

List of projects contained in these Technical Annexes:

**A048; A052; A056; A057; A058; D160; D221; D269; D270; D274; D275; D278; D279; D280;
D285; D289; D290; D293; D295; D296; D297; F007; F009; F010; F011; F012; F016; F017;
F018; M010; M013; M014; M736; M737; M738; M739; M740; M741; M743**

ANNEX 1E A01K [Project-Rapporteur : D269/GB] <CE45>

adopt M **1/00** **Housing animals; Equipment therefor**

adopt M 1/035 * * Devices for use in keeping domestic animals, e.g. fittings in housings or dog
beds

adopt M 1/06 * Devices for fastening animals, e.g. halters, toggles, neck-bars or chain
fastenings

adopt M 1/10 * Feed racks

adopt M **3/00** **Pasturing equipment, e.g. tethering devices; Grids for preventing cattle from
straying; Electrified wire fencing** (electric circuits or apparatus for supplying electric
wire fencing **H05C**)

adopt M **5/00** **Feeding devices for stock or game** (**A01K 1/10** takes precedence; feeding devices
for poultry or other birds **A01K 39/00**)

adopt M 5/015 * Licking-stone holders

adopt M 7/02 * Automatic devices

adopt M 11/00 **Marking of animals** (marking poultry or other birds **A01K 35/00**)

adopt M 13/00 **Devices for grooming or caring of animals, e.g. curry-combs; Fetlock rings; Tail-holders** (as part of the harness **B68B 5/04**) ; **Devices for preventing crib-biting; Washing devices; Protection against weather conditions or insects**

adopt M 14/00 **Removing the fleece from live sheep or similar animals** (hand-held clippers or shavers with a plurality of cutting edges, specially adapted for shearing animals, e.g. sheep, **B26B 19/24**)

adopt M 15/00 **Devices for taming animals, e.g. nose-rings or hobbles; Devices for overturning animals in general; Training or exercising equipment; Covering boxes**

adopt M 21/00 **Devices for assisting or preventing mating**

adopt M 27/00 **Leads or collars, e.g. for dogs**

adopt M 31/02 * Door appliances; Automatic door-openers

adopt M 39/02 * Drinking appliances (**A01K 39/04** takes precedence)

adopt M 43/08 * * according to weight

adopt M 47/06 * Other details of beehives, e.g. ventilating devices, entrances to hives, guards, partitions or bee escapes

adopt M **55/00** **Bee-smokers; Bee-keepers' accessories, e.g. veils**

adopt M **61/00** **Culture of fish, mussels, crayfish, lobsters, sponges, pearls, or the like**

adopt M 63/04 * Arrangements for treating water specially adapted to receptacles for live fish

adopt M 63/06 * Arrangements for heating or lighting in, or attached to, receptacles for live fish

adopt M **67/00** **Rearing or breeding animals, not otherwise provided for; New breeds of animals**

adopt M 67/02 * Breeding vertebrates

adopt M 67/033 * Rearing or breeding invertebrates; New breeds of invertebrates

adopt M 75/04 * Floats

adopt M 75/06 * Sinkers

adopt M 79/02 * by electrocution

adopt M **80/00** **Harvesting oysters, mussels, sponges or the like**

adopt M 85/08 * Artificial flies

adopt M 91/06 * Apparatus on lines not otherwise provided for, e.g. automatic hookers

adopt M 91/18 * Trotlines, longlines; Accessories therefor, e.g. baiting devices, lifters or setting
reelers

adopt M 97/04 * Containers for bait; Preparation of bait

adopt M 97/05 * Containers for live bait kept in water, e.g. for minnows or shrimps

ANNEX 2E A01M [Project-Rapporteur : D221/GB] <CE45>

adopt M **Title** **CATCHING, TRAPPING OR SCARING OF ANIMALS** (appliances for catching swarms or drone-catching **A01K 57/00**; fishing **A01K 69/00-A01K 97/00**; biocides, pest repellants or attractants **A01N**) ; **APPARATUS FOR THE DESTRUCTION OF NOXIOUS ANIMALS OR NOXIOUS PLANTS**

adopt M **7/00** **Special adaptations or arrangements of liquid-spraying apparatus for purposes covered by this subclass**

adopt M **9/00** **Special adaptations or arrangements of powder-spraying apparatus for purposes covered by this subclass**

adopt M **11/00** **Special adaptations or arrangements of combined liquid- and powder-spraying apparatus for purposes covered by this subclass**

adopt M **15/00** **Flame-throwers specially adapted for purposes covered by this subclass**

adopt M **21/00** **Apparatus for the destruction of unwanted vegetation, e.g. weeds** (control of undesirable vegetation on roads or permanent ways of railways **E01H 11/00**)

adopt M 31/02 * Shooting stands

ANNEX 3E A22C [Project-Rapporteur : M014/IB] <CE45>

adopt U 13/02 < unchanged >

ANNEX 4E A41C [Project-Rapporteur : D290/RU] <CE45>

adopt M **1/00** **Corsets or girdles**

adopt M 3/10 * with stiffening or bust-forming inserts

ANNEX 5E A45B [Project-Rapporteur : D295/BR] <CE45>

adopt M Title **WALKING STICKS** (walking aids, e.g. sticks, for blind persons **A61H 3/06**) ;
UMBRELLAS; LADIES' OR LIKE FANS (cane or umbrella stands or holders **A47G 25/12**)

adopt M 1/04 * Walking sticks with means for hanging-up or with locks

ANNEX 6E A45C [Project-Rapporteur : D270/BR] <CE45>

adopt M Title **PURSES; LUGGAGE; HAND CARRIED BAGS**

adopt M 1/10 * Money-bags for conductors or like people; Money-bags with rigid coin-holders

adopt M 1/12 * Savings boxes

adopt M **3/00 Flexible luggage; Hand bags** (collapsible or extensible luggage, bags or the like **A45C 7/00**)

adopt M 5/02 * Materials therefor

adopt M **9/00 Luggage or bags convertible into objects for other use** (sacks or packs carried on the body and convertible into other articles **A45F 4/02**; trunk-wardrobes **A47B 61/06**; trunk-beds **A47C 17/82**)

adopt M **11/00 Receptacles for purposes not provided for in groups A45C 1/00-A45C 9/00** (specially adapted for toilet or cosmetic equipment **A45D 29/20**, **A45D 44/18**; travelling sewing kits **A45F 3/48**)

adopt M 11/06 * * Making of spectacle or pince-nez cases

adopt M 11/34 * Pencil boxes; Pencil etuis or the like

adopt M 11/36 * Cases for drawing or like instruments

adopt M **13/00** **Details; Accessories**

adopt M 13/10 * Arrangement of fasteners

adopt M 13/26 * Special adaptations of handles (**A45C 13/22** takes precedence)

ANNEX 7E A61K [Project-Rapporteur : M738/CA] <CE45>

adopt M 31/635 * * having a heterocyclic ring, e.g. sulfadiazine

ANNEX 8E A61M [Project-Rapporteur : F009/EP] <CE45>

adopt M Subclass
index SUCTION OR PUMPING DEVICES **1/00**
 SYRINGES; IRRIGATORS; BATHS FOR THE
 INTESTINES **3/00, 5/00; 9/00**
 SPRAYERS, ATOMISERS; INSUFFLATORS **11/00; 13/00**

INHALING DEVICES	15/00, 16/00
DEVICES FOR PRODUCING OR ENDING SLEEP OR ANAESTHESIA	16/00, 19/00, 21/00
PROBES, CATHETERS; DRAINS; DILATORS TUBES, TUBE CONNECTORS, TUBE COUPLINGS, VALVES, ACCESS SITES OR THE LIKE, SPECIALLY ADAPTED FOR MEDICAL USE	25/00; 27/00; 29/00
OTHER DEVICES FOR INTRODUCING OR RETAINING REMEDIES IN THE BODY	39/00
OTHER DEVICES FOR SPREADING REMEDIES ON THE BODY	31/00, 37/00
APPLYING RADIOACTIVE MATERIAL TO THE BODY	35/00
	36/00

adopt D 23/00 (transferred to **A61M 25/09,A61M 29/00,A61B 17/00**)

ANNEX 9E A63B [Project-Rapporteur : M014/IB] <CE45>

adopt M **33/00** **Swimming equipment attachable to the head, e.g. swim caps or goggles** (diving masks **B63C 11/12**; breathing aids, e.g. snorkels, **B63C 11/18**)

ANNEX 10E A63F [Project-Rapporteur : A056/EP] <CE45>

adopt M **Title** **CARD, BOARD OR ROULETTE GAMES; INDOOR GAMES USING SMALL
MOVING PLAYING BODIES; VIDEO GAMES; GAMES NOT OTHERWISE
PROVIDED FOR**

adopt C **13/00** ***Video games, i.e. games using an electronically generated display having two or
more dimensions***

adopt D 13/02 (transferred to **A63F 13/20-A63F 13/245,A63F 13/98**)

adopt D 13/04 (transferred to **A63F 13/219**)

adopt D 13/06 (transferred to **A63F 13/20-A63F 13/245**)

adopt D 13/08 (transferred to **A63F 13/90-A63F 13/98**)

adopt D 13/10 (transferred to **A63F 13/40-A63F 13/88**)

adopt D 13/12 (transferred to **A63F 13/30-A63F 13/88**)

adopt N 13/20 * *Input arrangements for video game devices*

adopt N 13/21 * * *characterised by their sensors, purposes or types*

adopt N 13/211 * * * *using inertial sensors, e.g. accelerometers or gyroscopes*

adopt N 13/212 * * * *using sensors worn by the player, e.g. for measuring heart beat or leg activity*

adopt N 13/213 * * * *comprising photodetecting means, e.g. cameras, photodiodes or infrared cells*
(**A63F 13/219**, **A63F 13/655** take precedence)

adopt N 13/214 * * * *for locating contacts on a surface, e.g. floor mats or touch pads*

adopt N 13/2145 * * * * *the surface being also a display device, e.g. touch screens*

adopt N 13/215 * * * *comprising means for detecting acoustic signals, e.g. using a microphone*

adopt N 13/216 * * * *using geographical information, e.g. location of the game device or player using GPS*

adopt N 13/217 * * * *using environment-related information, i.e. information generated otherwise than by the player, e.g. ambient temperature or humidity*

adopt N 13/218 * * * *using pressure sensors, e.g. generating a signal proportional to the pressure applied by the player*

adopt N 13/219 * * * *for aiming at specific areas on the display, e.g. light-guns*

adopt N 13/22 * * * *Setup operations, e.g. calibration, key configuration or button assignment*

adopt N 13/23 * * * *for interfacing with the game device, e.g. specific interfaces between game controller and console*

adopt N 13/235 * * * *using a wireless connection, e.g. infrared or piconet*

adopt N 13/24 * * * *Constructional details thereof, e.g. game controllers with detachable joystick handles*

adopt N 13/245 * * * *specially adapted to a particular type of game, e.g. steering wheels*

adopt N 13/25 * *Output arrangements for video game devices*

adopt N 13/26 * * *having at least one additional display device, e.g. on the game controller or outside a game booth*

adopt N 13/27 * * *characterised by a large display in a public venue, e.g. in a movie theatre, stadium or game arena*

adopt N 13/28 * * *responding to control signals received from the game device for affecting ambient conditions, e.g. for vibrating players' seats, activating scent dispensers or affecting temperature or light (controlling the output signals based on the game progress **A63F 13/50**)*

adopt N 13/285 * * * *Generating tactile feedback signals via the game input device, e.g. force feedback*

adopt N 13/30 * *Interconnection arrangements between game servers and game devices; Interconnection arrangements between game devices; Interconnection arrangements between game servers*

adopt N 13/31 * * *Communication aspects specific to video games, e.g. between several handheld game devices at close range*

adopt N 13/32 * * *using local area network [LAN] connections*

adopt N 13/323 * * * *between game devices with different hardware characteristics, e.g. hand-held game devices connectable to game consoles or arcade machines*

adopt N 13/327 * * * *using wireless networks, e.g. Wi-Fi or piconet*

adopt N 13/33 * * * *using wide area network [WAN] connections*

adopt N 13/332 * * * *using wireless networks, e.g. cellular phone networks*

adopt N 13/335 * * * *using Internet*

adopt N 13/338 * * * *using television networks*

adopt N 13/34 * * * *using peer-to-peer connections*

adopt N 13/35 * * * *Details of game servers*

adopt N 13/352 * * * *involving special game server arrangements, e.g. regional servers connected to a national server or a plurality of servers managing partitions of the game world*

adopt N 13/355 * * * *Performing operations on behalf of clients with restricted processing capabilities, e.g. servers transform changing game scene into an MPEG-stream for transmitting to a mobile phone or a thin client*

adopt N 13/358 * * * *Adapting the game course according to the network or server load, e.g. for reducing latency due to different connection speeds between clients*

adopt N 13/40 * *Processing input control signals of video game devices, e.g. signals generated by the player or derived from the environment*

adopt N 13/42 * * *by mapping the input signals into game commands, e.g. mapping the displacement of a stylus on a touch screen to the steering angle of a virtual vehicle*

adopt N 13/422 * * * *automatically for the purpose of assisting the player, e.g. automatic braking in a driving game*

adopt N 13/424 * * * *involving acoustic input signals, e.g. by using the results of pitch or rhythm extraction or voice recognition*

adopt N 13/426 * * * *involving on-screen location information, e.g. screen coordinates of an area at which the player is aiming with a light gun*

adopt N 13/428 * * * *involving motion or position input signals, e.g. signals representing the rotation of an input controller or a player's arm motions sensed by accelerometers or gyroscopes*

adopt N 13/44 * * *involving timing of operations, e.g. performing an action within a time slot*

adopt N 13/45 * *Controlling the progress of the video game*

adopt N 13/46 * * *Computing the game score*

adopt N 13/47 * * *involving branching, e.g. choosing one of several possible scenarios at a given*

point in time

adopt N 13/48 * * * *Starting a game, e.g. activating a game device or waiting for other players to join a multiplayer session*

adopt N 13/49 * * * *Saving the game status; Pausing or ending the game*

adopt N 13/493 * * * *Resuming a game, e.g. after pausing, malfunction or power failure*

adopt N 13/497 * * * *Partially or entirely replaying previous game actions*

adopt N 13/50 * * * *Controlling the output signals based on the game progress*

adopt N 13/52 * * * *involving aspects of the displayed game scene*

adopt N 13/525 * * * *Changing parameters of virtual cameras*

adopt N 13/5252 * * * * * *using two or more virtual cameras concurrently or sequentially, e.g. automatically switching between fixed virtual cameras when a character changes room or displaying a rear-mirror view in a car-driving game*

adopt N 13/5255 * * * * * *according to dedicated instructions from a player, e.g. using a secondary joystick to rotate the camera around a player's character*

adopt N 13/5258 * * * * *by dynamically adapting the position of the virtual camera to keep a game object or game character in its viewing frustum, e.g. for tracking a character or a ball*

adopt N 13/53 * * *involving additional visual information provided to the game scene, e.g. by overlay to simulate a head-up display [HUD] or displaying a laser sight in a shooting game*

adopt N 13/533 * * * *for prompting the player, e.g. by displaying a game menu*

adopt N 13/537 * * * *using indicators, e.g. showing the condition of a game character on screen*

adopt N 13/5372 * * * * *for tagging characters, objects or locations in the game scene, e.g. displaying a circle under the character controlled by the player*

adopt N 13/5375 * * * * *for graphically or textually suggesting an action, e.g. by displaying an arrow indicating a turn in a driving game*

adopt N 13/5378 * * * * *for displaying an additional top view, e.g. radar screens or maps (using two or more virtual cameras concurrently **A63F 13/5252**)*

adopt N 13/54 * * *involving acoustic signals, e.g. for simulating revolution-dependent engine sound in a driving game or reverberation against a virtual wall*

adopt N 13/55 * *Controlling game characters or game objects based on the game progress*

adopt N 13/56 * * *Computing the motion of game characters with respect to other game*

characters, game objects or elements of the game scene, e.g. for simulating the behaviour of a group of virtual soldiers or for path finding

adopt N 13/57 * * * *Simulating properties, behaviour or motion of objects in the game world, e.g. computing tyre load in a car race game (**A63F 13/56** takes precedence)*

adopt N 13/573 * * * *using trajectories of game objects, e.g. of a golf ball according to the point of impact*

adopt N 13/577 * * * *using determination of contact between game characters or objects, e.g. to avoid collision between virtual racing cars*

adopt N 13/58 * * * *by computing conditions of game characters, e.g. stamina, strength, motivation or energy level*

adopt N 13/60 * * * *Generating or modifying game content before or while executing the game program, e.g. authoring tools specially adapted for game development or game-integrated level editor*

adopt N 13/61 * * * *using advertising information*

adopt N 13/63 * * * *by the player, e.g. authoring using a level editor*

adopt N 13/65 * * * *automatically by game devices or servers from real world data, e.g. measurement in live racing competition*

adopt N 13/655 * * * *by importing photos, e.g. of the player*

- adopt N 13/67 * * *adaptively or by learning from player actions, e.g. skill level adjustment or by storing successful combat sequences for re-use*
- adopt N 13/69 * * *by enabling or updating specific game elements, e.g. unlocking hidden features, items, levels or versions*
- adopt N 13/70 * *Game security or game management aspects*
- adopt N 13/71 * * *using secure communication between game devices and game servers, e.g. by encrypting game data or authenticating players*
- adopt N 13/73 * * *Authorising game programs or game devices, e.g. checking authenticity*
- adopt N 13/75 * * *Enforcing rules, e.g. detecting foul play or generating lists of cheating players*
- adopt N 13/77 * * *involving data related to game devices or game servers, e.g. configuration data, software version or amount of memory*
- adopt N 13/79 * * *involving player-related data, e.g. identities, accounts, preferences or play histories*
- adopt N 13/792 * * * *for payment purposes, e.g. monthly subscriptions*

adopt N 13/795 * * * *for finding other players; for building a team; for providing a buddy list*

adopt N 13/798 * * * *for assessing skills or for ranking players, e.g. for generating a hall of fame
(computing the game score **A63F 13/46**)*

adopt N 13/80 * *Special adaptations for executing a specific game genre or game mode*

adopt N 13/803 * * *Driving vehicles or crafts, e.g. cars, airplanes, ships, robots or tanks*

adopt N 13/807 * * *Gliding or sliding on surfaces, e.g. using skis, skates or boards*

adopt N 13/812 * * *Ball games, e.g. soccer or baseball*

adopt N 13/814 * * *Musical performances, e.g. by evaluating the player's ability to follow a
notation*

adopt N 13/816 * * *Athletics, e.g. track-and-field sports*

adopt N 13/818 * * *Fishing*

adopt N 13/822 * * *Strategy games; Role-playing games (**A63F 13/825, A63F 13/828** take
precedence)*

adopt N 13/825 * * *Fostering virtual characters*

adopt N 13/828 * * *Managing virtual sport teams*

adopt N 13/833 * * *Hand-to-hand fighting, e.g. martial arts competition (A63F 13/837 takes precedence)*

adopt N 13/837 * * *Shooting of targets*

adopt N 13/843 * * *involving concurrently two or more players on the same game device, e.g. requiring the use of a plurality of controllers, or of a split-screen or of a specific view of game data for each player*

adopt N 13/847 * * *Cooperative playing, e.g. requiring coordinated actions from several players to achieve a common goal*

adopt N 13/85 * *Providing additional services to players*

adopt N 13/86 * * *Watching games played by other players*

adopt N 13/87 * * *Communicating with other players during game play, e.g. by e-mail or chat*

adopt N 13/88 * * *Mini-games executed independently while main games are being loaded*

adopt N 13/90 * *Constructional details or arrangements of video game devices not provided for in groups A63F 13/20 or A63F 13/25, e.g. housing, wiring, connections or cabinets*

adopt N 13/92 * * *Video game devices specially adapted to be hand-held while playing*

adopt N 13/95 * * *Storage media specially adapted for storing game information, e.g. video game cartridges*

adopt N 13/98 * * *Accessories, i.e. detachable arrangements optional for the use of the video game device, e.g. grip supports of game controllers*

ANNEX 11E A63J [Project-Rapporteur : M014/IB] <CE45>

adopt M 9/00 **Centrifugal tracks, loop-the-loops or the like**

ANNEX 12E B23G [Project-Rapporteur : M010/IB] <CE45>

adopt M **Title** **THREAD CUTTING; WORKING OF SCREWS, BOLT HEADS, OR NUTS, IN CONJUNCTION THEREWITH** (thread-forming by corrugating tubes **B21D 15/04**, by rolling **B21H 3/02**, by forging, pressing, or hammering **B21K 1/56**; making helical grooves by turning **B23B 5/48**, by milling **B23C 3/32**, by grinding **B24B 19/02**; arrangements for copying or controlling **B23Q**)

ANNEX 13E B23K [Project-Rapporteur : A058/EP] <CE45>

adopt C 26/00 **Working by laser beam, e.g. welding, cutting or boring**

- adopt N Note 26/00
1. *This main group covers :*
 - *laser working for making a weakened layer, with or without removing material; [new]*
 - *laser shock processing; [new]*
 - *apparatus for laser surface treatment; [new]*
 - *laser ablation. [new]*
 2. *This main group does not cover :*
 - *laser assisted deposition which is covered by subclass **C23C**; [new]*
 - *laser sintering which is covered by group **B22F 3/105** for metallic powder, by group **B29C 67/04** for plastics, by group **C03B 19/06** for glass or by group **C04B 35/64** for ceramics; [new]*
 - *laser assisted chemical etching which is covered by group **C23F 1/00**. [new]*

adopt C 26/02 * *Positioning or observing the workpiece, e.g. with respect to the point of impact; Aligning, aiming or focusing the laser beam*

adopt M 26/03 * Observing, e.g. monitoring, the workpiece

adopt N 26/035 * *Aligning the laser beam (automatically **B23K 26/042**)*

adopt C 26/04 * *Automatically aligning, aiming or focusing the laser beam, e.g. using the back-scattered light*

adopt N 26/042 * *Automatically aligning the laser beam*

adopt N 26/044 * Seam tracking

adopt N 26/046 * *Automatically focusing the laser beam*

adopt C 26/06 * * *Shaping the laser beam, e.g. by masks or multi-focusing*

adopt N 26/062 * * * *by direct control of the laser beam*

adopt N 26/0622 * * * * *by shaping pulses*

adopt N 26/064 * * * *by means of optical elements, e.g. lenses, mirrors or prisms*

adopt N 26/066 * * * * *by using masks*

adopt C 26/08 * *Devices involving relative movement between laser beam and workpiece*

adopt N 26/082 * * *Scanning systems, i.e. devices involving movement of the laser beam relative to the laser head*

adopt C 26/12 * *in a special environment or atmosphere, e.g. in an enclosure*

adopt N 26/122 * * *in a liquid, e.g. underwater*

adopt C 26/14 * *using a fluid stream, e.g. a jet of gas, in conjunction with the laser beam;
Nozzles therefor (**B23K 26/12** takes precedence)*

adopt N 26/142 * * *for the removal of by-products*

adopt N 26/144 * * *the fluid stream containing particles, e.g. powder*

adopt N 26/146 * * *the fluid stream containing a liquid*

adopt M 26/16 * *Removal of by-products, e.g. particles or vapours produced during treatment of a workpiece (by a fluid stream **B23K 26/142**)*

adopt M 26/18 * *using absorbing layers on the workpiece, e.g. for marking or protecting purposes*

adopt C 26/20 * *Bonding (soldering by means of radiant energy **B23K 1/005**; joining of preformed plastics parts by heating using laser beam **B29C 65/16**)*

adopt N 26/21 * * *by welding*

adopt N 26/211 * * * *with interposition of special material to facilitate connection of the parts*

adopt M 26/22 < Add 1 dot(s) >

adopt C 26/24 < Add 1 dot(s) >

adopt N 26/242 * * * *Fillet welding, i.e. involving a weld of substantially triangular cross section joining two parts*

adopt N 26/244 · · · · *Overlap seam welding*

adopt C 26/26 < Add 1 dot(s) >

adopt N 26/262 · · · · · *of longitudinal seams of tubes*

adopt C 26/28 < Add 1 dot(s) >

adopt N 26/282 · · · · · *of tube sections*

adopt C 26/30 < Add 1 dot(s) >

adopt N 26/302 · · · · · *of helicoidal seams*

adopt C 26/32 · · *taking account of the properties of the material involved*

adopt N 26/322 · · · *involving coated metal parts (using absorbing layers on the workpiece **B23K**
26/18)*

adopt N 26/323 · · · *involving parts made of dissimilar metallic material*

adopt N 26/324 · · · *involving non-metallic parts*

adopt C 26/34 * *Laser welding for purposes other than joining*

adopt N 26/342 * * *Build-up welding*

adopt N 26/346 * *in combination with welding or cutting covered by groups **B23K 5/00-B23K 25/00**, e.g. in combination with resistance welding*

adopt N 26/348 * * *in combination with arc heating, e.g. TIG [tungsten inert gas], MIG [metal inert gas] or plasma welding (laser beam for starting a welding or cutting arc **B23K 9/067**)*

adopt N 26/351 * *for trimming or tuning of electrical components*

adopt N 26/352 * *for surface treatment*

adopt N 26/354 * * *by melting*

adopt N 26/356 * * *by shock processing*

adopt N 26/359 * * *by providing a line or line pattern, e.g. a dotted break initiation line*

adopt C 26/36 * *Removing material (**B23K 26/55**, **B23K 26/57** take precedence)*

adopt N 26/361 * * * *for deburring or mechanical trimming (B23K 26/351 takes precedence)*

adopt N 26/362 * * * *Laser etching*

adopt N 26/364 * * * *for making a groove or trench, e.g. for scribing a break initiation groove*

adopt C 26/38 * * * *by boring or cutting*

adopt N 26/382 * * * *by boring*

adopt N 26/384 * * * * *of specially shaped holes*

adopt N 26/386 * * * * *of blind holes*

adopt N 26/388 * * * * *Trepanning, i.e. boring by moving the beam spot about an axis*

adopt C 26/40 * * * *taking account of the properties of the material involved*

adopt N 26/402 * * * *involving non-metallic material, e.g. isolators*

adopt D 26/42 (transferred to **B23K 26/60, B23K 26/70**)

- adopt N 26/50 * *Working by transmitting the laser beam through or within the workpiece*
- adopt N 26/53 * *for modifying or reforming the material inside the workpiece, e.g. for producing break initiation cracks*
- adopt N 26/55 * *for creating voids inside the workpiece, e.g. for forming flow passages or flow patterns*
- adopt N 26/57 * *the laser beam entering a face of the workpiece from which it is transmitted through the workpiece material to work on a different workpiece face, e.g. for effecting removal, fusion splicing, modifying or reforming*
- adopt N 26/60 * *Preliminary treatment*
- adopt N 26/70 * *Auxiliary operations or equipment*
- adopt C 28/02 * *Combined welding or cutting procedures or apparatus*

ANNEX 14E B29C [Project-Rapporteur : M010/IB] <CE45>

- adopt M **Title** **SHAPING OR JOINING OF PLASTICS; SHAPING OF SUBSTANCES IN A PLASTIC STATE, IN GENERAL; AFTER-TREATMENT OF THE SHAPED PRODUCTS, e.g. REPAIRING** (working in the manner of metal **B23**; grinding, polishing **B24**; cutting **B26D**, **B26F**; making preforms **B29B 11/00**; making laminated products by combining previously unconnected layers which become one product whose layers will remain together **B32B 37/00-B32B 41/00**)
-

ANNEX 15E B29K [Project-Rapporteur : D296/BR] <CE45>

- adopt M 96/02 * Graft polymers
- adopt M 96/04 * Block polymers
- adopt M 105/08 * * of continuous length, e.g. cords, rovings, mats, fabrics, strands or yarns
- adopt M 105/12 * * of short lengths, e.g. chopped filaments, staple fibres or bristles
- adopt M 296/02 * Graft polymers
- adopt M 296/04 * Block polymers
- adopt M 311/06 * Bone, horn or ivory
- adopt M 311/14 * Wood, e.g. woodboard or fibreboard
- adopt M 496/02 * Graft polymers
- adopt M 496/04 * Block polymers

adopt M 505/14 * * Noble metals, e.g. silver, gold or platinum

adopt M 511/06 * Bone, horn or ivory

adopt M 511/10 * Natural fibres, e.g. wool or cotton

adopt M 511/14 * Wood, e.g. woodboard or fibreboard

adopt M 696/02 * Graft polymers

adopt M 696/04 * Block polymers

adopt M 705/14 * * Noble metals, e.g. silver, gold or platinum

adopt M 711/06 * Bone, horn or ivory

adopt M 711/10 * Natural fibres, e.g. wool or cotton

adopt M 711/14 * Wood, e.g. woodboard or fibreboard

adopt M Title **BOOKS; BOOK COVERS; LOOSE LEAVES; PRINTED MATTER CHARACTERISED BY IDENTIFICATION OR SECURITY FEATURES; PRINTED MATTER OF SPECIAL FORMAT OR STYLE NOT OTHERWISE PROVIDED FOR; DEVICES FOR USE THEREWITH AND NOT OTHERWISE PROVIDED FOR; MOVABLE-STRIP WRITING OR READING APPARATUS**

adopt M 15/02 * Postcards; Greeting, menu, business or like cards; Letter cards or letter-sheets
(**B42D 25/00** takes precedence)

adopt D 15/10 (transferred to **B42D 25/00**)

adopt N **25/00** *Information-bearing cards or sheet-like structures characterised by identification or security features; Manufacture thereof (printing processes to produce identification or security features **B41M 3/14**)*

adopt N 25/20 * *characterised by a particular use or purpose*

adopt N 25/21 * * *for multiple purposes*

adopt N 25/22 * * *for use in combination with accessories specially adapted for information-bearing cards*

adopt N 25/23 * * *Identity cards*

adopt N 25/24 * * *Passports*

adopt N 25/25 * * *Public transport tickets (apparatus for printing and issuing **G07B**)*

adopt N 25/26 · · *Entrance cards; Admission tickets*

adopt N 25/27 · · *Lots, e.g. lottery tickets*

adopt N 25/28 · · *for use in medical treatment or therapy*

adopt N 25/29 · · *Securities; Bank notes*

adopt N 25/30 · *Identification or security features, e.g. for preventing forgery*

adopt N 25/305 · · *Associated digital information (record carriers for use with machines and with at least a part designed to carry digital markings **G06K 19/00**)*

adopt N 25/309 · · *Photographs*

adopt N 25/313 · · *Fingerprints*

adopt N 25/318 · · *Signatures*

adopt N 25/324 · · *Reliefs*

adopt N 25/328 * * *Diffraction gratings; Holograms*

adopt N 25/333 * * *Watermarks*

adopt N 25/337 * * *Guilloche patterns*

adopt N 25/342 * * *Moiré effects*

adopt N 25/346 * * *Perforations*

adopt N 25/351 * * *Translucent or partly translucent parts, e.g. windows*

adopt N 25/355 * * *Security threads*

adopt N 25/36 * * *comprising special materials*

adopt N 25/364 * * * *Liquid crystals*

adopt N 25/369 * * * *Magnetised or magnetisable materials*

adopt N 25/373 * * * *Metallic materials*

adopt N 25/378 * * * *Special inks*

adopt N 25/382 * * * *absorbing or reflecting infra-red light*

adopt N 25/387 * * * *absorbing or reflecting ultra-violet light*

adopt N 25/391 * * * *absorbing or reflecting polarised light*

adopt N 25/40 * *Manufacture*

adopt N 25/405 * * *Marking*

adopt N 25/41 * * * *using electromagnetic radiation (B42D 25/435 takes precedence)*

adopt N 25/415 * * * *using chemicals (B42D 25/445 takes precedence)*

adopt N 25/42 * * * *by photographic processes*

adopt N 25/425 * * * *by deformation, e.g. embossing*

adopt N 25/43 * * * *by removal of material*

adopt N 25/435 * * * * *using electromagnetic radiation, e.g. laser*

adopt N 25/44 * * * * *using mechanical means, e.g. engraving*

adopt N 25/445 * * * * *using chemical means, e.g. etching*

adopt N 25/45 * * *Associating two or more layers*

adopt N 25/455 * * * *using heat*

adopt N 25/46 * * * *using pressure*

adopt N 25/465 * * * *using chemicals or adhesives*

adopt N 25/47 * * * * *using adhesives*

adopt N 25/475 * * *Cutting cards*

adopt N 25/48 * * *Controlling the manufacturing process*

adopt N 25/485 * * * *by electronic processing means*

adopt D 101/00 <deleted without transferred to / covered by>

adopt D 103/00 <deleted without transferred to / covered by>

adopt D 105/00 <deleted without transferred to / covered by>

adopt D 107/00 <deleted without transferred to / covered by>

adopt D 109/00 <deleted without transferred to / covered by>

adopt D 109/02 <deleted without transferred to / covered by>

adopt D 111/00 <deleted without transferred to / covered by>

adopt D 113/00 <deleted without transferred to / covered by>

adopt D 115/00 <deleted without transferred to / covered by>

adopt D 117/00 <deleted without transferred to / covered by>

adopt D 119/00 <deleted without transferred to / covered by>

adopt D 121/00 <deleted without transferred to / covered by>

adopt D 1/12 (transferred to **B42D 25/29,B42D 25/30**)

ANNEX 18E B60R [Project-Rapporteur : A048/EP] <CE45>

adopt M **25/00 Fittings or systems for preventing or indicating unauthorised use or theft of vehicles** (locks for vehicles **E05B 77/00-E05B 85/00**)

ANNEX 19E B61D [Project-Rapporteur : A048/EP] <CE45>

adopt M **19/00 Door arrangements specially adapted for rail vehicles** (locks for vehicles **E05B 77/00-E05B 85/00**; door-operating mechanisms **E05F**)

ANNEX 20E B61H [Project-Rapporteur : M010/IB] <CE45>

adopt M **Title BRAKES OR OTHER RETARDING APPARATUS PECULIAR TO RAIL VEHICLES; ARRANGEMENTS OR DISPOSITIONS OF BRAKES OR OTHER RETARDING APPARATUS IN RAIL VEHICLES** (electrodynamic braking of vehicles **B60L**, in general **H02K**; arrangements in rail vehicles for adjusting wheel-braking force to meet varying vehicular or permanent-way conditions **B60T 8/00**; transmitting braking action from initiating means to ultimate brake actuator with power assistance or drive, brake systems incorporating such transmitting means, e.g. air-pressure brake systems, **B60T 13/00**; construction, arrangement, or operation of valves incorporated in power brake systems **B60T 15/00**; component parts, details or accessories of brake systems **B60T 17/00**; brakes in general **F16D**)

ANNEX 21E B62M [Project-Rapporteur : M010/IB] <CE45>

adopt M 1/28 · · characterised by the use of flexible drive members, e.g. chains

ANNEX 22E B63B [Project-Rapporteur : M014/IB] <CE45>

adopt U 11/04 < unchanged >

adopt M 19/02 * Windows specially adapted for ships or other waterborne vessels, e.g. clear-view screens or portholes

adopt M 22/22 * Inflatable buoys with gas generating means (**B63B 22/12** takes precedence)

adopt U **57/00** < unchanged >

ANNEX 23E B63C [Project-Rapporteur : M014/IB] <CE45>

adopt M 11/12 * * Diving masks

ANNEX 24E B65G [Project-Rapporteur : D160/SE] <CE45>

adopt M **Title** **TRANSPORT OR STORAGE DEVICES, e.g. CONVEYORS FOR LOADING OR TIPPING, SHOP CONVEYOR SYSTEMS OR PNEUMATIC TUBE CONVEYORS** (packaging **B65B**; handling thin or filamentary materials, e.g. paper sheets or thread, **B65H**; cranes **B66C**; portable or mobile lifting or hauling appliances, e.g. hoists, **B66D**; devices for lifting or lowering goods for loading or unloading purposes, e.g. fork-lift trucks, **B66F 9/00**; emptying bottles, jars, cans, casks, barrels or similar containers, not otherwise provided for, **B67C 9/00**; delivering or transferring liquids **B67D**; filling or discharging vessels for liquefied, solidified or compressed gases **F17C**; pipe-line systems for fluids **F17D**)

adopt N *Note* This subclass does not cover road or railway vehicles, waterborne vessels or aircraft **B65G per se**, or their adaptation for transport purposes. This subject matter is covered by

classes **B60-B64**, for example in the following places:

- *vehicles adapted for load transportation* **B60P**; [new]
- *railway wagons adapted for load transportation* **B61D**; [new]
- *hand carts* **B62B**; [new]
- *superstructures for load-carrying vehicles* **B62D 33/00**; [new]
- *loading or load-accommodating arrangements on ships or vessels* **B63B 25/00, B63B 27/00**; [new]
- *equipment for handling freight in aircraft* **B64D 9/00**. [new]

adopt M Subclass
 index

HANDLING AND STORAGE	
Loading and unloading	65/00, 67/00, 69/00
Transfer, trans-shipment	63/00
Storage	1/00, 3/00, 5/00
Piling, unpiling	
of articles	57/00-61/00
of loose material	65/28
Assisting manual handling	7/00, 9/00
CONVEYORS, CHUTES	
Mechanical	
with endless element	15/00-23/00
with particular movement	25/00, 27/00, 29/00, 33/00
other kinds	35/00
combinations or systems of general use	37/00, 49/00
chutes; roller-ways; projectors	11/00, 13/00, 31/00
Parts or auxiliary devices applicable to different kinds	
rollers; frames; auxiliary handling	39/00, 41/00, 47/00
control, safety; maintenance	43/00, 45/00
Non-mechanical	51/00, 53/00, 54/00

adopt M 1/00 **Storing articles, individually or in orderly arrangement, in warehouses or magazines** (conveyor combinations in warehouses, magazines or workshops **B65G 37/00**; stacking of articles **B65G 57/00**; removing articles from stacks **B65G 59/00**; loading machines **B65G 65/02**)

adopt M 1/02 • Storage devices (furniture **A47B**; shop fittings **A47F**)

adopt M 1/137 * * * with arrangements or automatic control means for selecting which articles are to be removed

adopt M **3/00** **Storing bulk material or loose, i.e. disorderly, articles** (filling or emptying storage spaces or containers, spreading-out or piling-up bulk material or loose articles **B65G 65/28, B65G 65/30, B65G 69/04**)

adopt M **5/00** **Storing fluids in natural or artificial cavities or chambers in the earth**

adopt M **7/00** **Devices for assisting manual moving or tilting heavy loads** (roller-ways **B65G 13/00**; for tilting and emptying barrels or casks **B65G 65/24**)

adopt M 7/02 * Devices adapted to be interposed between loads and the ground or floor, e.g. crowbars with means for assisting conveyance of loads

adopt M **9/00** **Apparatus for assisting manual handling having suspended load-carriers movable by hand or gravity**

adopt M Guidance Chutes; Kinds or types of conveyors; Constructional features, details or
heading auxiliary devices peculiar to conveyors of particular types
11/00-
37/00

adopt M **11/00** **Chutes** (used as storage devices **B65G 1/02**)

adopt M **13/00** **Roller-ways** (storage devices comprising roller-ways **B65G 1/02**; endless-chain conveyors comprising load-supporting rollers **B65G 17/00**; rollers or arrangements thereof **B65G 39/00**)

adopt M **15/00** **Conveyors having endless load-conveying surfaces, i.e. belts and like continuous members, to which tractive effort is transmitted by means other than endless driving elements of similar configuration** (having load-conveying surfaces formed by interconnected longitudinal links **B65G 17/06**)

adopt M 15/18 * * * the belts being sealed at their edges

adopt M 15/20 * * * arranged side by side, e.g. for conveyance of flat articles in vertical position

adopt M 15/28 * Conveyors with a load-conveying surface formed by a single flat belt, not otherwise provided for

adopt M 15/30 * Belts or like endless load-carriers (co-operating with rails or the like **B65G 21/22**; with rollers **B65G 39/20**)

adopt M 15/60 * Arrangements for supporting or guiding belts, e.g. by fluid jets

adopt M **17/00** **Conveyors having an endless traction element, e.g. a chain, transmitting movement to a continuous or substantially-continuous load-carrying surface or to a series of individual load-carriers; Endless-chain conveyors in which the chains form the load-carrying surface**

adopt M 17/22 * with oppositely-moving parts of the conveyor located in a common plane

adopt M 17/32 * * Individual load-carriers

adopt M 17/38 * * Chains or like traction elements (drive chains **F16G 13/00**) ; Connections between traction elements and load-carriers

adopt M **19/00** **Conveyors comprising an impeller or a series of impellers carried by an endless traction element and arranged to move articles or materials over a supporting surface or underlying material, e.g. endless scraper conveyors**

adopt M **21/00** **Supporting or protective framework or housings for endless load-carriers or traction elements of belt or chain conveyors**

adopt M 21/16 * for conveyors having endless load-carriers movable in curved paths

adopt M 21/20 * Means incorporated in, or attached to, framework or housings for guiding load-carriers, traction elements or loads supported on moving surfaces (arrangements for supporting belts **B65G 15/60**; rollers or roller arrangements **B65G 39/00**)

adopt M **23/00** **Driving gear for endless conveyors; Belt- or chain-tensioning arrangements**

adopt M 23/10 * * * arranged intermediate the ends of the conveyors

adopt M 23/32 * for effecting drive at two or more points spaced along the length of the conveyors

adopt M 23/36 * * comprising two or more driving motors each coupled to a separate driving element, e.g. at either end of the conveyors

adopt M **25/00** **Conveyors comprising a cyclically-moving, e.g. reciprocating, carrier or**

impeller which is disengaged from the load during the return part of its movement (jigging B65G 27/00)

adopt M 25/02 * the carrier or impeller having different forward and return paths of movement, e.g. walking-beam conveyors

adopt M 25/04 * the carrier or impeller having identical forward and return paths of movement, e.g. reciprocating conveyors

adopt M 27/00 **Jigging conveyors**

adopt M 27/02 * comprising helical or spiral channels or conduits for elevation of materials

adopt M 27/30 * * * by means of an oppositely-moving mass, e.g. a second conveyor

adopt M 29/00 **Rotary conveyors, e.g. rotating discs, arms, star-wheels or cones** (mechanical projectors **B65G 31/00**; screw or rotary spiral conveyors **B65G 33/00**)

adopt M 29/02 * for inclined or vertical transit

adopt M 31/00 **Mechanical throwing machines for articles or solid materials**

adopt M 33/00 **Screw or rotary spiral conveyors**

adopt M 33/26 * * Screws

adopt M **35/00** **Mechanical conveyors not otherwise provided for**

adopt M 35/04 * comprising a flexible load-carrier, e.g. a belt, which is wound-up at one end and paid-out at the other (reciprocating belt conveyors **B65G 25/06**)

adopt M 35/06 * comprising a load-carrier moving along a path, e.g. a closed path, and adapted to be engaged by any one of a series of traction elements spaced along the path (effecting drive at two or more points spaced along the length of an endless conveyor **B65G 23/32**)

adopt M **37/00** **Combinations of mechanical conveyors of the same kind, or of different kinds, of interest apart from their application in particular machines or use in particular manufacturing processes** (series of co-operating belt conveyor units **B65G 15/22**; series of co-operating chain conveyor units **B65G 17/26**; sequence control of combined conveyors **B65G 43/10**)

adopt M 37/02 * Flow sheets for conveyor combinations in warehouses, magazines or workshops

adopt M Guidance Common features or details of, or auxiliary devices applicable to, conveyors of different kinds or types; Feeding or discharging devices incorporated in, or operatively associated with, conveyors
heading
39/00-
47/00

adopt M **39/00** **Rollers, e.g. drive rollers, or arrangements thereof incorporated in roller-ways or other types of mechanical conveyors** (driving gear for rollers of roller-ways **B65G 13/06**)

adopt M 39/08 * * the rollers being magnetic

adopt M 39/16 * * * for aligning belts or chains

adopt M 39/20 * * attached to moving belts or chains

adopt M **41/00** **Supporting frames or bases for conveyors as a whole, e.g. transportable conveyor frames**

adopt M **43/00** **Control devices, e.g. for safety, warning or fault-correcting**

adopt M 43/10 * Sequence control of conveyors operating in combination

adopt M **47/00** **Article or material-handling devices associated with conveyors; Methods employing such devices**

adopt M 47/02 * Devices for feeding articles or materials to conveyors

adopt M 47/06 * * * from a single group of articles arranged in orderly pattern, e.g. workpieces in magazines (de-stacking devices **B65G 59/00**)

adopt M 47/08 * * * spacing or grouping the articles during feeding (during transit by conveyor **B65G 47/28**)

adopt M 47/14 * * * arranging or orientating the articles by mechanical or pneumatic means during feeding (during transit by conveyor **B65G 47/24**, **B65G 47/26**)

adopt M 47/19 * * * * having means for controlling material flow, e.g. to prevent overloading

adopt M 47/22 * * * * Devices influencing the relative position or the attitude of articles during transit by conveyors (during feeding **B65G 47/14**)

adopt M 47/26 * * * * arranging the articles, e.g. varying spacing between individual articles

adopt M 47/28 * * * * during transit by a single conveyor

adopt M 47/30 * * * * during transit by a series of conveyors

adopt M 47/31 * * * * by varying the relative speeds of the conveyors forming the series

adopt M 47/34 * * * * Devices for discharging articles or materials from conveyors (**B65G 47/256** takes precedence)

adopt M 47/40 * * * * by tilting conveyor buckets

adopt M 47/46 * * * * with distribution, e.g. automatically, to desired points (in tube mail systems **B65G 51/36**)

adopt M 47/48 * * * * according to bodily destination marks on either articles or load-carriers

adopt M 47/50 * * * according to destination signals stored in separate systems

adopt M 47/51 * * * according to unprogrammed signals, e.g. influenced by supply situation at destination

adopt M 47/52 * Devices for transferring articles or materials between conveyors, i.e. discharging or feeding devices (loading or unloading by means not incorporated in, or not operatively associated with, conveyors **B65G 65/00**; transfer of workpieces during metal rolling **B21B 41/00**)

adopt M 47/53 * * between conveyors which cross one another

adopt M 47/56 * * to or from inclined or vertical conveyor sections

adopt M 47/60 * * to or from conveyors of the suspended, e.g. trolley, type

adopt M 47/64 * * Switching conveyors

adopt M 47/66 * * Fixed platforms or combs, e.g. bridges between conveyors

adopt M 47/68 * * adapted to receive articles arriving in one layer from one conveyor and to transfer them in individual layers to more than one conveyor, or vice versa , e.g. combining the flows of articles conveyed by more than one conveyor

adopt M 47/71 * * * the articles being discharged to several conveyors

adopt M 47/72 * * * transferring materials in bulk from one conveyor to several conveyors or vice versa

adopt M **49/00** **Conveying systems characterised by their application for specified purposes not otherwise provided for**

adopt M 49/06 * * * for fragile sheets, e.g. glass

adopt M 49/07 * * * for semiconductor wafers

adopt M 49/08 * * * for ceramic mouldings

adopt M **51/00** **Conveying articles through pipes or tubes by fluid flow or pressure; Conveying articles over a flat surface, e.g. the base of a trough, by jets located in the surface**

adopt M 51/08 * * * Controlling or conditioning the operating medium

adopt M **53/00** **Conveying materials in bulk through troughs, pipes or tubes by floating the materials or by flow of gas, liquid or foam**

adopt M 53/02 * * * Floating material troughs

adopt M 53/32 * Conveying concrete, e.g. for distributing same at building sites (mixing concrete on or by conveyors **B28C 5/34**)

adopt M 53/42 * * * * Nozzles

adopt M 53/44 * * * Endless conveyors

adopt M 53/48 * * * Screws or like rotary conveyors

adopt M **54/00** **Non-mechanical conveyors not otherwise provided for**

adopt M **57/00** **Stacking of articles (B65G 60/00 takes precedence; feeding, piling or stacking sheets B65H)**

adopt M 57/11 * * the articles being stacked by direct action of the feeding conveyor

adopt M 57/112 * * * the conveyor being adjustable in height

adopt M 57/14 * * * the articles being transferred from carriers moving in an endless path adjacent to the stacks

adopt M **61/00** **Use of pick-up or transfer devices or of manipulators for stacking or de-stacking articles not otherwise provided for**

adopt M **63/00** **Transferring or trans-shipping at storage areas, railway yards or harbours;
Marshalling yard installations**

adopt M 63/04 · with essentially-horizontal transit by bridges equipped with conveyors

adopt M 63/06 · with essentially-vertical transit

adopt M **65/00** **Loading or unloading** (of vehicles **B65G 67/00**)

adopt M 65/02 · Loading or unloading machines comprising essentially a conveyor for moving
the loads associated with a device for picking-up the loads

adopt M 65/06 · · with endless scraping or elevating pick-up conveyors

adopt M 65/08 · · with reciprocating pick-up conveyors

adopt M 65/12 · · · operations at positions off-set from the conveyor centreline

adopt M 65/14 · · with jiggling pick-up conveyors, e.g. duck-bills

adopt M 65/16 · · with rotary pick-up conveyors

adopt M 65/32 · · Filling devices

adopt M 65/34 * * * Emptying devices (conveyor construction **B65G 15/00-B65G 35/00**; devices similar to vehicle tipplers **B65G 67/48**)

adopt M 65/42 * * * using belt or chain conveyors

adopt M 65/44 * * * using reciprocating conveyors, e.g. jiggling conveyors

adopt M 65/46 * * * using screw conveyors

adopt M **67/00 Loading or unloading vehicles** (by means incorporated in the vehicles **B60-B64**, e.g. **B60P 1/00**, **B61D 9/00**, **B63B 27/00**, **B64D 9/00**; ground or aircraft-carrier-deck installations for aircraft **B64F 1/32**)

adopt M 67/08 * * * using endless conveyors

adopt M 67/10 * * * using conveyors covering the whole length of vehicle trains

adopt M 67/18 * * * Refuelling locomotives with solid fuels

adopt M 67/28 * * * External transverse blades attached to endless conveyors

adopt M 67/34 * * * Apparatus for tipping wagons or mine cars (inverting wagons **B65G 67/48**)

adopt M 67/48 * * * * Vehicle tipplers

adopt M 67/60 * Loading or unloading ships (arrangement of ship-based loading or unloading equipment for cargo or passengers **B63B 27/00**)

adopt M 67/62 * * using devices influenced by the tide or by the movements of the ship, e.g. devices on pontoons

adopt M **69/00** **Auxiliary measures taken, or devices used, in connection with loading or unloading** (by means incorporated in, or operatively associated with, conveyors **B65G 47/00**; preventing fire **A62C 3/00**; in vehicles, see the relevant subclasses, e.g. **B60P 1/58**, **B61D 7/32**, **B62D 33/00**, **B63B 25/00**, **B64D 9/00**)

adopt M 69/08 * Devices for emptying storage spaces as completely as possible (devices preventing the formation of bridges in large containers **B65D 88/64**)

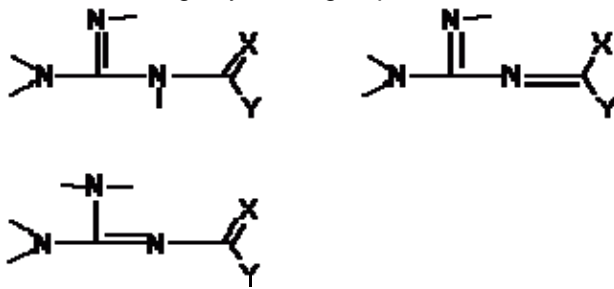
adopt M 69/10 * Obtaining an average product from stored bulk material

adopt M 69/22 * Horizontal loading or unloading platforms (as road or railway equipment **B61B 1/00**, **E01F 1/00**)

adopt M 69/28 * Loading ramps; Loading docks (as road or railway equipment **B61B 1/00**, **E01F 1/00**)

adopt M 279/20 *

containing any of the groups



any atom, e.g. acylguanidines

X being a hetero atom, Y being

ANNEX 26E C09D

[Project-Rapporteur : F016/EP] <CE45>

adopt C 11/00 *Inks*

adopt C 11/02 * *Printing inks (C09D 11/30 takes precedence)*

adopt N 11/023 * * *Emulsion inks*

adopt N 11/0235 * * * *Duplicating inks, e.g. for stencil printing*

adopt N 11/03 * * *characterised by features other than the chemical nature of the binder*

adopt N 11/033 * * * *characterised by the solvent*

adopt N 11/037 * * * *characterised by the pigment*

adopt C 11/10 * * *based on artificial resins*

adopt N 11/101 * * * *Inks specially adapted for printing processes involving curing by wave energy or particle radiation, e.g. with UV-curing following the printing*

adopt N 11/102 * * * *containing macromolecular compounds obtained by reactions other than those only involving unsaturated carbon-to-carbon bonds*

adopt N 11/103 * * * *of aldehydes, e.g. phenol-formaldehyde resins*

adopt N 11/104 * * * *Polyesters*

adopt N 11/105 * * * *Alkyd resins*

adopt N 11/106 * * * *containing macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds*

adopt N 11/107 * * * *from unsaturated acids or derivatives thereof*

adopt N 11/108 * * * *Hydrocarbon resins*

adopt C 11/16 * *Writing inks*

adopt N 11/17 * · *characterised by colouring agents*

adopt U 11/18 < unchanged >

adopt N 11/30 * *Inkjet printing inks*

adopt N 11/32 * · *characterised by colouring agents*

adopt N 11/322 * · · *Pigment inks*

adopt N 11/324 * · · · *containing carbon black*

adopt N 11/326 * · · · *characterised by the pigment dispersant*

adopt N 11/328 * · · *characterised by dyes*

adopt N 11/34 * · *Hot-melt inks*

adopt N 11/36 * · *based on non-aqueous solvents*

adopt N 11/38 * · *characterised by non-macromolecular additives other than solvents, pigments
or dyes*

adopt N 11/40 * * *Ink-sets specially adapted for multi-colour inkjet printing*

adopt N 11/50 * *Sympathetic, colour-changing or similar inks*

adopt N 11/52 * *Electrically conductive inks*

adopt N 11/54 * *Inks based on two liquids, one liquid being the ink, the other liquid being a reaction solution, a fixer or a treatment solution for the ink*

ANNEX 27E C11C [Project-Rapporteur : M740/RU] <CE45>

adopt M **Title FATTY ACIDS OBTAINED FROM FATS, OILS OR WAXES; CANDLES; FATS, OILS OR FATTY ACIDS OBTAINED BY CHEMICAL MODIFICATION OF FATS, OILS OR FATTY ACIDS**

adopt M **3/00 Fats, oils or fatty acids obtained by chemical modification of fats, oils or fatty acids, e.g. by ozonolysis** (sulfonated fats or oils **C07C 309/62**; epoxidised fats **C07D 303/42**; vulcanised oils, e.g. factice **C08H 3/00**)

ANNEX 28E C12F [Project-Rapporteur : D293/BR] <CE45>

adopt M **3/06** * from beer or wine (**C12F 3/02** takes precedence; removal of yeast of wine **C12G 1/08**)

ANNEX 29E C21B [Project-Rapporteur : D278/EP] <CE45>

adopt M Title **MANUFACTURE OF IRON OR STEEL** (preliminary treatment of ferrous ores or scrap
C22B 1/00)

adopt M 3/06 * * Treatment of liquid slag

adopt M 5/06 * using top gas in the blast furnace process

adopt M **7/00 Blast furnaces**

adopt M 7/04 * with special refractories

adopt M 9/12 * * Hot-blast valves or slides for blast furnaces

adopt M **15/00 Other processes for the manufacture of iron from iron compounds** (by
electrolysis **C25C 1/06**)

ANNEX 30E C21C [Project-Rapporteur : D279/EP] <CE45>

adopt M Title **PROCESSING OF PIG-IRON, e.g. REFINING, MANUFACTURE OF WROUGHT-
IRON OR STEEL; TREATMENT IN MOLTEN STATE OF FERROUS ALLOYS**

adopt M 5/52 * Manufacture of steel in electric furnaces

adopt M **7/00** **Treating molten ferrous alloys, e.g. steel, not covered by groups C21C 1/00-C21C 5/00** (treating molten metals during moulding **B22D 1/00, B22D 27/00**)

ANNEX 31E C21D [Project-Rapporteur : D280/EP] <CE45>

adopt M **1/00** **General methods or devices for heat treatment, e.g. annealing, hardening, quenching or tempering**

adopt M 1/55 · Hardenability tests, e.g. end-quench tests

adopt M 1/64 · · · with circulating liquids

adopt M 1/74 · Methods of treatment in inert gas, controlled atmosphere, vacuum, or pulverulent material

adopt M 1/82 · Descaling by thermal stresses (mechanically **B21, B23**; chemically **C23**; electrolytically **C25F 1/00**)

adopt M **3/00** **Diffusion processes for extraction of non-metals; Furnaces therefor** (local protective coatings **C21D 1/72**)

adopt M **9/00** **Heat treatment, e.g. annealing, hardening, quenching or tempering, adapted for particular articles; Furnaces therefor**

adopt M 9/04 · for rails

adopt M 9/14 * * wear-resistant or pressure-resistant pipes

adopt M 9/44 * for equipment for lining mine shafts, e.g. segments, rings or props

adopt M 9/68 * * * Furnace coilers; Hot coilers (cold coilers **B21C 47/00**)

adopt M **11/00** **Process control or regulation for heat treatments**

ANNEX 32E C25D [Project-Rapporteur : M739/DE] <CE45>

adopt U **3/00** < unchanged >

adopt U 3/10 < unchanged >

adopt U 3/32 < unchanged >

adopt U 3/36 < unchanged >

adopt U 3/52 < unchanged >

adopt U **5/00** < unchanged >

adopt U 5/02 < unchanged >

adopt U 5/04 < unchanged >

adopt U 5/06 < unchanged >

adopt U 5/08 < unchanged >

adopt U 5/10 < unchanged >

adopt U 5/16 < unchanged >

adopt U 5/18 < unchanged >

adopt U 5/20 < unchanged >

adopt U 5/22 < unchanged >

adopt U 5/24 < unchanged >

adopt U 5/54 < unchanged >

adopt U **7/00** < unchanged >

adopt U **9/00** < unchanged >

adopt U **11/00** < unchanged >

adopt M **13/00** **Electrophoretic coating characterised by the process (C25D 15/00** takes

precedence; compositions for electrophoretic coating **C09D 5/44**)

adopt U 13/10 < unchanged >

adopt U 13/12 < unchanged >

adopt U **19/00** < unchanged >

ANNEX 33E D21B [Project-Rapporteur : D285/BR] <CE45>

adopt M **1/00** **Fibrous raw materials or their mechanical treatment** (pretreatment of the finely-divided materials before digesting **D21C 1/00**; methods of beating or refining pulp **D21D 1/00**; purification of the pulp suspension by mechanical means **D21D 5/00**)

adopt M 1/04 * by dividing raw materials into small particles, e.g. fibres (breaking-up or cutting wood or the like by dry methods **B27L**; mechanical separation of fibres from plant material **D01B 1/00**; hackling or heckling machines **D01B 5/00**)

adopt M 1/14 * * * Disintegrating in mills

ANNEX 34E D21H [Project-Rapporteur : A057/EP] <CE45>

adopt M 21/40 * * Agents facilitating proof of genuineness or preventing fraudulent alteration, e.g. for security paper (watermarking **B41M 3/10**, **D21F 1/44**; security printing **B41M 3/14**; securities or banknotes characterised by colour effects **B42D 25/29**, **B42D 25/30**; testing paper currency or valuable papers for genuineness **G07D 7/00**)

ANNEX 35E E04C [Project-Rapporteur : M014/IB] <CE45>

adopt M 3/28 · · of materials not covered by groups **E04C 3/04-E04C 3/20**

adopt M 3/36 · · of materials not covered by groups **E04C 3/32** or **E04C 3/34**; of a combination of two or more materials

adopt M 3/46 · · of materials not covered by groups **E04C 3/40-E04C 3/44**; of a combination of two or more materials

ANNEX 36E E04D [Project-Rapporteur : F007/EP] <CE45>

adopt C 13/18 · *Roof covering aspects of energy collecting devices, e.g. including solar panels (supporting structures of photovoltaic modules specially adapted for roof structures **H02S 20/23**)*

ANNEX 37E E05B [Project-Rapporteur : A048/EP] <CE45>

- adopt N Note
E05B
1. *Operating or controlling of locks for vehicle wings are classified in groups **E05B 77/00-E05B 81/00**. [new]*
 2. *Knobs, handles or press buttons for locks of vehicle wings are classified in groups **E05B 79/00-E05B 85/00**. [new]*

adopt M Subclass
index

LOCKS WITH TUMBLERS	
Moved by rotation of the key	21/00, 23/00, 25/00
Set by pushing the key in	27/00-33/00
LOCKS FOR USE WITH SPECIAL KEYS OR KEY SETS	35/00
PERMUTATION OR PUZZLE LOCKS	37/00, 49/00
PADLOCKS	67/00, 37/00
LOCKS WITH INDICATING OR TIMING DEVICES	39/00-45/00

LOCKS WITH PROVISION FOR LATCHING	55/00-61/00
LOCKS WITH OTHER SPECIAL STRUCTURAL FEATURES	63/00
LOCKS FOR SPECIAL USE	65/00, 69/00-75/00
LOCKS FOR VEHICLES	77/00-85/00
OPERATION OR CONTROL OF LOCKS	47/00-53/00
OPERATION OR CONTROL OF LOCKS FOR VEHICLES	77/00-81/00
DETAILS OR ACCESSORIES OF LOCKS OR THE LIKE, KEYS	
Knobs or handles	1/00-7/00
Knobs or handles for vehicles	79/00, 85/00
Other details or accessories of locks or latches	9/00-17/00
Keys	19/00
HANDCUFFS	75/00

adopt M **9/00** **Lock casings or latch-mechanism casings** (padlock casings **E05B 67/02**; for vehicles **E05B 79/04, E05B 85/02**)

adopt M **53/00** **Operation or control of locks by mechanical transmissions, e.g. from a distance**

adopt M 63/12 * with means carried by the bolt for interlocking with the keeper

adopt D 65/12 (transferred to **E05B 77/00-E05B 85/00**)

adopt D 65/14 (transferred to **E05B 83/02**)

adopt D 65/16 (transferred to **E05B 83/10,E05B 83/12**)

adopt D 65/18 (transferred to **E05B 83/14**)

adopt D 65/19 (transferred to **E05B 77/08,E05B 83/16,E05B 83/24,E05B 83/26**)

adopt D 65/20 (transferred to **E05B 77/00-E05B 85/00**)

adopt D 65/22 (transferred to **E05B 85/22**)

adopt D 65/24 (transferred to **E05B 83/36,E05B 85/08-E05B 85/12**)

adopt D 65/26 (transferred to **E05B 85/10**)

adopt D 65/28 (transferred to **E05B 85/20**)

adopt D 65/30 (transferred to **E05B 85/24**)

adopt D 65/32 (transferred to **E05B 85/24**)

adopt D 65/34 (transferred to **E05B 85/28**)

adopt D 65/36 (transferred to **E05B 77/46**)

adopt D 65/38 (transferred to **E05B 77/50**)

adopt D 65/40 (transferred to **E05B 77/52**)

adopt D 65/42 (transferred to **E05B 77/54**)

adopt N *Guidance* **Locks for vehicles other than bicycles**
heading
77/00-
85/00

adopt N **77/00** **Vehicle locks characterised by special functions or purposes** (locks specially adapted for bicycles **E05B 71/00**; locking arrangements for non-fixed vehicle roofs **B60J 7/185**)

adopt N 77/02 * *for accident situations*

adopt N 77/04 * * *Preventing unwanted lock actuation, e.g. unlatching, at the moment of collision*

adopt N 77/06 * * * *by means of inertial forces*

adopt N 77/08 * * *Arrangements for protection of pedestrians*

adopt N 77/10 * * *Allowing opening in case of deformed bodywork, e.g. by preventing deformation of lock parts*

adopt N 77/12 * * *Automatic locking or unlocking at the moment of collision*

adopt N 77/14 * *Specially controlled locking actions in case of open doors or in case of doors moved from an open to a closed position, e.g. lock-out prevention or self-cancelling*

adopt N 77/16 * * *Preventing locking with the bolt in the unlatched position, i.e. when the door is open*

adopt N 77/18 * * *Keyless locking with self-cancellation, e.g. resulting in an unlocking action when the door is being closed*

adopt N 77/20 * * * *Override of self-cancellation, e.g. by actuation of the handle while the door is being closed*

adopt N 77/22 * *Functions related to actuation of locks from the passenger compartment of the vehicle*

adopt N 77/24 * * *preventing use of an inner door handle, sill button, lock knob or the like*

adopt N 77/26 * * * *specially adapted for child safety*

adopt N 77/28 * * * *for anti-theft purposes, e.g. double-locking or super-locking*

adopt N 77/30 * * *allowing opening by means of an inner door handle, even if the door is locked*

adopt N 77/32 * *allowing simultaneous actuation of locking or unlocking elements and a handle, e.g. preventing interference between an unlocking and an unlatching action*

adopt N 77/34 * *Protection against weather or dirt, e.g. against water ingress (closures or guards for keyholes **E05B 17/14**)*

adopt N 77/36 * *Noise prevention; Anti-rattling means*

adopt N 77/38 * * *Cushion elements, elastic guiding elements or holding elements, e.g. for cushioning or damping the impact of the bolt against the striker during closing of the wing*

adopt N 77/40 * • *Lock elements covered by silencing layers, e.g. coatings*

adopt N 77/42 * • *Means for damping the movement of lock parts, e.g. slowing down the return movement of a handle (**E05B 77/38** takes precedence)*

adopt N 77/44 * • *Burglar prevention, e.g. protecting against opening by unauthorised tools (**E05B 77/28** takes precedence)*

adopt N 77/46 * • *Locking several wings simultaneously*

adopt N 77/48 * • *by electrical means*

adopt N 77/50 * • *by pneumatic or hydraulic means*

adopt N 77/52 * • *Locking one wing by shutting another*

adopt N 77/54 * • *Automatic securing or unlocking of bolts triggered by certain vehicle parameters, e.g. exceeding a speed threshold (triggered by vehicle collision **E05B 77/12**)*

adopt N **79/00** ***Mounting or connecting vehicle locks or parts thereof***

adopt N 79/02 * • *Mounting of vehicle locks or parts thereof*

- adopt N 79/04 * * *Mounting of lock casings to the vehicle, e.g. to the wing*

- adopt N 79/06 * * *Mounting of handles, e.g. to the wing or to the lock*

- adopt N 79/08 * * *Mounting of individual lock elements in the lock, e.g. levers*

- adopt N 79/10 * *Connections between movable lock parts*

- adopt N 79/12 * * *using connecting rods*

- adopt N 79/14 * * * *the rods being linked to each other*

- adopt N 79/16 * * * *characterised by means for linking the rods to other lock parts, e.g. to levers*

- adopt N 79/18 * * * *Rod guides*

- adopt N 79/20 * * *using flexible connections, e.g. Bowden cables*

- adopt N 79/22 * * *Operative connections between handles, sill buttons or lock knobs and the lock unit (mounting of non-movable base elements of a handle to a lock **E05B 79/06**)*

adopt N **81/00** **Power-actuated vehicle locks**

adopt N 81/02 * · characterised by the type of actuators used

adopt N 81/04 * · Electrical (electrical circuits **E05B 81/54**)

adopt N 81/06 * · · using rotary motors

adopt N 81/08 * · · using electromagnets or solenoids

adopt N 81/10 * · Hydraulic or pneumatic (hydraulic or pneumatic circuits **E05B 81/52**)

adopt N 81/12 * · characterised by the function or purpose of the powered actuators

adopt N 81/14 * · operating on bolt detents, e.g. for unlatching the bolt

adopt N 81/16 * · operating on locking elements for locking or unlocking action

adopt N 81/18 * · to effect movement of bolts (**E05B 81/20** takes precedence)

adopt N 81/20 * · for assisting final closing or for initiating opening

adopt N 81/22 * * * *by movement of the striker*

adopt N 81/24 * * * *characterised by constructional features of the actuator or the power transmission*

adopt N 81/26 * * * *Output elements*

adopt N 81/28 * * * *Linearly reciprocating elements*

adopt N 81/30 * * * *Rotary elements*

adopt N 81/32 * * * *Details of the actuator transmission*

adopt N 81/34 * * * *of geared transmissions*

adopt N 81/36 * * * * *Geared sectors, e.g. fan-shaped gears*

adopt N 81/38 * * * * *Planetary gears*

adopt N 81/40 * * * * *Nuts or nut-like elements moving along a driven threaded axle*

adopt N 81/42 * * * * *Cams*

adopt N 81/44 * * * * *in the form of grooves*

adopt N 81/46 * * * *Clutches*

adopt N 81/48 * * *Actuators being driven in a single direction*

adopt N 81/50 * * *Powered actuators with automatic return to the neutral position by non-powered means, e.g. by springs*

adopt N 81/52 * *Pneumatic or hydraulic circuits (for locking several wings simultaneously **E05B 77/50**)*

adopt N 81/54 * *Electrical circuits (for locking several wings simultaneously **E05B 77/48**)*

adopt N 81/56 * * *Control of actuators*

adopt N 81/58 * * * *involving time control, e.g. for controlling run-time of electric motors*

adopt N 81/60 * * * *using pulse control, e.g. pulse-width modulation*

adopt N 81/62 * * * *for opening or closing of a circuit depending on electrical parameters, e.g. increase of motor current*

adopt N 81/64 * * * *Monitoring or sensing, e.g. by using switches or sensors*

adopt N 81/66 * * * *the bolt position, i.e. the latching status*

adopt N 81/68 * * * * *by sensing the position of the detent*

adopt N 81/70 * * * *the wing position*

adopt N 81/72 * * * *the lock status, i.e. locked or unlocked condition*

adopt N 81/74 * * * * *by sensing the state of the actuator*

adopt N 81/76 * * * *Detection of handle operation; Detection of a user approaching a handle;
Electrical switching actions performed by handles*

adopt N 81/78 * * * * *as part of a hands-free locking or unlocking operation*

adopt N 81/80 * * *characterised by the power supply; Emergency power operation*

adopt N 81/82 * * * *using batteries other than the vehicle main battery*

adopt N 81/84 * * * *using manually operated generator means*

adopt N 81/86 * * * *using capacitors*

adopt N 81/88 * * * *using inductive energy transmission*

adopt N 81/90 * *Manual override in case of power failure*

adopt N **83/00** **Vehicle locks specially adapted for particular types of wing or vehicle** (*locks specially adapted for bicycles **E05B 71/00**; locking arrangements for non-fixed vehicle roofs **B60J 7/185**; latching means for sideboards or tailgates of open load compartments **B62D 33/037**)*

adopt N 83/02 * *Locks for railway freight-cars, freight containers or the like; Locks for the cargo compartments of commercial lorries, trucks or vans*

adopt N 83/04 * * *for sliding wings*

adopt N 83/06 * * * *of railway freight-cars*

adopt N 83/08 * * *with elongated bars for actuating the fastening means*

adopt N 83/10 * * * *Rotary bars*

adopt N 83/12 * * *for back doors of vans (**E05B 83/04**, **E05B 83/08** take precedence)*

- adopt N 83/14 * * *with provisions for sealing*
- adopt N 83/16 * *Locks for luggage compartments, car boot lids or car bonnets*
- adopt N 83/18 * * *for car boot lids or rear luggage compartments*
- adopt N 83/20 * * * *with two or more wings, which together close a single compartment*
- adopt N 83/22 * * *for luggage compartments at the side of the vehicle, e.g. of buses or camper vans*
- adopt N 83/24 * * *for car bonnets*
- adopt N 83/26 * * *Emergency opening means for persons trapped in the luggage compartment*
- adopt N 83/28 * *Locks for glove compartments, console boxes, fuel inlet covers or the like*
- adopt N 83/30 * * *for glove compartments*
- adopt N 83/32 * * *for console boxes, e.g. between passenger seats*
- adopt N 83/34 * * *for fuel inlet covers essentially flush with the vehicle surface*

adopt N 83/36 * *Locks for passenger or like doors*

adopt N 83/38 * *for pillar-less vehicles, i.e. vehicles where a front and a back door engage each other in the closed position*

adopt N 83/40 * *for sliding doors*

adopt N 83/42 * *for large commercial vehicles, e.g. trucks, construction vehicles or vehicles for mass transport*

adopt N 83/44 * *for recreational vehicles, e.g. caravans or camper vans*

adopt N **85/00** ***Details of vehicle locks not provided for in groups E05B 77/00-E05B 83/00***

adopt N 85/02 * *Lock casings (mounting of lock casings **E05B 79/04**)*

adopt N 85/04 * *Strikers*

adopt N 85/06 * *Lock cylinder arrangements*

adopt N 85/08 * *Sill-buttons, garnish buttons or inner door lock knobs*

adopt N 85/10 * *Handles*

adopt N 85/12 * * *Inner door handles*

adopt N 85/14 * * *Handles pivoted about an axis parallel to the wing*

adopt N 85/16 * * * *a longitudinal grip part being pivoted at one end about an axis perpendicular to the longitudinal axis of the grip part*

adopt N 85/18 * * * *a longitudinal grip part being pivoted about an axis parallel to the longitudinal axis of the grip part*

adopt N 85/20 * *Bolts or detents*

adopt N 85/22 * * *Rectilinearly moving bolts*

adopt N 85/24 * * *Bolts rotating about an axis*

adopt N 85/26 * * * *Cooperation between bolts and detents*

adopt N 85/28 * * * *in which the member engaging the keeper is shaped as a toothed wheel or the like*

adopt M Note In this class, the following terms or expressions are used with the meanings indicated:

- F23
- "combustion" means a heat-producing sequence of chemical reactions between a burnable substance and molecular oxygen, e.g. in air, in most cases generating light in the form of flames or a glow;
 - "combustion chamber" means a chamber in which fuel is burned to establish a self-supporting fire or flame and which surrounds that fire or flame;
 - "burner" means a device by which fluid fuel, or solid fuel suspended in air, is passed to a combustion space where it burns to produce a self-supporting flame;
 - "air" means a mixture of gases containing free oxygen and able to promote or support combustion.

ANNEX 39E F24F [Project-Rapporteur : M014/IB] <CE45>

adopt M 3/02 * characterised by the pressure or velocity of the primary air

adopt M 3/048 * * with temperature control at constant rate of air-flow

adopt M 3/056 * * the air at least partially flowing over lighting fixtures, the heat of which is dissipated or used (outlets for directing or distributing air into rooms or spaces combined with lighting fixtures **F24F 13/078**)

adopt M 3/06 * characterised by the arrangements for the supply of heat-exchange fluid for the subsequent treatment of primary air in the room units

adopt M 3/12 * characterised by the treatment of the air otherwise than by heating and cooling

adopt M 6/14 * * using nozzles

adopt M 7/02 · Roof ventilation (ventilation of roof coverings **E04D**)

adopt M 9/00 **Use of air currents for screening, e.g. air curtain**

adopt M 11/00 **Control or safety systems or apparatus**

adopt M 11/04 · · solely for controlling the rate of air-flow

adopt M 12/00 **Use of energy recovery systems in air conditioning, ventilation or screening**
(with both heat and humidity transfer between supplied and exhausted air **F24F 3/147**)

adopt M 13/04 · · Air-mixing units (**F24F 13/06** takes precedence)

adopt M 13/062 · · · having one or more bowls or cones diverging in the flow direction

adopt M 13/065 · · · formed as cylindrical or spherical bodies which are rotatable

adopt M 13/078 · · · combined with lighting fixtures

adopt M 13/08 · Air-flow control members, e.g. louvres, grilles, flaps or guide plates (**F24F 7/013, F24F 13/06** take precedence)

adopt M 13/10 * * movable, e.g. dampers

ANNEX 40E F24J [Project-Rapporteur : F007/EP] <CE45>

adopt C 2/00 **Use of solar heat, e.g. solar heat collectors** (distillation or evaporation of water using solar energy **C02F 1/14**; roof covering aspects of energy collecting devices **E04D 13/18**; devices for producing mechanical power from solar energy **F03G 6/00**; semiconductor devices specially adapted for converting solar energy into electrical energy **H01L 31/00**; photovoltaic [PV] cells including means directly associated with the PV cell to utilise heat energy **H01L 31/0525**; PV modules including means associated with the PV module to utilise heat energy **H02S 40/44**)

adopt N Note Supporting structures also intended for use with photovoltaic modules should further 2/00 be classified in the relevant groups of subclass **H02S**. [new]

adopt C 2/38 * employing tracking means (**F24J 2/02**, **F24J 2/06** take precedence; rotary supports or mountings therefor **F24J 2/54**; supporting structures of photovoltaic modules for generation of electric power specially adapted for solar tracking systems **H02S 20/32**)

ANNEX 41E F41B [Project-Rapporteur : M014/IB] <CE45>

adopt M 11/71 * * Electric or electronic control systems, e.g. for safety purposes

ANNEX 42E G01N [Project-Rapporteur : F011/EP] <CE45>

adopt M 21/00 Investigating or analysing materials by the use of optical means, i.e. using infra-red, visible or ultra-violet light (**G01N 3/00-G01N 19/00** take precedence)

adopt C 21/35 * * * * using infra-red light (**G01N 21/39** takes precedence)

adopt N 21/3504 * * * * for analysing gases, e.g. multi-gas analysis

adopt N 21/3518 * * * * Devices using gas filter correlation techniques; Devices using gas pressure modulation techniques

adopt N Note This group also covers devices without instrumental sources, e.g. radiometric-type 21/3518 devices using ambient infra-red light. **[new]**

adopt N 21/3554 * * * * for determining moisture content

adopt N 21/3559 * * * * in sheets, e.g. in paper

adopt N 21/3563 * * * * for analysing solids; Preparation of samples therefor

adopt N 21/3577 * * * * for analysing liquids, e.g. polluted water

adopt N 21/3581 * * * * using far infra-red light; using Terahertz radiation

adopt N 21/3586 * * * * by Terahertz time domain spectroscopy [THz-TDS]

adopt N 21/359 * * * * using near infra-red light

adopt C 21/55 * • *Specular reflectivity*

adopt N 21/552 * • • *Attenuated total reflection*

ANNEX 43E G01R [Project-Rapporteur : F007/EP] <CE45>

adopt C 31/26 * *Testing of individual semiconductor devices (testing or measuring during manufacture or treatment **H01L 21/66**; testing of photovoltaic devices **H02S 50/10**)*

adopt C 31/40 * *Testing power supplies (testing photovoltaic devices **H02S 50/10**)*

ANNEX 44E G03B [Project-Rapporteur : F012/JP] <CE45>

adopt C 7/00 **Control of exposure by setting shutters, diaphragms or filters, separately or jointly** (control of exposure in television cameras by means of circuitry for compensating for variation in the brightness of the object **H04N 5/235**)

adopt N 7/01 * *with selection of either manual or automatic mode*

adopt C 7/08 * *Control effected solely on the basis of the response, to the intensity of the light received by the camera, of a built-in light-sensitive device*

adopt N 7/0805 * • *Setting of priority modes*

adopt C 7/099 * * * *Arrangement of photoelectric elements in or on the camera*

adopt N 7/0993 * * * *in the camera*

adopt N 7/0997 * * * *Through the lens [TTL] measuring*

adopt C 7/16 * * * *in accordance with both the intensity of the flash source and the distance of the flash source from the object, e.g. in accordance with the "guide number" of the flash bulb and the focusing of the camera*

adopt N 7/17 * * * *Selection of modes in flash units by exposure control arrangements*

adopt N 7/30 * * * *Safety arrangements for control of exposure*

ANNEX 45E G03B [Project-Rapporteur : F010/EP] <CE45>

adopt C 21/58 * * * *collapsible, e.g. foldable; of variable area*

adopt N 21/585 * * * *Inflatable screens*

adopt C 21/60 * * * *characterised by the nature of the surface*

adopt N 21/602 * * * * *Lenticular screens (G03B 21/625 takes precedence)*

adopt N 21/604 * * * * *Polarised screens*

adopt N 21/606 * * * * *for relief projection*

adopt N 21/608 * * * * *Fluid screens*

adopt C 21/62 * * * * *Translucent screens*

adopt N 21/625 * * * * * *Lenticular translucent screens*

ANNEX 46E G04D [Project-Rapporteur : D289/RU] <CE45>

adopt M Title **APPARATUS OR TOOLS SPECIALLY DESIGNED FOR MAKING OR
MAINTAINING CLOCKS OR WATCHES**

adopt M 9/00 **Demagnetising devices**

ANNEX 47E G05G [Project-Rapporteur : A056/EP] <CE45>

adopt M Note 1. This subclass covers :
G05G

- members of general applicability for mechanical control;

- mechanical systems for moving members to one or more definite settings.
2. Systems peculiar to the control of particular machines or apparatus provided for in a single other class are classified in the relevant class for such machines or apparatus, for example:

A61G 13/02	Controls for adjusting operating tables [6]
A61G 15/02	Controls for adjusting operating chairs [6]
A63F 13/20, A63F 13/98	Accessories for games using an electronically generated display [7]
B25J	Manipulators, e.g. controls therefor [6]
B60K 26/00	Arrangement or mounting of propulsion-unit control devices in vehicles [6]
B60T 7/00	Vehicle brake-action initiating means [6]
B62D 33/073	Adaptations of control devices for movable vehicle cabs [6]
B62K 21/00	Cycle-steering devices [6]
B62K 23/00	Rider-operated controls specially adapted for cycles [6]
B62L 3/00	Brake-actuating mechanisms specially adapted for cycles [6]
B63H 25/02	Marine steering initiating means [6]
B66B 1/00	Controls for elevators [6]
B66C 13/18	Control systems or devices for cranes [6]
B66C 13/56	Arrangements of handles or pedals for crane operation [6]
E02F 9/20	Control devices for dredging or soil shifting machines [6]
F16C 3/28	Adjustable cranks or eccentrics [6]
F16D 43/00	Automatic clutches [6]
F16K 31/00, F16K 33/00	Controls for valves [6]
F16P 3/00	Safety devices acting in conjunction with the control or operation of a machine [6]
F16P 7/02	Stopping machines on occurrence of dangerous conditions therein [6]
G02B 21/32	Micromanipulators structurally combined with microscopes [6]
G04B 1/00- G04B 18/00	Driving mechanisms in clocks or watches [6]
G06C	Digital computers in which all the computation is effected mechanically [6]
G06F 3/01	Manual computer input arrangements [6]
G06K 11/00	Converting a pattern of mechanical parameters into electric signals [6]
G21C 7/08	Displacement of solid control elements in nuclear reactors [6]
H01H	Mechanisms for operating switch contacts [6]
H03J 1/00	Mechanical control of resonant circuits. [6]

adopt M **Title** **SIGNALLING OR CALLING SYSTEMS; ORDER TELEGRAPHS; ALARM SYSTEMS**

adopt M **3/00** **Audible signalling systems; Audible personal calling systems**

adopt M **5/00** **Visible signalling systems, e.g. personal calling systems, remote indication of seats occupied**

adopt M 5/14 * * with indicator element moving about a pivot, e.g. hinged flap or rotating vane

adopt M 5/24 * * with indicator element moving about a pivot, e.g. hinged flap or rotating vane

adopt M 5/40 * using smoke, fire or coloured gases

adopt M **6/00** **Tactile signalling systems, e.g. personal calling systems**

adopt M **7/00** **Signalling systems according to more than one of groups G08B 3/00-G08B 6/00; Personal calling systems according to more than one of groups G08B 3/00-G08B 6/00**

adopt M **9/00** **Order telegraph apparatus, i.e. means for transmitting one of a finite number of different orders at the discretion of the user, e.g. bridge to engine room orders in ships**

adopt M **13/00** **Burglar, theft or intruder alarms**

adopt M 13/06 * * by tampering with fastening

adopt M 13/183 * * * by interruption of a radiation beam or barrier

adopt M **15/00** **Identifying, scaring or incapacitating burglars, thieves or intruders, e.g. by explosives**

adopt M **17/00** **Fire alarms; Alarms responsive to explosion**

adopt M 17/06 * Electric actuation of the alarm, e.g. using a thermally-operated switch

adopt M 17/11 * * using an ionisation chamber for detecting smoke or gas

adopt M 17/113 * * * Constructional details

adopt M 17/117 * * by using a detection device for specific gases, e.g. combustion products, produced by the fire (**G08B 17/103**, **G08B 17/11** take precedence)

adopt M 17/12 * Actuation by presence of radiation or particles, e.g. of infra-red radiation or of ions

adopt M 19/02 * Alarm responsive to formation or anticipated formation of ice

adopt M 21/06 * * indicating a condition of sleep, e.g. anti-dozing alarms

adopt M 21/10 * * responsive to calamitous events, e.g. tornados or earthquakes

adopt M 21/12 * * responsive to undesired emission of substances, e.g. pollution alarms

adopt M 21/24 * * Reminder alarms, e.g. anti-loss alarms

adopt M 25/06 * * using power transmission lines

adopt M 25/08 * * using communication transmission lines

adopt M 29/06 * * Monitoring of the line circuits, e.g. signalling of line faults

ANNEX 49E G10B [Project-Rapporteur : M736/GB] <CE45>

adopt M **Title** **ORGANS, HARMONIUMS OR LIKE MUSICAL INSTRUMENTS WITH ASSOCIATED BLOWING APPARATUS** (non-musical aspects of musical toy instruments **A63H 5/00**; accordions, concertinas or the like or keyboards therefor **G10D 11/00**; automatic wind instruments **G10F 1/12**)

adopt M 3/10 * Actions, e.g. couplers

ANNEX 50E G10C [Project-Rapporteur : M736/GB] <CE45>

adopt M 3/26 · Pedals or pedal mechanisms for half-blow or similar means for modifying the sound

ANNEX 51E G10D [Project-Rapporteur : M736/GB] <CE45>

adopt M Title **STRINGED MUSICAL INSTRUMENTS; WIND MUSICAL INSTRUMENTS; ACCORDIONS OR CONCERTINAS; PERCUSSION MUSICAL INSTRUMENTS; MUSICAL INSTRUMENTS NOT OTHERWISE PROVIDED FOR** (non-musical aspects of musical toy instruments **A63H 5/00**; organs, harmoniums or like musical instruments with associated blowing apparatus **G10B**; pianos, harpsichords, spinets or similar stringed musical instruments with one or more keyboards **G10C**; automatic musical instruments **G10F**; electrophonic musical instruments **G10H**; instruments in which the tones are generated by electromechanical means or electronic generators, or in which the tones are synthesised from a data store **G10H**)

adopt M 7/00 **General design of wind musical instruments** (accordions or concertinas **G10D 11/00**; whistles **G10K 5/00**)

adopt M 7/06 · of the type with a beating reed or reeds, e.g. oboes, clarinets, bassoons or bagpipes

adopt M 7/12 · of the type with free reeds, e.g. mouth-organs or trumpets for children

adopt M 9/00 **Details of, or accessories for, wind musical instruments**

ANNEX 52E G10F [Project-Rapporteur : M736/GB] <CE45>

adopt M 1/08 * Percussion instruments

adopt M 1/12 * Wind instruments

adopt M 1/16 * Stringed instruments other than pianofortes

ANNEX 53E G10L [Project-Rapporteur : M743/EP] <CE45>

adopt M 19/008 * Multichannel audio signal coding or decoding, i.e. using interchannel correlation to reduce redundancies, e.g. joint-stereo, intensity-coding or matrixing

adopt M **25/00** **Speech or voice analysis techniques not restricted to a single one of groups G10L 15/00-G10L 21/00** (muting semiconductor-based amplifier for gain or frequency control, e.g. muting when some special characteristics of a signal are sensed by using a speech detector **H03G 3/34**)

ANNEX 54E H01G [Project-Rapporteur : M013/IB] <CE45>

adopt U 11/10 < unchanged >

ANNEX 55E H01L [Project-Rapporteur : F007/EP] <CE45>

adopt M **25/00** **Assemblies consisting of a plurality of individual semiconductor or other solid state devices** (devices consisting of a plurality of solid state components formed in or on a common substrate **H01L 27/00**; photovoltaic modules or arrays of photovoltaic cells **H01L 31/042**)

adopt C 25/04 * * * *the devices not having separate containers*

adopt C 31/0203 * * * *Containers; Encapsulations (for photovoltaic devices **H01L 31/048**; for organic photosensitive devices **H01L 51/44**)*

adopt C 31/0216 * * * *Coatings (**H01L 31/041** takes precedence)*

adopt C 31/0232 * * * *Optical elements or arrangements associated with the device (**H01L 31/0236** takes precedence; for photovoltaic cells **H01L 31/054**; for photovoltaic modules **H02S 40/20**)*

adopt C 31/024 * * * *Arrangements for cooling, heating, ventilating or temperature compensation (for photovoltaic devices **H01L 31/052**)*

adopt C 31/04 * * * *adapted as photovoltaic [PV] conversion devices, e.g. PV modules or single PV cells (testing thereof during manufacture **H01L 21/66**; testing thereof after manufacture **H02S 50/10**)*

adopt N 31/041 * * * *Provisions for preventing damage caused by corpuscular radiation, e.g. for space applications*

adopt C 31/042 * * * *PV modules or arrays of single PV cells (plurality of thin film solar cells on a common substrate **H01L 27/142**; supporting structures for PV modules **H02S 20/00**)*

adopt N 31/043 * * * *Mechanically stacked PV cells*

adopt D 31/045 (transferred to **H02S 30/20**)

adopt C 31/048 · · · *Encapsulation of modules*

adopt N 31/049 · · · · *Protective back sheets*

adopt C 31/05 · · · *Electrical interconnection means between PV cells inside the PV module, e.g. series connection of PV cells (electrodes **H01L 31/0224**; electrical interconnection of thin film solar cells formed on a common substrate **H01L 27/142**; electrical interconnection means specially adapted for electrically connecting two or more PV modules **H02S 40/36**)*

adopt C 31/052 · · *Cooling means directly associated or integrated with the PV cell, e.g. integrated Peltier elements for active cooling or heat sinks directly associated with the PV cells (cooling means in combination with the PV module **H02S 40/42**)*

adopt N 31/0525 · · · *including means to utilise heat energy directly associated with the PV cell, e.g. integrated Seebeck elements*

adopt N 31/053 · · *Energy storage means directly associated or integrated with the PV cell, e.g. a capacitor integrated with a PV cell (energy storage means associated with the PV module **H02S 40/38**)*

adopt N 31/054 · · *Optical elements directly associated or integrated with the PV cell, e.g. light-reflecting means or light-concentrating means*

adopt C 31/055 · · · *where light is absorbed and re-emitted at a different wavelength by the optical element directly associated or integrated with the PV cell, e.g. by using luminescent material, fluorescent concentrators or up-conversion arrangements*

adopt N 31/056 · · · *the light-reflecting means being of the back surface reflector [BSR] type*

adopt D 31/058 (transferred to **H01L 31/0525,H02S 40/44**)

ANNEX 56E H01L [Project-Rapporteur : M013/IB] <CE45>

adopt M 41/318 < Add 1 dot(s) >

ANNEX 57E H01M [Project-Rapporteur : F017/EP] <CE45>

adopt M 10/42 · Methods or arrangements for servicing or maintenance of secondary cells or secondary half-cells (**H01M 10/60** takes precedence)

adopt D 10/50 (transferred to **H01M 10/60**)

adopt N 10/60 · *Heating or cooling; Temperature control*

adopt N 10/61 · · *Types of temperature control*

adopt N 10/613 · · · *Cooling or keeping cold*

adopt N 10/615 · · · *Heating or keeping warm*

adopt N 10/617* * * *for achieving uniformity or desired distribution of temperature*

adopt N 10/62* * * *specially adapted for specific applications*

adopt N 10/623* * * *Portable devices, e.g. mobile telephones, cameras or pacemakers*

adopt N 10/6235* * * * *Power tools*

adopt N 10/625* * * *Vehicles*

adopt N 10/627* * * *Stationary installations, e.g. power plant buffering or backup power supplies*

adopt N 10/63* * * *Control systems (measurement of temperature **H01M 10/48**; charging or discharging in response to temperature **H01M 10/44**)*

adopt N 10/633* * * *characterised by algorithms, flow charts, software details or the like*

adopt N 10/635* * * *based on ambient temperature*

adopt N 10/637* * * *characterised by the use of reversible temperature-sensitive devices, e.g. NTC, PTC or bimetal devices; characterised by control of the internal current flowing through the cells, e.g. by switching (**H01M 2/34** takes precedence)*

adopt N 10/64 * * * *characterised by the shape of the cells*

adopt N 10/643 * * * *Cylindrical cells*

adopt N 10/647 * * * *Prismatic or flat cells, e.g. pouch cells*

adopt N 10/65 * * * *Means for temperature control structurally associated with the cells*

adopt N 10/651 * * * *characterised by parameters specified by a numeric value or mathematical formula, e.g. ratios, sizes or concentrations*

adopt N 10/652 * * * * *characterised by gradients (for achieving a desired temperature gradient*
H01M 10/617)

adopt N 10/653 * * * *characterised by electrically insulating or thermally conductive materials*

adopt N 10/654 * * * *located inside the innermost case of the cells, e.g. mandrels, electrodes or electrolytes*

adopt N 10/655 * * * *Solid structures for heat exchange or heat conduction*

adopt N 10/6551 * * * * *Surfaces specially adapted for heat dissipation or radiation, e.g. fins or coatings*

adopt N 10/6552 * * * * *Closed pipes transferring heat by thermal conductivity or phase transition, e.g. heat pipes*

adopt N 10/6553 * * * * *Terminals or leads*

adopt N 10/6554 * * * * *Rods or plates*

adopt N 10/6555 * * * * *arranged between the cells*

adopt N 10/6556 * * * * *Solid parts with flow channel passages or pipes for heat exchange (closed pipes **H01M 10/6552**)*

adopt N 10/6557 * * * * *arranged between the cells*

adopt N 10/656 * * * *characterised by the type of heat-exchange fluid*

adopt N 10/6561 * * * * *Gases*

adopt N 10/6562 * * * * *with free flow by convection only*

adopt N 10/6563 * * * * *with forced flow, e.g. by blowers*

adopt N 10/6564 * * * * *using compressed gas*

adopt N 10/6565 * * * * * *with recirculation or U-turn in the flow path, i.e. back and forth*

adopt N 10/6566 * * * * * *Means within the gas flow to guide the flow around one or more cells, e.g. manifolds, baffles or other barriers (H01M 10/6565 takes precedence)*

adopt N 10/6567 * * * * * *Liquids*

adopt N 10/6568 * * * * * *characterised by flow circuits, e.g. loops, located externally to the cells or cell casings*

adopt N 10/6569 * * * * * *Fluids undergoing a liquid-gas phase change or transition, e.g. evaporation or condensation (heat pipes H01M 10/6552)*

adopt N 10/657 * * * * * *by electric or electromagnetic means*

adopt N 10/6571 * * * * * *Resistive heaters (arrangements for heating the battery by its resistance to the internal current H01M 10/637)*

adopt N 10/6572 * * * * * *Peltier elements or thermoelectric devices*

adopt N 10/658 * * * * * *by thermal insulation or shielding*

adopt N 10/659 * * * * * *by heat storage or buffering, e.g. heat capacity or liquid-solid phase changes or transition*

adopt N 10/6595 * * * *by chemical reactions other than electrochemical reactions of the cells, e.g. catalytic heaters or burners*

adopt N 10/66 * * *Heat-exchange relationships between the cells and other systems, e.g. central heating systems or fuel cells*

adopt N 10/663 * * * *the system being an air-conditioner or an engine*

adopt N 10/667 * * * *the system being an electronic component, e.g. a CPU, an inverter or a capacitor*

ANNEX 58E H02K [Project-Rapporteur : M741/SE] <CE45>

adopt M **Title** **DYNAMO-ELECTRIC MACHINES** (dynamo-electric relays **H01H 53/00**; conversion of DC or AC input power into surge output power **H02M 9/00**)

- adopt M Note
H02K
1. This subclass covers the structural adaptation of dynamo-electric machines for the purpose of their control.
 2. This subclass does not cover starting, regulating, electronically commutating, braking, or otherwise controlling motors, generators or dynamo-electric converters, in general, which is covered by subclass **H02P**.
 3. Attention is drawn to the Notes following the titles of class **B81** and subclass **B81B** relating to "micro-structural devices" and "micro-structural systems". **[7]**

adopt M Subclass
index

GENERATORS OR MOTORS
Continuously rotating
AC machines: asynchronous; synchronous;

with mechanical commutators	17/00; 19/00, 21/00; 27/00
DC machines or universal AC/DC motors:	
with mechanical commutators; with interrupters	23/00; 25/00
with non-mechanical commutating devices	29/00
Acyclic machines; oscillating machines; motors rotating step by step	31/00; 33/00, 35/00; 37/00
Generators producing a non-sinusoidal waveform	39/00
Machines with more than one rotor or stator	16/00
SPECIAL DYNAMO-ELECTRIC APPARATUS	
Machines for transmitting angular displacements; torque motors	24/00; 26/00
Machines involving dynamo-electric interaction with a plasma or a flow of conductive liquid or of fluid-borne conductive or magnetic particles	44/00
Systems for propulsing a rigid body along a path	41/00
Converters	47/00
Dynamo-electric clutches or brakes; dynamo- electric gears	49/00; 51/00
Alleged <u>perpetua mobilia</u>	53/00
Machines operating at cryogenic temperatures	55/00
Other machines	99/00
DETAILS	
Magnetic circuits; windings; casings	1/00; 3/00; 5/00
Arrangements structurally associated with the machine for handling mechanical energy; cooling; measuring or protective devices; current collection or commutation	7/00; 9/00; 11/00; 13/00
MANUFACTURE	15/00

adopt M 1/06 * characterised by the shape, form or construction

adopt U 1/20 < unchanged >

adopt M 1/22 * * Rotating parts of the magnetic circuit

adopt M 1/30 * * * * using intermediate parts, e.g. spiders

adopt U 1/32 < unchanged >

adopt M 1/34 · · · Reciprocating, oscillating or vibrating parts of the magnetic circuit

adopt M 3/04 · Windings characterised by the conductor shape, form or construction, e.g. with
bar conductors

adopt M 3/14 · · · with transposed conductors, e.g. twisted conductors

adopt M 3/16 · · · for auxiliary purposes, e.g. damping or commutating

adopt M 3/20 · · · for auxiliary purposes, e.g. damping or commutating

adopt M 3/24 · · · with channels or ducts for cooling medium between the conductors

adopt M 3/32 · Windings characterised by the shape, form or construction of the insulation

adopt M 3/40 · · · for high voltage, e.g. affording protection against corona discharges

adopt M 3/46 · Fastening of windings on the stator or rotor structure

adopt M 3/493 · · · · magnetic

adopt M 5/04 · Casings or enclosures characterised by the shape, form or construction thereof

adopt M 5/10 · · with arrangements for protection from ingress, e.g. of water or fingers

adopt M 5/124 · · · Sealing of shafts

adopt M 5/128 · · · using air-gap sleeves or air-gap discs

adopt M 5/132 · · · Submersible electric motors (**H02K 5/128** takes precedence)

adopt M 5/16 · · Means for supporting bearings, e.g. insulating supports or means for fitting bearings in the bearing-shields (magnetic bearings **H02K 7/09**)

adopt M 5/173 · · · using bearings with rolling contact, e.g. ball bearings

adopt U 5/18 < unchanged >

adopt U 5/20 < unchanged >

adopt M 5/22 · · Auxiliary parts of casings not covered by groups **H02K 5/06-H02K 5/20**, e.g. shaped to form connection boxes or terminal boxes

adopt M 5/24 · specially adapted for suppression or reduction of noise or vibrations

adopt M 5/26 * Means for adjusting casings relative to their supports

adopt M **7/00** **Arrangements for handling mechanical energy structurally associated with dynamo-electric machines, e.g. structural association with mechanical driving motors or auxiliary dynamo-electric machines**

adopt M 7/02 * Additional mass for increasing inertia, e.g. flywheels

adopt M 7/06 * Means for converting reciprocating motion into rotary motion or vice versa

adopt M 7/07 * * using pawls and ratchet wheels

adopt M 7/075 * * using crankshafts or eccentrics

adopt M 7/10 * Structural association with clutches, brakes, gears, pulleys or mechanical starters

adopt M 7/112 * * with friction clutches in combination with brakes

adopt M 7/114 * * with dynamo-electric clutches in combination with brakes

adopt M 7/118 * * with starting devices

adopt M 7/12 * * with auxiliary limited movement of stators, rotors or core parts, e.g. rotors axially movable for the purpose of clutching or braking

adopt M 7/14 * Structural association with mechanical loads, e.g. with hand-held machine tools or fans (with fan or impeller for cooling the machine **H02K 9/06**)

adopt M 7/16 * * for operation above the critical speed of vibration of the rotating parts

adopt M **9/00 Arrangements for cooling or ventilating** (channels or ducts in parts of the magnetic circuit **H02K 1/20, H02K 1/32**; channels or ducts in or between conductors **H02K 3/22, H02K 3/24**)

adopt M 9/04 * * having means for generating a flow of cooling medium

adopt M 9/06 * * * with fans or impellers driven by the machine shaft

adopt M 9/19 * for machines with closed casing and closed-circuit cooling using a liquid cooling medium, e.g. oil

adopt M 9/22 * by solid heat conducting material embedded in, or arranged in contact with, the stator or rotor, e.g. heat bridges

adopt M 9/26 * Structural association of machines with devices for cleaning or drying cooling medium, e.g. with filters

adopt M **11/00 Structural association of dynamo-electric machines with measuring or protective devices or electric components, e.g. with resistors or switches**

adopt M 13/00 **Structural associations of current collectors with motors or generators, e.g. brush mounting plates or connections to windings** (supporting or protecting brushes or brush holders in motor casings or enclosures **H02K 5/14**) ; **Disposition of current collectors in motors or generators; Arrangements for improving commutation**

adopt M 13/02 * Connections between slip-rings and windings

adopt M 13/04 * Connections between commutator segments and windings

adopt M 13/06 * * Resistive connections, e.g. by high-resistance chokes or by transistors

adopt M 13/08 * * Segments formed by extensions of the winding

adopt M 13/10 * Arrangements of brushes or commutators specially adapted for improving commutation

adopt M 13/12 * Arrangements for producing an axial reciprocation of the rotor and its associated current collector part, e.g. for polishing commutator surfaces

adopt M 13/14 * Circuit arrangements for improvement of commutation, e.g. by use of unidirectionally conductive elements

adopt M 15/00 **Methods or apparatus specially adapted for manufacturing, assembling, maintaining or repairing of dynamo-electric machines**

adopt M 15/04 * of windings, prior to mounting into machines (insulating windings **H02K 15/10**,
H02K 15/12)

adopt M 15/06 * Embedding prefabricated windings in machines

adopt M 15/08 * Forming windings by laying conductors into or around core parts

adopt M 15/10 * Applying solid insulation to windings, stators or rotors

adopt M 15/12 * Impregnating, heating or drying of windings, stators, rotors or machines

adopt M 15/16 * Centering rotors within the stator; Balancing rotors

adopt U 17/06 < unchanged >

adopt M 17/08 * * * Motors with auxiliary phase obtained by externally fed auxiliary windings, e.g.
capacitor motors

adopt M 17/10 * * * Motors with auxiliary phase obtained by split-pole carrying short-circuited
windings

adopt U 17/14 < unchanged >

adopt M 17/16 * * having rotors with internally short-circuited windings, e.g. cage rotors

adopt M 17/18 * * * having double-cage or multiple-cage rotors

adopt M 17/20 * * * having deep-bar rotors

adopt M 17/22 * * having rotors with windings connected to slip-rings

adopt M 17/24 * * * in which both stator and rotor are fed with AC

adopt M 17/26 * * having rotors or stators designed to permit synchronous operation

adopt U 17/28 < unchanged >

adopt M 17/30 * * Structural association of asynchronous induction motors with auxiliary electric devices influencing the characteristics of the motor or controlling the motor, e.g. with impedances or switches

adopt M 17/32 * * Structural association of asynchronous induction motors with auxiliary mechanical devices, e.g. with clutches or brakes

adopt M 17/40 * * * with a rotary AC/DC converter

adopt M 17/44 * * Structural association with exciting machines

adopt M 19/00 **Synchronous motors or generators** (having permanent magnets **H02K 21/00**)

adopt M 19/06 * * * Motors having windings on the stator and a variable-reluctance soft-iron rotor without windings, e.g. inductor motors

adopt M 19/08 * * * Motors having windings on the stator and a smooth rotor without windings of material with large hysteresis, e.g. hysteresis motors

adopt M 19/12 * * * characterised by the arrangement of exciting windings, e.g. for self-excitation, compounding or pole-changing

adopt M 19/14 * * * having additional short-circuited windings for starting as asynchronous motors

adopt M 19/18 * * * having windings each turn of which co-operates only with poles of one polarity, e.g. homopolar generators

adopt M 19/20 * * * with variable-reluctance soft-iron rotors without winding

adopt M 19/22 * * * having windings each turn of which co-operates alternately with poles of opposite polarity, e.g. heteropolar generators

adopt M 19/24 * * * with variable-reluctance soft-iron rotors without winding

adopt M 19/26 * * * characterised by the arrangement of exciting windings

adopt M 19/36 * * Structural association of synchronous generators with auxiliary electric devices influencing the characteristic of the generator or controlling the generator, e.g. with impedances or switches

adopt M 19/38 * * Structural association of synchronous generators with exciting machines

adopt M **21/00** **Synchronous motors having permanent magnets; Synchronous generators having permanent magnets**

adopt M 21/04 * * Windings on magnets for additional excitation

adopt M 21/12 * with stationary armatures and rotating magnets

adopt M 21/14 * * with magnets rotating within the armatures

adopt M 21/16 * * * having annular armature cores with salient poles (with homopolar co-operation **H02K 21/20**)

adopt M 21/18 * * * having horse-shoe armature cores (with homopolar co-operation **H02K 21/20**)

adopt M 21/22 * * with magnets rotating around the armatures, e.g. flywheel magnetos

adopt M 21/24 * * with magnets axially facing the armatures, e.g. hub-type cycle dynamos

adopt M 21/26 * with rotating armatures and stationary magnets

adopt M 21/28 * * with armatures rotating within the magnets

adopt M 21/30 * * * having annular armature cores with salient poles (with homopolar co-operation
H02K 21/36)

adopt M 21/32 * * * having a horse-shoe magnets (with homopolar co-operation **H02K 21/36**)

adopt M 21/34 * * * having bell-shaped or bar-shaped magnets, e.g. for cycle lighting (with
homopolar co-operation **H02K 21/36**)

adopt M 21/38 * with rotating flux distributors, and armatures and magnets both stationary

adopt M 21/40 * * with flux distributors rotating around the magnets and within the armatures

adopt M 21/42 * * with flux distributors rotating around the armatures and within the magnets

adopt M 21/44 * * with armature windings wound upon the magnets

adopt M **23/00** **DC commutator motors or generators having mechanical commutator;
Universal AC/DC commutator motors**

adopt M 23/02 * characterised by arrangement for exciting

adopt U 23/04 < unchanged >

adopt U 23/06 < unchanged >

adopt U 23/08 < unchanged >

adopt U 23/10 < unchanged >

adopt M 23/12 * * having excitation produced by current sources independent of the armature circuit

adopt M 23/16 * * having angularly adjustable excitation field, e.g. by pole reversing or pole switching

adopt U 23/18 < unchanged >

adopt M 23/20 * * having additional brushes spaced intermediately of the main brushes on the commutator, e.g. cross-field machines, metadynes, amplidynes or other armature-reaction excited machines

adopt M 23/22 * * having compensating or damping windings

adopt M 23/24 * * having commutating-pole windings

adopt M 23/26 · characterised by the armature windings

adopt M 23/28 · · having open windings, i.e. not closed within the armatures

adopt M 23/30 · · having lap windings; having loop windings

adopt U 23/32 < unchanged >

adopt U 23/34 < unchanged >

adopt M 23/36 · · having two or more windings; having two or more commutators; having two or more stators

adopt M 23/40 · characterised by the arrangement of the magnet circuits

adopt U 23/42 < unchanged >

adopt M 23/44 · · having movable, e.g. turnable, iron parts

adopt M 23/48 · · having adjustable armatures

adopt M 23/52 · Motors acting also as generators, e.g. starting motors used as generators for ignition or lighting

adopt M 23/56 * Motors or generators having iron cores separated from armature winding

adopt M 23/58 * Motors or generators without iron cores

adopt M 23/60 * Motors or generators having rotating armatures and rotating excitation field

adopt M 23/62 * Motors or generators with stationary armatures and rotating excitation field

adopt M 23/64 * Motors specially adapted for running on DC or AC by choice

adopt M **25/00 DC interrupter motors or generators**

adopt U 27/06 < unchanged >

adopt U 27/08 < unchanged >

adopt U 27/26 < unchanged >

adopt M 27/28 * Structural association with auxiliary electric devices influencing the characteristic of the machine or controlling the machine

adopt M **29/00 Motors or generators having non-mechanical commutating devices, e.g. discharge tubes or semiconductor devices**

adopt M 29/08 * * using magnetic effect devices, e.g. Hall-plates or magneto-resistors (**H02K 29/12** takes precedence)

adopt M **31/00** **Acyclic motors or generators, i.e. DC machines having drum or disc armatures with continuous current collectors**

adopt U 31/02 < unchanged >

adopt M **33/00** **Motors with reciprocating, oscillating or vibrating magnet, armature or coil system** (arrangements for handling mechanical energy structurally associated with motors **H02K 7/00**, e.g. **H02K 7/06**)

adopt M 33/02 * with armatures moved one way by energisation of a single coil system and returned by mechanical force, e.g. by springs

adopt M 33/04 * * wherein the frequency of operation is determined by the frequency of uninterrupted AC energisation

adopt M 33/06 * * * with polarised armatures

adopt M 33/08 * * * with DC energisation superimposed on AC energisation

adopt M 33/10 * * wherein the alternate energisation and de-energisation of the single coil system is effected or controlled by movement of the armatures

adopt M 33/12 * with armatures moving in alternate directions by alternate energisation of two coil systems

adopt M 33/14 * * wherein the alternate energisation and de-energisation of the two coil systems are effected or controlled by movement of the armatures

adopt M 33/16 * with polarised armatures moving in alternate directions by reversal or energisation of a single coil system

adopt M 33/18 * with coil systems moving upon intermittent or reversed energisation thereof by interaction with a fixed field system, e.g. permanent magnets

adopt M **35/00** **Generators with reciprocating, oscillating or vibrating coil system, magnet, armature or other part of the magnetic circuit** (arrangements for handling mechanical energy structurally associated with generators **H02K 7/00**, e.g. **H02K 7/06**)

adopt M 35/02 * with moving magnets and stationary coil systems

adopt M 35/04 * with moving coil systems and stationary magnets

adopt M 35/06 * with moving flux distributors, and both coil systems and magnets stationary

adopt M 37/02 * of variable reluctance type

adopt M 37/04 * * with rotors situated within the stators

- adopt M 37/06 * * with rotors situated around the stators

- adopt M 37/08 * * with rotors axially facing the stators

- adopt M 37/10 * of permanent magnet type (**H02K 37/02** takes precedence)

- adopt M 37/12 * * with stationary armatures and rotating magnets

- adopt M 37/14 * * * with magnets rotating within the armatures

- adopt M 37/16 * * * * having horseshoe armature cores

- adopt M 37/18 * * * * of homopolar type

- adopt M 37/20 * * with rotating flux distributors, the armatures and magnets both being stationary

- adopt M 41/035 * * DC motors; Unipolar motors

- adopt M 41/06 * Rolling motors, i.e. motors having the rotor axis parallel to the stator axis and following a circular path as the rotor rolls around the inside or outside of the stator

- adopt M 44/08 * Magnetohydrodynamic [MHD] generators

adopt M 44/12 * * * Constructional details of fluid channels

adopt M 44/14 * * * Circular or screw-shaped channels

adopt M 44/16 * * * Constructional details of the magnetic circuits

adopt M 44/18 * * * for generating AC power

adopt M 47/02 * * * AC/DC converters or vice versa

adopt M 47/10 * * * with booster machines on the AC side

adopt M 47/12 * * * DC/DC converters

adopt M 47/18 * * * AC/AC converters

adopt D 57/00 (transferred to **H02K 99/00**)

adopt N **99/00** *Subject matter not provided for in other groups of this subclass*

adopt D 6/00 (transferred to **H02S 10/00-H02S 99/00**)

ANNEX 60E H02S [Project-Rapporteur : F007/EP] <CE45>

adopt N **Title** **Generation of electric power by conversion of infra-red radiation, visible light or ultraviolet light, e.g. using photovoltaic [PV] modules** (solar heat collectors **F24J 2/00**; obtaining electrical energy from radioactive sources **G21H 1/12**; light sensitive inorganic semiconductor devices **H01L 31/00**; thermoelectric devices **H01L 35/00**; pyroelectric devices **H01L 37/00**; light sensitive organic semiconductor devices **H01L 51/42**)

adopt N **10/00** **PV power plants; Combinations of PV energy systems with other systems for the generation of electric power**

adopt N **10/10** * *including a supplementary source of electric power, e.g. hybrid diesel-PV energy systems (combinations with gas-turbine plants **F02C 6/00**)*

adopt N **10/12** * * *Hybrid wind-PV energy systems*

adopt N **10/20** * *Systems characterised by their energy storage means (**H02S 40/38** takes precedence)*

adopt N **10/30** * *Thermophotovoltaic systems (photovoltaic cells specially adapted for conversion or sensing of infra-red [IR] radiation **H01L 31/00**; thermoelectric devices **H01L 35/00**)*

adopt N **10/40** * *Mobile PV generator systems*

adopt N **20/00** **Supporting structures for PV modules**

adopt N *Note* *Supporting structures also intended for use with solar heat collectors should also be 20/00 classified in groups **F24J 2/38** or **F24J 2/52**. [new]*

adopt N 20/10 * *Supporting structures directly fixed to the ground (**H02S 20/30** takes precedence)*

adopt N 20/20 * *Supporting structures directly fixed to an immovable object (**H02S 20/30** takes precedence)*

adopt N 20/21 * * *specially adapted for motorways, e.g. integrated with sound barriers*

adopt N 20/22 * * *specially adapted for buildings*

adopt N 20/23 * * * *specially adapted for roof structures (roof covering aspects of energy collecting devices **E04D 13/18**)*

adopt N 20/24 * * * *specially adapted for flat roofs*

adopt N 20/25 * * * *Roof tile elements*

adopt N 20/26 * * * *Building materials integrated with PV modules, e.g. façade elements (**H02S 20/25** takes precedence)*

adopt N 20/30 * *Supporting structures being movable or adjustable, e.g. for angle adjustment*

adopt N 20/32 * * *specially adapted for solar tracking*

adopt N 30/00 **Structural details of PV modules other than those related to light conversion**
(semiconductor device aspects of modules of electrolytic light sensitive devices H01G 9/20, of inorganic PV modules H01L 31/00, of organic PV modules H01L 51/42)

adopt N 30/10 * *Frame structures*

adopt N 30/20 * *Collapsible or foldable PV modules*

adopt N 40/00 **Components or accessories in combination with PV modules, not provided for in groups H02S 10/00-H02S 30/00**

adopt N 40/10 * *Cleaning arrangements*

adopt N 40/12 * * *Means for removing snow*

adopt N 40/20 * *Optical components*

adopt N 40/22 * * *Light-reflecting or light-concentrating means (directly associated with the PV cell or integrated with the PV cell H01L 31/054)*

adopt N 40/30 * *Electrical components*

adopt N 40/32 * * *comprising DC/AC inverter means associated with the PV module itself, e.g. AC modules*

adopt N 40/34 * * *comprising specially adapted electrical connection means to be structurally associated with the PV module, e.g. junction boxes*

adopt N 40/36 * * *characterised by special electrical interconnection means between two or more PV modules, e.g. electrical module-to-module connection*

adopt N 40/38 * * *Energy storage means, e.g. batteries, structurally associated with PV modules*

adopt N 40/40 * *Thermal components (H02S 10/30 takes precedence)*

adopt N 40/42 * * *Cooling means (cooling means directly associated or integrated with the PV cell H01L 31/052)*

adopt N 40/44 * * *Means to utilise heat energy, e.g. hybrid systems producing warm water and electricity at the same time (directly associated with the PV cell or integrated with the PV cell H01L 31/0525)*

adopt N 50/00 ***Monitoring or testing of PV systems, e.g. load balancing or fault identification***

adopt N 50/10 * *Testing of PV devices, e.g. of PV modules or single PV cells (testing of semiconductor devices during manufacturing H01L 21/66)*

adopt N 50/15 * * *using optical means, e.g. using electroluminescence*

adopt N 99/00 **Subject matter not provided for in other groups of this subclass**

ANNEX 61E H03B [Project-Rapporteur : D274/EP] <CE45>

adopt M Title **GENERATION OF OSCILLATIONS, DIRECTLY OR BY FREQUENCY-CHANGING, BY CIRCUITS EMPLOYING ACTIVE ELEMENTS WHICH OPERATE IN A NON-SWITCHING MANNER; GENERATION OF NOISE BY SUCH CIRCUITS** (generators specially adapted for electrophonic musical instruments **G10H**; masers or lasers **H01S**; generation of oscillations in plasma **H05H**)

adopt U Subclass < unchanged >
index

adopt M 1/02 * Structural details of power oscillators, e.g. for heating (generators for heating by electromagnetic fields **H05B 6/00**)

adopt M 5/06 * * Modifications of generator to ensure starting of oscillations (starting of generators **H03L 3/00**)

adopt M 5/12 * * active element in amplifier being semiconductor device (**H03B 5/14**, **H03B 7/06** take precedence)

adopt M 5/14 * * the frequency-determining element being connected via a bridge circuit to a closed loop in which the signal is transmitted

adopt M 5/26 * * the frequency-determining element being part of a bridge circuit in a closed loop in which the signal is transmitted; the frequency-determining element being connected via a bridge circuit to such a closed loop, e.g. Wien-Bridge oscillator, parallel-T oscillator

adopt M 5/32 * * being a piezo-electric resonator

adopt M 5/38 * * * the frequency-determining element being connected via a bridge circuit to a closed loop in which the signal is transmitted

adopt M 5/40 * * being a magnetostrictive resonator (**H03B 5/42** takes precedence)

adopt M 5/42 * * the frequency-determining element being connected via a bridge circuit to a closed loop in which the signal is transmitted

adopt M 11/02 * excited by spark

adopt M **15/00** **Generation of oscillations using galvano-magnetic devices, e.g. Hall-effect devices, devices using spin transfer effects, devices using giant magnetoresistance, or using super-conductivity effects**

adopt M **17/00** **Generation of oscillations using a radiation source and a detector**

adopt M **19/00** **Generation of oscillations by non-regenerative frequency multiplication or division of a signal from a separate source**

adopt M **21/00** **Generation of oscillations by combining unmodulated signals of different frequencies** (H03B 19/00 takes precedence)

adopt M **23/00** **Generation of oscillations periodically swept over a predetermined frequency range**

adopt M **28/00** **Generation of oscillations by methods not covered by groups H03B 5/00-H03B 27/00, including modification of the waveform to produce sinusoidal oscillations** (analogue function generators for performing computing operations **G06G 7/26**)

adopt M **29/00** **Generation of noise currents and voltages** (gas-filled discharge tubes with solid cathode specially adapted as noise generators **H01J 17/00**)

ANNEX 62E H03C [Project-Rapporteur : D275/EP] <CE45>

adopt M **Title MODULATION** (masers or lasers **H01S**; coding, decoding or code conversion **H03M**)

adopt M 1/46 * Modulators with mechanically-driven or acoustically-driven parts

adopt M 1/54 * * Balanced modulators, e.g. bridge type, ring type or double balanced type

adopt M **7/00** **Modulating electromagnetic waves** (devices or arrangements for the modulation of light **G02F 1/00**)

ANNEX 63E H03K [Project-Rapporteur : F018/EP] <CE45>

adopt M **5/00** **Manipulation of pulses not covered by one of the other main groups of this subclass** (circuits with regenerative action **H03K 3/00**, **H03K 4/00**; by the use of non-linear magnetic or dielectric devices **H03K 3/45**)

adopt C 5/13 * *Arrangements having a single output and transforming input signals into pulses delivered at desired time intervals*

adopt N 5/131 * * *Digitally controlled*

adopt N 5/133 * * *using a chain of active-delay devices*

adopt N 5/134 * * * *with field-effect transistors*

adopt C 5/14 * * *by the use of delay lines (H03K 5/133 takes precedence)*

ANNEX 64E H04L [Project-Rapporteur : M013/IB] <CE45>

adopt U 12/753 < unchanged >

ANNEX 65E H04N [Project-Rapporteur : A052/EP] <CE45>

adopt M **7/00** **Television systems** (details **H04N 3/00**, **H04N 5/00**; methods or arrangements, for coding, decoding, compressing or decompressing digital video signals **H04N 19/00**; selective content distribution **H04N 21/00**)

adopt D 7/26 (transferred to **H04N 19/00**)

adopt D 7/28 (transferred to **H04N 19/94**)

adopt D 7/30 (transferred to **H04N 19/60**)

adopt D 7/32 (transferred to **H04N 19/50**)

adopt D 7/34 (transferred to **H04N 19/593**)

adopt D 7/36 (transferred to **H04N 19/503**)

adopt D 7/38 (transferred to **H04N 19/00**)

adopt D 7/40 (transferred to **H04N 19/00**)

adopt D 7/42 (transferred to **H04N 19/00**)

adopt D 7/44 (transferred to **H04N 19/00**)

adopt D 7/46 (transferred to **H04N 19/587,H04N 19/59**)

adopt D 7/48 (transferred to **H04N 19/00**)

adopt D 7/50 (transferred to **H04N 19/61**)

adopt N 19/00 **Methods or arrangements for coding, decoding, compressing or decompressing digital video signals**

adopt N 19/10 * *using adaptive coding*

adopt N Note *When classifying in this group, each aspect relating to adaptive coding should, 19/10 insomuch as possible, be classified in each one of subgroups **H04N 19/102, H04N 19/134, H04N 19/169 and H04N 19/189.** [new]*

adopt N 19/102 * * *characterised by the element, parameter or selection affected or controlled by the adaptive coding*

adopt N 19/103 * * * *Selection of coding mode or of prediction mode*

adopt N 19/105 * * * * *Selection of the reference unit for prediction within a chosen coding or prediction mode, e.g. adaptive choice of position and number of pixels used for prediction*

adopt N 19/107 * * * * *between spatial and temporal predictive coding, e.g. picture refresh*

adopt N 19/109 * * * * *among a plurality of temporal predictive coding modes*

adopt N 19/11 * * * * *among a plurality of spatial predictive coding modes*

adopt N 19/112 * * * * *according to a given display mode, e.g. for interlaced or progressive display mode*

adopt N 19/114 · · · · *Adapting the group of pictures [GOP] structure, e.g. number of B-frames between two anchor frames (H04N 19/107 takes precedence)*

adopt N 19/115 · · · *Selection of the code volume for a coding unit prior to coding*

adopt N 19/117 · · · *Filters, e.g. for pre-processing or post-processing (sub-band filter banks H04N 19/635)*

adopt N 19/119 · · · *Adaptive subdivision aspects e.g. subdivision of a picture into rectangular or non-rectangular coding blocks*

adopt N 19/12 · · · *Selection from among a plurality of transforms or standards, e.g. selection between discrete cosine transform [DCT] and sub-band transform or selection between H.263 and H.264*

adopt N *Note* *When classifying in this group, each compression algorithm is further classified in the 19/12 relevant subgroups of groups H04N 19/60 or H04N 19/90. [new]*

adopt N 19/122 · · · · *Selection of transform size, e.g. 8x8 or 2x4x8 DCT; Selection of sub-band transforms of varying structure or type*

adopt N 19/124 · · · *Quantisation*

adopt N 19/126 · · · · *Details of normalisation or weighting functions, e.g. normalisation matrices or variable uniform quantisers*

adopt N 19/127* . . . *Prioritisation of hardware or computational resources*

adopt N 19/129* . . . *Scanning of coding units, e.g. zig-zag scan of transform coefficients or flexible macroblock ordering [FMO]*

adopt N 19/13* . . . *Adaptive entropy coding, e.g. adaptive variable length coding [AVLC] or context adaptive binary arithmetic coding [CABAC]*

adopt N 19/132* . . . *Sampling, masking or truncation of coding units, e.g. adaptive resampling, frame skipping, frame interpolation or high-frequency transform coefficient masking*

adopt N 19/134* . . . *characterised by the element, parameter or criterion affecting or controlling the adaptive coding*

adopt N 19/136* . . . *Incoming video signal characteristics or properties*

adopt N 19/137* *Motion inside a coding unit, e.g. average field, frame or block difference*

adopt N 19/139* *Analysis of motion vectors, e.g. their magnitude, direction, variance or reliability*

adopt N 19/14* *Coding unit complexity, e.g. amount of activity or edge presence estimation (**H04N 19/146** takes precedence)*

adopt N 19/142* . . . *Detection of scene cut or scene change*

adopt N 19/146 · · · *Data rate or code amount at the encoder output*

adopt N 19/147 · · · *according to rate distortion criteria (rate-distortion as a criterion for motion estimation **H04N 19/567**)*

adopt N 19/149 · · · *by estimating the code amount by means of a model, e.g. mathematical model or statistical model*

adopt N 19/15 · · · *by monitoring actual compressed data size at the memory before deciding storage at the transmission buffer*

adopt N 19/152 · · · *by measuring the fullness of the transmission buffer*

adopt N 19/154 · · · *Measured or subjectively estimated visual quality after decoding, e.g. measurement of distortion (use of rate-distortion criteria **H04N 19/147**)*

adopt N 19/156 · · · *Availability of hardware or computational resources, e.g. encoding based on power-saving criteria*

adopt N 19/157 · · · *Assigned coding mode, i.e. the coding mode being predefined or preselected to be further used for selection of another element or parameter*

adopt N 19/159 · · · *Prediction type, e.g. intra-frame, inter-frame or bidirectional frame prediction*

adopt N 19/16* *for a given display mode, e.g. for interlaced or progressive display mode*

adopt N 19/162* . . . *User input*

adopt N 19/164* . . . *Feedback from the receiver or from the transmission channel*

adopt N 19/166* *concerning the amount of transmission errors, e.g. bit error rate [BER]*

adopt N 19/167* . . . *Position within a video image, e.g. region of interest [ROI]*

adopt N 19/169* . . . *characterised by the coding unit, i.e. the structural portion or semantic portion of the video signal being the object or the subject of the adaptive coding*

adopt N 19/17* . . . *the unit being an image region, e.g. an object*

adopt N 19/172* *the region being a picture, frame or field*

adopt N 19/174* *the region being a slice, e.g. a line of blocks or a group of blocks*

adopt N 19/176* *the region being a block, e.g. a macroblock*

adopt N 19/177* . . . *the unit being a group of pictures [GOP]*

adopt N 19/179 · · · *the unit being a scene or a shot*

adopt N 19/18 · · · *the unit being a set of transform coefficients*

adopt N 19/182 · · · *the unit being a pixel*

adopt N 19/184 · · · *the unit being bits, e.g. of the compressed video stream*

adopt N 19/186 · · · *the unit being a colour or a chrominance component*

adopt N 19/187 · · · *the unit being a scalable video layer*

adopt N 19/189 · · · *characterised by the adaptation method, adaptation tool or adaptation type used for the adaptive coding*

adopt N 19/19 · · · *using optimisation based on Lagrange multipliers*

adopt N 19/192 · · · *the adaptation method, adaptation tool or adaptation type being iterative or recursive*

adopt N 19/194 · · · *involving only two passes*

adopt N 19/196 · · · *being specially adapted for the computation of encoding parameters, e.g. by*

*averaging previously computed encoding parameters (processing of motion vectors
H04N 19/513)*

adopt N 19/20 * *using video object coding*

adopt N 19/21 * * *with binary alpha-plane coding for video objects, e.g. context-based arithmetic encoding [CAE]*

adopt N 19/23 * * *with coding of regions that are present throughout a whole video segment, e.g. sprites, background or mosaic*

adopt N 19/25 * * *with scene description coding, e.g. binary format for scenes [BIFS] compression*

adopt N 19/27 * * *involving both synthetic and natural picture components, e.g. synthetic natural hybrid coding [SNHC]*

adopt N 19/29 * * *involving scalability at the object level, e.g. video object layer [VOL]*

adopt N 19/30 * *using hierarchical techniques, e.g. scalability (**H04N 19/63** takes precedence)*

adopt N 19/31 * * *in the temporal domain*

adopt N 19/33 * * *in the spatial domain*

adopt N 19/34 * * Scalability techniques involving progressive bit-plane based encoding of the enhancement layer, e.g. fine granular scalability [FGS]

adopt N 19/36 * * Scalability techniques involving formatting the layers as a function of picture distortion after decoding, e.g. signal-to-noise [SNR] scalability

adopt N 19/37 * * with arrangements for assigning different transmission priorities to video input data or to video coded data

adopt N 19/39 * * involving multiple description coding [MDC], i.e. with separate layers being structured as independently decodable descriptions of input picture data

adopt N 19/40 * using video transcoding, i.e. partial or full decoding of a coded input stream followed by re-encoding of the decoded output stream

adopt N 19/42 * characterised by implementation details or hardware specially adapted for video compression or decompression, e.g. dedicated software implementation (**H04N 19/635** takes precedence)

adopt N 19/423 * * characterised by memory arrangements (**H04N 19/433** takes precedence)

adopt N 19/426 * * using memory downsizing methods

adopt N 19/43 * Hardware specially adapted for motion estimation or compensation

adopt N 19/433 * * characterised by techniques for memory access

adopt N 19/436 * • *using parallelised computational arrangements*

adopt N 19/44 * *Decoders specially adapted therefor, e.g. video decoders which are asymmetric with respect to the encoder*

adopt N 19/46 * *Embedding additional information in the video signal during the compression process (**H04N 19/517**, **H04N 19/68**, **H04N 19/70** take precedence)*

adopt N 19/463 * • *by compressing encoding parameters before transmission*

adopt N 19/467 * • *characterised by the embedded information being invisible, e.g. watermarking*

adopt N 19/48 * *using compressed domain processing techniques other than decoding, e.g. modification of transform coefficients, variable length coding [VLC] data or run-length data (motion estimation in a transform domain **H04N 19/547**; processing of decoded motion vectors **H04N 19/513**)*

adopt N 19/50 * *using predictive coding (**H04N 19/61** takes precedence)*

adopt N 19/503 * • *involving temporal prediction (adaptive coding with adaptive selection between spatial and temporal predictive coding **H04N 19/107**; adaptive coding with adaptive selection among a plurality of temporal predictive coding modes **H04N 19/109**)*

adopt N 19/507 * • • *using conditional replenishment*

adopt N 19/51 * * * * *Motion estimation or motion compensation*

adopt N 19/513 * * * * *Processing of motion vectors*

adopt N 19/517 * * * * *by encoding*

adopt N 19/52 * * * * *by predictive encoding*

adopt N 19/523 * * * * *with sub-pixel accuracy*

adopt N 19/527 * * * * *Global motion vector estimation*

adopt N 19/53 * * * * *Multi-resolution motion estimation; Hierarchical motion estimation*

adopt N 19/533 * * * * *Motion estimation using multistep search, e.g. 2D-log search or one-at-a-time search [OTS]*

adopt N 19/537 * * * * *Motion estimation other than block-based*

adopt N 19/54 * * * * *using feature points or meshes*

adopt N 19/543 * * * * *using regions*

- adopt N 19/547* *Motion estimation performed in a transform domain*
- adopt N 19/55* *Motion estimation with spatial constraints, e.g. at image or region borders*
- adopt N 19/553* *Motion estimation dealing with occlusions*
- adopt N 19/557* *Motion estimation characterised by stopping computation or iteration based on certain criteria, e.g. error magnitude being too large or early exit*
- adopt N 19/56* *Motion estimation with initialisation of the vector search, e.g. estimating a good candidate to initiate a search*
- adopt N 19/563* *Motion estimation with padding, i.e. with filling of non-object values in an arbitrarily shaped picture block or region for estimation purposes*
- adopt N 19/567* *Motion estimation based on rate distortion criteria*
- adopt N 19/57* *Motion estimation characterised by a search window with variable size or shape*
- adopt N 19/573* *Motion compensation with multiple frame prediction using two or more reference frames in a given prediction direction*
- adopt N 19/577* *Motion compensation with bidirectional frame interpolation, i.e. using B-pictures*

adopt N 19/58 * * * * *Motion compensation with long-term prediction, i.e. the reference frame for a current frame not being the temporally closest one (**H04N 19/23** takes precedence)*

adopt N 19/583 * * * * *Motion compensation with overlapping blocks*

adopt N 19/587 * * *involving temporal sub-sampling or interpolation, e.g. decimation or subsequent interpolation of pictures in a video sequence*

adopt N 19/59 * * *involving spatial sub-sampling or interpolation, e.g. alteration of picture size or resolution*

adopt N 19/593 * * *involving spatial prediction techniques*

adopt N 19/597 * * *specially adapted for multi-view video sequence encoding*

adopt N 19/60 * *using transform coding*

adopt N 19/61 * * *in combination with predictive coding*

adopt N 19/615 * * * *using motion compensated temporal filtering [MCTF]*

adopt N 19/62 * * *by frequency transforming in three dimensions (**H04N 19/63** takes precedence)*

adopt N 19/625 * * using discrete cosine transform [DCT]

adopt N 19/63 * * using sub-band based transform, e.g. wavelets

adopt N 19/635 * * * characterised by filter definition or implementation details

adopt N 19/64 * * * characterised by ordering of coefficients or of bits for transmission

adopt N 19/645 * * * * by grouping of coefficients into blocks after the transform

adopt N 19/65 * using error resilience

adopt N 19/66 * * involving data partitioning, i.e. separation of data into packets or partitions according to importance

adopt N 19/67 * * involving unequal error protection [UEP], i.e. providing protection according to the importance of the data

adopt N 19/68 * * involving the insertion of resynchronisation markers into the bitstream

adopt N 19/69 * * involving reversible variable length codes [RVLC]

- adopt N 19/70 * *characterised by syntax aspects related to video coding, e.g. related to compression standards*
- adopt N 19/80 * *Details of filtering operations specially adapted for video compression, e.g. for pixel interpolation (**H04N 19/635**, **H04N 19/86** take precedence)*
- adopt N 19/82 * *involving filtering within a prediction loop*
- adopt N 19/85 * *using pre-processing or post-processing specially adapted for video compression*
- adopt N 19/86 * *involving reduction of coding artifacts, e.g. of blockiness*
- adopt N 19/87 * *involving scene cut or scene change detection in combination with video compression*
- adopt N 19/88 * *involving rearrangement of data among different coding units, e.g. shuffling, interleaving, scrambling or permutation of pixel data or permutation of transform coefficient data among different blocks*
- adopt N 19/89 * *involving methods or arrangements for detection of transmission errors at the decoder*
- adopt N 19/895 * *in combination with error concealment*
- adopt N 19/90 * *using coding techniques not provided for in groups **H04N 19/10-H04N 19/85**, e.g. fractals*

adopt N 19/91 * * * *Entropy coding, e.g. variable length coding [VLC] or arithmetic coding (entropy coding in adaptive coding **H04N 19/13**)*

adopt N 19/93 * * * *Run-length coding*

adopt N 19/94 * * * *Vector quantisation*

adopt N 19/96 * * * *Tree coding, e.g. quad-tree coding*

adopt N 19/97 * * * *Matching pursuit coding*

adopt N 19/98 * * * *Adaptive-dynamic-range coding [ADRC]*

adopt M 21/234 * * * *Processing of video elementary streams, e.g. splicing of video streams or manipulating MPEG-4 scene graphs*

ANNEX 66E H04N [Project-Rapporteur : M013/IB] <CE45>

adopt M 21/4363 * * * * *Adapting the video stream to a specific local network, e.g. a IEEE 1394 or Bluetooth® network*

[End of Technical Annexes and of document]