

CPC COOPERATIVE PATENT CLASSIFICATION

A61N ELECTROTHERAPY; MAGNETOTHERAPY; RADIATION THERAPY; ULTRASOUND THERAPY (measurement of bioelectric currents [A61B](#); surgical instruments, devices or methods for transferring non-mechanical forms of energy to or from the body [A61B 18/00](#); anaesthetic apparatus in general [A61M](#); incandescent lamps [H01K](#); infra-red radiators for heating [H05B](#))

NOTE

In this subclass, the following term is used with the meaning indicated: In this subclass, the following term is used with the meaning indicated:

- "therapy" implies that the treatment, when it aims at destroying sick or abnormal cells, is performed within the limits of healthy cell life, the destruction thereof being undesired, contrary to that which takes place with instruments, devices or methods covered by group [A61B 18/00](#).

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

A61N 1/34	covered by	A61N 1/36021 , A61N 1/36071
A61N 2/04	covered by	A61N 2/02
A61N 5/067	covered by	A61N 5/06
A61N 5/08	covered by	A61N 5/06
A61N 2/08	covered by	A61N 2/06
A61N 2/10	covered by	A61N 2/06
A61N 5/073	covered by	A61N 5/06 , A61N 2005/073

1/00	Electrotherapy; Circuits therefor (A61N 2/00 takes precedence; irradiation apparatus A61N 5/00)	1/0476	. . . . . {Array electrodes (including any electrode arrangement with more than one electrode for at least one of the polarities)}
1/02	. Details		
1/025	. . {Digital circuitry features of electrotherapy devices, e.g. memory, clocks, processors}	1/048	. . . . . {Electrodes characterised by a specific connection between lead and electrode}
1/04	. . Electrodes {(electrosurgical electrodes A61B 18/14)}	1/0484	. . . . . {Garment electrodes worn by the patient}
1/0404	. . . {for external use (A61N 1/06 takes precedence)}	1/0488	. . . . . {Details about the lead}
1/0408	. . . . {Use-related aspects}	1/0492	. . . . . {Patch electrodes (A61N 1/0412 , A61N 1/0428 take precedence)}
1/0412	. . . . . {Specially adapted for transcutaneous electroporation, e.g. including drug reservoirs}	1/0496	. . . . . {characterised by using specific chemical compositions, e.g. hydrogel compositions, adhesives}
1/0416	. . . . . {Anode and cathode}	1/05	. . . for implantation or insertion into the body, e.g. heart electrode (A61N 1/06 takes precedence)
1/042	. . . . . {Material of the electrode}	1/0502	. . . . . {Skin piercing electrodes}
1/0424	. . . . . {Shape of the electrode}	1/0504	. . . . . {Subcutaneous electrodes}
1/0428	. . . . . {Specially adapted for iontophoresis, e.g. AC, DC or including drug reservoirs}	1/0507	. . . . . {Electrodes for the digestive system}
1/0432	. . . . . {Anode and cathode}	1/0509	. . . . . {Stomach and intestinal electrodes}
1/0436	. . . . . {Material of the electrode}	1/0512	. . . . . {Anal electrodes}
1/044	. . . . . {Shape of the electrode}	1/0514	. . . . . {Electrodes for the urinary tract}
1/0444	. . . . . {Membrane}	1/0517	. . . . . {Esophageal electrodes}
1/0448	. . . . . {Drug reservoir}	1/0519	. . . . . {Endotracheal electrodes}
1/0452	. . . . . {Specially adapted for transcutaneous muscle stimulation [TMS]}	1/0521	. . . . . {Genital electrodes}
1/0456	. . . . . {Specially adapted for transcutaneous electrical nerve stimulation [TENS]}	1/0524	. . . . . {Vaginal electrodes}
1/046	. . . . . {Specially adapted for shock therapy, e.g. defibrillation}	1/0526	. . . . . {Head electrodes (A61N 1/0551 takes precedence)}
1/0464	. . . . . {Specially adapted for promoting tissue growth}	1/0529	. . . . . {Electrodes for brain stimulation}
1/0468	. . . . . {Specially adapted for promoting wound healing}	1/0531	. . . . . {Brain cortex electrodes}
1/0472	. . . . . {Structure-related aspects}	1/0534	. . . . . {Electrodes for deep brain stimulation}
		1/0536	. . . . . {Preventing neurodegenerative response or inflammatory reaction}
		1/0539	. . . . . {Anchoring of brain electrode systems, e.g. within burr hole}
		1/0541	. . . . . {Cochlear electrodes}

1/0543	. . . . . {Retinal electrodes}	1/30	. . . Apparatus for iontophoresis, {i.e. transfer of media in ionic state by an electromotoric force into the body}, or cataphoresis
1/0546	. . . . . {Nasal electrodes}	1/303	. . . . {Constructional details (electrodes for external use A61N 1/0428)}
1/0548	. . . . . {Oral electrodes}	1/306	. . . . . {Arrangements where at least part of the apparatus is introduced into the body}
1/0551	. . . . . {Spinal or peripheral nerve electrodes}	1/32	. . . alternating or intermittent currents {(applying electric fields by inductive or capacitive coupling A61N 1/40 ; microwave apparatus A61N 5/02)}
1/0553	. . . . . {Paddle shaped electrodes, e.g. for laminotomy}	1/321	. . . {Electromedical belts}
1/0556	. . . . . {Cuff electrodes}	1/322	. . . {Electromedical brushes, combs, massage devices}
1/0558	. . . . . {Anchoring or fixation means therefor}	1/323	. . . {Interference currents, i.e. treatment by several currents summed in the body}
1/056	. . . . . {Transvascular endocardial electrode systems}	1/325	. . . {for iontophoresis, i.e. transfer of media in ionic state by an electromotoric force into the body (electrodes for external use A61N 1/0428)}
1/0563	. . . . . {specially adapted for defibrillation or cardioversion}	1/326	. . . {for promoting growth of cells, e.g. bone cells}
1/0565	. . . . . {Electrode heads}	1/327	. . . {for enhancing the absorption properties of tissue, e.g. by electroporation}
1/0568	. . . . . {with drug delivery}	1/328	. . . {for improving the appearance of the skin, e.g. facial toning or wrinkle treatment}
1/057	. . . . . {Anchoring means; Means for fixing the head inside the heart}	2001/34	. . . {for producing anaesthesia or for general pain therapy}
1/0573	. . . . . {characterised by means penetrating the heart tissue, e.g. helix needle or hook}	1/36	. . . for stimulation, e.g. heart pace-makers
1/0575	. . . . . {with drug delivery}	1/36003	. . . . {of motor muscles, e.g. for walking assistance}
2001/0578	. . . . . {having means for removal or extraction}	1/36007	. . . . {of urogenital or gastrointestinal organs, e.g. for incontinence control}
2001/058	. . . . . {Fixing tools}	1/3601	. . . . {of respiratory organs}
2001/0582	. . . . . {Suture sleeves}	1/36014	. . . . {External stimulators, e.g. with patch electrodes (external pacemakers A61N 1/3625)}
2001/0585	. . . . . {Coronary sinus electrodes}	1/36017	. . . . . {with leads or electrodes penetrating the skin}
1/0587	. . . . . {Epicardial electrode systems; Endocardial electrodes piercing the pericardium}	1/36021	. . . . . {for treatment of pain}
1/059	. . . . . {Anchoring means}	1/36025	. . . . . {for treating a mental or cerebral condition}
1/0592	. . . . . {Introducing the lead through the pericardium with a needle}	1/36028	. . . . . {for aversion therapy}
1/0595	. . . . . {Temporary leads}	1/36032	. . . . . {of the outer, middle or inner ear, e.g. cochlear implants}
1/0597	. . . . . {Surface area electrodes, e.g. cardiac harness}	1/36035	. . . . . {for correcting spinal deformities, e.g. scoliosis}
1/06	. . . for high-frequency therapy	2001/36039	. . . . . {for treating a mental or cerebral condition}
1/08	. . Arrangements or circuits for monitoring, protecting, controlling or indicating {(for heart stimulators A61N 1/37 ; for defibrillators A61N 1/3925 ; measuring electric variables G01R ; control of generator output in general H02P , H03L)}	1/36042	. . . . . {of grafted tissue, e.g. skeletal muscle}
2001/083	. . . {Monitoring integrity of contacts, e.g. be impedance measurement}	1/36046	. . . . . {of the eye}
2001/086	. . . {MRI compatible leads}	1/3605	. . . . . {Implantable neurostimulators for stimulating central or peripheral nerve system}
1/10	. Applying static electricity (applying ionised gases or vapours A61N 1/44)	1/36053	. . . . . {adapted for vagal stimulation (A61N 1/36114 takes precedence)}
1/14	. Leading-off electric charges, e.g. by earthing {(carrying-off electrostatic charges, in general H05F 3/00)}	1/36057	. . . . . {adapted for stimulating afferent nerves}
1/16	. Screening or neutralising undesirable influences from {or using,} atmospheric or terrestrial radiation or fields {(using atmospheric electricity or earth currents H05F 3/00)}	1/3606	. . . . . {adapted for a particular treatment}
1/18	. Applying electric currents by contact electrodes	1/36064	. . . . . {Epilepsy}
1/20	. . continuous direct currents	1/36067	. . . . . {Movement disorders, e.g. tremor, parkinson (stimulating motor muscle A61N 1/36003)}
1/205	. . . {for promoting a biological process}	1/36071	. . . . . {Pain}
1/22	. . . Electromedical belts, {e.g. neck chains, armbands}	1/36075	. . . . . {Headache, migraine}
1/24	. . . with built-in power source	1/36078	. . . . . {Inducing or controlling sleep, relaxation (non-implantable stimulator A61M 21/00)}
1/26	. . . Electromedical brushes; Electromedical massage devices {(massage devices in general A61H); Combs}		
1/28	. . . Apparatus for applying thermoelectric currents		

1/36082	. . . . .	{Cognitive or psychiatric applications, e.g. dementia, Alzheimer's, depression}	1/3627	. . . . .	{for treating a mechanical deficiency of the heart, e.g. congestive heart failure or cardionmyopathy}
1/36085	. . . . .	{Eating disorders and obesity}	1/3628	. . . . .	{using subthreshold, non-excitatory signals}
1/36089	. . . . .	{Addiction, withdrawal from substance abuse such as alcohol, drugs}	1/365	. . . . .	controlled by a physiological parameter, e.g. heart potential (evoked response A61N 1/371)}
1/36092	. . . . .	{Mental training}	1/36507	. . . . .	{controlled by gradient or slope of the heart potential}
1/36096	. . . . .	{Mood disorders, e.g. depression, anxiety, panic disorder}	1/36514	. . . . .	{controlled by a physiological quantity other than heart potential, e.g. blood pressure (controlled by two or more physical parameters A61N 1/36585)}
1/361	. . . . .	{Phantom sensations, e.g. tinnitus}	1/36521	. . . . .	{the parameter being derivable from measurement of an electrical impedance}
1/36103	. . . . .	{Neurorehabilitation; repair and reorganisation of neural tissue, e.g. after stroke}	1/36528	. . . . .	{the parameter being measured by means of ultrasound}
1/36107	. . . . .	{Sexual dysfunction (stimulating genital organ A61N 1/36007)}	1/36535	. . . . .	{controlled by body position or posture}
1/3611	. . . . .	{Respiration control (stimulating respiratory organ A61N 1/3601)}	1/36542	. . . . .	{controlled by body motion, e.g. acceleration}
1/36114	. . . . .	{Cardiac control, e.g. by vagal stimulation (stimulating the heart A61N 1/362)}	1/3655	. . . . .	{controlled by body or blood temperature}
1/36117	. . . . .	{for treating hypertension}	1/36557	. . . . .	{controlled by chemical substances in blood}
1/36121	. . . . .	{Production of neurotransmitters; modulation of gene expression}	1/36564	. . . . .	{controlled by blood pressure}
1/36125	. . . . .	{Details of circuitry or electric components}	1/36571	. . . . .	{controlled by blood flow rate, e.g. blood velocity or cardiac output}
1/36128	. . . . .	{Control systems}	1/36578	. . . . .	{controlled by mechanical motion of the heart wall, e.g. measured by an accelerometer or microphone}
1/36132	. . . . .	{using patient feedback}	1/36585	. . . . .	{controlled by two or more physical parameters}
1/36135	. . . . .	{using a physiological parameter}	1/36592	. . . . .	{controlled by the heart rate variability}
1/36139	. . . . .	{with automatic adjustment}	1/368	. . . . .	comprising more than one electrode co-operating with different heart regions (A61N 1/3622 , A61N 1/3627 take precedence)}
1/36142	. . . . .	{for improving safety}	1/3682	. . . . .	{with a variable atrioventricular delay}
1/36146	. . . . .	{specified by the stimulation parameters}	1/3684	. . . . .	{for stimulating the heart at multiple sites of the ventricle or the atrium, e.g. biventricular stimulation}
1/3615	. . . . .	{Intensity}	1/3686	. . . . .	{configured for selecting the electrode configuration on a lead (A61N 1/3688 takes precedence)}
1/36153	. . . . .	{Voltage}	1/3688	. . . . .	{configured for switching the pacing mode, e.g. from AAI to DDD}
1/36157	. . . . .	{Current}	1/37	. . . . .	Monitoring; Protecting
1/3616	. . . . .	{Voltage density or current density}	1/3702	. . . . .	{a physiological parameter (A61N 1/365 takes precedence; evoked response A61N 1/371)}
1/36164	. . . . .	{Subthreshold, non-excitatory signals (non-excitatory signals to the heart A61N 1/3628)}	1/3704	. . . . .	{Circuits specially adapted therefor, e.g. for sensitivity control}
1/36167	. . . . .	{Timing, e.g. stimulation onset}	1/3706	. . . . .	{a pacemaker parameter (stimulation threshold A61N 1/371)}
1/36171	. . . . .	{Frequency}	1/3708	. . . . .	{for power depletion}
1/36175	. . . . .	{Pulse width and/or duty cycle}	1/371	. . . . .	{Capture, i.e. successful stimulation}
1/36178	. . . . .	{Burst or pulse train parameters}	1/3712	. . . . .	{Autocapture, i.e. automatic adjustment of the stimulation threshold}
1/36182	. . . . .	{Direction of the electrical field, e.g. with sleeve around stimulating electrode}	1/3714	. . . . .	{Atrial capture}
1/36185	. . . . .	{Selection of the electrode configuration}			
1/36189	. . . . .	{using a modulation technique}			
1/36192	. . . . .	{Amplitude modulation}			
1/36196	. . . . .	{Frequency modulation}			
1/362	. . . . .	Heart stimulators (heart defibrillators A61N 1/39)			
1/3621	. . . . .	{for treating or preventing abnormally high heart rate}			
1/3622	. . . . .	{comprising two or more electrodes co-operating with different heart regions}			
1/3624	. . . . .	{occurring in the atrium, i.e. atrial tachycardia}			
1/3625	. . . . .	{External stimulators}			

1/3716	. . . . .	{ with reduction of residual polarisation effects }	1/3925	. . . . .	{ Monitoring; Protecting }
1/3718	. . . . .	{ Monitoring of or protection against external electromagnetic fields or currents }	1/3931	. . . . .	{ Protecting, e.g. back-up systems }
1/372	. . . . .	Arrangements in connection with the implantation of stimulators	1/3937	. . . . .	{ Monitoring output parameters }
1/37205	. . . . .	{ Microstimulators, e.g. implantable through a cannula }	1/3943	. . . . .	{ for threshold determination }
1/37211	. . . . .	{ Means for communicating with stimulators }	1/395	. . . . .	{ for treating atrial fibrillation }
1/37217	. . . . .	{ characterised by the communication link, e.g. acoustic or tactile }	1/3956	. . . . .	{ Implantable devices for applying electric shocks to the heart, e.g. for cardioversion }
1/37223	. . . . .	{ Circuits for electromagnetic coupling }	1/3962	. . . . .	{ in combination with another heart therapy, e.g. pacing }
1/37229	. . . . .	{ Shape or location of the implanted or external antenna }	1/3968	. . . . .	{ Constructional arrangements, e.g. casings (A61N 1/375 takes precedence) }
1/37235	. . . . .	{ Aspects of the external programmer }	1/3975	. . . . .	{ Power supply (A61N 1/378 takes precedence) }
1/37241	. . . . .	{ providing test stimulations }	1/3981	. . . . .	{ High voltage charging circuitry }
1/37247	. . . . .	{ User interface, e.g. input or presentation means }	1/3987	. . . . .	{ characterised by the timing or triggering of the shock }
1/37252	. . . . .	{ Details of algorithms or data aspects of communication system, e.g. handshaking, transmitting specific data or segmenting data }	1/3993	. . . . .	{ User interfaces for automatic external defibrillators }
1/37258	. . . . .	{ Alerting the patient }	1/40	. . . . .	Applying electric fields by inductive or capacitive coupling (microwave apparatus A61N 5/00) ; { Applying radio-frequency signals }
1/37264	. . . . .	{ Changing the program; Upgrading firmware }	1/403	. . . . .	{ for thermotherapy, e.g. hyperthermia }
1/3727	. . . . .	{ characterised by the modulation technique }	1/406	. . . . .	{ using implantable thermoseeds or injected particles for localized hyperthermia (preparations of seeds and particles A61K 41/0052) }
1/37276	. . . . .	{ characterised by means for reducing power consumption during telemetry }	1/44	. . . . .	Applying ionised fluids { (ion generators H01J 37/00) }
1/37282	. . . . .	{ characterised by communication with experts in remote locations using a network }	1/445	. . . . .	{ Hydro-electric baths }
1/37288	. . . . .	{ Communication to several implantable medical devices within one patient }	2/00		Magnetotherapy
2001/37294	. . . . .	{ Means for testing medical devices within the package prior to implantation }	2/002	. . . . .	{ in combination with another treatment }
1/375	. . . . .	Constructional arrangements, e.g. casings	2/004	. . . . .	{ specially adapted for a specific therapy }
1/3752	. . . . .	{ Details of casing-lead connections }	2/006	. . . . .	{ for magnetic stimulation of nerve tissue }
1/3754	. . . . .	{ Feedthroughs }	2/008	. . . . .	{ for pain treatment or analgesia }
1/3756	. . . . .	{ Casings with electrodes thereon, e.g. leadless stimulators }	2/02	. . . . .	using magnetic fields produced by coils, including single turn loops or electromagnets (A61N 2/12 takes precedence)
1/3758	. . . . .	{ Packaging of the components within the casing }	2/06	. . . . .	using magnetic fields produced by permanent magnets (A61N 2/12 takes precedence)
1/378	. . . . .	Electrical supply	2/12	. . . . .	using variable magnetic fields obtained by mechanical movement
1/3782	. . . . .	{ producing a voltage above the power source level }	5/00		Radiation therapy (ultrasound therapy A61N 7/00; devices or apparatus applicable to both therapy and diagnosis A61B 6/00)
1/3785	. . . . .	{ generated by biological activity or substance, e.g. body movement }	2005/002	. . . . .	{ Cooling systems }
1/3787	. . . . .	{ from an external energy source }	2005/005	. . . . .	{ for cooling the radiator }
1/38	. . . . .	for producing shock effects (in general H05C 1/00)	2005/007	. . . . .	{ for cooling the patient }
1/385	. . . . .	{ Devices for inducing an abnormal cardiac function, e.g. fibrillation }	5/01	. . . . .	Devices for producing movement of radiation source during therapy { (A61N 5/1077 takes precedence) }
1/39	. . . . .	Heart defibrillators	5/02	. . . . .	using microwaves
1/3906	. . . . .	{ characterised by the form of the shockwave }	5/022	. . . . .	{ Apparatus adapted for a specific treatment }
1/3912	. . . . .	{ Output circuitry therefor, e.g. switches }	5/025	. . . . .	{ Warming the body, e.g. hyperthermia treatment (heating by RF A61N 1/403 ; heating by infrared radiation A61N 5/0625 ; heating by other appliances A61F 7/00 ; hot air bath A61H 33/06) }
1/3918	. . . . .	{ characterised by shock pathway, e.g. by electrode configuration }	2005/027	. . . . .	{ using a phased array }
			5/04	. . . . .	Radiators for near-field treatment
			5/045	. . . . .	{ specially adapted for treatment inside the body (A61B 18/1815 takes precedence) }
			5/06	. . . . .	using light

- 5/0601 . . . {Apparatus for use inside the body (illuminating body cavities [A61B 1/06](#); diagnosis by radiation applied to body cavities [A61B 6/4057](#), [A61B 6/145](#); devices for heating or cooling body cavities [A61F 7/12](#); X-ray tubes having a small cross-section to facilitate introduction into small cavities [H01J 35/32](#))}
- 2005/0602 . . . {for treatment of blood vessels}
- 5/0603 . . . {for treatment of body cavities}
- 2005/0604 {Lungs and/or airways}
- 2005/0605 {Ear}
- 2005/0606 {Mouth}
- 2005/0607 {Nose}
- 2005/0608 {Rectum}
- 2005/0609 {Stomach and/or esophagus}
- 2005/061 {Bladder and/or urethra}
- 2005/0611 {Vagina}
- 2005/0612 . . . {using probes penetrating tissue; interstitial probes}
- 5/0613 . . {Apparatus adapted for a specific treatment}
- 5/0614 . . . {Tanning}
- 2005/0615 {using UV light sources having a specific spectrum}
- 5/0616 . . . {Skin treatment other than tanning}
- 5/0617 {Hair treatment}
- 5/0618 . . . {Psychological treatment ([A61M 21/00](#) takes precedence)}
- 5/0619 . . . {Acupuncture ([Acupuncture in general A61H 39/00](#))}
- 5/062 . . . {Photodynamic therapy, i.e. excitation of an agent}
- 5/0621 . . . {Hyperbilirubinemia, jaundice treatment}
- 5/0622 . . . {Optical stimulation for exciting neural tissue}
- 5/0624 . . . {for eliminating microbes, germs, bacteria on or in the body (sterilization by radiation [A61L 2/08](#), [A61L 2/10](#))}
- 5/0625 . . . {Warming the body, e.g. hyperthermia treatment (heating by RF [A61N 1/403](#); heating by microwave [A61N 5/025](#); heating by other appliances [A61F 7/00](#); hot air bath [A61H 33/06](#))}
- 2005/0626 . . {Monitoring, verifying, controlling systems and methods}
- 2005/0627 . . . {Dose monitoring systems and methods}
- 2005/0628 {including a radiation sensor}
- 2005/0629 . . . {Sequential activation of light sources}
- 2005/063 . . {comprising light transmitting means, e.g. optical fibres}
- 2005/0631 . . . {using crystals}
- 2005/0632 . . {Constructional aspects of the apparatus}
- 2005/0633 . . . {Arrangements for lifting or hinging the frame which supports the light sources}
- 2005/0634 . . . {Mechanisms that allow a space saving storage of the apparatus}
- 2005/0635 . . {characterised by the body area to be irradiated}
- 2005/0636 . . . {Irradiating the whole body}
- 2005/0637 {in a horizontal position}
- 2005/0638 {with a specially adapted support surface}
- 2005/0639 {with additional sources directed at, e.g. the face or the feet}
- 2005/064 {in a vertical position}
- 2005/0641 {with rotation of the patient}
- 2005/0642 {Irradiating part of the body at a certain distance}
- 2005/0643 {Applicators, probes irradiating specific body areas in close proximity}
- 2005/0644 {Handheld applicators}
- 2005/0645 {Applicators worn by the patient}
- 2005/0647 {the applicator adapted to be worn on the head}
- 2005/0648 {the light being directed to the eyes}
- 2005/0649 {using suction to fix the applicator to the tissue}
- 2005/065 . . {Light sources therefor}
- 2005/0651 . . . {Diodes}
- 2005/0652 {Arrays of diodes}
- 2005/0653 {Organic light emitting diodes}
- 2005/0654 . . . {Lamps}
- 2005/0655 . . . {Tubes}
- 2005/0656 . . . {Chemical light sources}
- 2005/0657 . . . {Natural light sources, e.g. captured sunlight}
- 2005/0658 . . {characterised by the wavelength of light used}
- 2005/0659 . . . {infra-red}
- 2005/066 {far infrared}
- 2005/0661 . . . {ultra-violet}
- 2005/0662 . . . {Visible light}
- 2005/0663 {Coloured light}
- 2005/0664 . . {Details}
- 2005/0665 . . . {Reflectors}
- 2005/0666 {for redirecting light to the treatment area}
- 2005/0667 . . . {Filters}
- 2005/0668 . . . {Apparatus adapted for operation in a moist environment, e.g. bath or shower}
- 2005/067 . . {using laser light}
- 2005/073 . . {using polarised light}
- 5/10 . . X-ray therapy; Gamma-ray therapy; Particle-irradiation therapy ([A61N 5/01](#) takes precedence; {radiation diagnosis, e.g. combined with radiation therapy [A61B 6/00](#); irradiation devices in general [G21K 1/00](#); X-ray tubes, Lenard tubes [H01J 35/00](#); X-ray techniques, in particular circuits for feeding or controlling X-ray tubes, [H05G](#))}
- 5/1001 . . {using radiation sources introduced into or applied onto the body; brachytherapy}
- 5/1002 . . . {Intraluminal radiation therapy (intraluminal catheters in general [A61M 25/00](#))}
- 2005/1003 {having means for centering a radioactive source within the lumen, e.g. balloons}
- 2005/1004 {having expandable radiation sources}
- 2005/1005 {with asymmetrical radiation pattern}
- 5/1007 . . . {Arrangements or means for the introduction of sources into the body (needle guides in general [A61B 17/3403](#); apparatus for implanting surgical devices [A61B 17/3468](#); devices for implanting seeds or pellets in general [A61M 37/0069](#))}
- 2005/1008 {Apparatus for temporary insertion of sources, e.g. afterloaders}
- 2005/1009 {Apparatus for loading seeds into magazines or needles}
- 2005/101 {Magazines or cartridges for seeds}
- 2005/1011 {Apparatus for permanent insertion of sources}
- 2005/1012 {Templates or grids for guiding the introduction of sources}

5/1014	. . .	{Intracavitary radiation therapy}	2005/1061	. . . .	{using an x-ray imaging system having a separate imaging source}
5/1015	. . . .	{Treatment of resected cavities created by surgery, e.g. lumpectomy}	2005/1062	. . . . .	{using virtual X-ray images, e.g. digitally reconstructed radiographs [DRR]}
5/1016	. . . .	{Gynaecological radiation therapy}	2005/1063	. . . .	{maintaining the position when the patient is moved from an imaging to a therapy system}
5/1017	. . . .	{Treatment of the eye, e.g. for "macular degeneration"}	5/1064	. . .	{for adjusting radiation treatment in response to monitoring}
2005/1018	. . . .	{with multiple channels for guiding radioactive sources}	5/1065	. . . .	{Beam adjustment}
2005/1019	. . .	{Sources therefor}	5/1067	. . . . .	{in real time, i.e. during treatment}
2005/1021	. . . .	{Radioactive fluid}	5/1068	. . . .	{Gating the beam as a function of a physiological signal}
2005/1022	. . . .	{Generators, e.g. X-ray tubes}	5/1069	. . . .	{Target adjustment, e.g. moving the patient support}
2005/1023	. . . .	{Means for creating a row of seeds, e.g. spacers}	5/107	. . . . .	{in real time, i.e. during treatment}
2005/1024	. . . .	{Seeds}	5/1071	. . .	{for verifying the dose delivered by the treatment plan}
2005/1025	. . . .	{Wires}	2005/1072	. . . .	{taking into account movement of the target}
5/1027	. . .	{Interstitial radiation therapy}	2005/1074	. . .	{Details of the control system, e.g. user interfaces}
5/1028	. . .	{using radiation sources applied onto the body}	5/1075	. . .	{for testing, calibrating, or quality assurance of the radiation treatment apparatus}
5/1029	. . . .	{Radioactive dressings (dressings in general A61F, A61L 15/00)}	2005/1076	. . . .	{using a dummy object placed in the radiation field, e.g. phantom}
5/103	. .	{Treatment planning systems}	5/1077	. .	{Beam delivery systems}
5/1031	. . .	{using a specific method of dose optimization}	5/1078	. . .	{Fixed beam systems}
2005/1032	. . . .	{Genetic optimization methods}	5/1079	. . .	{Sharing a beam by multiple treatment stations}
2005/1034	. . . .	{Monte Carlo type methods; particle tracking}	5/1081	. . .	{Rotating beam systems with a specific mechanical construction, e.g. gantries}
2005/1035	. . . .	{Simulated annealing}	5/1082	. . . .	{having multiple beam rotation axes}
5/1036	. . .	{Leaf sequencing algorithms}	5/1083	. . .	{Robot arm beam systems}
5/1037	. . .	{taking into account the movement of the target, e.g. 4D-image based planning}	5/1084	. . .	{for delivering multiple intersecting beams at the same time, e.g. gamma knives}
5/1038	. . .	{taking into account previously administered plans applied to the same patient, i.e. adaptive radiotherapy}	2005/1085	. .	{characterised by the type of particles applied to the patient}
5/1039	. . .	{using functional images, e.g. PET or MRI}	2005/1087	. . .	{Ions; Protons}
2005/1041	. . .	{using a library of previously administered radiation treatment applied to other patients}	2005/1088	. . . .	{generated by laser radiation}
5/1042	. .	{with spatial modulation of the radiation beam within the treatment head}	2005/1089	. . .	{Electrons}
5/1043	. . .	{Scanning the radiation beam, e.g. spot scanning or raster scanning}	2005/109	. . .	{Neutrons}
5/1044	. . . .	{with multiple repetitions of the scanning pattern}	2005/1091	. . .	{Kilovoltage or orthovoltage range photons}
5/1045	. . .	{using a multi-leaf collimator, e.g. for intensity modulated radiation therapy or IMRT}	2005/1092	. .	{Details}
5/1047	. . . .	{with movement of the radiation head during application of radiation, e.g. for intensity modulated arc therapy or IMAT}	2005/1094	. . .	{Shielding, protecting against radiation}
5/1048	. .	{Monitoring, verifying, controlling systems and methods}	2005/1095	. . .	{Elements inserted into the radiation path within the system, e.g. filters or wedges}
5/1049	. . .	{for verifying the position of the patient with respect to the radiation beam}	2005/1096	. . .	{Elements inserted into the radiation path placed on the patient, e.g. bags, bolus, compensators}
2005/105	. . . .	{using a laser alignment system}	2005/1097	. . .	{Means for immobilizing the patient}
2005/1051	. . . .	{using an active marker (markers in general A61B 90/39)}	2005/1098	. . .	{Enhancing the effect of the particle by an injected agent or implanted device}
2005/1052	. . . .	{using positron emission tomography [PET] single photon emission computer tomography [SPECT] imaging}	7/00		Ultrasound therapy (lithotripsy A61B 17/22, A61B 17/225; massage using supersonic vibration A61H 23/00; {using ultrasound for introducing media into the body A61M 37/0092})
2005/1054	. . . .	{using a portal imaging system}	2007/0004	. .	{Applications of ultrasound therapy}
2005/1055	. . . .	{using magnetic resonance imaging [MRI]}	2007/0008	. .	{Destruction of fat cells}
2005/1056	. . . .	{by projecting a visible image of the treatment field}	2007/0013	. .	{Fracture healing}
2005/1057	. . . .	{monitoring flexing of the patient support or the radiation treatment apparatus}	2007/0017	. .	{Wound healing}
2005/1058	. . . .	{using ultrasound imaging}	2007/0021	. .	{Neural system treatment}
2005/1059	. . . .	{using cameras imaging the patient}	2007/0026	. . .	{Stimulation of nerve tissue}
			2007/003	. . .	{Destruction of nerve tissue}

- 2007/0034 . . {Skin treatment}
- 2007/0039 . {using micro bubbles}
- 2007/0043 . {intra-cavitary}
- 2007/0047 . {interstitial}
- 2007/0052 . {using the same transducer for therapy and imaging}
- 2007/0056 . {Beam shaping elements}
- 2007/006 . . {Lenses}
- 2007/0065 . . {Concave transducers}
- 2007/0069 . . {Reflectors}
- 2007/0073 . {using multiple frequencies}
- 2007/0078 . {with multiple treatment transducers}
- 2007/0082 . {Scanning transducers}
- 2007/0086 . {Beam steering}
- 2007/0091 . . {with moving parts, e.g. transducers, lenses, reflectors}
- 2007/0095 . . {by modifying an excitation signal}
- 7/02 . Localised ultrasound hyperthermia {(hyperthermia in general [A61F 7/00](#))}
- 7/022 . . {intracavitary}
- 2007/025 . . {interstitial}
- 2007/027 . . {with multiple foci created simultaneously}