS:
219, Electric Heating, appropriate subclasses for various temperature regulating means, particularly subclass 241 for such means combined with a heated tool or instrument.

32 Electrical application:
This subclass is indented under subclass 1. Subject matter wherein the instrument has means thereon for applying electricity or electrical energy from the instrument to the body.

SEE OR SEARCH CLASS:
231, Whips and Whip Apparatus, subclasses 2+, for electrical shocking devices such as cattle prods.
463, Amusement Devices: Games, subclass 47.3 for a striking type of weapon for use on a human being which includes an electric shock feature (e.g., an electric prod used by police, etc.).

33 Electromagnetic wave irradiation:
This subclass is indented under subclass 32. Subject matter wherein the instrument has means for applying electrical energy to the body in the form of a field of electromagnetic wave radiation.

SEE OR SEARCH THIS CLASS, SUBCLASS:

127, for focused energy used to fragment concretions.

SEE OR SEARCH CLASS:

219, Electric Heating, subclasses 600+ for inductive heating, subclasses 678+ for microwave heating, and subclasses 764+ for capacitive dielectric heating.

600, Surgery, subclasses 9+, for magnetic field applied to the body for therapeutic purposes.

601, Surgery: Kinesitherapy, subclasses 15+ for kinesitherapy devices utilizing electric wave energy.

607, Surgery: Light, Thermal, and Electrical Application, subclasses 154+ for similar high frequency radiation devices.

34 Systems:

This subclass is indented under subclass 32. Subject matter for supplying electricity to electrical applicators by means in combination with conventional applicators or by means limited to a surgical purpose.

SEE OR SEARCH THIS CLASS, SUBCLASS:

41, for methods and systems including particular applicator structure.

35 Ground electrode monitoring:

This subclass is indented under subclass 34. Subject matter including means for monitoring the return circuit path from the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:

32, for ground electrodes, per se.

SEE OR SEARCH CLASS:

128, Surgery, subclass 908, for other patient protection devices.

361, Electricity: Electrical Systems and Devices, appropriate subclasses, for other safety and protection systems.

36 Depilation:

This subclass is indented under subclass 34. Subject matter designed to remove hair from the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:

43, for depilatory methods and systems including particular applicator structure.

133, for tweezers used to remove hair from the body.

134, for hair removal involving waxes or adhesives.

37 Combined cutting-coagulation:

This subclass is indented under subclass 34. Subject matter designed to effect both cutting and coagulation of localized portions of body tissue.

SEE OR SEARCH THIS CLASS, SUBCLASS:

45+, and 49, for methods and systems for cutting and coagulation including particular applicator structure.

110+, for the removal of tonsils, adenoids or polyps including cutting and hemostasis.

38 With feedback control:

This subclass is indented under subclass 37. Subject matter including feedback circuitry to regulate the output of a cutting or coagulation system based upon a sensed condition of the circuit's output or a sensed treatment area condition.

39 Cutting:

This subclass is indented under subclass 34. Subject matter designed to effect only cutting of localized portions of the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:

37, for other methods and systems for cutting.

45, for methods and systems for cutting including particular applicator structure.

167+, for cutting, punching and piercing devices.

40 Coagulation:

This subclass is indented under subclass 34. Subject matter designed to effect only coagulation of localized portions of body tissue.

SEE OR SEARCH THIS CLASS, SUBCLASS:

37, for other methods and systems for coagulation.

49, for methods and systems for coagulation including particular applicator structure.

111, for hemostasis devices used to remove tonsils, adenoids or polyps.

41 Applicators:

This subclass is indented under subclass 32. Subject matter including particular applicator structure or electrical application means in combination with such structure.

SEE OR SEARCH THIS CLASS, SUBCLASS:

34, for methods and systems including an electrical applicator without any particular applicator structure.

SEE OR SEARCH CLASS:

219, Electric Heating, subclass 234, for heating tools or instruments having the work in an electrical circuit.

604, Surgery, subclass 512 for methods of anesthetizing a patient.

42 With switching or power control:

This subclass is indented under subclass 41. Subject matter wherein the applicator includes means for switching between cut and coagulation outputs and means for controlling the output power of the instrument.

SEE OR SEARCH THIS CLASS, SUBCLASS:

31, for applicators with thermal control means.

SEE OR SEARCH CLASS:

200, Electricity: Circuit Makers and Breakers, appropriate subclasses, for switching devices.

43 Depilation:

This subclass is indented under subclass 41. Subject matter designed to remove hair from the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:

36, for methods and systems of depilation including an electrical applicator without any particular applicator structure.

133+, for mechanical means for removing hair from the skin.

44 By needle:

This subclass is indented under subclass 43. Subject matter wherein the depilation means is an elongated needle-like structure pointed at one and which is inserted into a hair follicle to remove the hair therefrom.

SEE OR SEARCH THIS CLASS, SUBCLASS:

222+, for suturing needles.

45 Cutting:

This subclass is indented under subclass 41. Subject matter designed to operate by cutting localized portions of the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:

37+, and 39+, for cutting methods and systems including an electrical applicator without any particular applicator structure.

167+, for surgical cutting instruments.

46 Endoscopic:

This subclass is indented under subclass 45. Subject matter wherein the cutting device is enclosed in a tubular speculum designed to be inserted into a natural body orifice.

SEE OR SEARCH THIS CLASS, SUBCLASS:

170+, for microsurgical cutting devices.

SEE OR SEARCH CLASS:

600, Surgery, subclasses 101+ for endoscopes for diagnostic purposes.

47 With formable electrode:

This subclass is indented under subclass 46. Subject matter wherein the electrode of the cutting device is formed into its working shape outside of the tubular speculum through which it is inserted into the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
108, for means to manipulate or use a conduit which is inserted in the body.

48 Bipolar electrodes:
This subclass is indented under subclass 45. Subject matter wherein the cutting device includes plural electrodes adapted to be connected to opposite poles of a power supply.

SEE OR SEARCH THIS CLASS, SUBCLASS:
50, for other bipolar electrode applicators.

49 Coagulation:
This subclass is indented under subclass 41. Subject matter designed to coagulate tissue in localized portions of the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
37+, and 40, for coagulation methods and systems including an electrical applicator without any particular applicator structure.
111, for hemostasis involving tonsil, adenoid or polyp removal.

50 Bipolar electrodes:
This subclass is indented under subclass 49. Subject matter wherein the coagulation devices includes plural electrodes adapted to be connected to opposite poles of a power supply.

SEE OR SEARCH THIS CLASS, SUBCLASS:
48, for other bipolar electrode applicators.

51 With forceps or tweezers:
This subclass is indented under subclass 50. Subject matter provided with pivoted arms or pincer-like, nonpivoted members for carrying contact elements for grasping parts of the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
43, and 52, for other electrical forceps or tweezers.
210+, for mechanical structure of forceps or tweezers.

52 With forceps or tweezers:
This subclass is indented under subclass 49. Subject matter provided with pivoted arms of pincer-like, nonpivoted members for carrying contact elements for grasping parts of the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
43, and 51, electrical forceps or tweezers.
210+, for mechanical structure of forceps or tweezers.

53 Orthopedic instrumentation:
This subclass is indented under the class definition. Subject matter where significance is attributed to means designed for particular use in, or in the preparation for, a surgical procedure on bone structure including means for permanent or temporary attachment to a bone, or portion thereof, to correct a deformity, fracture, unwanted or diseased condition.

(1) Note. For purposes of this class, the term “fracture” will include both accidental and purposeful disassociation of bone tissue, e.g., bone tissue surgically separated by osteotomy.

(2) Note. Patents claiming opening of a skull for the purpose of gaining entry into the skull are not considered for placement here since there is no preparation for a surgical procedure on bone structure (the skull) but is merely cutting into a bone structure to perform a surgical procedure on structure beneath the skull. Patents of this type are properly classified in this class subclasses 167+, particularly subclasses 172+ for cutting devices having dura guards.

SEE OR SEARCH CLASS:
623, Prosthesis (i.e., Artificial Body Members), Parts Thereof, or Aids and Accessories Therefor, subclasses 16+, for bone or joint prosthesis.

54 External fixation means:
This subclass is indented under subclass 53. Subject matter wherein a positioning means which remains external to the body, is applied or connected to at least one bone fragment to

maintain that bone fragment in a desired position during healing.

SEE OR SEARCH THIS CLASS, SUBCLASS:
300+, for bone fasteners.

55 Movable by patient:
This subclass is indented under subclass 54. Subject matter wherein the external bone fixation means is capable of limited movement, by the wearer thereof, to exercise a bone joint about which the fixation means is attached.

56 Ring frame:
This subclass is indented under subclass 54. Subject matter wherein the external fixation means is a brace which surrounds in whole or in part that portion of the body to which it is applied.

(1) Note. The frame members are typically, generally circular or U-shaped and designed for application about a person's limb or pelvis.

57 Compression or distraction mechanism:
This subclass is indented under subclass 54. Subject matter wherein the external fixation means causes a pressing together or a separation of the bone fragments to which the means is applied so as to adjust and maintain the bone fragments in a desired positional relationship during a substantial portion of the healing process, i.e., the compression or distraction mechanism remains as part of the external fixator during the whole period of treatment.

SEE OR SEARCH THIS CLASS, SUBCLASS:
105, for compression or distractions devices which do not remain as part of the fixator during the period of treatment.

58 Cyclable or incrementable:
This subclass is indented under subclass 57. Subject matter having additional means to permit reorientation of the positional relationship between the bone fragments during the healing process e.g., as in a bone-lengthening treatment regimen.

59 Pin connector:
This subclass is indented under subclass 54. Subject matter which provides the joining means between the external fixator structure and an elongated transcutaneous fastener element which is secured in a bone fragment to be fixated.

SEE OR SEARCH THIS CLASS, SUBCLASS:
300+, for bone fasteners.

SEE OR SEARCH CLASS:
403, Joints and Connections, appropriate subclasses, for rod joints in general.

60 Internal fixation means:
This subclass is indented under subclass 53. Subject matter wherein a means is adapted to be implanted within the body in direct contact with a bone or bone fragment for the purpose of reinforcement of said bone or bone fragment during the healing process or for positioning a plurality of bones or bone fragments relative to one another.

62 Intramedullary fixator:
This subclass is indented under subclass 60. Subject matter wherein the internal fixation means is adapted for placement within a medullary canal of a long bone.

63 Expanding in diameter or length:
This subclass is indented under subclass 62. Subject matter wherein the internal fixation means can be enlarged in width or along the greatest dimension.

SEE OR SEARCH THIS CLASS, SUBCLASS:
68, for expanding femoral nail means.

64 Cross fastened:
This subclass is indented under subclass 62. Subject matter wherein the internal fixation means is fixed relative to the medullary canal by means of a cross member which extends generally transverse to the longitudinal axis of the canal.

SEE OR SEARCH THIS CLASS, SUBCLASS:
98, for cross-pinning drill guides.

65 Femoral screw:
This subclass is indented under subclass 60. Subject matter wherein the internal fixation means is a cylindrical rod incised with one or more helical or advancing spiral threads adapted to be screwed into and thereby reinforce the neck portion of a femur.

66 Anti-rotation or keeper means:
This subclass is indented under subclass 65. Subject matter wherein the femoral screw is prevented from turning or spinning along its longitudinal axis while in place.

67 Femoral nail:
This subclass is indented under subclass 60. Subject matter wherein the internal fixation means is a slim, pointed piece of metal adapted to be driven into and thereby reinforce the neck portion of a femur.

68 Expanding:
This subclass is indented under subclass 67. Subject matter wherein the nail can be enlarged in width or along its greatest dimension.

SEE OR SEARCH THIS CLASS, SUBCLASS:
63, expanding screw fixation means.

70 Multi-element or coated plate:
This subclass is indented under subclass 280. Subject matter wherein the cortical plate is composed of a plurality of elements or a plate to which significance is attributed to the coating composition applied thereto.

SEE OR SEARCH THIS CLASS, SUBCLASS:
76+, for specialized coatings and materials for internal fixation devices.

71 Having separable and distinct plate elements:
This subclass is indented under subclass 70. Subject matter wherein the plural elements are separate individual pieces prior to assembly to a bone.

74 Bone cerclage device:
This subclass is indented under subclass 300. Subject matter wherein the fastener element is an element which encircles one or more bone portions and applies a force to said bone portions to hold those encircled portions together.

SEE OR SEARCH THIS CLASS, SUBCLASS:
139+, for elastic band appliers.

75 Staple or similar driven fastener:
This subclass is indented under subclass 300. Subject matter wherein the fastener element is generally a U-shaped loop of material with pointed ends, a cliplike fastener element, or a generally elongated element, adapted to be driven into, or about, one or more bone portions to hold such portions together or to attach soft tissue to a bone portion.

SEE OR SEARCH THIS CLASS, SUBCLASS:
139+, for clip appliers
151+, for surgical clip, clamp or bands.
157+, for occluding clip, clamp or bands.
219+, for staples used as suture elements.
221+, for approximating clips or serrefines.

SEE OR SEARCH CLASS:
227, Elongated-Member-Driving Apparatus, appropriate subclasses for staplers in general.

76 Specialized coating or material:
This subclass is indented under subclass 53. Subject matter wherein the bone attaching element has been impregnated or treated with material which reduces trauma, infection or corrosion during a process of healing.

(1) Note. The bone attaching element can be implanted or placed between broken bone elements or have a fixator specially coated to join the elements of the broken bone.

SEE OR SEARCH THIS CLASS, SUBCLASS:
298+, for materials used in cortical plates.
331, for materials used in orthopedic fasteners.
907+, for a cross-reference art collection of internal fixation devices composed of or coated with a particular material.

SEE OR SEARCH CLASS:

623, Prosthesis (i.e., Artificial Body Members), Parts Thereof, or Aids and Accessories Therefor, subclasses 17.11+ for spine bone prosthesis and subclasses 23.51+ for a particular prosthetic material.

77 Absorbable:

This subclass is indented under subclass 76. Subject matter wherein the particular coating, implanted material or portion thereof is assimilated by the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:

299, for materials used in a cortical plate.

331, for materials used in orthopedic fasteners.

908, for a cross-reference art collection of orthopedic fasteners composed of a bioabsorbable material.

78 Shape memory material:

This subclass is indented under subclass 76. Subject matter wherein the bone attaching element is composed of material which has been plastically deformed to a desired shape prior to being implanted into the body and upon heat application, either from the body or from external sources, the fixation element is caused to assume its original shape prior to being plastically deformed.

SEE OR SEARCH THIS CLASS, SUBCLASS:

299, for materials used in a cortical plate.

331, for materials used in orthopedic fasteners.

911, for a cross-reference art collection of orthopedic fasteners composed of a shape memory material.

79 Orthopedic cutting instruments:

This subclass is indented under subclass 53. Subject matter wherein significance is attributed to a cutting means particularly adapted to cut into bone or associated softer bone like tissues of the body.

(1) Note. Associated softer bone includes cartilage tissue.

(2) Note. See (2) note under subclass 53 which excludes skull cutting devices from placement here.

SEE OR SEARCH THIS CLASS, SUBCLASS:

110+, for means to remove tonsils, cartilage, adenoids or polyp by cutting.

119+, for obstetrical instruments having cutting means.

131+, for cutting device for removing skin.

135, for cutters used in animal sterilization.

163+, for cutting devices used to debeak or dehorn animals.

172+, for skull cutting devices.

174+, for cutting devices which disclose use in the cutting of bone.

176+, for saw type cutting means.

SEE OR SEARCH CLASS:

433, Dentistry, for similar cutting devices for cutting or drilling teeth.

80 Reamer or drill:

This subclass is indented under subclass 79. Subject matter wherein the cutting is accomplished by means which either has at least one cutting edge arranged on the periphery along the length of a thin, elongated member or a means which has at least one cutting edge at its end(s) for enlarging or originating a hole in bone tissue.

SEE OR SEARCH CLASS:

408, Cutting by Use of Rotating Axially Moving Tool, appropriate subclasses for reamers or drills of general utility.

81 Acetabular:

This subclass is indented under subclass 80. Subject matter wherein the cutting tool has a concave or convex substantially hemispherical configuration adapted to shape a bone socket in a bone head, e.g., hip or jaw articulation.

SEE OR SEARCH CLASS:

623, Prosthesis (i.e., Artificial Body Members), Parts Thereof, or Aids and Accessories Therefor, appropriate subclasses, for artificial or replacement joints.

82 Saw type tool:
This subclass is indented under subclass 79. Subject matter wherein the cutting means is a series of narrow sharp tooth like elements arranged substantially in single file along at least one edge of a thin generally planar member of circular or elongated shape.

SEE OR SEARCH THIS CLASS, SUBCLASS:
176+, for saws of general utility used to cut the body.

83 Rongeur, resector or nipper:
This subclass is indented under subclass 79. Subject matter wherein the bone or associated soft tissue is cut by a crushing, gnawing, chipping or cutting action.

(1) Note. The devices in this subclass are termed bone forceps, bone nippers and rongeurs (crushing devices) for use in cutting through thin boney structure (ribs) or cartilage material for either complete removal thereof or for separation for further surgery.

SEE OR SEARCH THIS CLASS, SUBCLASS:
176+, for shear or scissors like cutters.
205+, for forceps structure, particularly subclass 211 for forceps jaw structure.

84 Osteotome or scraper:
This subclass is indented under subclass 79. Subject matter wherein a portion of a bone or associated cartilage is removed by a sharpened blade, chisel or a means having tooth-like projections which wear the bone or cartilage dawn by friction.

(1) Note. The devices of this subclass include cutting blades on a handle, chisels or osteotomes and abraders which are either manually moved in a push-pull fashion, or by a motor drive means, or by having the head of the handle impacted by a hammer-like device.

85 Rasp or file:
This subclass is indented under subclass 84. Subject matter wherein tissue is operatively removed by cutting means having formed prominences which are distinct raised points or ridges; such cutting means being typically used to smooth or slightly modify the shape of a bone or cartilage surface.

SEE OR SEARCH CLASS:
29, Metal Working, subclasses 76.1+ for files.

86 Means for use in bone reparation:
This subclass is indented under subclass 53. Subject matter wherein means is provided to assist in the removal, repair or replacement of bone tissue.

(1) Note. Devices used in the manipulation, removal, or placement of an internal fixation means or bone prosthesis are classified in this and indented subclasses.

(2) Note. Devices for use in bone grafting are classified in this and indented subclasses.

87 Osteotomy jig or fixture:
This subclass is indented under subclass 86. Subject matter wherein the means to assist in bone reparation is a guide or gauge for aligning a cutting means of a desired orientation for severing or partially severing a bone at one or more desired location so that the severed portions may be reoriented or a prosthetic member fitted thereto to effect the repair of the bone.

SEE OR SEARCH THIS CLASS, SUBCLASS:
80, 82 and 96+, for guide or gauge members for use with a reamer or drill, saws or nail guides.

SEE OR SEARCH CLASS:
408, Cutting by Use of Rotating Axially Moving Tool, subclasses 72+ for drill jigs.

88 Knee or knee joint:
This subclass is indented under subclass 87. Subject matter wherein the jig or fixture member is used primarily on a joint between two long bones for purposes of altering or replacing the joint surfaces.

89 Femoral head:
This subclass is indented under subclass 87. Subject matter wherein the jig or fixture member is designed to be used on the proximal portion of a femur for purposes of altering or replacing the femoral portion of the hip joint.

90 Joint distractor:
This subclass is indented under subclass 86. Subject matter wherein the reparation means includes a spreading means which functions to separate or separate and hold adjacent, jointed bones in a desired special relationship to permit access thereto or for purposes of adjusting the tension in the ligaments which connect the joint.

91 Acetabular cup positioner:
This subclass is indented under subclass 86. Subject matter wherein the reparation means is used to assist in aligning a prosthetic hip socket relative to a pelvis for proper receipt of the associated femoral head which may be natural or prosthetic.

SEE OR SEARCH THIS CLASS, SUBCLASS:
80, for reamers or drills for shaping a socket or bone head.

92 Device for the application of bone cement:
This subclass is indented under subclass 86. Subject matter wherein the assisting means aids in the application or distribution of a glue-like material or luting agent to a bone surface or into a cavity in a bone.

(1) Note. Patents in this subclass disclose tube or disk shaped materials which actually become part of a prosthesis when filled with cement and are used to distribute the cement to a uniform thickness on a bone surface.

(2) Note. Bone cement, per se, is not classifiable here.

(3) Note. The term “cement” is considered to include any hardenable material which is used as a luting or grouting agent, but the material is not required to form an adhesive bond with bone tissue.

93 Applicator:
This subclass is indented under subclass 92. Subject matter wherein the assisting means is one which is used to apply or to mix and apply cement to a bone.

94 Pressurized cement placement:
This subclass is indented under subclass 93. Subject matter wherein the applicator means exerts a force upon the cement as it is applied to the bone.

(1) Note. Typically a seal is formed between the bone and the applicator so that the pressurized cement is forced into the relatively porous cancellous bone tissue which either underlies or surrounds a prosthetic member.

95 Intramedullary plug or centering means:
This subclass is indented under subclass 92. Subject matter wherein the assisting means is a medullary canal occluding means which controls the placement of bone cement in the canal of wherein the assisting means is insertable within a medullary canal and positions an implantable means in the canal such that the bone cement is distributed in a desired or predetermined pattern within said canal about the implantable means.

(1) Note. The plugs are typically placed in the femur during hip replacement to prevent bone cement within the medullary canal from migrating toward the knee.

SEE OR SEARCH CLASS:
623, Prosthesis, (i.e., Artificial Body Members), Parts Thereof, or Aids and Accessories Therefor, appropriate subclasses, for prosthetic devices having self-centering means, e.g., finger joints.

96 Drill or pin guide:
This subclass is indented under subclass 86. Subject matter wherein the assisting means directs the path of an elongated, end cutting, rotary cutting means or directs the path of a thin elongated pin or wire into the bone.

SEE OR SEARCH THIS CLASS, SUBCLASS:

80, for drills or reamers for cutting into bone or for drills and reamers having means thereon to guide them during their operation.

97 X-ray positioned:

This subclass is indented under subclass 96. Subject matter which include an image producing system to position the drill, pin or wire directing means.

(1) Note. The system typically includes a video display in real time of pin, wire or drill movement, however, still images are also included.

98 Cross-pinning drill guide:

This subclass is indented under subclass 96. Subject matter in which the drill, pin or wire is guided generally in a transverse direction with respect to an opposing member with which it is to cooperatively engage.

99 Prosthesis insertor or extractor:

This subclass is indented under subclass 86. Subject matter comprising force transferal means specifically adapted to place or remove a bone repairing means through forceful contact or collision in which momentum is transferred from the force transferral means to the reparation means.

(1) Note. Patents in this subclass includes devices for removing or inserting, nails, pins, intramedullary and femoral head prosthesis means.

100 Restrained movable mass (e.g., slide hammer):

This subclass is indented under subclass 99. Subject matter wherein the insertion or removing means comprises a rod which has a means extending therefrom for attaching to said rod the reparation means and a sliding weight which is moved along said rod to impact upon a corporating anvil-like member to provide a force for inserting or removing the reparation means.

101 Nail or plate bender:

This subclass is indented under subclass 86. Subject matter comprising deflection or plastic deformation means particularly adapted for changing the configuration of a nail or plate to a prescribed configuration or to a configuration which substantially conforms to some particular bone structure.

(1) Note. The benders in this subclass are used to alter the shape of bone plates, intramedullary nails, screws, or cortical plates to adapt a device of generally correct shape to fit a specific application site.

102 Gauging or measuring devices:

This subclass is indented under subclass 86. Subject matter wherein a physical characteristic of the bone repair means or a characteristic of the bone itself is subjected to assessment to determine how the reparation process should be altered to effect a proper repair.

103 Wiring aid:

This subclass is indented under subclass 86. Subject matter wherein the bone repair means is particularly adapted for the application of or tensioning of a slender, flexible, string-like piece of material about bone.

(1) Note. “Wiring” is an art term that includes, but is not limited, materially, to the use of metallic wire.

104 Screw or pin placement or removal means:

This subclass is indented under subclass 86. Subject matter wherein means is provided for inserting or extracting an elongated element having helical threads or a thin elongated element having a nail like shape.

(1) Note. This subclass accepts `screwdrivers' and similar or analogous devices which are particularly adapted for use in an orthopedic environment.

SEE OR SEARCH THIS CLASS, SUBCLASS:

96+, for pin or drill guide means.

SEE OR SEARCH CLASS:
81, Tools, subclasses 436+ for screwdrivers.

105 Bone compression or distraction:
This subclass is indented under subclass 86. Subject matter wherein removable means is provided to pull together or move apart bone portions during the application of a cortical plate.

(1) Note. The bone compression or distraction means is removed after the application of the bone plate is complete.

105.5 Cast removal implement:
This subclass is indented under subclass 105. Subject matter which provides a means for disengaging a plaster of Paris or the like immobilization splint from a body portion.

(1) Note. Casts typically have one or more layers of padding between the rigid cast shell and the body portion being treated which become adhered to the shell and make cast removal difficult without some form of prying device; vibratory cast "saws" are not proper for this subclass.

SEE OR SEARCH CLASS:
30, Cutlery, appropriate subclasses for circular saws and cast cutters, per se.
602, Surgery, subclass 9 for cast removal devices which are embedded within the wall of the splint.

106 Means for removing foreign objects from the throat or connected passageways (e.g., probang):
This subclass is indented under subclass 1. Subject matter wherein an instrument means is used to remove foreign materials from those tubes or cavities which connect a mouth with a stomach or a mouth with nasal passages.

SEE OR SEARCH THIS CLASS, SUBCLASS:
127+, for devices used to remove kidney stones.

107 Means for removing, inserting or aiding in the removal or insertion of eye lens material:
This subclass is indented under subclass 1. Subject matter wherein means is provided to take out of, put into, or put onto an eye, a natural or an artificial material intended to replace or augment that portion of an eye which focuses light to create an image, or means to assist in such action.

(1) Note. This subclass contains devices for use in assisting in placing artificial or natural lens material into or on the eye as well as means for removing lens material from the eye. Means for installing contact lenses would also be found in this subclass.

(2) Note. This subclass is intended for means used to manipulate a whole or substantially whole natural lens or a substitute therefor and does not include a device which comminutes a natural lens prior to removal thereof.

SEE OR SEARCH THIS CLASS, SUBCLASS:
166, for corneal cutters and guides for corneal cutters.
170+, for devices which comminute a tissue structure prior to the removal thereof from the body.

108 Means for inserting or removing conduit within body:
This subclass is indented under subclass 1. Subject matter wherein means are provided for placing or extracting a generally tubular like structure, having a bore or hole therethrough, into a body.

(1) Note. Patents in this and the indented subclass disclose means for inserting or removing endotracheal tubes, ear drum vents, bladder drains, vascular grafts, alimentary canal tubes, and other generally tubular members into the body.

(2) Note. Patents in which material is removed from or introduced into the body for the purpose of treating the body are found in Class 604, Surgery. Patents

in this subclass are limited to means for placing or removing conduits from the body without means to introduce or remove material from the body. In other words, the use or purpose of the conduit is not at issue; merely the means for inserting or removing the conduit prior to or subsequent to use are being entertained.

SEE OR SEARCH THIS CLASS, SUBCLASS:

130, for stereotaxic devices.
159, for means for removing an obstruction from a blood vessel, teat or a duct.
191, for dilators.

SEE OR SEARCH CLASS:

604, Surgery, subclasses 93.01+ for conduits having means for introducing or removing material from the body including body fluids.

109 Ear vent or drain:

This subclass is indented under subclass 108. Subject matter wherein the conduit is placed such that it penetrates the tympanic membrane in an organ of hearing.

(1) Note. Patents in this subclass are limited to devices which place conduits into the ear and do not claim the passage of material into or out of the conduit. Conduits placed in the body for the purpose of introducing or removing material are properly classifiable in Class 604, Surgery.

SEE OR SEARCH THIS CLASS, SUBCLASS:

185+, for devices for puncturing having similar structure to the devices in this subclass which puncture the middle ear structure for insertion of a vent or drain.

SEE OR SEARCH CLASS:

604, Surgery, subclass 244 for body inserted tubular conduit structure.

110 Means for removing tonsils, adenoids or polyps:

This subclass is indented under subclass 1. Subject matter wherein means is provided for extracting nonosseous tissue from the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:

79+, for cutting devices for cutting soft tissues associated with bones.

111 With hemostasis:

This subclass is indented under subclass 110. Subject matter wherein means is provided to substantially stop the flow of blood, from the site where the soft tissue was removed from the body.

112 By pressure application:

This subclass is indented under subclass 111. Subject matter wherein the blood flow is substantially stopped by compressing the tissue to such a degree that the tissue separates and the walls of the blood vessels in the tissue of the region adjacent the site of separation become self-adherently closed so that there is little or no bleeding from the site after removal is effected.

113 By wire loop or snare:

This subclass is indented under subclass 110. Subject matter wherein a filament or chain encircles the nonosseous tissue and removes said tissue by severing or cutting.

SEE OR SEARCH THIS CLASS, SUBCLASS:

79, for similar loop or snare devices for removing cartilage.

114 With collecting means for removed material:

This subclass is indented under subclass 110. Subject matter having additional means which receives, contains or holds the nonosseous tissue when cut from the body.

115 By vacuum application:

This subclass is indented under subclass 114. Subject matter wherein the collecting means or the excised nonosseous tissue is subjected to negative pressure to effect containment of the excised tissue.

116 Means for marking animals:
This subclass is indented under subclass 1. Subject matter wherein cutting, punching, piercing, tattooing or other means are applied to an animal's flesh to permanently identify or distinguish said animal from animals belonging to another or other animals in a herd, flock, etc.

(1) Note. This subclass contains patents which notch, cut, tattoo or pierce an animals flesh, usually the ear, to permanently mark the animal so that it can be distinguished from other animals.

SEE OR SEARCH THIS CLASS, SUBCLASS:
117, for devices for applying tags to animals.

SEE OR SEARCH CLASS:
40, Card, Picture, or Sign Exhibiting, subclasses 300+ for animal markers.

117 Means for applying animal identification device:
This subclass is indented under subclass 1. Subject matter wherein means is provided to place or insert upon or within an animal a tag or tag-like element to identify or distinguish said animal.

(1) Note. The applicators in this subclass apply identification tags to animals and do not permanently mark the skin of an animal or make any imprint upon the skin of an animal other than the point(s) of attachment for the identification device.

SEE OR SEARCH THIS CLASS, SUBCLASS:
116, for animal marking devices which place markings upon the animal's skin.
188, for earlobe piercing devices which insert a “trainer” earring at the time of piercing.

SEE OR SEARCH CLASS:
29, Metal Working, subclasses 400.1+ for a method of applying a tag.
63, Jewelry, subclasses 12+ for earrings.
119, Animal Husbandry, subclass 858, for a collar having or adapted to support an ID tag, subclasses 834+ for a hog ring and subclass 866 for a nose ring, per se.
227, Elongated-Member-Driving Apparatus, appropriate subclasses for apparatus for applying a tag to work by a member, e.g., staple.

118 Means for circumcision:
This subclass is indented under subclass 1. Subject matter wherein means are provided to remove or assist in the removal of the prepuce from a male.

(1) Note. Although some texts include operative procedures to be performed on a female in the definition of the term “circumcision”, such procedures and means therefor are not included in the subject matter of this subclass; patents directed to clitoridectomy or preputium clitoridectomy and similar procedures, excluded above, are properly classifiable in subclass 119.

119 Obstetric or gynecological instruments:
This subclass is indented under subclass 1. Subject matter wherein the instruments are specifically adapted for use in childbirth or for treatment of a female's reproductive organs.

SEE OR SEARCH CLASS:
600, Surgery, subclasses 185+, 201, and 211+ for specula used to examine the interior of maturally occurring orifices of the body.

120 Umbilical clamp:
This subclass is indented under subclass 119. Subject matter comprising pressure means to close off the umbilical artery during or shortly after childbirth.

(1) Note. Surgical clamp which disclose or claim cutting of umbilical cord in addition to clamping said cord are properly classified in this subclass.

SEE OR SEARCH THIS CLASS, SUBCLASS:
146+, for devices which apply occluding clips.

157+, for other occluding clips, clamps, and bands which are applied to analogous body conduits.

121 Parturition assistance device:
This subclass is indented under subclass 119. Subject matter wherein the instrument is used to aid in delivering or removing a fetus from a viviparous animal.

122 Fetus extractor:
This subclass is indented under subclass 121. Subject matter wherein the delivery aiding means is placed in contact with the fetus, or a portion thereof, so that a tractive force may be applied to the fetus to effect an easier extraction from the birth canal.

123 With vacuum or suction application:
This subclass is indented under subclass 122. Subject matter wherein the fetus extractor includes a negative pressure means applied to the fetus or a pressure differential means applied to the perineal area of a female to assist in the removal of the fetus from the birth canal.

124 With mechanical means for applying tension (e.g., gearing reels, etc.):
This subclass is indented under subclass 122. Subject matter wherein the fetus extraction means has mechanical force multiplying means for increasing the tractive force that the extraction means exerts on the fetus to effect its removal from the birth canal.

125 Means for rupturing the amniotic membrane:
This subclass is indented under subclass 119. Subject matter wherein means is provided for surgically severing, scratching, or cutting the thin inner membranous layer of the placental sac which contains the fetus and amniotic fluid.

126 Embryotome:
This subclass is indented under subclass 119. Subject matter wherein means is provided with which to cut or sever parts from a fetus so as to dismember or dissect same and thus facilitate its withdrawal through the birth canal.

SEE OR SEARCH CLASS:
604, Surgery, appropriate subclasses, for devices which aspirate the severed fetal tissue through a suction tube.

127 Means for concretion removal:
This subclass is indented under subclass 1. Subject matter wherein means is provided for extracting or easing the natural passage of a calculus or “stone” (any solid mass formed by coalescence or cohesion) from a body organ or associated excretory duct.

SEE OR SEARCH CLASS:
601, Surgery: Kinesitherapy, subclasses 4+ for massaging devices used to crush body stones by the application of a force external to the body.

128 With fragmenting means:
This subclass is indented under subclass 127. Subject matter wherein the concretion removal means has associated therewith an additional means which divides, breaks or disintegrates the solid mass or stone while inside the body.

SEE OR SEARCH CLASS:
601, Surgery: Kinesitherapy, subclasses 4+ for a shock wave lithotripter wherein the shock waves are applied from a location outside the body.

129 Electrode guide means:
This subclass is indented under subclass 1. Subject matter wherein an instrument is provided to direct in the application or removal of an electrical conductor connection with a specified segment of internal body tissue.

SEE OR SEARCH CLASS:
604, Surgery, subclass 512 for methods of anesthetizing a patient.

130 Stereotaxic device:
This subclass is indented under subclass 1. Subject matter wherein a means is provided for use in surgery for directing the tip of a delicate instrument (e.g., a needle or an electrode) in three planes with the ability to reach or return to a predetermined point or region of a body through a relatively small access opening.

(1) Note. Included in this subclasses are means for treating internal tumors, neural disorders, etc., which have been located by other means e.g., CT Scanners, tomography, and other devices

used to "target" a particular portion of e.g., the brain.

131 Means for removal of skin or material therefrom:

This subclass is indented under subclass 1. Subject matter wherein extraction means is provided for treating the external covering or integument of the body to excise a portion of the covering or integument or, alternately, to extricate unwanted hair, external tissue (e.g., polyps, moles, warts, etc.), foreign substances, or parasites imbedded in or upon said external covering or integument.

(1) Note. This subclass takes tweezers claiming parasite or splinter removal from the skin as well as skin abrasion devices.

SEE OR SEARCH THIS CLASS, SUBCLASS:

9, for means using light to remove hair, lesions, or other extraneous matter from the skin.

36, and 43, for electrical hair removal means.

133+, for mechanical or chemical hair removal means.

210, for similar tweezer structure.

SEE OR SEARCH CLASS:

132, Toilet, subclasses 73+ for toilet devices for manicuring the nails and for removing corns and other callosities by abrasion.

132 By means for skin graft preparation (e.g., dermatome):

This subclass is indented under subclass 131. Subject matter wherein the skin removal means is a cutter which is used to flay a portion of the skin to cut skin segments therefrom, or a further means which is used to cut, alter or process previously removed skin segments prior to the use in transplantation to another portion of the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:

174+, for cutting devices of general utility.

133 Physical removal of hair or hair plugs from skin:

This subclass is indented under subclass 131. Subject matter wherein the material extracted or removed from the skin is a naturally occurring fine, generally cylindrical filament growing from the skin or a piece of flesh, generally cylindrical, containing said naturally occurring filament.

(1) Note. This subclass contains depilatory devices, eyebrow pluckers, as well as tweezers specifically claiming hair removal functions and cutters designed to remove hair plugs for transplantation.

SEE OR SEARCH THIS CLASS, SUBCLASS:

9, for means using light to remove hair, lesions, or other extraneous matter from the skin.

36, and 43, for hair removal by electrolysis.

210, for similar tweezer structure.

134 By application of wax or adhesive:

This subclass is indented under subclass 133. Subject matter wherein the hair is removed from the skin by applying a material composed of warmed lipids which substantially solidify at body temperature and entrap the hair, or a material to which the hair adheres.

135 Means for or to assist in mammalian sterilization:

This subclass is indented under subclass 1. Subject matter wherein means are provided to aid in rendering or to render an animal incapable of producing offspring.

SEE OR SEARCH THIS CLASS, SUBCLASS:

140+, for elastic band appliers.

151, for bands, per se.

SEE OR SEARCH CLASS:

128, Surgery, subclasses 842+, for male reproductive tract shields a birth control device.

136 By crushing:
This subclass is indented under subclass 135. Subject matter wherein the means to render an animal incapable of producing offspring is a means which applies pressure with sufficient force to destroy or deform that part of the body which is applied.

SEE OR SEARCH CLASS:
81, Tools, subclasses 300+ for tool-jaws positioned by relatively movable plural handles (e.g., pliers).

137 By severing:
This subclass is indented under subclass 135. Subject matter wherein the means applied to an animal to render said animal incapable of producing offspring is a cutter which severs that part of the body to which it is applied.

SEE OR SEARCH THIS CLASS, SUBCLASS:
174+, for cutting devices of general utility.

138 Means for removing suture, clip, staple or ligature:
This subclass is indented under subclass 1. Subject matter wherein means is provided to extract a wound closure means which had been placed to join the wound, made either by an accidental occurrence or by a surgical procedure, when the closure means device is no longer deemed desirable for continued treatment.

139 Suture, ligature, elastic band or clip applier:
This subclass is indented under subclass 1. Subject matter comprising means for (1) engaging a thread-like material in opposed edges of a wound or incision for the purpose of joining said edges; (2) forming an isolated tissue mass by compressively encircling and knotting a thread-like material between the tissue mass and the body or a body organ; (3) engaging a ring-like thin, elongated, generally flat, strip of material, which material has the capability of returning to its original shape upon being deformed or stretched, about some portion of the body or a body organ; or (4) engaging a deformable fastener device which grips and holds tightly or positions the engaged tissue.

SEE OR SEARCH THIS CLASS, SUBCLASS:
151+, for clips, clamps or bands, per se.
157+, for occluding clips, clamps or bands, per se.
228+, for sutures or ligatures, per se.

SEE OR SEARCH CLASS:
132, Toilet, subclasses 323+ for thread holding and guiding of dental floss holders.
227, Elongate-Member-Driving Apparatus, appropriate subclasses for surgical staplers.
623, Prosthesis (i.e., Artificial Body Members), Parts Thereof, or Aids and Accessories Therefor, subclass 1 for arterial prosthesis.

140 Elastic band applier:
This subclass is indented under subclass 139. Subject matter comprising means for the application of a ring-like strip of resilient material around a portion of body tissue.

(1) Note. The term band is extended to include any generally circular, loop or ring-like member which is unitarily formed without interruption. A joined or knotted ring-like member is considered to be a ligature whether it is resilient or not.

141 Band applied to reproductive organ:
This subclass is indented under subclass 140. Subject matter wherein the elastic band is applied to a male or female reproductive organ or a portion thereof.

(1) Note. The patents in this subclass do not claim birth control by the application of the elastic band to a reproductive organ. For patents claiming birth control functions see search note below.

SEE OR SEARCH CLASS:
128, Surgery, subclasses 830+ for female reproductive tract birth control devices and subclasses 842+ for male reproductive tract birth control devices.

142 Clip applier:
This subclass is indented under subclass 139. Subject matter wherein the applicator engages a deformable fastener means which when deformed grips and holds tightly about or positions the engaged tissue.

(1) Note. The deformable clips applied by an instrument classifiable in this subclass are limited to those clips which do not intentionally pierce the tissue (work) to which they are applied. Instruments which apply deformable fastener elements which are intended to pierce the tissue (work) to which they are applied are not classifiable in this subclass since the fastener is considered to be a staple; see search note below.

SEE OR SEARCH CLASS:
227, Elongated-Member-Driving Apparatus, appropriate subclasses for surgical staplers.

143 Clip fed from supply:
This subclass is indented under subclass 142. Subject matter wherein the clip applier carries its own source of fastener means which are sequentially deliverable, one at a time, from the source of supply to the instruments application zone.

SEE OR SEARCH CLASS:
227, Elongated-Member-Driving Apparatus, appropriate subclasses for similar staple feed means in surgical staplers.

144 Mechanical suture or ligature applier:
This subclass is indented under subclass 139. Subject matter comprising means based on the use of levers or inclined planes which is contrived and devised to manipulate or contort a thread-like filament around or through body tissue so as to form a compressive constraint to isolate a tissue mass or to form unlocked stitches or interlacings between tissue masses which are being joined, approximated, or otherwise connected.

SEE OR SEARCH CLASS:
81, Tools, subclasses 300+ for pliers of general utility.
112, Sewing, subclasses 169+ for similar devices which form a locked stitch.
223, Apparel Apparatus, subclass 104 for awls carrying a thread supply in the handle.

145 Shuttle action by suture passing device:
This subclass is indented under subclass 144. Subject matter wherein the filament manipulating means includes a filament-attached or filament-engaged transport means which carries the filament through the tissue masses being joined as the transport means is moved from a first position to a second position and is then returned to the first position to complete the movement required to form a lace or stitch and also ready the applier for further lace or stitch placement.

146 Spool feeds suture to needle:
This subclass is indented under subclass 144. Subject matter wherein the filament manipulating means includes an elongated, pointed, slender, either straight or curved tissue piercing member which has operatively associated therewith a supply of filament that is disposed on a reel in such fashion as to be dispensable from said piercing member to form stitches or lacings between the pierced tissue masses being connected.

SEE OR SEARCH CLASS:
112, Sewing, subclasses 169+ for similar devices which form a locked stitch.

147 Means for clamping needle to handle:
This subclass is indented under subclass 144. Subject matter wherein the applier includes at least one manually graspable lever having a member mounting means for disconnectably attaching in either substantially parallel or generally perpendicular orientation thereto an elongated, pointed, either straight or curved, slender tissue piercing member which is used to manipulate the filament when placing the stitches or laces used to connect the tissue masses.

148 Suturing or ligating aid or guide:
This subclass is indented under subclass 139. Subject matter comprising means for assisting in the placement or directing the path of a suture or ligature during its application.

(1) Note. Forceps or tweezers especially adapted to tie or guide a suturing or ligating device are classifiable in this subclass.

149 Eversion device:
This subclass is indented under subclass 148. Subject matter wherein the suturing or ligating aid or guide is particularly adapted to be applied to opposed ends of hollow body organs for the purpose of invaginating the end portions thereof and abuting same in order to allow them to be joined by suturing or ligation.

SEE OR SEARCH THIS CLASS, SUBCLASS:
151+, for clips, clamp, connectors or bands, per se.

150 Alignment device (e.g., approximators):
This subclass is indented under subclass 148. Subject matter wherein the suturing aid or ligating guide is a holding or clamping means for registering the tubular end portions of hollow body organs in close approximation relative to one another during anastomotic surgery.

SEE OR SEARCH THIS CLASS, SUBCLASS:
151+, for surgical clips, clamps, connectors or bands, per se.

151 Surgical mesh, connector, clip, clamp or band:
This subclass is indented under subclass 1. Subject matter comprising elements or devices which are adapted to be applied during a surgical procedure of joining portions of body tissue either by: (1) the application of a fenestrated surgical mat or net-like support means; (2) use of a cooperatively interengaging holding means; (3) an element which binds or interdigitates and fastens together or (4) an element which encircles and grips a portion of tissue.

(1) Note. This subclass does not provide for wound or incision closing elements, such would be properly classifiable in the subclasses noted in the search this class note below.

SEE OR SEARCH THIS CLASS, SUBCLASS:
213+, for sutureless closures.
222+, for surgical needles.
228+, for sutures or ligators.

SEE OR SEARCH CLASS:
128, Surgery, subclass 831 for fallopian occludes.

152 Connector for nerve endings:
This subclass is indented under subclass 151. Subject matter wherein a surgical support means is adapted to encircle or align distinct end portions of a severed fiber bundle tissue which forms a part of system for conveying electrical impulses between a brain or spinal cord and other parts of the body so that a fiber bundle or portions of different fiber bundles are held in close approximation to augment the healing thereof.

153 Connector for hollow body organs:
This subclass is indented under subclass 151. Subject matter wherein the connector consists of at least one element which is applied to an interrupted tubular organ or between two organs of the body to permit fluid communication therebetween.

(1) Note. This subclass contains patents which claim anastomosis devices being applied to body organs or blood vessels to connect them and to allow for their normal function.

154 Bioabsorbable:
This subclass is indented under subclass 153. Subject matter wherein the connector element is composed of disintegratable material which the body is capable of absorbing.

155 Connector is single element:
This subclass is indented under subclass 153. Subject matter wherein the connector element is of a unitary structure.

156 Removable:
This subclass is indented under subclass 155. Subject matter wherein the single element connector can be moved out from within the hollow body organ in which it had been placed.

157 Occluding clip, clamp or band:
This subclass is indented under subclass 151. Subject matter wherein a hollow body organ is closed or sealed off by the application of a clip, clamp or band thereto.

SEE OR SEARCH THIS CLASS, SUBCLASS:
120, for a clamp applied to an umbilical cord and including clamps which hold the umbilical cord during and cutting thereof.

SEE OR SEARCH CLASS:
251, Valves and Valve Actuation, subclasses 4+ for stopping the flow of liquid through flexible tubular conduits.

158 Artery or vein:
This subclass is indented under subclass 157. Subject matter wherein the occluded hollow body organ is part of a blood vascular system.

SEE OR SEARCH THIS CLASS, SUBCLASS:
122, for an umbilical cord clamp.

159 Blood vessel, duct or teat cutter, scraper or abrader:
This subclass is indented under subclass 1. Subject matter comprising means for removing an obstruction in, or for enlarging the orifice of a vascular conduit, connective duct or milk duct passageway by cutting, by rubbing with a sharp surface or by eroding a surface by the application of friction.

SEE OR SEARCH THIS CLASS, SUBCLASS:
84+, for bone scrappers.
108+, for means to insert or remove a conduit from within the body.
160, for curettes.
161, for optic, otic or oral scrappers.
162, for means used to clean the eye, ear or nose.
170, for cutting means carried within a elongated probe-like member.

160 Curette:
This subclass is indented under subclass 1. Subject matter comprising means for removing tissue from a female reproductive organ by scrapping or abrading said tissue.

(1) Note. Patents in this subclass are restricted to use in the female reproductive system.

SEE OR SEARCH THIS CLASS, SUBCLASS:
84, for bone scrapper or abrading.
131+, for removal of skin by scrapping or abrading.
159, for removal of material from blood vessels, or ducts of a teat by cutting, scrapping, or abrading.
161, for eye, ear or mouth scrapper.
162, for eye, ear or nose cleaning devices.

161 Optic, otic or oral scrapper or abrader:
This subclass is indented under subclass 1. Subject matter comprising means for removing extraneous material from the surface of an organ of vision, an organ by hearing or from various portions of an animal's mouth by rubbing a surface of any one of those organs with a sharpened element.

162 Means for cleaning eye, ear or nose:
This subclass is indented under subclass 1. Subject matter comprising means for removing foreign material from an organ of sight, hearing or smell.

(1) Note. Patents in this subclass disclose hair, wire, swab, vegetable fiber, celluloid, rubber in the form of a brush, spoon or loop for removing material from the eye, ear or nose.

163 Means for debeaking or dehorning animals:
This subclass is indented under subclass 1. Subject matter comprising a device for removing a bird's bill or a boney, often curved and pointed, hollow, paired growth on the upper head portion of mammals.

164 By electrical or thermal application:
This subclass is indented under subclass 163. Subject matter wherein the beak or horn is removed by the application of electricity or heat thereto.

165 Means for removal of animal tail:
This subclass is indented under subclass 1. Subject matter comprising a device for cutting off the hindmost part of an animal which forms a distinct, trailing, flexible caudal extension of the animals spinal column.

SEE OR SEARCH THIS CLASS, SUBCLASS:
174+, for similar cutlery devices having a sharing action during cutting.

166 Corneal cutter or guide for corneal cutter:
This subclass is indented under subclass 1. Subject matter comprising cutting means or a means to direct the path of a cutting means used in a surgical procedure upon the anterior, external transparent layer of an eye.

SEE OR SEARCH THIS CLASS, SUBCLASS:
170+, for cutting means covered by an elongated probe-like member.
172+, for means to limit cutter depth of penetration.
180, for rotating cutters.

167 Cutting, puncturing or piercing:
This subclass is indented under subclass 1. Subject matter comprising means for use in severing, perforating or penetrating the body or a specific portion thereof.

(1) Note. Patents claiming the cutting of bone, bone-like material or cartilage are classified in subclasses 79+.

(2) Note. Patents claiming cutting of body joints are also classifiable in subclasses 79+, orthopedic cutting instruments.

SEE OR SEARCH THIS CLASS, SUBCLASS:
79+, for cutting means specific to orthopedic use.
116+, for punching, cutting or piercing means to mark animals.
117, for means to apply identification tags of punching or piercing.
118, for circumcision devices.
125, for cutting devices for rupturing amniotic membranes.
131, for skin removal means including cutting.
135, for cutting means used to sterilize animals.
138, for cutting of sutures, ligatures, slaps and clips.
159, for cutting devices inserted into a vessel or duct to enlarge it.
163, for debeaking or dehorning an animal by cutting.
165, for cutting of animal tails.
166, for cutting of the cornea.

SEE OR SEARCH CLASS:
27, Undertaking, subclasses 24.1+ for trocars for treating a corpse.
30, Cutlery, appropriate subclasses for cutting implements adapted to dehorn animals but having general utility, for cutting structures associated with surgery; such as plastic casts and external stitches but not a part of the body, and mere knives although referred to as surgical knives.
175, Boring or Penetrating the Earth, subclasses 327+ for earth boring bit or bit element.

168 Cutter drive reversed to clean material therefrom:
This subclass is indented under subclass 167. Subject matter comprising means to change the direction of cutter movement to remove material cut from cutter surface.

(1) Note. Patents in this subclass include probe-like cutters having the cutter located on their distal end with a drive means which can be reversed to unclog the cutter of the material removed from the body member being cut.

SEE OR SEARCH THIS CLASS, SUBCLASS:
79+, for bone or cartilage cutter having material removal means.
114+, for collecting means for removed tonsil, adenoid or polyp masses.

170+, for other probe-like cutters having suction means to remove cut material from the cutlery area.

169 Cutter having vibratory drive means:
This subclass is indented under subclass 167. Subject matter having a cutter moving means which moves to and fro quickly and repeatedly to impart motion thereto.

(1) Note. Vibratory drive means includes both subsonic an ultrasonic means to drive the cutter.

(2) Note. Many of the patents in this subclass disclose the use of vibrating drive means for microsurgery of the eye.

SEE OR SEARCH THIS CLASS, SUBCLASS:
166, for cutting devices used to cut a guide or cutter in removal or cutting of the cornea.

170 Cutter carried on elongated probe-like member:
This subclass is indented under subclass 167. Subject matter comprising a cutting means which is supported by an elongated tube-like member which member permits surgical procedures to be undertaken in relatively confined areas.

(1) Note. Patents in this subclass are designed to be used in areas of the body having difficult access such as the eye, nasal passages, urinary tract, and in various microsurgical procedures.

SEE OR SEARCH THIS CLASS, SUBCLASS:
79+, for patents claiming microsurgical procedures and instrumentation for operation in the cutting of bone or cartilage.
169, for microsurgical instruments having vibrating drive means.

171 Reciprocating or oscillating cutter:
This subclass is indented under subclass 170. Subject matter wherein the cutting means is rotatably reciprocated about a fixed point or is moved alternatively backward and forward in a linear direction along its longitudinal axis.

SEE OR SEARCH THIS CLASS, SUBCLASS:
177, for reciprocating saws.

172 Means to limit cutter penetration depth (e.g., dura guard):
This subclass is indented under subclass 167. Subject matter comprising a stop or guard which limits the advance or movement of a cutting device to prevent cutting too deeply into the body portion being cut.

173 By disconnecting cutter drive:
This subclass is indented under subclass 172. Subject matter wherein the advance or movement of the cutting means is stopped by a means which interrupts or disables the drive train between the cutting means and a driving force therefor.

174 Shear type (e.g., scissors, etc.):
This subclass is indented under subclass 167. Subject matter wherein the cutting is accomplished by the action of two cutting blades which when moved toward each other about a fixed pivot point cooperate to effect a cut.

(1) Note. Patents in this subclass are limited to scissors-type cutters which typically begin their cut at the edge of a surface and continue their cutting action into the interior of the surface as desired.

(2) Note. Punching devices which disclose a (1) punch and a cooperating die or a (2) punch and a cooperating anvil surface are not considered shears since their cut is made for the purpose of making a generally circular type of incision in a surface, usually at some distance from a peripheral edge of that surface.

SEE OR SEARCH THIS CLASS, SUBCLASS:
184, for punching devices of the type referred to in note (2), above.

SEE OR SEARCH CLASS:
30, Cutlery, subclasses 194+, for shears.

175 Snout cutter:
This subclass is indented under subclass 174. Subject matter wherein the shears cut a portion of a projecting nose, jaws or anterior part of an animals' muzzle.

SEE OR SEARCH THIS CLASS, SUBCLASS:
116, for shears used in cutting marks on animals.
163, for shear type cutters for removing of animal beaks or horns.
165, for shears used in removing tails from an animal.

176 Saw type:
This subclass is indented under subclass 166. Subject matter wherein the cutter is a thin blade or disc with a sharpened, toothed edge.

SEE OR SEARCH THIS CLASS, SUBCLASS:
82, for bone cutting saws.

SEE OR SEARCH CLASS:
30, Cutlery, subclasses 166.3+ for a saw, generally.

177 Reciprocating:
This subclass is indented under subclass 176. Subject matter wherein the saw is alternately moved backward and forward in a linear motion which is generally parallel to the toothed edge.

SEE OR SEARCH THIS CLASS, SUBCLASS:
171, for elongated probe-like members having a reciprocating cutter.

178 Oscillating:
This subclass is indented under subclass 176. Subject matter wherein the cutter is rotatably reciprocated about a fixed point along its longitudinal axis.

SEE OR SEARCH THIS CLASS, SUBCLASS:
171, for oscillated cutters carried by an elongated probe-like instrument used in microsurgery.

179 Cylindrical:
This subclass is indented under subclass 176. Subject matter wherein the saw is circular or disc-like in shape.

180 Rotary cutter:
This subclass is indented under subclass 167. Subject matter wherein the periphery of the cutter exhibits at least one cutting edge which moves such that the path of every point in its motion, about a fixed axis, is a circle or a circular arc.

181 Lancet:
This subclass is indented under subclass 167. Subject matter comprising an instrument having 1) a short, wide, double-edged pointed blade which cuts laterally as the instrument is advanced longitudinally or 2) a blade which can repeatedly produce an incision of specific length or an incision of specific length and specific depth in body tissue.

182 Spring driven or biased into cutting position:
This subclass is indented under subclass 181. Subject matter wherein the lancet blade is actuated from a checked or inoperative position when released to an operative position by an energy storing resilient means.

183 Plural cutting blades:
This subclass is indented under subclass 182. Subject matter wherein the lancet carries at least two blades which act in unison upon release.

184 Punch:
This subclass is indented under subclass 167. Subject matter wherein the cutter has a continuous, closed, usually circular, cutting edge which cooperates with (1) a die element which receives the closed circular cutting edge, (2) a solid anvil-like surface element to effect a cut, or (3) no other element to effect or cut.

(1) Note. A punch removes material from the surface it is passed through. Patents in this subclass disclose the punching of arteries for the purpose of making a bypass connection as well as nose punches which punch out a hole for placing a ring in an animal's nose.

SEE OR SEARCH THIS CLASS, SUBCLASS:

133, for a punch used to remove a hair plug for transplantation to another part of the scalp.

185 Puncturing or piercing:

This subclass is indented under subclass 167. Subject matter wherein the cutter is a sharp, pointed instrument which penetrates a portion of the body to make a hole therein without removing any of the tissue through which the cutter passes.

SEE OR SEARCH THIS CLASS, SUBCLASS:

117, for devices which remove tissue or pierce without the removal of tissue while applying an identification tag to an animal.

184, for punching devices which remove tissue by cutting or punching out a circular shape from the tissue it is used upon.

186 Multiple puncturing elements (e.g., tattoo, scarifier, etc.):

This subclass is indented under subclass 185. Subject matter comprising two or more puncturing or piercing elements which act in unison.

187 Hair or artificial hair injector or anchor:

This subclass is indented under subclass 185. Subject matter wherein the puncturing or piercing means inserts a hair follicle transplant or a synthetic fibrous material which simulates a hair into the skin or inserts the means required to hold a toupee or a wig-like contrivance onto the body, typically the skull.

SEE OR SEARCH THIS CLASS, SUBCLASS:

131+, for devices for removing hair from the skin.

188 Earlobe piercing means:

This subclass is indented under subclass 185. Subject matter wherein the puncturing or piercing device is used to pierce the soft, fleshy, tissue at lowermost portion of an external ear.

(1) Note. The patents in this subclass typically disclose concomitant piercing and placement of an ornamented earing in the perforation.

SEE OR SEARCH THIS CLASS, SUBCLASS:

117, for identification tags inserted in an animal's ear.

189 Acupuncture means:

This subclass is indented under subclass 185. Subject matter wherein the puncturing or piercing device consists of one or more needle-like instruments which are pushed into the body at one or more predetermined locations to provide a body treatment.

SEE OR SEARCH THIS CLASS, SUBCLASS:

41+, for electrical applicators.

129, for electrode placement means.

204, for accupressure devices.

190 Blunt dissectors:

This subclass is indented under subclass 1. Subject matter comprising means to separate layers of tissue or tissue from other material without cutting either tissue or material during the separation process.

(1) Note. Patents in this subclass disclose an obturator-like device which is passed through layers of tissue to separate them without cutting also disclosed are blunt ended rods that are passed through blood vessels to separate arteriosclerotic material from a vessel wall.

(2) Note. Separation of tissue layers or arteriosclerotic material may also be accomplished by the introduction of a fluid through the blunt dissector.

191 Internal pressure applicator (e.g., dilator):

This subclass is indented under subclass 1. Subject matter comprising means which are inserted in a natural body orifice or organ to expand said orifice or organ.

SEE OR SEARCH CLASS:

604, Surgery, subclasses 48+ for means inserted into natural body orifices to

permit the introduction or removal material for therapeutic purposes; subclasses 93.01+, for means for intro or removing material from the body of a conduit, hollow or implant reservoir and subclasses 104+, for means for expanding a body ori or canal.

192 Inflatable or expandable by fluid:

This subclass is indented under subclass 191. Subject matter wherein the body inserted means is distended to expanded by the application or absorption of a fluid therein while disposed in the natural body orifice for the purpose of retaining the dilator therein, dilating the body orifice, or sealing the body orifice.

(1) Note. Dilators may be inflated by the introduction of a fluid such as air, water, etc., or expanded by the absorption of body fluids to dilate the body part in which it is inserted.

SEE OR SEARCH THIS CLASS, SUBCLASS:

193, for dilators inflatable within the female reproductive system.

194, for dilators inflatable within the vascular system.

198, for mechanically (nonfluid) expanded dilators.

SEE OR SEARCH CLASS:

604, Surgery, subclass 509.

193 Inserted in female reproductive system:

This subclass is indented under subclass 192. Subject matter wherein the dilator is inflated upon being placed in a female's vagina, uterus or fallopian tubes.

(1) Note. See (1) Note to subclass 192, above.

(2) Note. See search this class notes to subclass 192 above.

194 Inserted in vascular system:

This subclass is indented under subclass 192. Subject matter wherein the dilator is inflated upon being introduced into the blood circulatory system.

SEE OR SEARCH CLASS:

604, Surgery, subclass 507 for means whereby material is introduced or removed from the body by means placed within a blood vessel, subclass 96.01 for inflatable catheters; and sub 104+ and 509, for body orifice dilators.

An alternative electronic search for U.S. patents, based upon a modifica of the European Patent Office Classification for portions of the subject matter of this subclass may also be found in Class 604, Cross-Refer Art Collections 907 - 921. (There are no definitions associated with these Cross-Reference Art Col. The most available disclosure as to the types of documents contained herein in is given in any notes associated with the titles.

195 Detachable from inflation means:

This subclass is indented under subclass 194. Subject matter wherein the dilator is separable, upon inflation, from the fluid supply means which causes its expansion.

(1) Note. The patents in this subclass generally disclose blood vessel occlusion means which are to remain in the vessel which they occlude.

196 Nose or throat:

This subclass is indented under subclass 192. Subject matter wherein the dilator is placed in the body in either that portion of a digestive system between a mouth and esophagus or in the nostril region.

SEE OR SEARCH THIS CLASS, SUBCLASS:

199, for noninflative nasal dilators.

197 Rectal or anal:

This subclass is indented under subclass 191. Subject matter wherein the dilator expands either (1) a large intestine portion of the body extending from a segmoid flexure to an anal canal or (2) expands an external opening of a alimentary canal.

198 Expanding dilator (e.g., expanding arm, etc.):

This subclass is indented under subclass 191. Subject matter wherein the dilator is enlarged, usually radially, either by the application of a mechanical force, or by the expansion of the material of which it is composed which expands upon introduction into the natural body orifice.

(1) Note. Self-expanding dilators which usually are compressed spring devices which expand upon placement in a body cavity are not considered to be expanded by the application of a mechanical force since no external mechanical force is applied to expand the device. Similarly, devices composed of material which expands by means of its chemical composition or body temperature are not classifiable in this subclass.

SEE OR SEARCH THIS CLASS, SUBCLASS:

192+, for expandable dilators which are expanded by the application of fluid pressure.

202, for nasal dilators which are inserted in a compressed state and expand upon placement in the nostrils without the application of a mechanical force being applied thereto.

SEE OR SEARCH CLASS:

604, Surgery, subclasses 104+ for devices to expand body orifices for the purpose of introducing or removing material therefrom.

199 Nasal dilator:

This subclass is indented under subclass 191. Subject matter wherein the dilation device is placed in a nostril to expand said nostril or a connecting passageway.

200 With emboli trap or filter:

This subclass is indented under subclass 191. Subject matter wherein the dilator is introduced into the vascular system for the purpose of removing occlusive or floating thrombotic material.

SEE OR SEARCH THIS CLASS, SUBCLASS:

159, for blood vessel scraping devices.

192+, for inflated balloon type devices which function to trap thrombotic material.

201 External pressure applicator:

This subclass is indented under subclass 1. Subject matter wherein structural means is applied to an external portion of the body to provide a compressive force to restrict or to stop the flow of blood from or through said body portion or to provide treatment for pain or disease by means of force application to one or more predetermined portions of the body.

202 Pneumatic cuff:

This subclass is indented under subclass 201. Subject matter wherein the pressure applicator comprises a flexible or elastic, fluid or tight, inflatable chamber which is intended to be positioned in a deflated state, to encircle a body portion and is then inflated to apply the compressive force to the body position.

(1) Note. Patents in this subclass disclose pneumatic tourniquets used to stop blood flow through a body portion to prevent bleeding therefrom as well as pneumatic tourniquets with at least one associated gage used to stop or restrict blood flow through a body portion for purposes of measuring blood pressure therein.

203 Tourniquet:

This subclass is indented under subclass 201. Subject matter wherein the pressure applying member is a releasably constrictable band or strap-like means which totally encircles the body portion and which is applied by effectively shortening the band or stretching the band to produce the force to temporarily arrest the flow of blood in that portion of the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:

202, for inflatable cuffs which may stop blood flow or are used for the taking of blood pressure.

204 Accupressure device:
This subclass is indented under subclass 201. Structure for applying the compressive force to predetermined points on the body to provide a body treatment without puncturing the skin at those points to which the compressive forces have been applied.

204.15 Head:
This subclass is indented under subclass 201. Subject matter which provides a means for exerting a force on the uppermost or cranial portion of the body to correct a deformity, disorder, or abnormality thereof.

204.25 Eye:
This subclass is indented under subclass 204.15. Subject matter which provides a means for producing a strain upon the muscles which focus the lens or which direct the eye's line of sight so as to treat visual disorder or abnormality of the eye.

(1) Note. This subclass includes devices such as moving targets which the patient follows with one or both eyes to exercise or strengthen defective muscles.

SEE OR SEARCH THIS CLASS, SUBCLASS:
25, for devices wherein the eye is forcibly exercised.

SEE OR SEARCH CLASS:
351, Optics: Eye Examining, Vision Testing and Correcting, subclass 203 for eye examining and testing instruments combined with eye exercising or training.

204.35 Wrinkle remover:
This subclass is indented under subclass 204.15. Subject matter comprising means for eradicating facial age lines at least on a temporary basis.

204.45 Nose shaper:
This subclass is indented under subclass 204.15. Subject matter comprising means for changing the appearance or proportions of the nostrils or a facial portion adjacent thereto.

(1) Note. The nose shapers may also, as a secondary function, enhance or relieve breathing.

SEE OR SEARCH THIS CLASS, SUBCLASS:
199, for nasal dilators.

204.55 Horn bender:
This subclass is indented under subclass 204.15. Subject matter comprising a means for changing the natural path of growth or “training” the shape of an animal's horn or antler.

205 Forceps:
This subclass is indented under subclass 1. Subject matter provided with pivoted arms carrying cooperating, contacting members for grasping parts of the body, articles within the body, or devices associated with body treatment.

SEE OR SEARCH THIS CLASS, SUBCLASS:
120, for forcep-like devices used to clamp the umbilical cord.
148, for forceps which are specific for tying sutures or ligatures, or for assisting in guiding suturing means.
157+, for occluding, clip, clamp or bands.
203, for clamp tourniquets.
210+, for hinged tweezers.

SEE OR SEARCH CLASS:
81, Tools, subclasses 300+ for pliers and subclasses 318+, for pliers having locking means.
433, Dentistry, subclass 159 for pliers.

206 Jaws biased to open or closed position:
This subclass is indented under subclass 205. Subject matter wherein the pivoted cooperating members are urged by resilient means either into a closed or open position from which position the forceps may be manually shifted to the alternate position.

207 Jaw structure:
This subclass is indented under subclass 205. Subject matter wherein significance is attributed to the structure of the cooperating contacting members which provide means for grasping the body or diverse structure.

208 Hinge or latch structure:
This subclass is indented under subclass 205. Subject matter wherein significance is attributed to either the structure about which the jaws pivot or to the closure means which locks the jaws in a closed or contacting position for the continued application of a grasping force by the jaws.

209 Tubular member stripper:
This subclass is indented under subclass 205. Subject matter wherein the cooperating members are moved along a tube-like device or generally tubular portion of the body to remove material contained therein.

(1) Note. Devices in this subclass disclose forceps having roller elements for jaws which are passed along a cows' teat to remove material therefor or passed along a tube to remove material therefrom.

SEE OR SEARCH CLASS:
604, Surgery, subclasses 151+ for peristaltic pumps in dosing devices.

210 Tweezers:
This subclass is indented under subclass 1. Subject matter comprising a small pincer-like instrument having resiliently hinged, cooperating jaw members particularly adapted or suited to be used for plucking or handling small objects.

SEE OR SEARCH THIS CLASS, SUBCLASS:
131, for tweezer-like devices which are specifically designed to remove embedded materials, such as slivers, from human skin.
133, for tweezers which are designed to remove hair from human skin.

211 Combined with another device:
This subclass is indented under subclass 210. Subject matter in combination with a diverse feature or a device that is not provided for in the preceding subclasses.

(1) Note. Patents in this subclass disclose tweezers combined with mirrors, magnifying lenses, pins, etc.

212 Hoof crack repair:
This subclass is indented under subclass 1. Subject matter wherein means are provided for coaptating cracks in that portion of an animals' foot covered by a horny protective covering.

213 Sutureless closure:
This subclass is indented under subclass 1. Subject matter wherein means are provided for joining a wound or incision's edges or lips without stitching said lips or edges together.

(1) Note. Patents claiming means to apply sutureless closures are provided for in this and indented subclasses.

(2) Note. Patents for applying surgical staples to class wounds are properly classifiable in Class 227, subclasses 175.1+.

214 Chemical bonding material applied to wound edges:
This subclass is indented under subclass 213. Subject matter wherein the lips or edges of a wound or incision are joined by the application of a substance produced by a chemical process thereto or thereover.

215 Material placed on opposed sides of incision or wound:
This subclass is indented under subclass 213. Subject matter wherein structural means are placed on opposite sides of the edges of a wound or incision for bringing the edges into coaptation.

216 Means to draw opposed sides of incision into apposition:
This subclass is indented under subclass 215. Subject matter wherein the material placed upon opposed sides of the wound or incision is manually moved or drawn together by a means which forces the edges of said wound or incision into coaptation.

(1) Note. Patents in this subclass have at least one manually actuated means to bring wound edges in opposition; adhesive strip, placed upon opposite sides of a wound, which are joined by elastic bands, which bands pull the adhesive strip together to close the edges of the wound are considered to be selfmoving

means which do so because of their own composition since they are not means physically moved by a person to chew the wound together, such devices are not properly classifiable in this subclass but in subclass 215 above.

217 Sliding fastener:
This subclass is indented under subclass 216. Subject matter wherein the means for coaptation is an actuator member which can at least engage an interlock as it slides along the material placed upon opposite sides of the wound to fasten together said material and thereby bring the wound into apposition, or to alternatively, to separate said material upon sliding said actuator member in the opposite direction to deactuate the interlock.

(1) Note. Patents in this subclass provide structure which resembles a zipper, in action, if not by structure also.

218 Screw, rack and pinion or pawl and racket:
This subclass is indented under subclass 216. Subject matter wherein the means to manually move or draw the edges of the wound into coaptation is a screw, rack and pinion, or a pawl and racket which moves the material on either side of the wound at least partially together; thus, moving the edges of the wound into apposition.

219 Staple fastener:
This subclass is indented under subclass 215. Subject matter wherein the edges of the wound are joined in juxtaposition by the application of a deformable, tissue-piercing device that is formed from metal or another material which has legs with pointed ends which pierce the tissue adjacent the wound and are deformed to draw and fasten the wound edges together in juxtaposition or apposition.

SEE OR SEARCH THIS CLASS, SUBCLASS:
75, staple or similar driven fastener, for staples which are particularly adapted for use in orthopedic surgery.
157+, occluding clip, clamp, or band.

SEE OR SEARCH CLASS:
227, Elongated-Member-Driving Apparatus, subclasses 175+ for surgical staplers and subclass 902 for staplers, per se.
411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, various subclasses, for non-surgical staples and staple-like structure.

220 With retaining means:
This subclass is indented under subclass 219. Subject matter wherein the legs of the staple pass through a mating member, after having passed through the tissue, which locks the staple in place upon its application to the wound.

221 Approximating clip or serrefine:
This subclass is indented under subclass 215. Subject matter wherein the means to hold the edges of the wound in apposition is either (1) a flat, planar member having pointed pin-like hooks on opposite sides thereof or (2) a loop-like member provided with pointed pin-like hooks on each end thereof which project therefrom or (3) a substantially U-shaped wound spanning member having pointed pin-like barbs projecting from near the end of each leg of the U-shaped member so as to engage the tissue on opposed portions of the wound and to draw the edges thereof into coaptation.

222 Suturing needle:
This subclass is indented under subclass 1. Subject matter comprising a thin pointed means designed to be engageable with and to carry a sewing filament through soft body tissue without prior preparation of the penetration points.

SEE OR SEARCH THIS CLASS, SUBCLASS:
148, suturing aid or guide for devices used in combination with a needle to help place the sewing filament as desired.

SEE OR SEARCH CLASS:
206, Special Receptacle or Package, subclass 234 for pocket container for diverse tools; subclasses 365+, for hypodermic needles; and subclass 380 for needles.

604, Surgery, subclasses 264+ for body inserted tubular conduits.

223 Needle tip or body structure:
This subclass is indented under subclass 222. Subject matter wherein significance is attributed to the shape or composition of the pointed end of the needle or its body.

224 Filament attachment:
This subclass is indented under subclass 222. Subject matter provided with means for adfixing a suture to the needle.

225 Tied, hooked, wedged or grasped:
This subclass is indented under subclass 224. Subject matter wherein the means for adfixing the suture is either a means which permits the suture to be (1) passed through a loop or eye in the needle and knotted thereon; or (2) attached through a loop or bight which is held by a curved, bent means which engages said loop or; (3) to be pushed, crowded or forced into a limited space; or (4) to be held or seized firmly in the unpointed end of the needle by a resilient means.

SEE OR SEARCH THIS CLASS, SUBCLASS:
226, for sutures which are affixed to a needle by metal deformation such as swaging.

226 Deformed:
This subclass is indented under subclass 224. Subject matter wherein the suture is adfixed to the needle by the application of force or pressure to the end of the needle into which the suture is inserted such that the end becomes altered in shape so as to hold the suture tightly within the altered shape of the needle end.

(1) Note. Patents in this subclass disclose form plastic deformation by swaging or by the application of force to that portion of the needle which holds the end of the suture.

SEE OR SEARCH THIS CLASS, SUBCLASS:
224+, for suture attachment to a needle by nondeformation of the end in which the suture is inserted.

227 Pull out or frangible:
This subclass is indented under subclass 224. Subject matter wherein the suture is affixed to, but is readily separable from the needle upon application of a prescribed tensile force whereby: (1) the tension upon the suture causes the suture to be dislodged from the holding portion of the needle; or (2) the tension upon the suture causes a weakened or reduced cross-sectional area of the suture, adjacent to the holding portion of the needle, to break so that the majority of the suture filament becomes disassociated from the needle.

228 Suture or ligature:
This subclass is indented under subclass 1. Subject matter comprising prepared threads, cords or filaments used to close a wound or to tie bind or constrict a portion of a body organ.

(1) Note. This subclass and its indented subclasses include suture making processes not provided for elsewhere.

SEE OR SEARCH CLASS:
8, Bleaching and Dyeing; Fluid Treatment and Chemical Modification of Textiles and Fibers, subclass 94.11 for the treatment or preparation of these elements.
57, Textiles: Spinning, Twisting, and Twining, subclasses 210+ for twisted strands of general application.
206, Special Receptacle or Package, subclass 63.3 for packaged ligatures.
422, Chemical Apparatus and Process Disinfecting, Deodorizing, Preserving, or Sterilizing, subclasses 1+ for processes of sterilizing sutures and ligatures.
426, Food or Edible Material: Processes, Compositions, and Products, subclass 140 for animal derived edible casing.

229 Collagen containing:
This subclass is indented under subclass 228. Subject matter wherein the sutures contains at least one component derived from natural or chemically processed material found in animal connective tissue, skin, bone or intestine.

SEE OR SEARCH CLASS:
604, Surgery, subclass 368 for absorbent pads containing collagen.

230 Absorbable in body:
This subclass is indented under subclass 228. Subject matter wherein the suture is composed of material which the body can assimilate naturally.

231 Organic material containing:
This subclass is indented under subclass 228. Subject matter wherein the suture has at least one component which is, or contains, or is related to products derived through chemical interaction of carbon containing compounds.

232 Suture retaining means (e.g., buttons):
This subclass is indented under subclass 1. Subject matter wherein means is provided to restrain, hold or otherwise maintain a suture in place upon the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
300+, for bone fasteners.

SEE OR SEARCH CLASS:
623, Prosthesis (i.e., Artificial Body Members), Parts Thereof, or Aids and Accessories Therefor, subclasses 17.11+ for spine bone prosthesis and subclasses 23.51+ for a particular prosthetic material.

233 Suture supported from engagement with incision (e.g., suture bridge):
This subclass is indented under subclass 1. Subject matter comprising a lifting means which lifts a suture above a wound thus changing the angle and the forces applied by said suture to the tissue to help to prevent cutting and scarring.

234 Oral pacifier:
This subclass is indented under subclass 1. Subject matter comprising a device designed for use by humans for biting upon to relieve gum irritation or inflammation or to serve to calm or to relieve stress or tension.

(1) Note. Tension or stress relief devices to protect the teeth from grinding or clenching are classifiable in this subclass.

(2) Note. Devices used orally to satisfy a craving for cigarettes or other tobacco products are classifiable in this subclass.

235 Teething devices:
This subclass is indented under subclass 234. Subject matter wherein the pacifier is structured as a means upon which a baby can bite to aid in the development of teeth as they grow through the gums.

236 Nipple attachment or structure:
This subclass is indented under subclass 234. Subject matter wherein significance is attributed to the structure of a teat-like protuberance or to the means for attaching said protuberance to a base upon which it is carried.

237 Chiropractic or osteopathic implement:
This subclass is indented under subclass 1. Subject matter comprising means for restoring or tending to restore a portion of the body to its normal position or to a more proper position.

238 Percussive prod:
This subclass is indented under subclass 237. Subject matter comprising means for applying pressure at a desirable angle to particular bony structure so as to rearrange the orientation of the structure with respect to the remainder of the skeletal system.

SEE OR SEARCH THIS CLASS, SUBCLASS:
201, for external press applicators.

239 Motorized pummelling device:
This subclass is indented under subclass 238. Subject matter which includes a prime mover to operate the prodding device.

240 Positioner for recumbent user:
This subclass is indented under subclass 237. Subject matter comprising a formed element for straightening the spine by either having a patient lay supine upon the element or by impressing the element upon a prone patient's back.

241 Extension appliance:
This subclass is indented under subclass 237. Subject matter comprising means for elongating the skeletal system or a portion thereof by means of a tractive force so that the affected bones or bone fragments are moved to a substantially natural orientation.

242 Couch:
This subclass is indented under subclass 241. Subject matter in which the reorientation is accomplished on a table, bed, or similar supportive structure.

SEE OR SEARCH CLASS:
- 5, Beds, subclasses 600+ for beds for invalids, subclasses 630+ for a table designed to serve as a support for an animal during surgical operations, especially subclass 652 for a device attached to or combined with a table comprising a mere body support for surgical operations.
- 108, Horizontally Supported Planar Surfaces, subclasses 1+ for a tiltable horizontally supported surface.
- 297, Chairs and Seats, appropriate subclasses for a chair or couch whose component parts may be manipulated to change the relative position of the parts of the body of an occupant.

243 With intermediate gap:
This subclass is indented under subclass 242. Subject matter in which the supportive structure is divided by an intermediate space into which the patient's body is allowed to sag.

244 With pivot to pedestal:
This subclass is indented under subclass 242. Subject matter in which the structure is hinged to a prominence in such fashion that the structure may be rotated from horizontal to vertical or vice versa to provide body-weight traction to a patient secured to the structure.

245 With intermediate pivot:
This subclass is indented under subclass 237. Subject matter in which two support structures are hinged together in such fashion as to act upon a patient's body by bending it.

246 Spinal positioner or stabilizer:
This subclass is indented under subclass 60. Subject matter wherein the internal fixation means maintains the relative placement or limits the relative movement between a vertebra and some other bone, or between a plurality of vertebrae.

(1) Note. Apparatus of this subclass is not required to be load-bearing.

SEE OR SEARCH THIS CLASS, SUBCLASS:
- 280+, for platelike devices used to position or stabilize the spine.
- 900, for a cross-reference art collection of stabilizers for the lumbar region of the spine.
- 901, for a cross-reference art collection of stabilizers for the thoracic region of the spine.
- 907+, for a cross-reference art collection of orthopedic fasteners composed of particular material.

247 Facet implant:
This subclass is indented under subclass 246. Subject matter for maintaining the relative position or limiting the movement of a vertebra with respect to another bone that is adapted to be inserted in between the smooth flat circumscribed anatomical surfaces of adjacent vertebrae.

248 Spinous process implant:
This subclass is indented under subclass 246. Subject matter for maintaining the relative position or limiting the movement of a vertebra with respect to another bone that is adapted to be inserted in between the median spinelike or platelike dorsal process of the neural arch of adjacent vertebrae.

249 Spacer type:
This subclass is indented under subclass 248. Subject matter wherein the spinal positioner or stabilizer is placed in between the median spinelike or platelike dorsal process of adjacent vertebrae in order to maintain a desired distance therebetween.

250 Including transverse connector linking longitudinal rods; e.g., parallel rods:
This subclass is indented under subclass 246. Subject matter having plural slender bars which act as a spinal positioner or stabilizer and further including joining means interconnecting the plural slender bars together.

(1) Note. The longitudinal rods frequently extend in a direction generally parallel to the spinal column and span plural vertebrae.

251 Adjustable:
This subclass is indented under subclass 250. Subject matter wherein the joining means is adaptable to the particular situation in which it will be used.

252 Sliding adjustment:
This subclass is indented under subclass 250. Subject matter wherein the joining means is made adaptable through linear movement along a guiding surface.

253 Articulated linkage:
This subclass is indented under subclass 250. Subject matter wherein the joining means is made adaptable through pivoting movement about an axis.

254 Flexible rod:
This subclass is indented under subclass 60. Subject matter including a pliable slender bar which acts as the spinal positioner or stabilizer.

(1) Note. The slender bar frequently extends in a direction generally parallel to the spinal column and spans plural vertebrae.

SEE OR SEARCH THIS CLASS, SUBCLASS:
283, for a flexible cortical plate.

255 Resilient rod:
This subclass is indented under subclass 254. Subject matter wherein the slender bar is bendable under stress and yet recovers to original configuration when the stress is removed.

256 Articulating rod:
This subclass is indented under subclass 246. Subject matter including a slender bar which acts as the spinal positioner or stabilizer and wherein the slender bar pivots about the vertebrae to which it is attached.

(1) Note. The slender bar frequently extends in a direction generally parallel to the spinal column and spans plural vertebrae.

257 Dynamic stabilization:
This subclass is indented under subclass 246. Subject matter including a slender bar which acts as the spinal positioner or stabilizer and which allows the vertebrae to which the slender bar is attached to move within the normal physiological limits of motion, while also providing structural support that limits the amount of translation motion beyond normal physiological limits.

(1) Note. The slender bar frequently extends in a direction generally parallel to the spinal column and spans plural vertebrae.

258 Adjustable length rod:
This subclass is indented under subclass 246. Subject matter including a slender bar which acts as the spinal positioner or stabilizer and which further includes structure that allows the length of the slender bar to be varied.

(1) Note. The slender bar frequently extends in a direction generally parallel to the spinal column and spans plural vertebrae.

259 Multipart rod:
This subclass is indented under subclass 246. Subject matter including a slender bar made up of plural distinct sections which acts as a spinal positioner or stabilizer.

(1) Note. The slender bar frequently extends in a direction generally parallel to the spinal column and spans plural vertebrae.

260 Including connector for securing rods end to end:
This subclass is indented under subclass 259. Subject matter including structure to fasten the sections together in longitudinal alignment.

261 Particular shaped rod:
This subclass is indented under subclass 246. Subject matter including a slender bar of non-cylindrical shape which acts as the spinal positioner or stabilizer.

(1) Note. The slender bar frequently extends in a direction generally parallel to the spinal column and spans plural vertebrae.

262 Formable in situ:
This subclass is indented under subclass 261. Subject matter wherein the slender bar is given its specific shape immediately prior to, or while being attached to, the spine.

SEE OR SEARCH THIS CLASS, SUBCLASS:
284+, for a shapeable cortical plate (e.g., formed in situ).

263 Including wire, strap, or cable:
This subclass is indented under subclass 246. Subject matter wherein the spinal positioner or stabilizer or its associated attaching means is fixed to the skeletal structure with (1) a metal in the form of a very flexible thread or slender rod, (2) a narrow flat strip or thong of flexible material, or (3) a rope or chain of great tensile strength.

(1) Note. The slender bar frequently extends in a direction generally parallel to the spinal column and spans plural vertebrae.

264 Rod attachable by threaded fastener:
This subclass is indented under subclass 246. Subject matter including a slender bar which acts as the spinal positioner or stabilizer and wherein the slender bar is linked to the skeletal structure by a connecting means having at least one helical projection, the connecting means being rotated into the bone and secured therein by that helical projection.

(1) Note. The slender bar frequently extends in a direction generally parallel to the spinal column and spans plural vertebrae.

(2) Note. The fasteners in this and indented subclasses include single screw elements that are applied to vertebrae and paired elements, such as nuts and bolts, that are fastened to the vertebrae.

SEE OR SEARCH THIS CLASS, SUBCLASS:
301, for threaded orthopedic fasteners, per se.

SEE OR SEARCH CLASS:
403, Joints and Connections, for rod joints.
411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclasses 378+ for an externally threaded fastener element (e.g., bolt, screw, etc.) of general utility.

265 With head of fastener attachable to longitudinal rod:
This subclass is indented under subclass 265. Subject matter wherein a portion of the connection means protudes from the bone and that protruding portion directly connects to the slender bar which extends in a direction parallel to the spine.

266 Ball and socket type (e.g., polyaxial):
This subclass is indented under subclass 265. Subject matter wherein the connection means includes a partially rounded body rotatable within an at least partially hollow spherical receiving means so as to allow rotary motion in every direction within certain limits.

SEE OR SEARCH THIS CLASS, SUBCLASS:
287, for polyaxial connecting means used to connect cortical plates.

267 Head attachable using multiple parts:
This subclass is indented under subclass 265. Subject matter wherein the connecting means includes more than a single part.

SEE OR SEARCH THIS CLASS, SUBCLASS:

328, for an orthopedic fastener, per se, having multiple separate parts.

268 Including washer:

This subclass is indented under subclass 267. Subject matter wherein the connecting means includes a flat thin ring or a perforated plate to ensure tightness, prevent leakage or relieve friction.

SEE OR SEARCH THIS CLASS, SUBCLASS:

290, for a locking ring or washer used to fasten a cortical plate to bone.

SEE OR SEARCH CLASS:

411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclasses 147+ for a locking ring or washer on fasteners of general utility.

269 Including retaining ring:

This subclass is indented under subclass 267. Subject matter wherein the connecting means includes a circular band for holding and connecting the longitudinal rod to the fastener.

270 Including set screw:

This subclass is indented under subclass 267. Subject matter where the connecting means includes a screw screwed through one part tightly upon or into another part to prevent relative movement of the parts.

271 Externally threaded head:

This subclass is indented under subclass 265. Subject matter wherein the portion of the connecting means extending from the bone includes helical projecting threads for attaching the longitudinal rod thereto.

SEE OR SEARCH THIS CLASS, SUBCLASS:

306, for an orthopedic fastener, per se, having a detachable head.

SEE OR SEARCH CLASS:

411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclass 396 for a separate head element on an externally threaded fastener of general utility.

272 Including locking mechanism:

This subclass is indented under subclass 265. Subject matter wherein the connecting means includes means to securely fasten the rod to the attaching means in order to securely prevent separation.

SEE OR SEARCH THIS CLASS, SUBCLASS:

289+, for a threaded fastener in combination with a cortical plate which includes specific retention means.

SEE OR SEARCH CLASS:

411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclasses 81+ for threaded fasteners of general utility which are locked to discreet structure.

273 Anti-splay:

This subclass is indented under subclass 264. Subject matter wherein the connecting means further includes means to prevent loosening through spreading or expansion of portions of the connecting means.

274 Nut:

This subclass is indented under subclass 273. Subject matter wherein the means to prevent loosening includes a member provided with internal screw threads which encircles a portion of the connecting means.

SEE OR SEARCH THIS CLASS, SUBCLASS:

292, for a cortical plate fastener using a nut as a screw retention and locking means.

SEE OR SEARCH CLASS:

411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclasses 190+ for structure to restrict rotation of threaded,

mating pieces on a fastener of general utility.

275 Thread structure (e.g., double threaded, etc.):
This subclass is indented under subclass 264. Subject matter wherein the portion of the connecting means that is inserted into bone has a particularly unique design of the helical projection.

SEE OR SEARCH THIS CLASS, SUBCLASS:
315+, for an orthopedic fastener, per se, having multiple threads on a single fastener.

SEE OR SEARCH CLASS:
411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclasses 412+ for plural threads on a single shank of an externally threaded fastener of general utility.

276 Attachable by hook:
This subclass is indented under subclass 246. Subject matter wherein the spinal positioner or stabilizer is attached to the skeletal structure by an element which is shaped in the form of a wire or rod section, the end of which is curved or sharply bent, or an element having a J-shaped configuration.

SEE OR SEARCH THIS CLASS, SUBCLASS:
330, for a hook-type orthopedic fastener, per se.

277 Attachable by clamp:
This subclass is indented under subclass 246. Subject matter wherein a connecting means applies a compressive force on opposing side of the vertebrae in order to fix the spinal positioner or stabilizer to the vertebrae.

SEE OR SEARCH THIS CLASS, SUBCLASS:
324, for a clamp-type orthopedic fastener.

278 Rod connectors, per se:
This subclass is indented under subclass 246. Subject matter drawn to an intermediary member which links a slender bar that acts as the spinal positioner or stabilizer with a means to attach the spinal positioner or stabilizer to the vertebrae.

279 Method of spinal positioning or stabilizing:
This subclass is indented under subclass 246. Method of maintaining the relative placement or limiting the relative movement between a vertebra and another bone or between a plurality of vertebrae.

SEE OR SEARCH THIS CLASS, SUBCLASS:
281, for a method of implanting a bone plate, in general.

280 Cortical plate (e.g., bone plates):
This subclass is indented under subclass 60. Subject matter wherein the implanted means is a relatively flat, relatively rigid element (e.g., cortical plate) that is applied to a fractured bone on its exterior surface and fastened thereto so as to hold the disassociated portions in alignment during healing.

(1) Note. The plate may be implanted on a permanent basis or removed upon healing of the bone.

SEE OR SEARCH THIS CLASS, SUBCLASS:
902, for cross-reference art collections of cortical plates specifically adapted for particular bones.

SEE OR SEARCH CLASS:
403, Joints and Connections, for rod joints.
623, Prosthesis (i.e., Artificial Body Members), Parts Thereof, or Aids and Accessories Therefor, subclasses 17.11+ for spine bone prostheses and subclasses 23.51+ for a particular prosthetic material.

281 Method of implanting a bone plate:
This subclass is indented under subclass 280. Subject matter wherein a method or process is utilized for inserting cortical plates inside the body adjacent to the bone.

SEE OR SEARCH THIS CLASS, SUBCLASS:
279, for a method of spinal positioning or stabilizing.

282 With compression or distraction mechanism:
This subclass is indented under subclass 280. Device wherein the fastening of the cortical plate to the bone causes a pressing together or a separation of the bone fragments to which the plate is applied so as to adjust and maintain the disassociated portions of the fractured bone in a desired positional relationship during a substantial portion of the healing process.

SEE OR SEARCH THIS CLASS, SUBCLASS:
105, for bone compression and distraction mechanisms, in general.

283 Flexible plate:
This subclass is indented under subclass 280. Device wherein the cortical plate is pliant (i.e., capable of being bent).

SEE OR SEARCH THIS CLASS, SUBCLASS:
254+, for a flexible rod used as a spinal positioner or stabilizer.
299, for a cortical plate made of material that is deformable under stress but returns exactly to its original configuration upon removal of that stress.

284 Shapeable plate (e.g., in situ):
This subclass is indented under subclass 280. Device wherein the cortical plate is malleable so that it may be made to conform to a particular configuration.

SEE OR SEARCH THIS CLASS, SUBCLASS:
262, for a rod associated with spinal positioners or stabilizers that are formable in situ.

285 With pliable or malleable elements or having a meshlike structure (e.g., small strips for craniofacial surgery):
This subclass is indented under subclass 284. Device wherein the cortical plate is composed of interconnected sections at least some of which are malleable or is a netlike construction so that it may be made to conform to a particular configuration.

286 Including anchoring means:
This subclass is indented under subclass 280. Device wherein the cortical plate includes connecting means that fixably attach the cortical plate to the bone.

SEE OR SEARCH THIS CLASS, SUBCLASS:
300+, for bone fasteners.

287 Ball and socket type (e.g., polyaxial):
This subclass is indented under subclass 286. Device wherein the connection means includes a partially rounded body rotatable within an at least partially hollow spherical receiving means so as to allow rotary motion in every direction within certain limits.

SEE OR SEARCH THIS CLASS, SUBCLASS:
266, for polyaxial connecting used with spinal positioners or stabilizers.

288 Having indirect contact with screw head:
This subclass is indented under subclass 286. Device wherein the connecting means is a generally cylindrically shaped fastener that is helically or spirally threaded and designed for insertion in a bone by rotating an upper portion of the fastener (i.e., the head), and wherein the head of the fastener does not directly contact the cortical plate.

289 Screw retention means (e.g. anti-backup):
This subclass is indented under subclass 286. Device wherein the connecting means is a generally cylindrically shaped fastener that is helically or spirally threaded and designed for insertion in a bone by rotating an upper portion of the fastener (i.e., screw head), and further including an additional mechanism (i.e., screw retention means) that prevents the helically threaded fastener from backing out of its securing position within the bone.

SEE OR SEARCH THIS CLASS, SUBCLASS:
272, for a fastener locking mechanism used in combination with a spinal positioner or stabilizer.

SEE OR SEARCH CLASS:

411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclasses 81+ for threaded fasteners of general utility which are locked to discreet structure.

290 Locking ring or washer:

This subclass is indented under subclass 289. Device wherein the screw retention means consists of at least one element in the form of an open-center figure having a principal axis which generally coincides with the longitudinal axis of the helically threaded fastener and wherein the figure may either (a) form a closed path as in (1) a circle or (2) a disc-like element having an opening more or less in its center and having axially facing regions of significantly greater area than in the instance of (1), or (b) formed other than a closed path by having free ends which (1) fall short of meeting one another or (2) pass one another and extend there beyond.

SEE OR SEARCH THIS CLASS, SUBCLASS:

268, for a locking ring or washer used in combination with a spinal positioners or stabilizers.

SEE OR SEARCH CLASS:

411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclasses 147+ for a locking ring or washer on fasteners of general utility.

291 Interlocking screw head and plate holes (e.g., conical or threaded):

This subclass is indented under subclass 289. Device wherein the screw retention means involves a locking relationship between screw threads on the threaded fastener and helical threads which surround the hole in the cortical plate through which the fastener extends.

292 Nut:

This subclass is indented under subclass 289. Device wherein the screw retention means includes an internally threaded element matingly engaged with the connecting means so as to restrict (i.e., limit or prevent) the rotation, in at least the unthreading direction, of one element relative to the other.

SEE OR SEARCH THIS CLASS, SUBCLASS:

274, for a nut used to prevent splaying in a spinal positioner or stabilizer.

SEE OR SEARCH CLASS:

411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclasses 190+ for structure to restrict rotation of threaded, mating pieces on a fastener of general utility.

293 Wedge:

This subclass is indented under subclass 289. Device wherein the screw retention means includes a holding device or anchor having a tapered surface thereon engaged by a mating surface on the connecting means wherein relative axial movement between the two surfaces results in a change in the transverse dimension of the connecting means or anchor.

SEE OR SEARCH CLASS:

411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclasses 75+ for wedge surfaces which lock a fastener of general utility.

294 Spring:

This subclass is indented under subclass 289. Device wherein the screw retention means is biased against the screw by an elastic body.

295 Screw head cover:

This subclass is indented under subclass 289. Device wherein the screw retention means is a member placed over the top of the threaded fastener head which prevents the screw from backing out of its secured position.

SEE OR SEARCH THIS CLASS, SUBCLASS:

302, for a screw head cover used in conjunction with an orthopedic fastener of general utility.

322, for a cover or protector on a non-threaded orthopedic fastener.

296 Slidable over screw head:
This subclass is indented under subclass 295. Device wherein the member placed over the top of the threaded fastener is linearly moveable along a guiding surface from a retracted position, which allows the fastener to pass through the plate to an extended position overlying the head of the fastener and thus preventing the fastener from backing out.

297 Bone-penetrating element (e.g., spikes):
This subclass is indented under subclass 286. Device wherein the cortical plate includes a projection that is designed to enter the bone in order to secure the plate thereto.

298 Plate material:
This subclass is indented under subclass 280. Device wherein the material that the plate is made of is particularly adapted for use within the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
331, for orthopedic fasteners composed of particular material.
907+, for a cross-reference art collection of orthopedic fasteners composed of particular material.

299 Memory material:
This subclass is indented under subclass 298. Device wherein the cortical plate is made of material which is deformable under stress, but returns exactly to its original configuration upon removal of the stress.

SEE OR SEARCH THIS CLASS, SUBCLASS:
331, for orthopedic fasteners composed of particular material.
911, for a cross-reference art collection of orthopedic fasteners composed of memory material.

300 Orthopedic fastener:
This subclass is indented under subclass 60. Subject matter comprising attaching means which is applied internally or transcutaneously to hold bone fragments in alignment or to connect an external fixation means with bone (i.e., orthopedic fastener).

SEE OR SEARCH THIS CLASS, SUBCLASS:
232, for suture anchors which are anchored to bone.

SEE OR SEARCH CLASS:
411, Expanded, Threaded, Driven Headed, Tool Deformed, or Locked-Threaded Fasteners, for fasteners of general utility which are not limited for use as an orthopedic fastener.
623, Prosthesis (i.e., Artificial Body Members), Parts Thereof, or Aids and Accessories Therefore, subclasses 13.11+ for fasteners to attach ligaments or tendons, especially subclass 13.14 for ligament or tendon anchors and subclasses 16.11+ for devices used with or as a bone prosthesis.

301 Threaded fastener element:
This subclass is indented under subclass 300. Subject matter wherein the fastener is either (1) a single elongated means having helical threads thereon that is designed to be inserted into bone and secured thereto through interaction of the helical threads with the bone, or (2) a fastener consisting of externally threaded element formed from a pin, rod, or wire having a head at one end and designed to be inserted through bone portions and secured by a mating element having a threaded opening which is tightened by the application of torque.

(1) Note. The fasteners in this subclass include single screw elements that are applied into bones (i.e., bone screws) and paired elements, such as nuts and bolts, that are fastened to bones to hold them in place.

SEE OR SEARCH THIS CLASS, SUBCLASS:
59, for subject matter that provides a joining means between an external fixator structure and a threaded fastener element that is secured in a bone fragment to be fixed.
65+, for a threaded fastener element adapted to be screwed into and thereby reinforce the neck portion of a femur.

264, for a threaded fastener used in combination with a spinal positioner or stabilizer.
286+, for threaded fasteners used in combination with cortical plates.

SEE OR SEARCH CLASS:
411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclasses 378+ for an externally threaded fastener element (e.g., bolt, screw, etc.) of general utility.

302 Including a cover or protector:
This subclass is indented under subclass 301. Subject matter wherein a device is placed over the head of a threaded fastener and that may also aid in shielding the fastener from injury.

SEE OR SEARCH THIS CLASS, SUBCLASS:
295, for a screw head cover used in combination with cortical plate which also acts as a screw retention means.
322, for a non-threaded orthopedic fastener having a cover and protector.

SEE OR SEARCH CLASS:
411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclass 372.5 for a headed fastener element of general utility which includes a cap.

303 Including a grommet:
This subclass is indented under subclass 301. Subject matter wherein the threaded fastener element is an eyelet of firm material to strengthen or protect the opening through which it is passed.

SEE OR SEARCH THIS CLASS, SUBCLASS:
323, for a cannulated orthopedic fastener.

304 Cannulated:
This subclass is indented under subclass 301. Subject matter wherein the threaded fastener has a passageway extending therethrough.

SEE OR SEARCH THIS CLASS, SUBCLASS:
323, for a cannulated orthopedic fastener.

305 Head structure:
This subclass is indented under subclass 301. Subject matter wherein the portion of the threaded fastener extending from the bone is specially configured for orthopedic use.

SEE OR SEARCH CLASS:
411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclasses 396 through 410 for special head structure on an externally threaded fastener of general utility.

306 Detachable:
This subclass is indented under subclass 301 Subject matter wherein the head of the threaded fastener is separable from the rest of the fastener.

SEE OR SEARCH CLASS:
411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclass 396 for a separate head element on an externally threaded fastener of general utility.

307 Enlarged:
This subclass is indented under subclass 305. Subject matter wherein head of the threaded fastener is oversized in order to specially accommodate the screw for orthopedic use.

308 Particular shape:
This subclass is indented under subclass 305. Subject matter wherein head of the threaded fastener is of a particular configuration.

309 Shank:
This subclass is indented under subclass 301. Subject matter wherein the portion of the threaded fastener extending into the bone is specially configured for orthopedic use.

SEE OR SEARCH CLASS:
411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclasses 411+ for thread or shank structure on and externally threaded fastener of general utility.

310 Including anchor means extendable from shank:

This subclass is indented under subclass 309. Subject matter wherein the portion of the threaded fastener extending into the bone contains means in addition to the threads that serve to hold the fastener firmly in the bone.

311 Self-drilling:

This subclass is indented under subclass 309. Subject matter wherein the portion of the threaded fastener extending into the bone includes means for boring a hole.

SEE OR SEARCH CLASS:

411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclass 387.1 for a drill-tip end on an externally threaded fastener of general utility.

312 Self-tapping:

This subclass is indented under subclass 309. Subject matter wherein the portion of the threaded fastener extending into the bone has cutting teeth that, upon rotation, etch a helical path in the bone.

SEE OR SEARCH CLASS:

411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclass 387.4 for a self-tapping threaded fastener of general utility.

313 Radially expandable:

This subclass is indented under subclass 309. Subject matter wherein at least a portion of the transverse dimension of the portion of the threaded fastener extending into the bone can be increased and means are provided to effect this increase in dimension.

(1) Note. The increasing means of this subclass includes, but is not limited to, a wedge-shaped mandrel, fluid pressure, a screw (tapered or straight shanked) for applying an expanding force to the threaded shank, cooperating sloped faces, etc.

SEE OR SEARCH THIS CLASS, SUBCLASS:

327, for an expandable, threadless anchoring means.

SEE OR SEARCH CLASS:

411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclasses 15+ for expandable fasteners of general utility.

314 Slotted:

This subclass is indented under subclass 309. Subject matter wherein the portion of the threaded fastener extending into the bone has a narrow groove passing transversely therethrough that divides the shank into laterally spaced sections.

SEE OR SEARCH CLASS:

411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclasses 418+ for thread or shank structure on a externally threaded fastener of general utility.

315 Multiple threads on a single fastener:

This subclass is indented under subclass 309. Subject matter wherein the helical thread on the threaded fastener comprises plural distinct helical threads concentrically arranged on the shank of the fastening means wich each of the helical threads lying between the adjacent convolutions of one or more of other of said helical threads.

SEE OR SEARCH THIS CLASS, SUBCLASS:

275, for a multiple threaded fastener used to secure a spinal positioner or stabilizer to the vertebrae.

SEE OR SEARCH CLASS:

411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclasses 412+ for plural threads on a single shank of an externally threaded fastener of general utility.

316 With interrupted thread:
This subclass is indented under subclass 309. Subject matter wherein the thread pattern is missing along a portion of the shank of the fastener.

317 Variable pitch thread:
This subclass is indented under subclass 309. Subject matter wherein the distance from a point on the thread to a corresponding point on an adjacent thread is not uniform along the length of the thread.

(1) Note. The variation in pitch may constitute a variance of any type over any portion of the thread.

SEE OR SEARCH CLASS:
411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclass 413 and 415 for threads of varying pitch on the shank of an externally threaded fastener of general utility.

318 Screw tip:
This subclass is indented under subclass 309. Subject matter wherein the part of the fastener that initially contacts the bone is specially configured for orthopedic use.

SEE OR SEARCH THIS CLASS, SUBCLASS:
311, for self-drilling orthopedic fasteners.

319 Including additional head-anchoring means:
This subclass is indented under subclass 301. Subject matter wherein the portion of the threaded fastener extending from the bone also includes its own means for holding the fastener firmly in place within the bone.

320 Adjustable (e.g., longitudinally adjustable):
This subclass is indented under subclass 301. Subject matter wherein the threaded fastener is adaptable to permit the longitudinal dimension of the fastener to be varied.

SEE OR SEARCH THIS CLASS, SUBCLASS:
258, for an adjustable length rod used in a spinal positioner or stabilizer.

SEE OR SEARCH CLASS:
411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclass 384 for an axially adjustable threaded fastener of general utility.

321 Headless screw (e.g., ligament interference screw, etc.):
This subclass is indented under subclass 301. Subject matter wherein the threaded fastener includes an upper extremity of the same or lesser diameter than portion of the threaded fastener extending into the bone.

322 Including cover or protector:
This subclass is indented under subclass 300. Subject matter wherein a device is placed over the orthopedic fastener and may also aid in shielding the fastener from injury.

SEE OR SEARCH THIS CLASS, SUBCLASS:
289+, for a screw retention means used in combination with cortical plate.
302, for a threaded fastener having a cover or protector.

SEE OR SEARCH CLASS:
411, Expanded, Threaded, Driven, Headed, Tool-Deformed, or Locked-Threaded Fastener, subclasses 372.5+ for a headed fastener element of general utility which includes a cap.

323 Hollow (e.g., with socket or cannula, etc.):
This subclass is indented under subclass 300. Subject matter wherein the fastener has a passageway extending therethrough.

324 Clamp:
This subclass is indented under subclass 300. Subject matter wherein the fastener applies a compressive force to opposing sides of a bone in order to (1) hold bone fragments together or (2) fix the fastener to the bone.

SEE OR SEARCH THIS CLASS, SUBCLASS:
277, for a clamping fastener used in conjunction with a spinal fixation device.

325 Having rotation means:
This subclass is indented under subclass 300. Subject matter wherein the fastener is not threaded and must be turned about its own axis in order to be anchored firmly within a bone.

SEE OR SEARCH THIS CLASS, SUBCLASS:
300, for threaded orthopedic fasteners.

326 Expandable:
This subclass is indented under subclass 300. Subject matter wherein the size of the fastening device can be made larger in a given direction.

327 Radially:
This subclass is indented under subclass 326. Subject matter wherein the adjustability in the size of the fastener is in a direction transverse to the longest dimension of the fastener.

SEE OR SEARCH THIS CLASS, SUBCLASS:
313, for radially expandable threaded orthopedic fasteners.

328 Comprising multiple separate parts:
This subclass is indented under subclass 300. Subject matter wherein the fastener itself is made of a plurality of separate and distinct components that are attached together.

SEE OR SEARCH THIS CLASS, SUBCLASS:
267, for a multipart fastener used in combination with a spinal positioner or stabilizer.

329 Nail, tack, or pin:
This subclass is indented under subclass 300. Subject matter wherein the fastener is provided with an impact receiving surface adapted to receive an axially applied force that causes the fastener to penetrate bone or to an elongated smooth-sided member that is placed within a predrilled bore in bone.

330 Hook:
This subclass is indented under subclass 300. Subject matter wherein the fastener is shaped in the form of a wire or rod section, the end of which is curved or sharply bent, or an element having a J-shaped configuration.

SEE OR SEARCH THIS CLASS, SUBCLASS:
276, for a hook-shaped fastener used in combination with a spinal positioner or stabilizer.

331 Composed of particular material:
This subclass is indented under subclass 300. Subject matter wherein the material that the fastener is made of is particularly adapted for use within the body.

SEE OR SEARCH THIS CLASS, SUBCLASS:
298, for cortical plates composed of particular material.
907+, for a cross-reference art collection of orthopedic fasteners composed of particular material.

SEE OR SEARCH CLASS:
623, Prosthesis (i.e., Artificial Body Members), Parts Thereof, or Aids and Accessories Therefor, subclasses 17.11+ for spine bone prosthesis and subclasses 23.51+ for a particular prosthetic material.

CROSS-REFERENCE ART COLLECTIONS

900 LUMBAR STABILIZER:
Subject matter which positions the part of the vertebrae between the thoracic vertebrae and the five united vertebrae that are directly connected with or form a part of the pelvis.

901 THORACIC STABILIZER:
Subject matter which positions the part of the vertebrae lying between the neck and the abdomen.

902 CORTICAL PLATE SPECIFICALLY ADAPTED FOR PARTICULAR BONE:
Subject matter wherein the cortical plate is specially shaped or modified for use with a certain type of bone.

903 Cranial and facial plate:
This art collection is indented under art collection 902. Subject matter wherein the cortical plate is specially shaped or modified to be used with the bones of the skull.

904 Jaw plate:
This art collection is indented under art collection 903. Subject matter under cross-reference art collection 903 wherein the cortical plate is specially shaped or modified to be used with the mandible.

905 Rib or sternum plate:
This art collection is indented under art collection 902. Subject matter wherein the cortical plate is specially shaped or modified to be used with the curved bones that stiffen the wall of the body and protect the viscera or with the breastbone.

906 Small bone plate:
This art collection is indented under art collection 902. Subject matter wherein the cortical plate is specially shaped or modified to be used with a bone having comparatively little size (e.g., finger bone, toe bone, etc.).

907 COMPOSED OF PARTICULAR MATERIAL OR COATED:
Subject matter wherein the material that the internal fixation means is made of or its covering, finishing, or protective layer is particularly adapted for orthopedic use.

SEE OR SEARCH THIS CLASS, SUBCLASS:
298+, for particular material used in a cortical plate.
331, for particular material used in an orthopedic fastener.

908 Bioabsorbable material:
This art collection is indented under art collection 907. Subject matter wherein the material that the internal fixation means is made of or its covering, finishing, or protective layer is capable, over a period of time, of being assimilated or incorporated by the body.

909 Bone:
This art collection is indented under art collection 907. Subject matter wherein the material that the internal fixation means is made of or its covering, finishing, or protective layer is composed of the hard largely calcareous tissue of which the adult skeleton of most vertebrates is chiefly composed.

910 Polymer:
This art collection is indented under art collection 907. Subject matter wherein the material that internal fixation means is made of or its covering, finishing, or protective layer is composed of a chemical compound or a mixture of compounds formed by a chemical reaction in which two or more small molecules combine to form larger molecules and consisting essentially of repeating structural units.

911 Memory material:
This art collection is indented under art collection 907. Subject matter wherein the material that the internal fixation means is made of or its covering, finishing, or protective layer is composed of a material which is deformable under stress, but returns exactly to its original configuration upon removal of that stress.

912 Radiolucent material:
This art collection is indented under 907. Subject matter wherein the material that the internal fixation means is made of or its covering, finishing, or protective lay is composed of a material that is permeable to radiation, such as X-ray radiation.

913 Monolithic:
This subclass is indented under subclass 907.
This art collection is indented Subject matter wherein the internal fixation means is made from a single piece of material that exhibits massive uniformity.

914 TOOLKIT FOR INSTALLING OR REMOVING SPINAL POSITIONER OR STABILIZER:
Subject matter wherein a pre-packaged collection of orthopedic tools or instruments are used for placing within the body or taking away from the body, the spinal positioner or stabilizer or its component parts.

SEE OR SEARCH THIS CLASS, SUBCLASS:
915, for a toolkit for installing or removing cortical plate, or a component thereof.
916, for a toolkit for installing or removing an orthopedic fastener.

915 TOOLKIT FOR INSTALLING OR REMOVING CORTICAL PLATE:
Subject matter wherein pre-packaged orthopedic tools or instruments are used to place within the body or remove from the body the cortical plate or its component parts.

SEE OR SEARCH THIS CLASS, SUBCLASS:

914, for a toolkit for installing or removing a component or fastener of a spinal positioning or stabilizing system.

916, for a toolkit for installing or removing an orthopedic fastener.

916 TOOL FOR INSTALLING OR REMOVING ORTHOPEDIC FASTENER:
Subject matter wherein pre-packaged orthopedic tools or instruments are used to adjust the position of within the body, place within the body, or remove from the body an orthopedic fastener.

FOREIGN ART COLLECTIONS

The definitions below correspond to abolished subclasses from which these collections were formed. See the Foreign Art Collection Schedule of this class for specific correspondences. [Note: The titles and definitions for indented art collections include all the details of the one(s) that are hierarchically superior.]

FOR 100 Spinal positioner or stabilizer:
Foreign art collection for subject matter wherein the internal fixation means is particularly adapted for positioning vertebrae.

FOR 101 Cortical plate:
Foreign art collection for subject matter wherein the internal fixation means is an elongated element which is applied to a fractured bone on its exterior surface and fastened thereto so as to hold the disassociated portions in alignment during healing.

(1) Note. The plate may be implanted on a permanent bases or removed upon healing of the break in the bone.

FOR 102 Orthopedic fastener:
Foreign art collection for subject matter comprising fastener elements which are applied internally or transcutaneously to hold bone fragments in alignment or to connect an external fixation means with bone fragments to be aligned.

(1) Note. The fastener elements in this subclass are nonthreaded elements such as pins and wires which are placed through the bone elements to pin them together.

(2) Note. This subclass also contains elongated pin elements which have their own drilling head contained on the fastener.

FOR 103 Threaded fastener element:
Foreign art collection for subject matter wherein the fastener is either a single elongated means having helical threads thereon or a fastener consisting of externally threaded elongated element formed from a pin, rod or wire having a head at one end and designed to be inserted through bone portions and secured by a mating element having a threaded opening which is tightened by the application of torque.

(1) Note. The fasteners in this subclass include single screw elements which are applied into bones and paired elements, such as nuts and bolts, which are fastened to bones to hold them in place.

END