

SECTION G — PHYSICS

G04 HOROLOGY

G04G ELECTRONIC TIME-PIECES [3]

Note(s)

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.

Subclass index

PRODUCING TIMING PULSES.....	3/00
TIME-SETTING; SYNCHRONISING.....	5/00, 7/00
TIME- OR DATE-INDICATING	
Visual; optical signals; acoustic signals.....	9/00, 11/00, 13/00
OPERATING A DEVICE AT PRESELECTED TIMES.....	15/00
STRUCTURAL DETAILS; HOUSINGS.....	17/00
ELECTRIC POWER SUPPLY CIRCUITS.....	19/00
INPUT OR OUTPUT DEVICES INTEGRATED IN TIME-PIECES.....	21/00
OTHER SUBJECTS.....	99/00

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]	9/12	• • using light valves, e.g. liquid crystals [3]
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]	11/00	Producing optical signals at preselected times [3]
3/04	• Temperature-compensating arrangements [7]	13/00	Producing acoustic time signals [3]
5/00	Setting, i.e. correcting or changing, the time-indication (radio-controlled time-pieces G04R) [3, 2013.01]	13/02	• at preselected times, e.g. alarm clocks [3]
5/02	• by temporarily changing the number of pulses per unit time, e.g. quick-feed method [3]	15/00	Time-pieces comprising means to be operated at preselected times or after preselected time intervals (G04G 11/00, G04G 13/00 take precedence; pulse delay circuits H03K 5/13; electronic time-delay switches H03K 17/28; electronic time-programme switches which automatically terminate their operation after the programme is completed H03K 17/296; time programming for television signal recording H04N 5/761) [3]
5/04	• by setting each of the displayed values, e.g. date, hour, independently [3]	17/00	Structural details; Housings (constructional details of radio-controlled time-pieces, e.g. antennas G04R 60/00) [7, 2013.01]
7/00	Synchronisation (radio-controlled time-pieces G04R) [3]	17/02	• Component assemblies [7]
9/00	Visual time or date indication means [3]	17/04	• • Mounting of electronic components [7]
9/02	• by selecting desired characters out of a number of characters or by selecting indicating elements the position of which represent the time, e.g. by using multiplexing techniques [3]	17/06	• • Electric connectors, e.g. conductive elastomers [7]
9/04	• • by controlling light sources, e.g. electroluminescent diodes [3]	17/08	• Housings [7]
9/06	• • using light valves, e.g. liquid crystals [3]	19/00	Electric power supply circuits specially adapted for use in electronic time-pieces [7]
9/08	• by building-up characters using a combination of indicating elements, e.g. by using multiplexing techniques [3]	19/02	• Conversion or regulation of current or voltage [7]
9/10	• • by controlling light sources, e.g. electroluminescent diodes [3]	19/04	• • Capacitive voltage division or multiplication [7]
		19/06	• • Regulation [7]
		19/08	• Arrangements for preventing voltage drop due to overloading the power supply [7]
		19/10	• Arrangements for supplying back-up power [7]

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19/12 • Arrangements for reducing power consumption during storage [7]

21/00 Input or output devices integrated in time-pieces [2010.01]

21/02 • Detectors of external physical values, e.g. temperature [2010.01]

21/04 • using radio waves (radio-controlled time-pieces G04R) [2010.01, 2013.01]

21/06 • using voice [2010.01]

21/08 • Touch switches specially adapted for time-pieces [2010.01]

99/00 Subject matter not provided for in other groups of this subclass [2010.01]