

CODE (max. 10 chars incl. spaces)	NOTE (see Comment Box)	NEW TITLE	ORIGINAL TITLE	NEW SCOPE NOTES	ORIGINAL SCOPE NOTES (only include if scope notes are to be changed)	KEYWORDS/SEARCH TERMS
Section S						
S02 Engineering Instrumentation						
S02-F03	Change Title	Applications and methods of measuring force	Special-purpose measurements of force, work, mechanical power or torque			
S02-F03A	Change Title	Linear force, tension	Of muscular force, ski binding release force, tension in ropes, belts	Includes e.g. muscular force, ski binding release force, tension in ropes, belts etc.	Includes force sensing arrangements to control release of ski binding also, see W04-X01E for electrical aspects also.	
S02-F03B	Change Title/Scope/Search/IPC	Torque, mechanical power, work	Of axial thrust in shaft, vehicle power, several components of force, torque on nut, testing brakes	Includes, e.g. axial thrust in shaft, vehicle power, several components of force, torque on nut, testing brakes, force applied control members, e.g. brake pedal, steering input etc.	NONE	Brake pedal force, steering input
S02-F03X	Change title	Testing, compensation and calibration; other	Other special purpose measurements of force, work, mechanical power or torque			
S02-F04D3A	Change Search					Misfire
S02-G01B1	Change Scope			Does not include measurement of angular velocity using electric gyroscope, see S02-G01X.	NONE	
S02-G09	Change Title	Apparatus details and other speed-related measurement aspects	Other speed-related measurements			
S03 Scientific Instrumentation						
S03-C02B	Change Scope			Includes measuring Earth's magnetic field and proximity sensors. For weapon detection at airports, see also S03-C06 and W06-B02A1.	Includes measuring Earth's magnetic field and proximity sensors. NMR methods are covered by S03-C02X. For weapon detection at airports, see also W06-B02A1.	
S03-E06	Change Scope			Includes use of ionizing or particle radiation for determining properties of a sample, e.g. patient x-ray diagnosis or scanning electron microscopy. For measurement of ionizing radiation intensity per se (x-ray, gamma ray, alpha, beta etc.), particle beha	Includes e.g. transmission of radiation through material. Medical appts. is also coded in S05-C or S05-D codes. For luggage check see also S03-C03, S03-C06 and W06-B02A. Measurement of radioactive emission from sample injected in human body, e.g. scintogr	
S03-E06H1	Change Scope			Includes control, e.g. source intensity control, dosage etc. For source positioning see S03-E06H4.	NONE	
S03-E06H5A	Change Scope			For measurement of ionizing radiation intensity using semiconductor detectors, see S03-G02B2G.	For novel semiconductor detectors per se, S03-G02B2G and U12.	
S03-E06H5B	Change Scope			For measurement of ionizing radiation intensity using scintillation detectors see S03-G02B1.	For novel scintillation detectors per se, S03-G02B1.	
S03-E09C7	Change Title	Chromatography and electrophoresis detectors	Chromatography detectors			
S03-E10A3	Change Scope			Includes e.g. ion mobility spectrometers. Also includes Coaxial Impact Collision Ion Scattering Spectrometer.	Includes Coaxial Impact Collision Ion Scattering Spectrometer.	
S03-E10A5	Change Scope			Include ion trap mass spectrometers.		
S03-E13B	Change scope/search			Also includes sampling of granular solids, e.g. sand, flour, salt etc.	NONE	Sand, flour, water, liquid
S03-E13B9	Change Scope			Includes sampling of suspensions from liquids, gases or other fluent materials, e.g. exhaust gas particulate sampling.	NONE	
S03-F04	Change Scope/Search			Includes e.g. measurement of wettability.	NONE	Surface tension, Fick's law, solder wettability

S05 Electrical Medical Equipment						
S05-A03X	Change search terms					brachytherapy
S05-A05	change scope			Not steam baths, saunas, etc. they are in S05-A09 only. Includes massagers using ultrasound. See W04-X01A for sports training equipment. See X27-A02A2 for massage/vibrators.	NONE	
S05-A05A	change search term					cardiac wrap/harness, pump, squeeze, pressure
S05-A09	Change title	Other e.g. speech therapy, relaxation therapy	Other (relaxation therapy)			
S05-B04	Change title/scope	Monitoring during surgery	Monitoring patient during surgery	For monitoring of patient during surgery, see S05-B04B.	Note that both S05-B04 and S05-B04A can be used in conjunction if location of surgical instruments and patient are both being monitored".	
S05-B04A	Change title/scope	Monitoring of surgical apparatus/procedure	Monitoring location of surgical instruments	For monitoring status of surgical equipment during surgery, e.g. temperature of cauterisation appts., power used by ablation appts. etc. Also for monitoring progress of surgical procedure itself, e.g. amount of tissue removed, status of tissue surrounding	Includes equipment for tracking the location of surgical instruments inserted into patient, and monitoring location of instruments in the operating theatre, e.g. instruments tags, swab counters etc."	
S05-C	Change scope			These codes cover electrical aspects only. See S03-E13 codes for sampling, S03-E14H codes for specific sample types and other relevant S03 codes for specific testing techniques.	This code covers electrical aspects only. See also S03 E14H codes.	
S05-D01A2	Change scope/search			Includes measurement of neurological bioelectric currents and signals e.g. electroencephalography, electromyography, magnetoencephalography etc.	Includes measurement of neurological bioelectric currents and signals e.g. electroencephalography, electromyography, magnetic fields etc.	EMG, EEG, MEG, Squid
S05-D01C5A	Change scope			Includes fingerprint identification, driver alertness sensors and determining eye movements for use in controlling aircraft, etc.	Includes fingerprint identification, and determining eye movements for use in controlling aircraft, etc.	
S05-D01K	Change search term					cystometer
S05-D02A5B	Change search term					fluoroscopy, feature
S05-D02B3	Change scope			See also S03-E09X for contrast agents.	NONE	
S05-D09	Change search term					fetus, ovulation, gender, conception
S05-D09	Change Title/Scope	Other electrical diagnosis	Other (Electrical diagnosis, e.g. for pregnancy)	Including aspects of diagnosis associated with pregnancy e.g. conception, sex and ovulation determination. Includes measurements associated with nutritional management systems, e.g. diet planners, calorie counters.	Including aspects of diagnosis associated with pregnancy e.g. conception, sex, and ovulation determination.	
S05-E03	Change Title/Scope	Diagnostic equipment and measurements e.g. X-rays		Includes all electrical equipment for dental diagnosis and measurement. Includes initial electrical measurements for dental prosthetics design.	See S05-D02 for radiation diagnosis in general.	
S05-G02G2	Change Search					health care scheduling, health insurance, health cover
S05-Y01	Change Title	Testing and monitoring of medical equipment and systems	Testing of medical equipment and systems	Includes methods and apparatus for alerting an operator when an abnormality occurs in an electrical medical apparatus.		
S06 Electrophotography and Photography						
S06-A01A9	change scope			Includes aspects of photoconductive belt not covered by other S06-A01A codes. Applying lubricant to drum/photoconductor surface. Also includes details for facsimile photoconductor layers.	Includes aspects of photoconductive belt not covered by other S06-A01A codes	
S06-A03G3	change title/scope/search	Determining details of original document		Density and size measurement, color, page width/length, see also S02-A03B2 for length/width/thickness measurements	Includes sensors for determining details of original document to enable automatic or manual adjustment of copying condition settings	
S06-A04C	change scope			Codes in this section cover materials per-se and their mfr. Only. Includes toner details for electrophotographic facsimile and laser printer.	Codes in this section cover materials per-se and their mfr. On	
S06-A04X	change scope			Storing waste toner for disposal.	NONE	
S06-A10A	change search term					Surface, brush, lube block
S06-A19B	change scope			See also X25-L05 for fans.	NONE	
S06-B09	change search term					Radiate, beam, colour, cassette, medical, tomography, photobooth, separate flash units and lighting units, photothermography.

CODE (max. 10 chars incl. spaces)	NOTE (see Comment Box)	NEW TITLE	ORIGINAL TITLE	NEW SCOPE NOTES	ORIGINAL SCOPE NOTES (only include if scope notes are to be changed)	KEYWORDS/SEARCH TERMS
Section T						
T01 Digital Computers						
T01-H01B3A	change scope			Search together with other T01-H01B3 codes for type, see also T04-K. for removable memory.	Includes smart card and integrated circuit memory card. See T01-H01C1 for card fraud protection, and T04-K for smart card construction.	
T01-H01B3A	Change Search Term					(remove SIMM) Add MMC, SD, CF, Memory Stick
T01-J07D1	Change Scope			See T01-J07D3 for vehicle Guidance	Includes aerospace, shipping. See also T01-J06B and T06-B01 for vehicle guidance. See also X22 codes and T01-J07C1 prior 2002. Previous code: T01-J07C.	
T01-J08A	Change Scope				For e.g. automatic camera control, copier functions. Using dedicated, integral microprocessor. See also code for specific apparatus.	
T01-J10X	Change Scope			See T01-H7C3B between 1997 and 2002. See T01-N01D1B post 2002	Includes image transmission prior to 1997. See T01-H07C3B post 1997.	
T01-J12C	Change Scope			(remove mention of physical security measures) For physical Security measures see T01-L02E	Preventing unauthorised access to files and processing systems such as anti-hacking and copy protection; prevention of physical removal of computer terminals and peripherals; physical, mechanical and electronic security systems for computers. See also T01	
T01-J15A	change scope			See also U11 or V04. Includes CAD systems for mask	NONE	
T01-J15B	Change Scope			Includes fault finding techniques	NONE	
T01-J30	change scope			For details of media systems see W03-G03C1	NONE	
T01-N01D2	change scope			For transfer of files other than multimedia. Includes downloading non-internet executable programs, as well as web page transfer. Includes the transfer of Instant Message (IM) data between users in real time.	For intranet and internet documentation and web page transfer, see T01H07C3C prior to 2002. Previous code: T01-H07C3C.	
T01-N02B1B	Change Scope			add Network Security Administration to scope notes	Includes access file/folders and restricted areas using a password, see T01-J12C prior 2002.	
T01-N02B2A	Change Scope			add cookie, search term	Includes monitoring a user(s) activity on a computer/network	
T03 Data recording						
T03-A03C9C	Change scope	Spacer layer		Includes conductive non-magnetic layer between magnetic layers.	Includes conductive layers and non-magnetic layers between magnetic layers	
T03-A03C9E	Change scope	Tunnel barrier layer		Includes insulating non-magnetic layer between magnetic layers.	NONE	
T03-A03C9J	Change Scope	Shielding layer		Used for internal shielding layers of magnetoresistive heads only. For other shielding aspects see T03-A03J7A.	NONE	
T03-A05C8	Change Scope	Connections to read/write head		Prior to 200501 this was covered by T03-A05C3 and T03-A06C.	Includes wiring formed on head support arm.	
T03-A06X	Change Title	Other recording circuitry and methods	Other recording circuitry			
T03-A07	Change Title	Re-recording	Re-recording, write/erase protection	Prior to 200601 this section included write/erase protection. From 2006 hardware aspects of write/erase protection for all types of recording are transferred to T03-H07 while signal format and signal processing methods are covered solely in T03-P07. T03		
T03-B01E3G	Change Scope	Pressing		Includes bonding of multiple substrates and setting resins as well as sheet stamping methods. See T03-B01E3X for punching hole in substrate after pressing.	NONE	
T03-B02A4	Change Scope	Tilt correction		Covers arrangements involving movement of lens or using other optical systems e.g. liquid crystal element. Search in conjunction with T03-B06 codes for compensation by signal processing.	Covers arrangements involving movement of lens or using other optical systems e.g. liquid crystal element.	
T03-B02B7	Change Title	Optical systems, optical elements	Beam splitter, polariser, other optical elements			
T03-B02C	Change Scope				Covers arrangements for reading or writing without physical movement of either record carrier or head, e.g. by optical beam scanning. Does not cover optical static stores, which are covered by U14-A02 codes	
T03-B10A	Change Search Term	Disc Drive				CD, CD-ROM, CD-R, CD-RW, DVD, DVD-ROM, DVD-R, DVD-RW, DVD-RAM, DVD+R, DVD+RW, HD-DVD, BD-ROM, BD-R, BD-RW
T03-D01A5J	Change Search Term	Domain wall displacement system				memory layer, switching layer, displacement layer, control layer, reading layer, MAMOS, magnetically amplifying magneto optical system

T03-E01B5	Change Title/scope	External feeding apparatus	External feeding apparatus, e.g. for tape library	From 2006 library systems are no longer included here, being covered by T03-Q codes.	Also coded in T03-Q01.	
T03-F01A1	Change Scope	Disc shutter opener		Disc cartridge shutters per se are covered by T03-H01A5. Includes arrangements to extract disc from cartridge within drive for playback/reproduction.	Disc cartridge shutters per se are covered by T03-H01A5.	pin, tab, lever
T03-F01F1	Change scope	Feeding from stack within recording apparatus		Includes jukebox systems. Feeding systems from external stack (apart from library systems) are covered by T03-F01F5. Library systems are covered by T03-Q codes.	Includes jukebox systems. Library systems are covered by T03-F01F5.	
T03-F01F5	Change Scope	Feeding from stack or system external to equipment per se		From 2006 library systems are no longer included here, being covered by T03-Q codes.	Includes library systems feeding single carrier from a stack or 'filling cabinet' arrangement external to the recording/playing equipment per se. All aspects of library systems are coded in T03-Q codes, e.g. T03-Q05 codes for disc-based systems. Feeding fr	
T03-F02X	Change scope	Other disc drive details		Includes internal connectors, e.g. between drive assembly and PCB. Prior to 2005 this code included external interfacing connectors, which are now covered in T03-M07. Includes arrangements for lubricating carriers within disc drives. For lubricating arr	Includes connectors (see V04 codes also).	
T03-H01B8A	Change Scope	Loading cassette with tape		Includes arrangements for cutting tape and attaching leader, gripper or buckle etc.. For novel gripper or buckle arrangements per se, see T03-H01B9.	NONE	
T03-H01B9	Change Scope	Other end-to-end cassette details		Includes attachments to tape leader for gripping etc..		
T03-M07	Change Scope	Interfacing, connectors		Covers external interfacing and connectors, e.g. between drive and other equipment, only. Interfacing for magnetic drives and optical drives are covered in T03-A10 and T03-B08 respectively, and is not coded here. See V04 codes also.	Interfacing for magnetic drives and optical drives is covered in T03-A10 and T03-B08 respectively, and is not coded here. See also V04 codes.	
T03-N	Change Scope	Recorder types		Notes (1) Codes in this section are applied to indicate equipment type only, and do not themselves indicate novel features; (2) It is not intended that the codes be used in isolation, but rather to restrict the scope of other T03 codes; (3) From 9201, T03	Notes (1) Codes in this section are applied to indicate equipment type only, and do not themselves indicate novel features; (2) It is not intended that the codes be used in isolation, but rather to restrict the scope of other T03 codes (3) From 9201, T03	
T03-N01	Change Scope	Disc		Delete existing scope note from manual	Delete existing scope note from manual	
T03-P07	Change Title/ scope	Signal processing to restrict or monitor access, writing, erasing or copying	Signal processing to prevent or monitor copying	From 9701 the title of this code is expanded to reflect the previous inclusion of 'copy marking' techniques (now covered by T03-P07C), as well as arrangements making copying impossible (T03-P07A). See T03-A07 codes for anti-copying aspects specific to mag	From 9701 the title of this code is expanded to reflect the previous inclusion of 'copy marking' techniques (now covered by T03-P07C), as well as arrangements making copying impossible (T03-P07A). See T03-A07 codes for anti-copying aspects specific to mag	
T03-P07A	Change Title	Signal processing to prevent unauthorised access or copying				
T04 Computer Peripheral Equipment						
T04-F01	change scope			For typewriter keyboards see also T04-G. For switch and key actuation aspects see V03-C01, cross reference T01-C02A for keyboard interface. Virtual keyboards are coded in T01-C02B1 only.	For typewriter keyboards see also T04-G. For switch and key actuation aspects see V03-C01, cross reference T01-C02A keyboard interface, virtual keyboard T01-C02B1D.	
T04-G04	change scope			For line projection onto photosensitive medium which is then electrophotographically developed, see S06-A03B also. If light deflection or modulation aspects are claimed, then see V07-K codes also. For facsimile see W02-J02B2. See S06-A04C codes for toner	For line projection onto photosensitive medium which is then electrophotographically developed, see S06-A03B also. If light deflection or modulation aspects are claimed, then see V07-K codes also. For facsimile see W02-J02B2.	
T04-G06B	change scope	Finishing apparatus		Includes stapling, binding, laminating, etc. See also S06-A18 for copier apparatus, W02-J05B for fax and S06-C05 for industrial process. For devices independent of printer see T04-J02.	Includes stapling, binding, etc. See also S06-A18 for copier apparatus; W02-J05B for Fax and S06-C05 for industrial processes. For devices independent of the printer see T04-J02.	
T04-H03	change title	Arrangements for other visual indicators	Control arrangements for other visual indicators			
T04-H03C9	change scope	Other display types		head mounted display, use of micromechanical flags/structure	Head mounted display, electrophoretic, digital micromirror display	
T04-K01	change scope	Smart media details		Includes all construction aspects of smart media	Card with encapsulated microprocessor and memory. For memory cards, PC cards see T01 codes.	
T05 Counting, Checking, Vending, ATM and POS Systems						
T05-H05E	Change search terms					Gambling, prize, reward, award, win, lose, skill, AWP, amusement-with-prizes, slot machine, pinball, pachinko

CODE (max. 10 chars incl. spaces)	NOTE (see Comment Box)	NEW TITLE	ORIGINAL TITLE	NEW SCOPE NOTES	ORIGINAL SCOPE NOTES (only include if scope notes are to be changed)	KEYWORDS/SEARCH TERMS
Section U						
U11 Semiconductor Materials and Processes						
U11-C04J	Change search					Soft lithography
U12 Discrete Devices						
U12-A01A1X	change scope			From 2006 see U12-A01A1E for polymeric and organic LEDs.	Includes polymeric and organic LEDs (OLEDs), see also U12-B03C for organic aspects.	
U12-A01A4A	change scope			Covers all special package adaptations specific to white LEDs e.g. phosphor (see also U12-A01A4B for phosphor aspects).	Covers all special package adaptations specific to white LEDs e.g. phosphor.	
U12-A02A2X	change scope			From 2006 see U12-A02A2D for devices using polymeric and organic layers.	For devices using organic materials see also U12-B03C. For tandem solar cells see U12-A02A4C.	
U12-A02B5X	change search					REMOVE TERM "organic"
U12-B03C	change scope			Excludes chemical or pressure-sensitive transducers (see U12-B03E). For LEDs, Solar cells and photoreceivers with organic layers see U12-A01A1E, U12-A02A2D and U12-A2B5E respectively.	Excludes chemical or pressure-sensitive transducers (see U12-B03E).	
U12-B03E	changed scope			See also appropriate codes in S02, S03 and V06 classes. For non-semiconductor piezoelectric elements/transducers see V06 codes only. Includes e.g. pressure sensitive (see also S02-F04B3), piezoresistive, and chemical sensors. For manufacture see also U11-	See also appropriate codes in S02, S03 classes. Includes e.g. pressure sensitive (see also S02-F04B3), peizoresistive, and chemical sensors. For manufacture see also U11-C18C.	
U12-D01B9	change scope			Includes silicon unilateral/bilateral switch. From 1997 see U11-D01B4 for Shockley diodes and U11-D01B5 for static induced thyristors.	Includes silicon unilateral/bilateral switch, Shockley diode, static induced thyristor.	
U12-D02A9	Change Scope/search			Includes e.g. vertical MOS, U-Shaped grooved MOS, double diffused MOS, Schottky barrier source and drain MOS. For superconductive FET see also U14-F02B. From Jan 2006 see U12-D02E for multigate MOSFETs.	Includes e.g. vertical MOS, U-shaped grooved MOS, doubled-diffused MOS, Schottky barrier source and drain MOS. For superconductive FET see also U14-F02B.	VMOS, UMOS, DMOS, DIMOS
U13 Integrated Circuits						
U13-A01F	Change scope			Includes optical filters, lenses. For complete optical filter manufacture see U11-C18D. For package window structures see U13-A01D and U11-D01C1.	Includes optical filters, lenses. For complete optical filter manufacture see U11-C18D.	
U13-E01	Change search					latch-up prevention
U14 Memories, Film and Hybrid Circuits						
U14-A03X	change scope			Includes e.g. memories based on electrochemical cell, organic films etc. For variable resistance memories see U14-A03H form Jan 2006.	includes e.g. memories based on electrochemical cell, variable resistance, organic films etc.	
U14-A04A	change scope			Add *use both U14-A04A1 and U14-A04A2 codes for memories using tunnel junction giant magnetoresistive elements*	Includes crossie random access memory, Bloch line memory element used for nonvolatile RAM.	
U21 Logic circuits, Electronic Switching and coding						
U21-A	Change Search					Encode, compress, predict
U21-A02	Change Scope			Search with U21-A04A for sigma-delta type.	NONE	
U21-A03	Change Scope			Search with U21-A04A for sigma-delta type.	NONE	
U21-A03F5A	Change Scope			Includes scaling and gain control arrangements, see U24-C codes for novel amplifier/gain control aspects.	NONE	
U21-A03F6D	Change Title	Sample modification	Sample rate conversion			
U21-A06	Change Scope			U21-A06 is the general place for error detection/correction however, for specific telecommunications application W01-A01B codes are only applied.	See W01-A01 also for error correction in data transmission, and T03-P01A for application to data recording.	
U21-A06A	Change Scope			Covers error detection/correction coding where a predetermined number of check bits are joined to a predetermined number of information bits.	NONE	
U21-A06A9	Change Title	Other block codes	Other			
U21-A06C	Change Scope			Covers error detection/correction coding where the coded sequence is algorithmically achieved through the use of current data bits plus some of the previous data bits from the incoming stream.	NONE	
U21-A06C9	Change Title	Other convolutional codes	Other			
U21-A06E	Change Scope			Covers error detection/correction arrangements where the data structure is re-organised to reduce errors.	NONE	
U21-A06X	Change Title	Other error detection/correction	Other			
U21-B01C	Change Scope			U21-B01C is not applied with U21-B02H for the mere fact that e.g. a triac is inherently bi-directional. U21-B02H is for novel bi-directional switcing arrangements.	NONE	
U21-C01A2	Change Search					ECL, EFL, BCL
U21-C03A3	Change Title/scope	Inverter circuit details	Inverters (logic)	Includes details of pulses for e.g. NMOS, CMOS, BJT inverters (see also U21-C01A, U21-C01B). For pulse aspects see also appropriate U22-D01 codes. Includes also modifications of threshold for gating or switching. Complete novel inverters are coded as logi	Includes details of pulses for e.g. NMOS, CMOS, BJT inverters (see also U21-C01A, U21-C01B). For pulse aspects see also the appropriate U22-D01 code. Includes also modifications of threshold for gating or switching.	

U22 Pulse Generation and Manipulation						
U21-G03C1A	Change Scope			For integration function see U22-G03C1G.	NONE	
U22-D01A1C	Change Search					Slicing
U22-G03	Change Scope			U22-G03 codes cover digital signal processing and networks and are split to cover constructional details (U22-G03A), digital sampling (U22-G03B), functions and performance (U22-G03C) and operation and application (U22-G03E). U22-G01 codes applied in addit	These codes cover digital signal processing in general. See U22-G01 codes in addition when concerned with digital filters.	
U22-G03A	Change Scope			This code covers constructional details including design, z-transform blocks, DSP block architectures, etc. Testing aspects are covered in U22-G03A1. Other U22-G03 are applied where applicable.	NONE	
U22-G03C1	Change Scope			U22-G03C1 codes are applied to highlight functions performed by digital signal processors/networks. These codes are to be used to highlight block level functions and not the overall application, see U22-G03E3 for overall application.	NONE	
U22-G03C1E	Change Scope			This code is applied to highlight the function of fetching values from memory locations and/or copying data from memory to memory.	NONE	
U22-G03C1X	Change Title	Other function	Other			
U22-G03C2X	Change Title	Other performance aspect	Other			
U22-G03E	Change Scope			These codes are used to highlight overall operation and application of a DSP system/network, i.e. the use of DSP blocks to perform e.g. Fourier transform, where the novelty may not be the blocks themselves but is the way the blocks are used to perform the o	NONE	
U22-G03E1	Change Scope			This code is applied to highlight general operation of digital signal processing/networks.	NONE	
U22-G03E3A	Change Title/scope	Noise reducing/cancelling	Noise cancelling	Includes echo reducing/cancelling. See W02-C01C1 codes for line systems and W02-C03E2 for radio systems.	NONE	
U22-G03E3X	Change Title	Other DSP application	Other			
U24 Amplifiers and Low Power Supplies						
U24-D01J	Change Title	Measurements/testing/monitoring	Measurements/testing			
U24-E01C7	Change Scope	Band gap reference circuits		Includes, generally, regulators using the difference between base-emitter voltages of two bipolar transistors operating at different current densities. For voltage reference circuits using feedback, see U24-E02B7	Includes, generally, regulators using the difference between the base-emitter voltages of two bipolar transistors operating at different current densities.	
U24-G03D5	Change Scope			For pre-distortion see U24-G03K and W02 codes.	NONE	
U24-G03K	Change Scope			For pre-distortion see U24-G03D5 and W02 codes.	Includes novel arrangements, to impart a particular characteristic e.g. logarithmic. (General aspects of log. amplifiers are coded in U24-G01F).	

CODE (max. 10 chars incl. spaces)	NOTE (see Comment Box)	NEW TITLE	ORIGINAL TITLE	NEW SCOPE NOTES	ORIGINAL SCOPE NOTES (only include if scope notes are to be changed)	KEYWORDS/SEARCH TERMS
Section V						
V01 Resistors and Capacitors						
V01-B01A1	Change Scope	Sintered		This code is assigned alone or with V01-B01A4 codes describing composition or manufacture of materials.	NONE	Sintered
V01-B01B	Change Title/Scope	Electrolytes and electrolyte manufacture; separators; containers	Electrolytes; separators; containers	From 2006 the scope of this code has been expanded to allow electrolyte compositions and electrolyte manufacture to be separately highlighted, and where neither of these aspects are novel, the solid or liquid / paste nature of the electrolyte to be indicated	NONE	
V01-B01B1	Change Title/Scope	Novel details of solid electrolytes	Solid electrolytes	This code has been subdivided to allow novel electrolyte compositions and electrolyte manufacture to be separately highlighted, these codes taking precedence over V01-B01B6A which is assigned to characterise the capacitor by the solid nature of its elect	NONE	
V01-B01B5	Change Title/Scope	Novel details of liquid or paste electrolytes	Liquid/paste electrolytes	This code has been subdivided to allow novel electrolyte compositions and electrolyte manufacture to be separately highlighted, these codes taking precedence over V01-B01B6C which is assigned to characterise the capacitor by the liquid or paste nature of	NONE	
V02 Inductors and Transformers						
V02-D	Change scope	Coils (incl. Connections); (de)magnetising		Includes general coils where an application is not clear. For coils designed for specific use, see the appropriate code. For example, see V02-F03B for hf coils. For high power coils, see X12-C codes.	Includes coils per se. For particular applications see V02-E, V02-F and V02-G. For power coils see X12-C.	
V04 Printed Circuits and Connectors						
V04-P	Change title	Appts. and processes for connector manufacture assembly, testing, repair	Appts. and processes for connectors manufacture, assembly, repair			
V04-Q02A4	Change title	Non-electrical components	Mechanical components	Includes structural association of PCB with non-electrical components e.g. heatsink clamps and optical components such as lens holders etc.		
V04-Q05A	Change title	Tracks layout design for EMI/RFI shielding or ESD	Track layout design for EMI/RFI shielding			EMI, ESD, RFI
V04-R01B	Change scope	Phototool		Includes all etching resist exposure methods and apparatus. For all other types of PCB exposure methods and apparatus see V04-R12.	NONE	
V04-R06G4	Change scope	Wireless fixture		Includes fixture having wires replaced by PCB.	NONE	
V04-R12	Change scope	PCB exposure		Includes all non-etching resist exposure methods and apparatus. See V04-R01B for etching resist exposure. For lamp details see X26 codes.	Includes all exposure details and used either on its own or in conjunction, where appropriate, with an end application, such as V04-R01A for exposing a photoresist for conductive materials removal. For lamp details, see X26 codes also.	
V04-S	Change title/scope	Electronic equipment casing/cabinet, and drawers		Includes casings for electronic equipment like computers, A-V apparatus, etc. Electrical equipment such as microwave ovens, etc are not included here. For insulating materials (see X12-E codes, too) designated for general electronic equipment or apparatus	For insulating materials (see also X12-E codes) designated for general electronic equipment or apparatus, prior to 1997 see V04-S codes. From 1997 onwards, see V04-X01B codes.	
V04-T	Change scope			This code is used only for electronic equipment such as computers, A-V apparatus, etc. Electrical equipment such as microwave ovens are not included here.	NONE	

V05 Valves, Discharge Tubes and CRTs						
V05-A01A1	Change Scope			Prior to 2005, tubes limited to displaying characters only in matrix form were covered by V05-A01A3C.	Tubes limited to displaying characters only in matrix form are covered by V05-A01A3C.	
V05-A01B	Change Title	Light emitting arrangements; phosphors	Light emitting arrangements			
V05-A01D	Change Scope			Includes novel shape or size of cells. Screens and filters not forming part of the vessel are covered by V05-A01F codes.	Screens and filters not forming part of the vessel are covered by V05-A01F codes.	
V05-A01D1	Change Search					Casing, housing, front plate, back plate, glass
V05-B05A3X	Change Scope			Includes cold cathode heat pumps and analogous devices.		
V05-C02B3A	Change Search					Radio frequency interference, choke, feedthrough, capacitor, condenser
V05-D01B	Change Search					Braun tube
V05-D01B1D	Change Search					Aperture grill
V05-D03C	Change Scope			Covers camera tubes sensitive to radiation other than visible light. (Electrical output/visible light input tubes are covered by V05-D02 codes). Note does not include photomultiplier tubes, see V05-G and K codes as appropriate.	Covers camera tubes sensitive to radiation other than visible light. (Electrical output/visible light input tubes are covered by V05-D02 codes).	
V05-D05B1	Change Scope			Includes manufacture of phosphor materials per se. Also coded in V05-M01A if suitable for screens in general. (Prior to 9201, search V05-D05B and V05-M01).	Also coded in V05-M01A if suitable for screens in general. (Prior to 9201, search V05-D05B and V05-M01).	
V05-D06A2	Change Search					Acceleration electrodes
V05-D06A3	Change Search					Lens electrodes, quadrupole
V05-D06A5	Change Search					Halo correction
V05-D06B1A	Change Scope			Includes manufacture of deflection yokes. Also coded in V02-F01A and W03-A08A1B unless TV receiver is specifically excluded. Note, convergence coils are covered by V05-D06B1.	Also coded in V05-F01A and W03-A08A1B unless TV receiver is specifically excluded. Note, convergence coils are covered by V05-D06B1.	
V05-D06E	Change Scope			For electron multipliers in general, see V05-K01 codes. (Prior to 9201 search V05-D06X and V05-K). See V05-L01A5A for manufacture.	For electron multipliers in general, see V05-K01. See V05-L01A5A for manufacture. (Prior to 9201 search 05-D06X and V05-K).	
V05-D07A	Change Search					
V05-D07A1	Change Scope/Search			Includes e.g. attaching mechanism of t-band to envelope.		Anti-implosion band, t-band, reinforcing, adhesive tape
V05-D07A5	Change Search					Glass panel, funnel, neck
V05-D07B	Change Search					
V05-D07B1	Change Search					Connecting pins
V05-D07B3	Change Scope/Search			Includes conductive coatings in general, where coating function or location (internal/external) is not disclosed or is irrelevant.		Discharge preventing coating, conductive coating touchscreen, front panel RFI filter
V05-D08C1	Change Search					EHT connection, anode cap, HV, anode button,
V05-D08C5	Change Search					CRT Rose
V05-E01	Change Title	Electron beam target-impact X-ray tubes and generators	X-ray tubes and generators			
V05-E01A3A	Change Title	Of separate target section	With separate target section			
V05-E01B5	Change Scope			For non-rotary anode cooling see V05-E01F.		
V05-E01C	Change Scope			Includes cathode supports.		
V05-E01D1	Change Scope			Includes all x-ray tube electron-optical systems.		
V05-E01H7	Change Search					Pulse operation
V05-E02	Change Scope/Search			See also S05-A03 and S05-D02A for medical therapy and diagnostic appts. respectively.	Includes power supplies. See also S05-A03 and S05-D02A for medical therapy and diagnostic appts. respectively.	
V05-E02C	Change Title/Search	Output control; tube protection	Output control			Exposure time control, dose control, measurement, monitoring, current
V05-E02C1	Change Search					Pulse operation
V05-E02C5A	Change Search					Measurement, moitoring, current
V05-E02C5C	Change Search					Dose control
V05-E03	Change Scope			For tube details, see also V05-M codes.	Includes devices using plasma, non-electron beam target-impact tubes (e.g. laser target-impact) and coherent X-ray laser sources (see also V08-B02). Includes non-standard extreme UV generation. For tube details, see V05-E04 and V05-M codes.	
V05-E04	Change title	Laser plasma X-ray/EUV sources		For application to lithography systems, see also V05-F08C1 and V05-F05 codes. See also relevant V05-M codes for novelty not included below. Prior to 2006, coded in V05-E03.		
V05-E08B	Change code to E08C in manual					
V05-F05C1	Change Scope			Includes all ionising arrangements located outside tube envelope. For conductive RF coupling internal to the tube, see V05-F05C2.		

V05-F05D	Change title/scope	Using scanning probe/tunnelling effects		Includes all analogous techniques, e.g. AFM. See also V05-F09C codes for lithography or recording techniques. Does not include microscopy, see V05-F01A5. Prior to 200501, processing using scanning probe/tunnelling effects was coded in V05-F01A5 in combin	Includes all analogous techniques, e.g. AFM. See also V05-F09C codes for lithography or recording techniques. Does not include microscopy, see V05-F01A5. Prior to 200501, processing using scanning probe/tunnelling effects was coded in V05-F01A5 in comb	
V05-F08E	Change Scope			Includes cleaning of specimen/workpiece, or e.g. resist		
V05-F08E5	Change title	Machining/milling	Machining			
V05-G	Change Title/Scope/Search	Photoelectric discharge tubes not involving gas ionisation; photomultiplier tubes	Photoelectric discharge tubes not involving gas ionisation	See also V05-K01 codes where electron multiplier arrangements of PMT are novel.		PMT, PM, Photomultiplier
V05-G01	Change Scope			Includes all novel photocathode materials, constructions etc. See also V05-D02/D03 codes for application to camera tubes/image converters or intensifiers.		
V05-H	Change Scope/Search			Includes only radiation or particle detectors where incident radiation causes gas ionisation detected via breakdown voltage. See also S03-G codes .	See S03-G codes for application	Geiger-muller tube, geiger counter, proportional counter tube, multi-wire proportional counters
V05-J01C	Change Scope/Search			Includes sample carriers. For vacuum locks search with V05-M05D codes.		Chamber, pressure, atomizing, sample injection
V05-L01B8	Change title	Screen electrodes	Screens			
V05-L03B	Change Scope			Manufacturing of coating materials per se is not treated as tube manufacture; see appropriate devices codes where relevant.	See also V05-D07B codes.	
V05-L03B1	Change Scope				See also V05-D07B3.	
V05-L03B3	Change Search					Anti-reflective, anti-glare
V05-L05A1	Change title	Plasma display panel/segment type display	Display			
V05-L05E	Change title	X-ray/EUV generators; ion tubes	X-ray generators; ion tubes			
V05-M03A	Change Search					Field emitters, field emission, FE
V05-M03A1	Change Scope/Search			Includes carbon nanotube based field emitters. Also covers cathode (or other electrode in conjunction with it) formed using semiconductor manufacturing techniques on e.g. silicon substrate.	Covers cathode (or other electrode in conjunction with it) formed using semiconductor manufacturing techniques on e.g. silicon substrate.	CNT, carbon nanofibre, nano-emitter
V06 Electromechanical Transducers and Small Machines						
V06-U09	Add Scope	Audio, video equipment		Includes digital cameras. For film based cameras see V06-U13 and S06 codes.		
V06-U13	Change Scope	Cameras		Includes film based cameras. For digital cameras see V06-U09 and W04 codes.		

V07 Fibre-Optics and Light Control						
V07-F01A1X	change scope			Includes holey fibres, photonic fibres and micro/nano structured fibres. Dispersion compensating and slope compensating fibres may also be coded here. U13-B03F and V06 codes may also be added for micro/nano structured aspects. See V07-K10C for photonic ma	Includes holey fibres, photonic fibres and micro/nano structured fibres. Dispersion compensating and slope compensating fibres may also be coded here. U13-B03F and V06 codes may also be added for micro/nano structured aspects.	
V07-F01A4	Change scope			Prior to Jan 2005 see V07-F01A. Includes photonic waveguides with novel structure. For photonic materials see V07-K10C, for photonic fibres see V07-F01A1X, and from 2006 see V07-F02D for all other photonic optical elements.	Prior to Jan 2005 see V07-F01A.	
V07-H02	Change Scope			Includes splice cases, distribution boxes, strain relief, heat shrinkable covers, clamps etc. For installation tools used with these fittings see also V07-H01.	Includes splice cases, distribution boxes, strain relief, heat shrinkable covers, clamps etc	
V07-H03	change scope			Includes details of optical fibres in underwater/underground/overhead power distribution network. For installation tools used on site see also V07-H01.	Includes details of optical fibres in underwater/underground/overhead power distribution network	
V07-H04	Change scope	Optical fiber excess management		Includes optical cable reels, trays, cable guides and supports for excess cable management, surface inlaid fiber optic installations and pre-assembled fiber-optic installation panels. From 2006 see V07-H04A for excess fibre management for fibre in use,	Includes optical cable reels, trays, cable guides and supports for excess cable management, surface inlaid fiber optic installations and pre-assembled fiber-optic installation panels. See also X12-G04A1 for reels for composite optical and electrical cable	
V07-H09	change scope/search			Includes all other aspects of cable installation not covered anywhere else. From 2005 see V07-H04 codes for Reels.	Includes all other aspects of cable installation not covered anywhere else	REMOVE "Reels"
V07-K10C	Change scope			Covers all novel photonic materials, including e.g. new band-gap technology/arrangements. For photonic fibres see V07-F01A1X, for photonic waveguides see V07-F01A4, and from 2006 see V07-F02D for all other photonic optical elements.		

CODE (max. 10 chars incl. spaces)	NOTE (see Comment Box)	NEW TITLE	ORIGINAL TITLE	NEW SCOPE NOTES	ORIGINAL SCOPE NOTES (only include if scope notes are to be changed)	KEYWORDS/SEARCH TERMS
Section W						
W01 Telephone and Data Transmission Systems						
W01-A01	Change Scope			Error correction coding in general is covered by U21-A06 codes.	For error correction and detection in coding systems, see U21-A06 also.	
W01-A01A	Change Search Term					ARQ, retransmission request, MIMO
W01-A01B	Change Scope			Generally-applicable error detection using codes, i.e. not specific to data communications, is covered by U21-A06 codes.	NONE	
W01-A01B1	Change Search Term			Covers coding where the final codeword is of fixed, finite length, e.g. cyclic block coding.		Party, cyclic, Hamming distance, BCH
W01-A01B1A	Change Scope			Includes the use of odd and even checking bits.	Includes the use of checking bits (odd an even).	
W01-A05B	Change Scope			This code covers authentication and identity verification in which data encryption is involved in some way. Verifying entitlement to access data networks is covered by W01-A06E1C, and is not assigned W01-A05B also unless some encryption aspect exists. App	Includes coding for checking ID in networks, and also systems applicable to ID cards and credit cards, where some novel data transfer aspect is involved. Applications such as password checking for computer access are not included, and are covered by T01-J	
W01-A06	Change Scope			Subject matter covered here has considerable overlap with class T01, especially in the case of computer communication aspects. Searching appropriate T01 codes, e.g. T01-H05, T01-H07, or T01-N codes, in conjunction with W01-A06 codes enables these topics t	Search with W01-A06F1 for access control. Subject matter covered here has considerable overlap with class T01, especially in the case of computer communication aspects. Searching appropriate T01 codes, e.g. T01-H05, T01-H07, or T01-N codes, in conjunction	
W01-A06C4A	Change Title	IEEE 802.15 radio link, including Bluetooth	Bluetooth radio interface			ZigBee, WPAN, IEEE 802.15x
W01-A06E	Change Scope			Includes hardware and software for control of transmission and reception of messages and/or data across a network. Network resource allocation is covered by W01-A06E and W01-A06A3. See also T01-N02B1A code for network management software.	Includes hardware and software for control of transmission and reception of messages and/or data across a network. See also T01-N02B1A code for network management software.	
W01-A06E1	Change Scope			Includes Media Access Control (MAC), see W01-A06G3 also. Network addressing as opposed to routing (i.e. for determining destination of packets, and not the route that they will travel) is covered in T01-N02A1A. From 2006, all aspects of routing are covered	Includes Media Access Control (MAC), see W01-A06G3 also. From 2002, routers are covered by W01-A06G5E.	
W01-A06F2	Change Search Term					Routing, mobile IP, IP multicast
W01-A06F3	Change Search Term					DNS/BIND, FTP, HTTP, NNTP, Network File System, SMTP, SNMP, Telnet, UDP
W01-A07	Change Scope			W01-A07 codes are intended for inventions in the field of data transmission of a generally applicable nature. Although W01-A07 codes may be used with W01-A06 (network) codes to highlight a specific aspect, (e.g. a power supply for a LAN is represented by	From 9701 the title of this code has been expanded to reflect its content and emphasise its use for inventions of generally applicable nature.	
W01-A07E	Change Scope			Prior to 2006 this code was used with W01-A07H1 to indicate optical fibre interfaces, now covered by W01-A07H4 alone. Data networks using fibre-optic and free-space optical links are respectively covered by W01-A06C1 or W01-A06C3. W02-C04 codes cover opti	See W02-C04 codes for optical communication in general and W01-A06C1 or W01-A06C3 for networks using fibre-optic and free-space optical links respectively.	

W01-A07H1	Change Scope			This code is intended for transmission of data through a wired medium, including serial and parallel interface. Prior to 2006 this code included optical fibre interfaces when used with W01-A07E. From 2006 interfaces of that type are covered by W01-A07H4.	Includes optical fibre interface, for which W01-A07E is also assigned.	RS-232, serial port, USB, universal serial bus, IEEE1394, firewire, i-link, RS-485, parallel port, centronics
W01-C01B8	Change Title	Keyboard and other manual input arrangements	Keyboard and key-switch details			
W01-C01B8H	Change Title	Manual input devices based on absolute position, including touch screens	Touch screen			Stylus, tablet
W01-C01D1	Change Search Term					DECT
W01-C01D1A	Change Scope			This code covers cordless telephone usable with one or multiple base station at the subscriber location.	NONE	
W01-C01D1E	Change Scope/Search			Covers personal cordless telephone usable with one or multiple distributed callpoints, solely provided by the service provider. See W01-C01D1A for cordless telephone handsets used with a base station at the subscriber location.	Covers personal cordless telephone usable with distributed callpoints. Cordless telephones for use with a single base station, e.g. for use at subscriber location only, are covered by W01-C01D1A.	CT2, CT3, JCT, PHS, Personal handyphone
W01-C01D3D	Change Search Term					PIN, ID, SIM, USIM
W01-C01F6	Change Title/Scope	Controlling built-in and external equipment in response to incoming call		60 From 2006 the scope of this code has been expanded to allow control, e.g. muting or pausing, of built-in audio, video, or other equipment in response to an incoming call, in addition to the previous usage for transmitting control signals to external equip	Includes arrangements for muting of A/V equipment or displaying message. See also W03 and W04 codes, especially W03-G05 codes.	
W01-C01F8C	Change Scope			Provides a dynamic profile of the user, visible to others, the user's availability, whereabouts and suitable methods of communication. System aspects of telephone call handling are covered by W01-C02B2N.	Provides a dynamic profile of the user, visible to others, the user's availability, whereabouts and suitable methods of communication.	
W01-C01G6H	Change Scope			This code covers phones providing direct one-to-one or one-to-many voice communication using Voice over IP (VoIP) over packet network. Telephone systems aspects are covered by W01-C05B4G.	This code covers phones providing direct one-to-one or one-to-many voice communication using Voice over IP (VoIP) over cellular packet network. Telephone systems aspects are covered by W01-C02B1 and W01-C05B3J.	
W01-C01G8A	Change Title/Scope	User interface management / menu-driven telephone set	Menu-driven telephone set	Covers telephone, especially of mobile type (W01-C01D3 codes also assigned in that case), in which particular features are accessible via a menu system or via a special user interface, e.g. using a reduced number of keys. Special function keys themselves	Covers telephones, especially of mobile type (W01-C01D3 codes also assigned in that case), in which particular features are accessible via a menu system, e.g. using a reduced number of keys. Special function keys themselves are covered by W01-C01B8K. Cont	GUI, pull down menu, window, split screen, icons
W01-C02A7	Change Scope			Includes overall control of operation and functions such as least cost routing (also coded in W01-C06A). Network resource allocation is covered by W01-C02A7 and W01-C02A1A. Radio resource allocation in general is covered by W02-C03E7 and when relating to	Includes overall control of operation and functions such as least cost routing (also coded in W01-C06).	Stored program, control, SPC, computer, microprocessor, microprogram, LCR
W01-C02B2E	Change Scope			This code is intended for the facility by which a subscriber can set up or cancel call diversion, and specify a number to which calls are to be routed without ringing of the subscriber's telephone. Call forwarding based on a call going unanswered is covered	This code is intended for the facility by which a subscriber can set up or cancel a call diversion facility, and specify a number to which calls are to be routed. Time-dependent operation of this feature is indicated by assignment of W01-C02B2J also. Call	Redial, redirect
W01-C02B2L	Change Scope			This code is intended for the facility by which a subscriber can set up call forwarding, and specify a number to which unanswered calls are to be forwarded. Call diversion without ringing is covered by W01-C02B2E and call barring is covered by W01-C02B2G.	This code is intended for the facility by which a subscriber can set up a call forwarding facility, and specify a number to which calls are to be forwarded. Call diversion is covered by W01-C02B2E and call Barring is covered by W01-C02B2G.	Redial, redirect
W01-C05B5A	Change Search Term					Subscription/cable TV, pay-per-view communication, karaoke, chatline

W02 Broadcasting, Radio and Line Transmission Systems						
W02-B08C	Change Title	Active and structurally-associated aerials, mast-head and general RF preamplifiers	Active aerials and mast-head amplifiers			
W02-B08C5	Change Title/Scope/Search	Mast-head and general RF preamplifiers	Mast-head amplifiers	This code has been expanded in scope to include RF preamplifiers in general, e.g. connected into an antenna cable at the receiver end, as well as amplifiers used at the antenna. RF amplifiers within communications receivers are covered by W02-G03A3.	NONE	Booster, preamplifier, LNA, low-noise amplifier
W02-C03C1	Change Scope			Application to telephone systems is indicated by assignment of W01-B05A1A for systems (with W02-C03C1A) or base stations (with W02-C03C1B), and by W01-C01D3 codes for subscriber telephones themselves (with W02-C03C1C). From 2006, roaming and registration	Does not include 'call-point' cordless telephone systems, which are covered by W02-C03C3 codes. Satellite telephone systems are regarded as cellular types and thus W02-C03C1 codes are assigned in addition to W02-C03B1 codes. Application to telephone systems	
W02-C03C1E	Change Scope			For location register details see W01-B05A1Q also. For mobile location determination in non-cellular systems see W02-C03C3F.	For mobile location determination in non-cellular systems see W02-C03C3F.	
W02-F05A1B	Change Scope			TV receiver aspects of descrambling are not included, being covered by W03-A16C3A.	See W03-A codes for receiver details.	
W02-F06B	Change Title	Stereophonic and multichannel sound TV	Stereophonic sound			
W02-F10A	Change Title/Scope	Video-on-demand, video-on-request and video-based systems	Video-on-demand and video-based systems	The title of this code has been expanded to allow the inclusion of video-on-request systems, covered from 2006 in W02-F10A1E.	Covers systems predominately of a video nature. Systems involving selection of predominately non-video programme material are covered by W02-F10C. From 2002 the title of this code has been expanded to better reflect its content, and to separate actual vid	
W02-G03A3	Change Scope			Novel RF amplifier details are also assigned U24-G01D and other relevant amplifier codes. From 2006, RF AGC is covered by W02-G03D3, previously coded as W02-G03A3 and W02-G03D.	For novel details of small-signal RF amplifiers search with U24-G01D.	
W02-G03A8	Change Scope			These codes are used, in conjunction with other W02-G03 codes as necessary, to represent receivers of homodyne, synchrodyne, 'zero-IF' or 'low-IF' type. Arrangements for suppression of offsets at the output of the mixer are also assigned W02-G03B4G_Dir	These codes are used, in conjunction with other W02-G03 codes as necessary, to represent receivers of homodyne, synchrodyne, 'zero-IF' or 'low-IF' type. Arrangements for suppression of offsets at the output of the mixer are also assigned W02-G03B4G.	
W02-G03B4G	Change Scope			This code relates to the reduction of offsets arising from limitations in receiver performance, especially DC offsets due to e.g. LO leakage in a direct conversion receiver, for which W02-G03A8A is also assigned. Correction of offsets, e.g. by AFC, arisin	This code chiefly relates to offsets arising in a direct conversion receiver, and as such is normally used with W02-G03A8 codes.	
W02-G03C	Change Scope			From 2006, W02-G03C5 is introduced to separately highlight IF amplifiers, and IF AGC is covered by W02-G03D5 (previously coded as W02-G03C and W02-G03D).	NONE	
W02-G03D	Change Scope			Also assigned U24-C01 codes. Prior to 2006 this code was used with W02-G03A3 for RF AGC and W02-G03C for IF AGC. These topics are now covered solely by the subdivision codes below.	Also assigned U24-C01 codes.	
W02-G03K3	Change Scope			Novel aspects of AD converters and AD conversion are covered by U21-A03 codes.	Novel AD converters are covered by U21-A03 codes.	
W02-J02B2	Change Scope			See also T04-G for printer type and S06-A01A codes for photoconductor details, S06-A04C codes for toner details	See also V07-K01 codes for optical modulator per se.	
W02-J02B2B	Change Scope			See T04-G04 for laser printing details.	NONE	
W02-J02B3	Change Scope			See T04-G02 for ink jet printing details.	NONE	
W02-J05B	Change title / scope	Finishing apparatus	Stapling, binding of output sheets.	Includes stapling, binding, laminating, etc. of output sheets. See also S06-A18 if for copier, and/or T04-G06B of for printer.	NONE	
W02-L07	Change Scope			This code covers the interception of communications using any medium, bugging of conversations using hidden microphones, laser reflection from windows etc., and also countermeasures to these techniques. For systems specific to telephone communications (wi	Covers arrangements to detect or prevent interception of communications by a third party, other than purely by scrambling or encryption, which in general is covered by W02-L05, and also detection of listening devices, e.g. by 'sweeping' for bugs and simi	

W03 TV and Broadcast Radio Receivers					
W03-A01B3	Change Scope			Novel RF amplifier details are also assigned U24-G01D and other relevant amplifier codes. From 2006, RF AGC is covered by W03-A03A3, previously coded as W03-A01B3 and W03-A03A. Amplifiers external to the receiver itself are covered in W02-B08C5.	Also coded in U24-G01D and other relevant amplifier codes.
W03-A01B6	Change Title	Direct conversion and low-IF receivers			
W03-A03A	Change Scope			Prior to 2006 this code was used with W03-A01B3 for RF AGC and W03-A03B for IF AGC. These topics are now covered solely by the subdivisions below.	For RF AGC search with W03-A01B3, AGC circuits specific to IF amplifiers are also coded in W03-A03B. AGC circuits in general are assigned U24-C01 codes.
W03-A03B	Change Title/Scope	TV receiver IF system	IF amplifier stages	From 2006, W03-A03B5 is introduced to separately highlight IF amplifiers, and IF AGC is covered by W03-A03A5 (previously coded as W03-A03A and W03-A03B).	Novel amplifier stages are also coded in U24-G01D.
W03-A08A6	Change Scope			Covers suppression of magnetic, electromagnetic, or electric fields for EMC or health and safety considerations. See W03-A09 codes also for constructional aspects. Compensation for effects of external magnetic fields is covered by W03-A08A4 for de-matnet	Covers suppression of magnetic, electromagnetic, or electric fields for EMC or health and safety considerations. See W03-A09 codes also for constructional aspects. Compensation for effects of external magnetic fields (especially terrestrial magnetism) is
W03-A08J	Change Scope			Novel aspects of electroluminescent displays are covered by U14-J codes. OLED displays are assumed to use 'organic light emitting devices' and are therefore coded here unless specific mention is made of 'light emitting diodes'.	Novel aspects of electroluminescent displays are covered by U14-J codes.
W03-A10	Change Scope			Teletext transmission system aspects are covered by W02-F05B codes. Non-television text equipment (e.g. receiving text information over telephone line) is not coded here, unless interfacing equipment such as a modulator is being used to insert the text in	Teletext transmission system aspects are covered by W02-F05B codes. Non-television text equipment (e.g. receiving text information over telephone line) is not coded here, unless interfacing equipment such as a modulator is being used to insert the text in
W03-A11B	Change Title	Standard recognition circuits and switching	Standard recognition circuit		
W03-A11B1	Change Scope			Covers control aspects to select appropriate demodulator, or other signal processing stage. Includes use of standard recognition circuits in switching receiver circuitry.	Covers control aspects to select appropriate demodulator, or other signal processing stage.
W03-A11K3	Change Scope			Novel aspects of AD converters and AD conversion are covered by U21-A03 codes.	Novel AD converters are covered by U21-A03 codes
W03-A11X	Change Scope			Includes multiple analogue standard reception. Receivers for both digital and analogue reception are coded in W03-A11G1.	NONE
W03-A13G	Change Scope			From 2006 character generation aspects are covered in W03-A10C codes.	Includes display arrangement for channel number, volume level, etc. using insertion of e.g. graphics. See W03-A10C1 for use of teletext character generator in on-screen display systems, and W03-A01C for tuning displays. Prior to 2002 OSD and more general
W03-A16C5G	Change Title	For game playing, virtual reality, or karaoke	For playing game		
W03-A16C5K	Change Scope			Includes reception of Internet TV broadcasts, which is also assigned W03-A16C5A.	For access to internet
W03-A18A5	Change Title/Scope	Time programming, channel control and programme guide control	Time programming	Covers use of programme guide to present suitable channels for viewing to user. Recording aspects of time programming are covered by W04-E04C codes in conjunction with the appropriate W04-B, W04-C and/or W04-F codes.	NONE
W03-A20	Change Scope			Includes antenna details	NONE
W03-B01A3	Change Scope			Novel RF amplifier details are also assigned U24-G01D and other relevant amplifier codes. From 2006, RF AGC is covered by W03-B02A3, previously coded as W03-B01A3 and W03-B02A. Amplifiers external to the receiver itself are covered in W02-B08C5.	NONE
W03-B01A6	Change Title/ Scope	Direct conversion and low-IF receivers	Direct conversion broadcast receiver	These codes are used, in conjunction with other W03-B01A codes as necessary, to represent receivers of homodyne, synchrodyne, 'zero-IF' , or 'low-IF' type. Arrangements for suppression of offsets at the output of the mixer are also assigned W02-G03B4G, Di	Direct conversion communications receivers are covered by W02-G03A8 codes and TV receivers of this type by W03-A01B6.
W03-B02A	Change Scope			Prior to 2006 this code was used with W03-B01A3 for RF AGC and W03-B02B for IF AGC. These topics are now covered solely by the subdivisions below	Also coded in U24-C01 codes.
W03-B02B	Change Title/Scope	Broadcast receiver IF system	IF amplifier	From 2006, W03-B02B5 is introduced to separately highlight IF amplifiers, and IF AGC is covered by W03-B02A5 (previously coded as W03-B02A and W03-B02B).	Novel HF amplifier circuits are also coded in U24-G01D (and other U24-G codes as appropriate).
W03-B02C3	Change Title/Scope	Stereophonic decoders and stereo separation control	Stereophonic decoders	From 2006 the title of this code is expanded to distinguish novel stereo decoders and automatic control of separation, e.g. by blending, whether performed within the decoder or in a subsequent stage.	See U23-P05 for stereophonic decoders in general. Stereophonic transmission systems, including RDS aspects, are covered by W02-E codes.

W03-B02C3A	Change Title/Scope	Automatic stereo switching and stereo separation control	Automatic switching	This code covers switching between stereo and mono modes, e.g. in response to low signal strength, and automatic control of separation, e.g. by blending, whether performed within the decoder or in a subsequent stage including audio amplifiers. Receiver no	Includes circuits responsive to e.g. low signal-to-noise ratio to either switch to monaural mode, or reduce channel separation. See W02-G03B codes for noise reduction.	Cyrillic, Kanji, Kana, Hangul, Arabic, shift JIS
W03-B07C	Change Scope			Novel aspects of AD converters and AD conversion are covered by U21-A03 codes.	Novel AD converters are covered by U21-A03 codes	
W03-B08	Change Title/Scope	RDS and related systems radio receiver	RDS radio receiver	This code is assigned for all aspects of RDS and similar-system receivers. Prior to 9701, W03-B02C5 codes were used for inventions involving RDS-type decoders and their use in a broad sense. From 9701 only inventions strictly relating to the decoder per s	This code is assigned for all aspects of RDS and similar-system receivers. Prior to 9701, W03-B02C5 codes were used for inventions involving RDS-type decoders and their use in a broad sense. From 9701 only inventions strictly relating to the decoder per s	
W03-G05	Change Title/Scope	Remote control, general control, general displays and interconnection	Remote control and interconnection	From 2006 the title and scope of this code is expanded to include control and display aspects of AV equipment in general, these topics being respectively covered in W03-G05E and W03-G05G codes.	NONE	
W03-G05C1	Change Title/Search	AV home network	AV 'bus' systems			
W03-G09	Change Scope			Prior to 200601 this code included recycling and packaging aspects. This topic is now covered in W03-G10	NONE	

W04 Audio/ Visual Recording and Systems

W04-F	Change Title	General video signal recording	TV signal processing for recording/reprodn.			
W04-F01	Change Title	Video signal processing for recording	Equalisation; signal transformation; (de)modulation			
W04-G04	Change title	Audio signal dynamic range and frequency control, other effects				
W04-G04A	Change title/scope	Audio signal dynamic range control		Includes AGC, compression, expansion, limiting and companding schemes. See also U24 codes.		
W04-G	Change Title/Scope	Audio signal processing, mixing and studio equipment	Audio signal processing; signal mixing	W03-C and W03-G codes are used as appropriate to convey additional information regarding audio equipment.	Includes audio mixing and processing in e.g. sound studio, and for general application.	
W04-H01C	Change search term					metadata
W04-N	Change Title	Video special effects and manipulation, TV studio equipment	TV studio equipment and circuitry			
W04-Q01B7	Change Scope			Laser aspects are covered by W04-Q01B1. See also appropriate codes in X26 for light sources, reflectors, etc. For light source testing and monitoring search in conjunction with W04-Q01J.	Laser aspects are covered by W04-Q01B1. See also appropriate codes in X26 for light sources, reflectors, etc.	
W04-V10G1C	Change Scope			Covers arrangements using e.g. discrete Fourier Transform (DFT), discrete cosine transform (DCT) and modified discrete cosine transform (MDCT). Includes AC-2 and perceptual audio coding (PAC). Also includes AAC coding used in MPEG2 and MPEG4 standards (Covers arrangements using e.g. discrete Fourier Transform (DFT), discrete cosine transform (DCT) and modified discrete cosine transform (MDCT). Includes AC-2 and perceptual audio coding (PAC).	
W04-V10G1J	Change Scope			Covers arrangements to reduce redundancy and irrelevancy of multichannel signals in order to reduce overall bitrate. Includes AC-3, MPEG-2 multichannel coding and AAC (see also W04-V10G1C).	Covers arrangements to reduce redundancy and irrelevancy of multichannel signals in order to reduce overall bitrate. Includes AC-3 and MPEG-2 multichannel coding.	
W04-X03G1	Change Title	Theatre, auditorium, concert equipment	Theatre equipment			

W05 Alarms, Signalling, Telemetry and Telecontrol						
W05-B01	Change Scope			Search with X22-D03 also to distinguish inventions relating to vehicle theft alarms. Antitheft systems for vehicles, or other applications, not including alarms are excluded from W05-B01 codes.	NONE	Personnel presence detection, restricted area monitoring, patient/detainee absconding detection
W05-B01A5C	Change Scope			This code is used either alone, or with W05-B01A5B in the case of transponder-based systems, and concerns monitoring to determine that an item to be protected is within a desired range of an individual or specified point. Analogous systems for protection	This code is used either alone, or with W05-B01A5B in the case of transponder-based systems, and concerns monitoring to determine that an item to be protected is within a desired range of an individual or specified point. Analogous systems for protection	
W05-B02C	Change Scope			Covers fire alarm actuation by breaking glass, or conductors.	Includes e.g. breaking glass on alarm.	
W05-B02D	Change Scope			Covers fire alarm actuation by thermally-responsive switch, or similar.	Includes thermally responsive switch.	
W05-B05B5	Change Scope			This code covers the use of the internet as an alarm signal transmission medium. As such, 'internet' codes in W01-A06B7 are not normally used, unless some novel aspect from a data communications viewpoint is involved. Use of other, e.g. private, data tran	This code covers the use of the internet as an alarm signal transmission medium. As such, 'internet' codes in W01-A06B7 are not normally used, unless some novel aspect from a data communications viewpoint is involved.	
W05-D02	Change Scope			This code covers multiplexing and multiple-access schemes, especially as used in data networks. To highlight novel aspects of such systems, W01-A and W02-K codes are also assigned as appropriate, e.g. W01-A06F1 codes which highlight access control proto	The title of this code has been expanded from 2002 to better reflect its coverage for multiplexing and multiple-access schemes, especially as used in data networks. To highlight novel aspects of such systems, W01-A and W02-K codes are also assigned as app	
W05-D06A5	Change Scope			This code is primarily intended for transmission of remote monitoring or control signals through air or similar gaseous medium. Systems involving sonic or ultrasonic transmission with a mechanical connection - including transmission through water - are c	Systems involving sonic or ultrasonic transmission with a mechanical connection are covered by W05-D06M codes. Sonic or ultrasonic communication in general is covered by W02-C07 codes.	
W05-D06M	Change Scope			This code covers the transmission of measurement or control signals through water or other liquids. Systems involving sonic or ultrasonic transmission without a mechanical connection, e.g. via the air, are covered by W05-D06A5.	Systems involving sonic or ultrasonic transmission without a mechanical connection, e.g. via the air, are covered by W05-D06A5.	
W05-D07X	Change Title/Scope	Other application of telemetry and telecontrol systems.	Other	Prior to 2006 this code was assigned chiefly for application to oil rigs and drilling, which is now covered by W05-D07H.	Includes application to oil rigs.	
W05-D08L	Change Title	Learning' type and 'universal' remote controllers	Learning' type remote controllers			
W05-E05B	Change Scope			This code covers back and edge lighting of displays, especially LCDs, in which case U14-K01A4C is also assigned, but also the lighting of any translucent or transparent information source, such as advertisements, also assigned W05-E03A1. Note that backli	The title of this code has been expanded from 2002 to better reflect its coverage. Light sources per se are in X26.	
W06 Aviation, Marine and Radar Systems						
W06-B01A1	Change search term					Speed, power, flow, starting
W06-B02A5	Change title/scope/search	For baggage inspection or tracking	For baggage inspection	Includes all electrical aspects associated with baggage security.	Includes use of transponder tags or bar-code reader. See S03-C03 and S03-E06B codes also for inspection.	Smuggling
W06-B09	Change scope/search			Includes other aircraft and space craft systems not covered elsewhere, such as antistatic or RF screening. From 2006, aircraft types are covered by W06-B15 codes, though 'other' aircraft types such as balloons, airships, and gliders remain searchable in W	Balloons, gliders, parachutes, Protective coating for antistatic or RF screening purposes	Protective coating for antistatic or RF screening purposes
W06-C09	Change search term					Diving equipment, diver communication systems, buoys

CODE (max. 10 chars incl. spaces)	NOTE (see Comment Box)	NEW TITLE	ORIGINAL TITLE	NEW SCOPE NOTES	ORIGINAL SCOPE NOTES (only include if scope notes are to be changed)	KEYWORDS/SEARCH TERMS
Section X						
X12 Power Distribution/ Components/ Converters						
X12-D01E	Change title	Ion/proton conductors	Ion conductors			
X12-D03E	Change scope				Includes screens to avoid potential gradients, and to reduce interference. Covers both electrostatic and electromagnetic fields' shielding into and out of the cable.	EMI shield, EMI screen, Electrostatic shield, Electrostatic screen
X12-D04	Change title	High power and low power cables	Power cables			
X12-D06	Change title/scope	Superconducting cable/materials	Super- or hyper-conductive cables or transmission lines	Includes superconducting materials and their manufacture, which are also covered by U14-F codes. Superconducting wire and line manufacture is covered by X12-D07 codes. Details of superconducting cables are covered by X12-D03 codes. Superconducting machine	Also includes all superconductive materials and their manufacture when superconductor cable is the stated use. For electrical (heavy current) applications, e.g. machines (X11-H05) or coils (X12-C05). Electronic aspects of superconductors are in U14-F.	
X12-E02C	Change scope due to error in printed manual			Includes a mixture where the organic material is a major constituent	Includes a mixture where the inorganic material is a major constituent	
X12-G02A	Change title	Cable or line connectors	Cable or line connectors (incl. Earthing connectors)			
X12-H01A3	Change scope			Includes the use of series reactors/superconducting coils (see also X12-C codes) etc. Applicable only to power lines.	Includes series reactors, superconducting coils, etc.	
X12-H01A4	Change scope			Filters in general are covered by U25-E codes. The use of this code is restricted for power lines. Filtering in converter systems is covered by X12-J01E.	Filters in general are covered by U25-E codes.	
X12-H01A7	Change scope			For general storage of electric energy, see X12-H06. This code involves the use of e.g. flywheels, batteries, pumped storage hydroelectric plants (see X11-B06, too)	For general storage of electric energy see X12-H06. This code involves the use of e.g. flywheels, batteries.	
X12-H01B1	Change scope due to error in printed manual			Includes connection to the utility mains or geographically distributed solar power, wind power, fuel cell power, gas microturbines, etc. See also U24-D and X12-J codes for power converter details.	Includes connection to the utility mains or geographically distributed solar power, wind power, fuel cells' power, gas microturbines, etc. See also U24-J and X12-J codes for power converter details.	
X12-H04	Change title/scope	Utility electrical measurements	Utility load measurements	Includes meters and metering/measuring arrangements relating only to electrical power systems covering generation, transmission and distribution. Also covers such measurements for domestic, commercial and industrial premises. See also S01 codes for all el	See also S01 for general electrical measurement arrangements. Includes arrangements for measurement of transients, overvoltages, overcurrents, power and inter-energy transfer, etc. Also includes recording of data at the time of fault. Also includes me	
X12-H04A	Change scope			Includes arrangements for obtaining meter readings from the customer premises-based meters. Customers, in this context, include domestic, commercial and industrial users. Does not cover arrangements for metering/measuring power line electrical values for	Includes remote telemetry, interrogating customer-premises meter. See also W05-D07 codes.	
X12-H05	Change scope			Includes not only network simulation but also modelling of the system to manage load demand/generation, predicting outcomes of operational parameter changes, etc.	Previous code: X12-H09	
X12-H06	Change scope			For pumped storage hydroelectric systems, see also X11-B06 and X12-H01A7 codes. This code includes systems using superconducting coils, etc. See also X16-L. Storage for load-balancing purposes is in X12-H01A7.	For pumped storage hydroelectric systems see X11-B09. This code includes systems using superconducting coils, etc. See also X16-L. Storage for load-balancing purposes is in X12-H01A7.	
X13 Switchgear. Protection, Electric Drives						
X13-G04	Change title/scope	Dyamo-electric brakes or clutches; non-static converters	Dynamo-electric brakes or clutches, transformers, non-static converters	For reactor/transformer controllers, see X12-C02B codes. For static converters, see X12-J01A and X13-G03 codes.	NONE	
X15 Non-Fossil Fuel Power Generating Systems						
X15-A02	Change scope			For more detailed breakdown of solar cells such as construction and their manufacture, see U12-A02A codes.	See also U12-A02A codes.	
X15-B03	Change scope			This code is used with other relevant codes to denote an offshore location, where disclosed	This code is used in conjunction with other codes as appropriate	
X16 Electrochemical Storage						
X16-L	Change Title/Scope	Other types of electric energy storage	Non-chemical storage of electric energy	Includes non-chemical and non-battery type of chemical storage of electric energy. See also X12-H codes for storage of excess generated energy. Does not include pumped storage hydroelectric systems. Includes flywheel storage systems.	See also X12-H06 for excess generated energy storage	
X16-L02	Change Scope			Includes capacitors of the type used for supplying power e.g. electrochemical double layer capacitor/supercapacitor (see also V01-B01D codes).	See also V01-B01D codes.	

X21 Electric Vehicles						
X21-A01D1	Change scope notes			Includes vehicle whose wheels are driven by both electric motor and e.g. internal combustion engine, including four wheel drive type vehicles where IC engine drives front wheels and electric motor(s) drive rear wheels. Also see X22-P04 and other relevant	Includes vehicle whose wheels are driven by both electric motor and e.g. internal combustion engine. Also see X22-P04 and other relevant X22 codes.	
X21-A01F	Change scope notes			Includes electric vehicles (EV) and fuel cell electric vehicles (FCEV). Can also be applied to indicate general or unspecified electric vehicle application. Unspecified vehicles using fuel cells are considered to be electric vehicles rather than motor veh	NONE	
X22 Automotive Electrics						
X22-E03	Change Title/Scope	Battery charging/condition indicators	Battery charging indicators	From 2006 this code has been expanded to include all vehicle battery warning/indicating aspects. Includes indication of remaining battery capacity (see also S01-G06A and X16-H01), or battery charging/discharging indication. Also includes warning that batt	NONE	
X22-E13	Change Title/Search	Collision-imminence warning/alarm	Collision-imminence alarm			Road marking sensor, lane marking sensor, deviation, collision warning display
X22-E13A	Change scope notes			Includes video image recognition of obstacles or road signs, e.g. to identify change of speed limits or hazards, road edges. For systems presenting actual video image of road to driver display, see X22-E09 instead.	Includes video image recognition of obstacles or road signs e.g. to identify change of speed limits or hazards, road edges.	
X22-J11	Change scope notes			Includes anti-submarining seats, flip-up roll over bars and roll over control arrangements. For airbags and seatbelt pretensioners see X22 X22-J07 and X22-J03B1 only. From 2005 active head restraints are coded in X22-J03A3A only. Also includes general pas	Includes anti-submarining seats, active head restraints (see X22-J03A also) and flip up roll over bars. For airbags and seat belt pretensioners see X22-J07 and X22-J03B1 only.	
X22-X08	Change scope notes			Includes general noise, vibration and harshness (NVH) control for improving comfort of vehicle occupants. For transmission based NVH control see X22-G03N only, and for engine based vibration noise reduction see X22-A12 or X22-A03X as appropriate. See also	See also W04-V.	
X23 Electric Railways and Signalling						
X23-A03	Change scope notes			Includes wood working; screw tighteners; general aspects of tools. For general control of machine tools see T06-D06 also. For systems for cleaning of workspace, e.g. for a combined sanding and dust extracting machine, also see X25-H05.	NONE	
X23-B04E	Change title	Warning and safety devices along route or between trains	Warning devices along route			
X24 Electric Welding						
X24-A09	Change title /scope	Other electrical soldering aspects	Other	Includes brazing; control and measurements. From 2006, solder feeding devices have been transferred to X24-A04.	Includes solder feeding devices; brazing; control and measurements.	
X24-B01	Change title	Seam and built-up arc welding	Seam and built-up welding			
X24-B04	Change scope notes			Includes welding rods, electrodes, materials and media. Also includes all aspects of cables and connectors, and other accessories with significant electrical content. Includes protective mask (see also X27-A02B1).	Includes protective mask, see also X27-A02B1.	
X24-B05	Change scope notes			Includes shielded metal-arc welding using a covered electrode stick, and submerged arc welding where weld area is protected by granulated flux. Also includes electroslog and flash butt welding.	NONE	
X24-B06	Change scope notes			Includes WIG (Wolfram inert gas), GMAW (gas metal-arc welding) or MIG (metal inert gas), TIG (tungsten inert gas) or GTAW (gas tungsten-arc welding) and associated shielding gas feed control. Also includes plasma-arc welding/cutting (PAW) where heat for m	NONE	WIG, MIG, TIG, GMAW, GTAW, plasma-arc
X24-C09	Change title /scope	Other resistance welding or cutting aspects	Other	Includes spot welding, resistance seam welding (forming a series of overlapping spot welds) and projection welding (where the flow of current is confined to protrusions embossed on surface of material to be welded). For robotic spot welding also see X25-A	NONE	Spot, seam, projection
X24-D03A	Change scope notes			Covers all aspects of working metal using laser beam (and having sufficient electrical content) e.g. cutting, trimming, hole forming etc. Also see appropriate corresponding X25-A codes e.g. for cutting per se. Also includes laser-hybrid welding, and robot	Covers all aspects of working metal using laser beam (and having sufficient electrical content) e.g. cutting, trimming, hole punching, etc.; See appropriate corresponding codes in X25.	Laser-hybrid
X24-D05	Change title /scope	Flame or gas welding/cutting	Flame, plasma or gas welding	For plasma welding see X24-B06 only.	NONE	Blow torch
X24-F02	Change title /scope	Electrodes	Electrodes (incl. moving and spacing electrodes)	Includes moving and spacing of electrodes.	NONE	

X25 Industrial Electric Equipment						
X25-A09	Change scope notes			Includes metallic coating, e.g. plasma deposition, plasma spray coating or plasma transferred arc hardfacing, e.g. for applying wear-resistant metallic material such as stellite (RTM) to steel. For other coating, such as painting, see X25-K05.	Includes metallic coating (for other coating see X25-K05).	
X25-B01C1C	Change scope notes			Includes windscreen and wing mirror heaters. See also X22-J02A for vehicle windscreen demister.	See X22-J02A for windscreen demister.	
X25-F	Change scope notes			Includes filling materials; labelling; tagging, e.g. electronic tagging using e.g. radio frequency ID tags to track goods/items during conveyance (see also W06-A04B5 and W02-G05 codes); etc. General control details are also coded in T06-D08 as appropriate	Includes filling materials; labelling; etc. General control details are also coded in T06-D08 as appropriate.	
X25-F05A	Change search term			Includes fork lift trucks, walking robots and electrical aspects of shopping trolleys. For control details see T06-D08F also.	For control details see T06-D08F also.	Fork lift, walking robot, electric shopping trolley
X25-H	Change title	Separating materials, cleaning, sterilizing	Separating materials, cleaning			
X25-H03	Change scope notes			Includes water distillation; water sterilization e.g. using ultraviolet radiation; desalination plant; aerator; swimming pool cleaning (see X25-X06 also).	Includes water distillation; desalination plant, aerator, swimming pool cleaning (see X25-X06 also). Previous code: C02F-001/00-011/20 X25-H09	
X25-H09	Change scope notes			Includes electrodialysis; flotation; dry cleaning plant (see X27-D09 for domestic scale dry cleaning); general disinfection and sterilization; etc.	Includes electrodialysis; flotation; dry cleaning plant (see X27-D09 for domestic scale dry cleaning); etc.	
X25-H09A	Change scope notes			Includes ultrasonic bath. See X27-D07A for domestic ultrasonic mixed mode cleaning.	Includes ultrasonic bath.	
X25-P01B	Change title/scope notes	Industrial beer brewing/alcoholic beverage production equipment	Industrial beer brewing equipment	Includes electrical aspects of large scale beer or wine making equipment. See X27-X02 only for small scale domestic brewing/wine making.	See X27-X02 also for small scale domestic brewing.	
X25-T	Delete scope and search terms			Delete scope and search terms	Includes book binding (Also see S06-C09).	Delete scope and search terms
X25-T09	Change scope/IPC			See T06-D03A also for control details.	NONE	
X25-T09G	Change scope/search			See X25-W04 also for paper recycling. See X25-A02A also for paper press, and X25-F02A only for paper and envelope handling. Includes book binding (also see S06-C05).	See X25-W04 for paper recycling. See X25-A02A for paper press also, and X25-F02A for paper and envelope handling, and T06-D03A for control details.	Binding, printing
X26 Lighting						
X26-E01E	Change title/scope	Solar-powered light	Solar garden/path lights	Includes garden/path lights, etc.	NONE	
X27 Domestic Electrical Appliances						
X27-A01A	Change scope notes			Includes hedge trimmers, Strimmers (RTM) and also robotic type lawn mowers (T06-B01A may also be required for 2-D position control).	NONE	
X27-A02C	Change scope notes			Includes electrical aspects only of pens, briefcases, diaries, files incorporating computer, note pads, etc. For notepad computers and PDAs see T01 only, and for electronic blackboards and other conference equipment see W04-W05 only.	Includes electrical aspects only of pens, briefcases, diaries, files incorporating computer, note pads, etc.	
X27-D	Change title	Cleaning and disinfecting appliances	Cleaning appliances			
X27-D01A	Change scope notes			Also see X27-D07 codes for mixed mode cleaning, e.g. using ultraviolet radiation to kill bacteria.	NONE	
X27-D01B	Change scope notes			Also see X27-D07 codes for mixed mode cleaning, e.g. using ultrasonic vibration to enhance cleaning action.	NONE	
X27-D04	Change scope notes			Also see X27-D07 for mixed mode cleaning, e.g. using ultraviolet radiation to kill mites or bacteria.	NONE	
X27-D05	Change title /scope	Floor cleaners/washers/polishers	Floor polisher	Includes floor sweeping, washing and polishing machines. Also includes robotic floor cleaning machines (T06-B01A may also be required for 2-D position control). For carpet cleaning see X27-D08 only.	NONE	
X27-E01B2	Change title	Ozoniser, air cleaner and freshener, (de)humidifier	Ozoniser, air cleaner and freshner and humidifier			
X27-F	Change scope notes			Includes all domestic and industrial systems, e.g. cold rooms and components; display cabinets; water coolers; heat pump systems (for air-conditioning, see X27-E01B also); refrigerated containers for lorry (see also X22-X04). Cryogenics is in X25-V. Also	Includes all domestic and industrial systems e.g. cold rooms and components; display cabinets, ice mfr., water coolers, heat-pump systems (for air-conditioning, see X27-E1B), refrigerated containers for lorry (see also X22-X). Cryogenics is in X25-V.	
X27-X	Change scope notes			Includes ash tray, insecticide dispenser for house, wallpaper stripping iron, mail box, paper towel dispenser (also X25-F03), pill bottle warning alarm indicating lid removal (also W05-A02) etc. Can also be used for indicating general domestic appliance *	Includes ashtray, insecticide dispenser for house, wallpaper stripping iron, mail box, paper towel dispenser (also X25-F03), pill bottle warning alarm indicating lid removal (also W05-A02), etc.	
X27-X02	Change title/scope	Domestic beer brewing/alcoholic beverage production equipment	Domestic beer brewing and associated equipment	Includes beer brewing plant (domestic scale), beer mat, beer dispenser (see also X25-F03B1). Also includes domestic wine production equipment.	Includes beer brewing plant (domestic scale), beer mat, beer dispenser (see also X25-F03B1).	