CLASS 968, HOROLOGY

SECTION I - CLASS DEFINITION

Class 968, Horology, [G04], is used for optional searching. As patents in the U.S. and other countries are published, the examiners in the European Patent Office (EPO) receive the patents for placement into their search files, i.e., the European Patent Classifications (EPC). EPO examiners do not depend upon the International Patent Classification (IPC's) printed on the issuing documents for placement; they reclassify each patent anew. All of the patents in Class 968 have been classified by EPO personnel.

In Class 968, no definitions are associated with the cross-reference subclasses. The full extent of the types of documents intended to be classified in a subclass are titles and any associated notes. References to other areas of Class 968 are provided with the subclass title. Additional search information relating to other areas of the International Patent Classification (IPC) is also provided with the subclass title.

The European Patent Classification used by EPO examiners is not identical to the IPC. A number of classification areas have been added to the IPC as a way to provide additional search areas for the needs of EPO examiners. These areas are identified in the EPC schedule as having alpha characters added to the traditional IPC notation. At the end of each digest, presented between brackets, is the classification notation in the EPC which translates to that digest.

Class 968 has been presented in a manner consistent with the presentation of search areas in the U.S. Manual of Classification and is, in general, a replication of the G04 areas of the IPC.

Patents can be added to the newly created classifications in the traditional manner, i.e., blue slips, miscellaneous transfer, or 14B card. Patents can also be deleted by the present method of submitting a copy of the document along with a request to Search and Information Resources. Class 968 cannot accept an original classification.

It is the intention of Classification to maintain Class 968 in a form that reflects the current status of the EPC. As patents are classified into the EPC, the class will be updated to reflect the addition of the newly added documents.

At the present time, some of the newly created sub-

classes do not contain patents. It is anticipated that eventually every subclass will provide an area that can be searched.

SECTION II - LINES WITH OTHER CLASSES AND WITHIN THIS CLASS

Digest 1 contains paper copies in numerical order of all the patents found in subclasses 2-977. All subclasses as well as digest 1 are searchable on the APS messenger system and in all groups which have image search capability. At the time of issue, the examiner should indicate on the blue slip for digest 1 the appropriate subclasses to which a copy should be added. At the same time, a copy MUST be indicated on the blue slip for digest 1. Do not indicate a copy for digest 1 without adding a copy for subclasses 2-977.

Note the following:

(A) Subclasses 85-94 relate to transmission of the driving force on the escape and on the regulation mechanism; subclasses 95-102 relate to operating mechanisms; subclasses 103-138 relate to regulating mechanisms; subclasses 265-293 relate to frameworks, supports, or arrangements of the clockwork parts in relation to each other, so-called calibers; subclasses 394-380 relate to protection of the clockwork against damage from the outside; subclasses 381-416 relate to clocks with unusual features; subclasses 426-505 relate to electric winding of mechanical clocks such as independent electric clocks or watches whereas subclasses 426-633 include electric features of mechanically driven clocks or watches, such as electric winding of such clocks or the provision of electric contacts thereon; subclasses 506-563 relate to electric clock installations, masterand-slave clock systems, and synchronous-motor clocks; subclasses 564-644 relate to indicating the time or producing electrically; subclasses 801-856 include apparatus for measuring off predetermined time intervals, apparatus for producing such intervals as timing standards, e.g., metronomes, etc., and apparatus for measuring unknown intervals; subclasses 876-877 cover electronic timepieces with nonmoving parts (electronic timepieces with moving parts are covered by subclasses 426-633) and electronic circuitry for producing timing pulses irrespective of the nature of the time-indicating means utilized.

(B) Apparatus or tools specially designed for making or maintaining clocks or watches is in subclasses 651+ and machine tools, in general, in B23 and B24; handtools, in general, in B25 (G04D).

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(C) Time interval measuring in subclasses 801+ and measuring pulse characteristics in G01R, e.g., G01R 21/02, in radar or like systems G01S, masers in H01S 1/00, generation of oscillations in H03B, generation or counting or pulses, frequency dividing, analog/digital conversion in H03K, and time fuses in F42C 9/00 (G04F).

SECTION III - SUBCLASS REFERENCES TO THE CURRENT CLASS

SEE OR SEARCH THIS CLASS, SUBCLASS:

- through 282 and 284-416, for mechanically driven clocks or watches, mechanical parts of clocks or watches, timepieces using the position of the sun, moon, or stars; specifically sub-2-22 for driving mechanisms, classes subclasses 23-68 for combined normal and automatic winding, subclasses 69-84 for supervision of winding parts, subclasses 85-138 for clock movement such as escapement, frequency stabilization, and setting frequency gearwork; subclasses 139-247 for time indicating, subclasses 248-284 for time setting, subclasses 265-292 for frameworks, supports, and calibers; subclass 293 for the adjusting of clock movement, and subclasses 381-416 for protection of clockwork such as cases, crystals, glasses, and other protection means.
- 11, for composition and manufacture of the springs, see specifically subclass 94 for compositions and manufacture of components, wheels, spindles, pivots, etc.; subclass 102 for compositions of component escarpments, subclass 111 for composition and manufacture of hairsprings, subclass 126 for compensation for the effects of variations of temperature of springs using alloys, subclass 271 for materials for bearings of clockworks; (C22C for iron and steel alloys, C2ID 8/00 for heat treatment and chemical or mechanical treatment for control of the structure, and C22C and B22F for nonferrous alloys) [G04B 1/14B].
- 16, for protecting arrangements against rupture or overwinding of the mainspring located in the barrel or attached to the barrel; see specifically subclass 15 for protecting arrangements whereby the spring and the spring cylinder are connected by friction, subclasses 36 and 38 for keys or the like, subclass 66 for automatic winding devices, subclass 71 for protecting arrangements, subclass 292 for calibers with arrangements affording protection of the clock-

- work against damage as a consequence of a rupture of the mainspring, subclass 443 for electric winding arrangements with protection against overwinding of mechanical clockworks; (G11B 19/22, 19/28 for driving mechanism for gramophones) [G04B 1/20].
- for normal winding of clockworks by hand or mechanically; winding up several mainsprings or driving weights simultaneously; see specifically subclass 40 for automatic winding up, subclass 68 for combined normal and automatic winding up, subclass 73 for click devices, subclass 228 for winding up and striking mechanism by the clockwork and vice versa, subclasses 255 and 263 for mechanical devices for setting the time-indication by using the winding means, subclass 291 for calibers of which the mainsprings are easily removable, subclass 426 for winding mechanical clocks electrically, subclass 673 for tools for setting springs; (G11B 19/00 for driving mechanism for gramophones, G03B 1/00 for driving mechanism for cinematographies) [G04B 3/00].
- 94, for assembly and manufacture, specifically subclass 11 for manufacture of springs, subclass 102 for component parts and manufacture of the escape wheel, subclass 685 for machines and tools for the manufacture of chain wheels for clocks; (C21C 33/00-41/00 for steel alloys, B29 for manufacture of pinions from synthetic material, C22C for nonferrous alloys, B23F for pinions manufactured by milling and planing, G04B 13/02R for operating mechanisms).
- 426, through 633, for electromechanical clocks or watches; specifically 426-445 for electrical winding of mechanical clocks, subclasses 446-497 for electromechanical clock movements and electric or magnetic escapements, subclasses 564-604 for time indicating by optical and acoustical means, subclasses 498-502 for time setting, subclasses 503-505 for power supplies, subclasses 506-563 for synchronization, master-and-slave clock system, and synchronous-motor clocks; and subclasses 605-633 for clocks for operating a device at a preselected time.
- 651, through 783, for apparatus or tools specifically designed for making or maintaining clocks or watches; specifically subclasses 651-745 for hand and machine tools, subclasses 746 and 747 for lubricating devices, subclasses 748-782 for measuring and testing apparatus, and subclass 783 for demagnetizing devices.

- 801, through 858 for time interval measuring, specifically subclasses 801-816 for measuring predetermined time intervals with or without driving mechanisms, subclasses 817-830 for measuring predetermined time intervals producing time standards, and subclasses 831-856 for measuring unknown time intervals.
- 875+, for electromechanical clocks or watches, such as mechanical parts or pieces with no moving parts and electronic circuitry for producing timing pulses, (G04C).
- 876, through 977, for electronic timepieces; specifically subclasses 901-905 for producing timing pulses, subclasses 906-924 for time setting and synchronizing, subclasses 925-974 for time-indicating or date-indicating, and subclasses 975-977 for operating a device at preselected times.

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