

Symbol	Typ	Titel
G	Sektion	PHYSICS
G04	Klasse	HOROLOGY
G04B	Unterkategorie	MECHANICALLY-DRIVEN CLOCKS OR WATCHES; MECHANICAL PARTS OF CLOCKS OR WATCHES IN GENERAL; TIME-PIECES USING THE POSITION OF THE SUN, MOON, OR STARS (spring- or weight-driven mechanisms in general F03G; electromechanical clocks or watches G04C; electromechanical clocks with attached or built-in means operating any device at preselected times or after predetermined time intervals G04C 23/00; clocks or watches with stop devices G04F 7/08; structural details or housings specially adapted for electronic time-pieces with no moving parts G04G 17/00)
		<u>Driving mechanisms</u>
G04B 1/00	Hauptgruppe	Driving mechanisms [1, 2006.01]
G04B 1/02	1-Punkt Untergruppe	. with driving weight [1, 2006.01]
G04B 1/04	2-Punkt Untergruppe	.. Mechanisms in which the clockwork acts as the driving weight [1, 2006.01]
G04B 1/06	2-Punkt Untergruppe	.. with several weights [1, 2006.01]
G04B 1/08	2-Punkt Untergruppe	.. Driving weights; Chains; Chain wheels; Arbors for chain wheels [1, 2006.01]
G04B 1/10	1-Punkt Untergruppe	. with mainspring [1, 2006.01]
G04B 1/12	2-Punkt Untergruppe	.. with several mainsprings [1, 2006.01]
G04B 1/14	2-Punkt Untergruppe	.. Mainsprings; Bridles therefor (mainsprings with bridles G04B 1/18; alloys C22C; springs in general F16F) [1, 2006.01]
G04B 1/16	2-Punkt Untergruppe	.. Barrels; Arbors; Barrel axles (arrangements facilitating the removal of the mainspring G04B 33/14) [1, 2006.01]
G04B 1/18	2-Punkt Untergruppe	.. Constructions for connecting the ends of mainsprings with the barrel or the arbor [1, 2006.01]
G04B 1/20	3-Punkt Untergruppe	... Protecting arrangements against rupture or overwinding of the mainspring located in the barrel or attached to the barrel (in connection with keys or the like G04B 3/06, G04B 3/10; in connection with automatic winding devices G04B 5/24) [1, 2006.01]
G04B 1/22	2-Punkt Untergruppe	.. Compensation of changes in the motive power of the mainspring (by mechanical shaping of the mainspring G04B 1/14) [1, 2006.01]
G04B 1/24	1-Punkt Untergruppe	. with both mainsprings and driving weights [1, 2006.01]
G04B 1/26	1-Punkt Untergruppe	. driven by liquids or gases; Liquid or gaseous drives for mechanically-controlled secondary clocks [1, 2006.01]
		<u>Winding</u>
G04B 3/00	Hauptgruppe	Normal winding of clockworks by hand or mechanically; Winding-up several mainsprings or driving weights simultaneously [1, 2006.01]
G04B 3/02	1-Punkt Untergruppe	. Removably-mounted keys or the like [1, 2006.01]
G04B 3/04	1-Punkt Untergruppe	. Rigidly-mounted keys, knobs, or crowns (divided winding stems G04B 37/06) [1, 2006.01]
G04B 3/06	1-Punkt Untergruppe	. Keys or the like with means preventing overwinding (protecting devices arranged in, or attached to, the barrel G04B 1/20; in connection with automatic winding devices G04B 5/24) [1, 2006.01]
G04B 3/08	1-Punkt Untergruppe	. by parts of the cases [1, 2006.01]
G04B 3/10	2-Punkt Untergruppe	.. Protecting means preventing overwinding (arranged in, or attached to, the barrel G04B 1/20; in connection with keys G04B 3/06; in connection with automatic winding devices G04B 5/24) [1, 2006.01]

Symbol	Typ	Titel
G04B 3/12	1-Punkt Untergruppe	. by mechanical means, e.g. pneumatic motor (winding-up with electric or electromechanical means G04C) [1, 2006.01]
G04B 5/00	Hauptgruppe	Automatic winding-up [1, 2006.01]
G04B 5/02	1-Punkt Untergruppe	. by self-winding caused by movement of the watch [1, 2006.01]
G04B 5/04	2-Punkt Untergruppe	... by oscillating weights the movement of which is limited [1, 2006.01]
G04B 5/06	3-Punkt Untergruppe	... acting in one direction only [1, 2006.01]
G04B 5/08	3-Punkt Untergruppe	... acting in both directions [1, 2006.01]
G04B 5/10	2-Punkt Untergruppe	... by oscillating weights the movement of which is not limited [1, 2006.01]
G04B 5/12	3-Punkt Untergruppe	... acting in one direction only [1, 2006.01]
G04B 5/14	3-Punkt Untergruppe	... acting in both directions [1, 2006.01]
G04B 5/16	2-Punkt Untergruppe	... Construction of the weights [1, 2006.01]
G04B 5/18	2-Punkt Untergruppe	... Supports, suspensions, or guide arrangements, for oscillating weights [1, 2006.01]
G04B 5/19	3-Punkt Untergruppe	... Suspension of the oscillating weight at its centre of rotation [3, 2006.01]
G04B 5/20	1-Punkt Untergruppe	. by movements of other objects, e.g. by opening hand-bag, by opening case, by opening door; Winding-up by wind power [1, 2006.01]
G04B 5/22	1-Punkt Untergruppe	. by thermometric, barometric, or like effects or alterations [1, 2006.01]
G04B 5/24	1-Punkt Untergruppe	. Protecting means preventing overwinding (arranged in, or attached to, the barrel G04B 1/20; in connection with keys or the like G04B 3/06; in connection with parts of the cases G04B 3/10) [1, 2006.01]
G04B 7/00	Hauptgruppe	Combined normal and automatic winding-up [1, 2006.01]
G04B 9/00	Hauptgruppe	Supervision of the state of winding, e.g. indicating the amount of winding [1, 2006.01]
G04B 9/02	1-Punkt Untergruppe	. Devices controlled by such state, e.g. device affording protection against overwinding (protecting means preventing overwinding arranged in or on the barrel G04B 1/20; protecting means in connection with keys or the like G04B 3/06; in connection with parts of the cases G04B 3/10; in connection with automatic winding devices G04B 5/24) [1, 2006.01]
G04B 11/00	Hauptgruppe	Click devices, stop clicks or clutches for winding [1, 2006.01]
G04B 11/02	1-Punkt Untergruppe	. Devices allowing the motion of a rotatable part in only one direction [3, 2006.01]
G04B 11/04	2-Punkt Untergruppe	... Pawl constructions therefor, e.g. pawl secured to an oscillating member actuating a ratchet [3, 2006.01]
G04B 13/00	Hauptgruppe	Gearwork [1, 2006.01]
G04B 13/02	1-Punkt Untergruppe	. Wheels; Pinions; Spindles; Pivots (bearings G04B 31/00) [1, 2006.01]
G04B 15/00	Hauptgruppe	Escapements (electric or magnetic means for converting oscillatory to rotary motion in electromechanical time-pieces G04C 5/00) [1, 2006.01]
G04B 15/02	1-Punkt Untergruppe	. permanently in contact with the regulating mechanism [1, 2006.01]
G04B 15/04	2-Punkt Untergruppe	... Cylinder escapements [1, 2006.01]
G04B 15/06	1-Punkt Untergruppe	... Free escapements [1, 2006.01]
G04B 15/08	2-Punkt Untergruppe	... Lever escapements [1, 2006.01]
G04B 15/10	1-Punkt Untergruppe	... with constant impulses for the regulating mechanism [1, 2006.01]
G04B 15/12	1-Punkt Untergruppe	... Adjusting (tools therefor G04D 1/02); Restricting the amplitude of the lever or the like [1, 2006.01]

Symbol	Typ	Titel
G04B 15/14	1-Punkt Untergruppe	. Component parts or constructional details, e.g. construction of the lever or the escape wheel [1, 2006.01]
G04B 17/00	Hauptgruppe	Mechanisms for stabilising frequency [1, 3, 2006.01]
G04B 17/02	1-Punkt Untergruppe	. Oscillators acting by gravity, e.g. pendulum swinging in a plane [1, 2006.01]
G04B 17/04	1-Punkt Untergruppe	. Oscillators acting by spring tension [1, 2006.01]
G04B 17/06	2-Punkt Untergruppe	.. Oscillators with hairsprings, e.g. balance [1, 2006.01]
G04B 17/08	2-Punkt Untergruppe	.. Oscillators with coil springs stretched and unstretched axially [1, 2006.01]
G04B 17/10	2-Punkt Untergruppe	.. Oscillators with torsion strips or with springs acting in the same manner as torsion strips, e.g. weight oscillating in a horizontal plane [1, 2006.01]
G04B 17/20	1-Punkt Untergruppe	. Compensation of mechanisms for stabilizing frequency [1, 2006.01]
G04B 17/22	2-Punkt Untergruppe	.. for the effect of variations of temperature (alloys independent of variations of temperature C22C) [1, 2006.01]
G04B 17/24	2-Punkt Untergruppe	.. for the effect of variations of atmospheric pressure [1, 2006.01]
G04B 17/26	2-Punkt Untergruppe	.. for the effect of variations of the impulses [1, 2006.01]
G04B 17/28	2-Punkt Untergruppe	.. for the effect of unbalance of the weights, e.g. tourbillon [1, 2006.01]
G04B 17/30	1-Punkt Untergruppe	. Rotating governors, e.g. centrifugal governors, fan governors (for striking mechanism G04B 21/06) [1, 2006.01]
G04B 17/32	1-Punkt Untergruppe	. Component parts or constructional details, e.g. collet, stud [1, 2006.01]
G04B 17/34	2-Punkt Untergruppe	.. for fastening the hairspring onto the balance [3, 2006.01]
G04B 18/00	Hauptgruppe	Mechanisms for setting frequency [3, 2006.01]
G04B 18/02	1-Punkt Untergruppe	. Regulator devices; Indexing devices [3, 2006.01]
G04B 18/04	1-Punkt Untergruppe	. Adjusting the beat of the pendulum, balance, or the like, e.g. putting into beat [3, 2006.01]
G04B 18/06	2-Punkt Untergruppe	.. by setting the collet or the stud of a hairspring [3, 2006.01]
G04B 18/08	1-Punkt Untergruppe	. Component parts or constructional details [3, 2006.01]
<u>Time indicating</u>		
G04B 19/00	Hauptgruppe	Indicating the time by visual means (by electric lamps G04C 17/02; display arrangements in general G09) [1, 2006.01]
G04B 19/02	1-Punkt Untergruppe	. Back-gearing arrangements between gear train and hands [1, 2006.01]
G04B 19/04	1-Punkt Untergruppe	. Hands; Discs with a single mark or the like [1, 2006.01]
G04B 19/06	1-Punkt Untergruppe	. Dials (for time-pieces without clockwork G04B 49/04) [1, 2006.01]
G04B 19/08	2-Punkt Untergruppe	.. Geometrical arrangement of the graduations [1, 2006.01]
G04B 19/10	2-Punkt Untergruppe	.. Ornamental shape of the graduations or the surface of the dial; Attachment of graduations to the dial [1, 2006.01]
G04B 19/12	2-Punkt Untergruppe	.. Selection of materials for dials or graduations [1, 2006.01]
G04B 19/14	2-Punkt Untergruppe	.. Fastening the dials to the clock or the watch plates [1, 2006.01]
G04B 19/16	2-Punkt Untergruppe	.. Shiftable dials, e.g. indicating alternately from 1 to 12 and from 13 to 24 [1, 2006.01]
G04B 19/18	2-Punkt Untergruppe	.. Graduations on the crystal or glass, on the bezel, or on the rim [1, 2006.01]

Symbol	Typ	Titel
G04B 19/20	1-Punkt Untergruppe	. Indicating by numbered bands, drums, discs, or sheets [1, 2006.01]
G04B 19/21	2-Punkt Untergruppe	.. Drums [3, 2006.01]
G04B 19/22	1-Punkt Untergruppe	. Arrangements for indicating different local apparent times; Universal time-pieces [1, 2006.01]
G04B 19/23	2-Punkt Untergruppe	.. by means of additional hands or additional pairs of hands [3, 2006.01]
G04B 19/24	1-Punkt Untergruppe	. Clocks or watches with date indicators; Clockwork calendars [1, 2006.01]
G04B 19/243	2-Punkt Untergruppe	.. characterised by the shape of the date indicator [3, 2006.01]
G04B 19/247	3-Punkt Untergruppe	... disc-shaped [3, 2006.01]
G04B 19/25	4-Punkt Untergruppe Devices for setting the date indicators manually [3, 2006.01]
G04B 19/253	4-Punkt Untergruppe Driving or releasing mechanisms [3, 2006.01]
G04B 19/257	3-Punkt Untergruppe	... drum-shaped [3, 2006.01]
G04B 19/26	1-Punkt Untergruppe	. Clocks or watches with indicators for tides, for the phases of the moon, or the like [1, 2006.01]
G04B 19/28	1-Punkt Untergruppe	. Adjustable guide marks or pointers for indicating determined points of time [1, 2006.01]
G04B 19/30	1-Punkt Untergruppe	. Illumination of dials or hands [1, 2006.01]
G04B 19/32	2-Punkt Untergruppe	.. by luminescent substances [1, 2006.01]
G04B 19/34	1-Punkt Untergruppe	. Position of the hands projected optically [1, 2006.01]
G04B 21/00	Hauptgruppe	Indicating the time by acoustic means (at preselected times G04B 23/00; by electro-acoustic means G04C 21/04; sound-producing apparatus per seG10) [1, 2006.01]
G04B 21/02	1-Punkt Untergruppe	. Regular striking mechanisms giving the full hour, half hour, or quarter hour [1, 2006.01]
G04B 21/04	2-Punkt Untergruppe	.. Hour wheels; Racks or rakes; Snails or similar control mechanisms [1, 2006.01]
G04B 21/06	2-Punkt Untergruppe	.. Details of striking mechanisms, e.g. hammer, fan governor [1, 2006.01]
G04B 21/08	2-Punkt Untergruppe	.. Sounding bodies; Whistles; Musical apparatus (with electro-acoustic transmitters G04C 21/00) [1, 2006.01]
G04B 21/10	2-Punkt Untergruppe	.. Releasing or locking the regular stroke, e.g. for silence during the night [1, 2006.01]
G04B 21/12	2-Punkt Untergruppe	.. Reiterating watches or clocks [1, 2006.01]
G04B 21/14	2-Punkt Untergruppe	.. Winding-up the striking mechanism by the clockwork; Winding-up the clockwork by the striking mechanism [1, 2006.01]
G04B 23/00	Hauptgruppe	Arrangements producing acoustic signals at preselected times (electrically-released alarm signals G04C 21/00; metronomes G04F 5/02; sound-producing apparatus per seG10) [1, 2006.01]
G04B 23/02	1-Punkt Untergruppe	. Alarm clocks [1, 2006.01]
G04B 23/03	2-Punkt Untergruppe	.. Alarm signal stop arrangements [3, 2006.01]
G04B 23/04	2-Punkt Untergruppe	.. with coarse and fine setting of the preselected time [1, 2006.01]
G04B 23/06	2-Punkt Untergruppe	.. adjustable for several preselected times with automatic stopping of the signal [1, 2006.01]
G04B 23/08	2-Punkt Untergruppe	.. operating on successive days without resetting; operating only once in each 24 hours [1, 2006.01]
G04B 23/10	2-Punkt Untergruppe	.. with presignal; with repeated signal; with changeable intensity of sound [1, 2006.01]

Symbol	Typ	Titel
G04B 23/12	2-Punkt Untergruppe	... Alarm watches to be worn in pockets or on the wrist (giving signals by stimulating the skin G04B 25/04) [1, 2006.01]
G04B 25/00	Hauptgruppe	Indicating the time by other means or by combined means (electric or electromechanical indicating G04C) [1, 2006.01]
G04B 25/02	1-Punkt Untergruppe	. by feeling; Clocks or watches for blind persons [1, 2006.01]
G04B 25/04	2-Punkt Untergruppe	... Alarm clocks or watches with devices stimulating the skin [1, 2006.01]
G04B 25/06	1-Punkt Untergruppe	. by moving figures, e.g. cuckoo-clock, trumpet clock [1, 2006.01]
G04B 27/00	Hauptgruppe	Mechanical devices for setting the time-indicating means [1, 2006.01]
G04B 27/02	1-Punkt Untergruppe	. by making use of the winding means [1, 2006.01]
G04B 27/04	2-Punkt Untergruppe	... with clutch wheel [1, 2006.01]
G04B 27/06	2-Punkt Untergruppe	... with rocking bar [1, 2006.01]
G04B 27/08	1-Punkt Untergruppe	. by using parts of the case [1, 2006.01]
		<u>Frameworks, supports, or arrangements of the clockwork parts in relation to each other, so-called "calibers"</u>
G04B 29/00	Hauptgruppe	Frameworks [1, 2006.01]
G04B 29/02	1-Punkt Untergruppe	. Plates; Bridges; Cocks [1, 2006.01]
G04B 29/04	1-Punkt Untergruppe	. Connecting or supporting parts [1, 2006.01]
G04B 31/00	Hauptgruppe	Bearings; Point suspensions or counter-point suspensions; Pivot bearings; Single parts therefor (bearings in general F16C) [1, 2006.01]
G04B 31/004	1-Punkt Untergruppe	. characterised by the material used [3, 2006.01]
G04B 31/008	2-Punkt Untergruppe	... Jewel bearings (G04B 31/04 takes precedence) [3, 2006.01]
G04B 31/012	2-Punkt Untergruppe	... Metallic bearings [3, 2006.01]
G04B 31/016	2-Punkt Untergruppe	... Plastic bearings [3, 2006.01]
G04B 31/02	1-Punkt Untergruppe	. Shock-damping bearings [1, 2006.01]
G04B 31/04	2-Punkt Untergruppe	... with jewel hole and cap jewel [3, 2006.01]
G04B 31/06	1-Punkt Untergruppe	. Manufacture or mounting processes [3, 2006.01]
G04B 31/08	1-Punkt Untergruppe	. Lubrication [3, 2006.01]
G04B 33/00	Hauptgruppe	Calibers [1, 2006.01]
G04B 33/02	1-Punkt Untergruppe	. Circular calibers [1, 2006.01]
G04B 33/04	1-Punkt Untergruppe	. Non-circular calibers [1, 2006.01]
G04B 33/06	1-Punkt Untergruppe	. of extremely flat shape [1, 2006.01]
G04B 33/08	1-Punkt Untergruppe	. in which the gear train is arranged in different planes, e.g. parallel or inclined to each other (G04B 33/10 takes precedence) [1, 2006.01]
G04B 33/10	1-Punkt Untergruppe	. with seconds hand arranged in the centre of the dial [1, 2006.01]
G04B 33/12	1-Punkt Untergruppe	. for extremely-long running times [1, 2006.01]
G04B 33/14	1-Punkt Untergruppe	. Calibers of which the mainsprings or barrels are easily removable (mainsprings G04B 1/14; barrels, arbors G04B 1/16) [1, 2006.01]

Symbol	Typ	Titel
G04B 33/16	1-Punkt Untergruppe	. with arrangements affording protection of the clockwork against damage as a consequence of a rupture of the mainspring [1, 2006.01]
G04B 35/00	Hauptgruppe	Adjusting the gear train, e.g. the backlash of the arbors, depth of meshing of the gears [1, 2006.01]
		<u>Protection of the clockwork against damage from outside</u>
G04B 37/00	Hauptgruppe	Cases [1, 2006.01]
G04B 37/02	1-Punkt Untergruppe	. Evacuated cases; Cases filled with gases or liquids; Cases containing substances for absorbing or binding moisture or dust [1, 2006.01]
G04B 37/04	1-Punkt Untergruppe	. Mounting the clockwork in the case; Shock-absorbing mountings [1, 2006.01]
G04B 37/05	2-Punkt Untergruppe	.. Fixed mountings for pocket or wrist watches [3, 2006.01]
G04B 37/06	1-Punkt Untergruppe	. Forming the passage for the winding stem through the case; Divided winding stems [1, 2006.01]
G04B 37/08	1-Punkt Untergruppe	. Hermetic sealing of openings, joints, passages, or slits [1, 2006.01]
G04B 37/10	2-Punkt Untergruppe	.. of winding stems [1, 2006.01]
G04B 37/11	2-Punkt Untergruppe	.. of the back cover of pocket or wrist watches [3, 2006.01]
G04B 37/12	1-Punkt Untergruppe	. Cases for special purposes, e.g. watch combined with ring, watch combined with button (watch guards or protectors A45C 11/10, A45C 11/12; watches combined with cosmetic powder containers A45D 33/30) [1, 2006.01]
G04B 37/14	1-Punkt Untergruppe	. Suspending devices, supports, or stands for time-pieces in so far as they form part of the case (wrist-watch straps, fastening means therefor A44C 5/00) [1, 2006.01]
G04B 37/16	2-Punkt Untergruppe	.. Fastening the case to the bracelet [3, 2006.01]
G04B 37/18	1-Punkt Untergruppe	. for pocket or wrist watches (G04B 37/02-G04B 37/16 takes precedence) [3, 2006.01]
G04B 37/20	2-Punkt Untergruppe	.. with hinged covers or backs [3, 2006.01]
G04B 37/22	1-Punkt Untergruppe	. Materials or processes of manufacturing pocket watch or wrist watch cases [3, 2006.01]
G04B 39/00	Hauptgruppe	Watch crystals; Fastening or sealing crystals; Clock glasses [1, 2006.01]
G04B 39/02	1-Punkt Untergruppe	. Sealing crystals or glasses [3, 2006.01]
G04B 41/00	Hauptgruppe	Locking or holding devices for pendulums, chimes, or the like, for use during transport [1, 2006.01]
G04B 43/00	Hauptgruppe	Protecting clockworks by shields or other means against external influences, e.g. magnetic fields [1, 2006.01]
		<u>Clocks with unusual features</u>
G04B 45/00	Hauptgruppe	Time-pieces of which the indicating means or cases provoke special effects, e.g. aesthetic effect (ornamental shaping of dials G04B 19/10) [1, 2006.01]
G04B 45/02	1-Punkt Untergruppe	. Time-pieces of which the clockwork is visible partly or wholly [1, 2006.01]
G04B 45/04	1-Punkt Untergruppe	. Time-pieces with invisible drive, e.g. with hands attached to rotating glass disc [1, 2006.01]
G04B 47/00	Hauptgruppe	Time-pieces combined with other articles which do not interfere with the running or the time-keeping of the time-piece (G04B 37/12 takes precedence; writing or drawing implements with devices for indicating time B43K 29/087; combinations with vehicle mirror assemblies B60R 1/12; combined with cameras, projectors, or photographic printing apparatus G03B 29/00) [1, 2006.01]
G04B 47/02	1-Punkt Untergruppe	. Installations within mirrors, pictures, furniture, or other household articles [1, 2006.01]
G04B 47/04	1-Punkt Untergruppe	. with attached ornaments or amusement apparatus [1, 2006.01]
G04B 47/06	1-Punkt Untergruppe	. with attached measuring instruments, e.g. pedometer, barometer, thermometer, compass [1, 2006.01]

Symbol	Typ	Titel
G04B 49/00	Hauptgruppe	Time-pieces using the position of the sun, moon, or stars [1, 2006.01]
G04B 49/02	1-Punkt Untergruppe	. Sundials [1, 2006.01]
G04B 49/04	2-Punkt Untergruppe	.. Graduation or shaping of dials [1, 2006.01]
G04B 99/00	Hauptgruppe	Subject matter not provided for in other groups of this subclass [2006.01]