

## SECTION G — PHYSICS

## G04 HOROLOGY

**G04F TIME-INTERVAL MEASURING** (measuring pulse characteristics G01R, e.g. G01R 29/02; in radar or like systems G01S; masers H01S 1/00; generation of oscillations H03B; generation or counting of pulses, frequency dividing H03K; analogue/digital conversion in general H03M 1/00) [2]

Note(s) [2]

This subclass covers:

- apparatus for measuring-off predetermined time intervals;
- apparatus for producing such intervals as timing standards, e.g. metronomes;
- apparatus for measuring unknown intervals, e.g. precision systems for short-time-interval measurement.

Subclass index

## MEASURING PREDETERMINED TIME INTERVALS

Producing time standards.....5/00

Apparatus: without driving mechanisms; with driving mechanisms.....1/00, 3/00

## MEASURING UNKNOWN TIME INTERVALS

Mechanically; electromechanically; electrically; otherwise.....7/00, 8/00, 10/00, 13/00

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| <p><b>1/00 Apparatus which can be set and started to measure-off predetermined or adjustably-fixed time intervals without driving mechanisms, e.g. egg timer</b> (time or time-programme switches which automatically terminate their operation after the programme is completed H01H 43/00) [1, 2006.01]</p> <p>1/02 • by consuming prefixed quantities of materials, e.g. by burning candle [1, 2006.01]</p> <p>1/04 • by movement or acceleration due to gravity [1, 2006.01]</p> <p>1/06 • • by flowing-away of a prefixed quantity of fine-granular or liquid materials, e.g. sand-glass, water-clock [1, 2006.01]</p> <p>1/08 • • by a body falling a prefixed distance in air or in a viscous material [1, 2006.01]</p> <p><b>3/00 Apparatus which can be set and started to measure-off predetermined or adjustably-fixed time intervals with driving mechanisms, e.g. dosimeter with clockwork</b> (time or time-programme switches which automatically terminate their operation after the programme is completed H01H 43/00) [1, 2006.01]</p> <p>3/02 • with mechanical driving mechanisms [1, 2006.01]</p> <p>3/04 • • Additional arrangements in connection with ordinary non-electric clocks for this purpose [1, 2006.01]</p> <p>3/06 • with electric driving mechanisms [1, 2006.01]</p> <p>3/08 • • Additional arrangements in connection with ordinary electric clocks for this purpose [1, 2006.01]</p> <p><b>5/00 Apparatus for producing preselected time intervals for use as timing standards</b> (generating clock signals for electric digital computers G06F 1/04; automatic frequency control or stabilisation of generators in general H03L) [1, 2006.01]</p> | <p>5/02 • Metronomes [1, 2006.01]</p> <p>5/04 • using oscillators with electromechanical resonators [2, 2006.01]</p> <p>5/06 • • using piezo-electric resonators [2, 2006.01]</p> <p>5/08 • • using magnetostrictive resonators [2, 2006.01]</p> <p>5/10 • using electric or electronic resonators (G04F 5/14 takes precedence) [2, 2006.01]</p> <p>5/12 • using fluidic devices [2, 2006.01]</p> <p>5/14 • using atomic clocks [2, 2006.01]</p> <p>5/16 • using pulses produced by radio-isotopes [2, 2006.01]</p> <p><b>7/00 Apparatus for measuring unknown time intervals by non-electric means</b> (G04F 13/06 takes precedence) [1, 2, 2006.01]</p> <p>7/02 • by measuring the distance of fall or the final velocity of a falling body [1, 2006.01]</p> <p>7/04 • using a mechanical oscillator [1, 2, 2006.01]</p> <p>7/06 • • running only during the time interval to be measured, e.g. stop-watch [1, 2006.01]</p> <p>7/08 • • Watches or clocks with stop devices, e.g. chronograph [1, 2006.01]</p> <p>7/10 • Means used apart from the time-piece for starting or stopping same [1, 2, 2006.01]</p> <p><b>8/00 Apparatus for measuring unknown time intervals by electromechanical means</b> [2, 2006.01]</p> <p>8/02 • using an electromechanical oscillator [2, 2006.01]</p> <p>8/04 • • using a piezo-electric oscillator [2, 2006.01]</p> <p>8/06 • • using a magnetostrictive oscillator [2, 2006.01]</p> <p>8/08 • Means used apart from the time-piece for starting or stopping same [2, 2006.01]</p> <p><b>10/00 Apparatus for measuring unknown time intervals by electric means</b> [2, 2006.01]</p> |
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## G04F

- 10/02 • using oscillators with passive electric resonator, e.g. lumped LC [2, 2006.01]
- 10/04 • by counting pulses or half-cycles of an ac [2, 2006.01]
- 10/06 • by measuring phase [2, 2006.01]
- 10/08 • using pulses produced by radio-isotopes [2, 2006.01]
- 10/10 • by measuring electric or magnetic quantities changing in proportion to time [2, 2006.01]

- 13/00 Apparatus for measuring unknown time intervals by means not provided for in groups G04F 5/00-G04F 10/00 [2, 2006.01]**
- 13/02 • using optical means [2, 2006.01]
- 13/04 • using electrochemical means [2, 2006.01]
- 13/06 • using fluidic means [2, 2006.01]