NOTES

1. This subclass covers:
   • electronic time-pieces with no moving parts;
   • electronic circuitry for producing timing pulses irrespective of the nature of the time indicating means utilised.

2. This subclass does not cover electronic time-pieces with moving parts, which are covered by subclass G04C.

WARNING
In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

3/00 Producing timing pulses (driving circuits for stepping motors G04C 3/14; producing preselected time intervals for use as timing standards G04F 5/00; pulse technique in general H03K; control, synchronisation, or stabilisation of generators in general H03L)

3/02 Circuits for deriving low frequency timing pulses from pulses of higher frequency (pulse frequency dividers in general H03K 23/00 - H03K 29/00)

3/022 the desired number of pulses per unit time being obtained by adding to or subtracting from a pulse train one or more pulses (in general G06F 7/68)

3/025 [by storing time-date which are periodically investigated and modified accordingly, e.g. by using cyclic shift-registers]

3/027 [by combining pulse-trains of different frequencies, e.g. obtained from two independent oscillators or from a common oscillator by means of different frequency dividing ratios (synchronisation of electric time pieces G04G 7/00, G04C 11/00)]

3/04 Temperature-compensating arrangements

5/00 Setting, i.e. correcting or changing, the time-indication (radio-controlled time-pieces G04R)

5/002 [brought into action by radio]

5/005 [Debouncing circuits]

5/007 [by using a separate register into which the entire correct setting is introduced, which is thereafter transferred to the time counters]

5/02 by temporarily changing the number of pulses per unit time, e.g. quick-feed method

5/022 [quick-feed method]

5/025 [the time-counters first being reset to zero]

5/027 [by adding or suppressing individual pulses, e.g. for step-motor]

5/04 by setting each of the displayed values, e.g. date, hour, independently

5/041 [Correction of the minutes counter in function of the seconds' counter position at zero adjustment of the latter]

5/043 [using commutating devices for selecting the value, e.g. hours, minutes, seconds, to be corrected]

5/045 [by using a sequential electronic commutator]

5/046 [by using a separate register into which the correct setting of one of the counters is introduced which is thereafter transferred to the selected time-counter to be reset]

5/048 [by using a separate register into which the correct setting of the selected time-counter is introduced which is thereafter transferred to the time-counter to be reset]

7/00 Synchronisation (radio-controlled time-pieces G04R)

7/005 [provided with arrangements to prevent synchronisation by interfering signals (G04G 7/023 takes precedence)]

7/02 [by radio]

7/023 [provided with arrangements to prevent synchronisation by interfering signals]

7/026 [the time-piece preparing itself on set times on the reception of the synchronising signal]

9/00 Visual time or date indication means

9/0005 [Transmission of control signals]

9/0011 [using coded signals (synchronisation combined with automatic setting at regular intervals, e.g. by coded signals G04G 7/00)]

9/0017 [in which the light emitting display elements may be activated at will or are controlled in accordance with the ambient light]

9/0023 [by light valves in general (G04G 9/06, G04G 9/12 takes precedence; electro-, magneto- or acousto-optic devices in general G02F 1/00)]

9/0029 [Details]

9/0035 [constructional]

9/0041 [Illumination devices]
[9/02] 9/022 ... [using multiplexing techniques]
9/025 ... [provided with date indication]
9/027 ... [provided with means for displaying at will a time indication or a date or a part thereof]
9/04 ... by controlling light sources, e.g. electroluminescent diodes ([G04G 9/0082 takes precedence])
9/042 ... [using multiplexing techniques]
9/045 ... [provided with date indication]
9/047 ... [provided with means for displaying at will a time indication or a date or a part thereof]
9/06 ... using light valves, e.g. liquid crystals
9/062 ... [using multiplexing techniques]
9/065 ... [using a drop of liquid suspended by capillary forces and moved by an electric field]
9/067 ... [using mechano-optical means]
9/08 ... by building-up characters using a combination of indicating elements, e.g. by using multiplexing techniques ([G04G 9/0082 takes precedence])
9/082 ... [using multiplexing techniques]
9/085 ... [provided with date indication]
9/087 ... [provided with means for displaying at will a time indication or a date or a part thereof]
9/10 ... by controlling light sources, e.g. electroluminescent diodes ([G04G 9/0058 takes precedence])
9/102 ... [using multiplexing techniques]
9/105 ... [provided with date indication]
9/107 ... [provided with means for displaying at will a time indication or a date or a part thereof]
9/12 ... using light valves, e.g. liquid crystals
9/122 ... [using multiplexing techniques]
9/124 ... [provided with date indication]