

CPC COOPERATIVE PATENT CLASSIFICATION

G PHYSICS (NOTES omitted)

INSTRUMENTS

G06 COMPUTING; CALCULATING; COUNTING (score computers for games [A63B 71/06](#), [A63D 15/20](#), [A63F 1/18](#); combinations of writing implements with computing devices [B43K 29/08](#))
(NOTES omitted)

G06M COUNTING MECHANISMS; COUNTING OF OBJECTS NOT OTHERWISE PROVIDED FOR (counting by measuring volume or weight of articles to be counted [G01F](#), [G01G](#); computers [G06C](#) - [G06J](#); counting electric pulses [H03K](#); counting characters, words or messages in switching networks for transmission of digital information [H04L 12/08](#))

NOTE

This subclass covers:

- stepping or continuously-moving mechanical counters operated through one or more inputs applied to the lowest order mechanically or electrically;
- counting systems involving applications of either mechanical, electrical, or electronic counters.

WARNINGS

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:
[G06M 15/00](#) covered by
2. 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.

1/00	Design features of general application	1/083	. . {by mechanical means (counting of stacked objects G06M 9/00)}
1/02	. Housing (for measuring instruments in general G01D)	1/086	. . . {including barriers (counting of conveyed objects G06M 7/00)}
1/022	. . {Plates}	1/10	. . by electric or magnetic means
1/024	. . . {Bearings}	1/101	. . . {by electro-optical means}
1/026	. . {Connecting or supporting parts}	1/102	. . . {by magnetic or electromagnetic means}
1/028	. . {Arbors, drum fixing and adjusting means (arbor-fixing means F16C 17/08)}	1/104 {electromagnets, clicks}
1/04	. for driving the stage of lowest order (with variable ratio of drive G06M 1/38)	1/105 {electronic circuits for actuating the electromagnets}
1/041	. . {for drum-type indicating means}	1/107 {electromotors}
1/042	. . . {with click devices (electromagnetic driving means G06M 1/102)}	1/108	. . . {by electronic means}
1/044	. . . {with escapements (electromagnetic driving means G06M 1/102)}	1/12	. . by fluid means
1/045	. . {for dial, pointer, or similar type indicating means}	1/123	. . . {by pneumatic means}
1/047	. . {for arithmetical operations}	1/126	. . . {by hydraulic means}
1/048	. . {with switching means between two or more counting devices}	1/14	. for transferring a condition from one stage to a higher stage (with variable ratio of transfer G06M 1/38)
1/06	. . producing continuous revolution of the stage, e.g. with gear train	1/143	. . {with drums}
1/062	. . . {for drum type indicating means}	1/146	. . {with dials, pointers, or similar type indicating means}
1/064	. . . {for dial, pointer, or similar type indicating means}	1/16	. . self-operating, e.g. by Geneva mechanism
1/066	. . . {for arithmetical operations}	1/163	. . . {with drums}
1/068	. . . {with switching means between two or more counting devices}	1/166	. . . {with dials, pointers or similar type indicating means}
1/08	. for actuating the drive	1/18	. . requiring external operation, e.g. by electromagnetic force
		1/183	. . . {with drums}

- 1/186 . . . {with dials, pointers, or similar type indicating means}
- 1/20 . . specially adapted for denominations with unequal numbers in each stage, e.g. degrees and minutes of angle
- 1/22 . for visual indication of the result of count on counting mechanisms, e.g. by window with magnifying lens
- 1/24 . . Drums; Dials; Pointers (for measuring instruments in general [G01D](#); {for time measuring instruments [G04B 19/00](#), including drums [G04B 19/21](#), [G04C 19/04](#); date indicating [G04B 19/24](#)})
- 1/241 . . . {Drums}
- 1/243 {Drums with presetting means}
- 1/245 . . . {Dials; Pointers}
- 1/246 . . . {Bands; Sheets}
- 1/248 . . . {Discs}
- 1/26 . . Aligning means
- 1/27 . for representing the result of count in the form of electric signals, e.g. by sensing markings on the counter drum
- 1/272 . . using photoelectric means
- 1/274 . . using magnetic means; using Hall-effect devices
- 1/276 . . using mechanically-actuated contacts
- 1/28 . for zeroising or setting to a particular value
- 1/283 . . {with drums}
- 1/286 . . {with dials, pointers, or similar type indicating means}
- 1/30 . . using heart-shaped or similar cams; using levers
- 1/303 . . . {with drums}
- 1/306 . . . {with dials, pointers, or similar type indicating means}
- 1/32 . . . Actuating means, e.g. magnet, spring, weight
- 1/323 {with drums}
- 1/326 {with dials, pointers, or similar type indicating means}
- 1/34 . . using reset shafts
- 1/343 . . . {with drums}
- 1/346 . . . {with dials, pointers, or similar type indicating means}
- 1/36 . . . Actuating means, e.g. magnet, spring, weight
- 1/363 {with drums}
- 1/366 {with dials, pointers, or similar type indicating means}
- 1/38 . for varying ratio of drive or transfer mechanism, e.g. by using alternative counting trains
- 1/385 . . {differentials}
- 3/00 Counters with additional facilities (generating electric pulses at random intervals [H03K 3/84](#))**
- 3/02 . for performing an operation at a predetermined value of the count, e.g. arresting a machine ({[G06M 3/04](#) takes precedence})
- 3/021 . . {with drums type indicating means}
- 3/022 . . . {by subtracting}
- 3/024 . . . {by adding}
- 3/025 . . {with dial, pointer, or similar type indicating means}
- 3/027 . . . {by subtracting}
- 3/028 . . . {by adding}
- 3/04 . . with an additional counter train operating in the reverse direction
- 3/043 . . . {with drums}

- 3/046 . . . {with dials, pointers, or similar type indicating means}
- 3/06 . for printing or separately displaying result of count ([display systems G09](#))
- 3/062 . . {for printing}
- 3/065 . . . {with drums}
- 3/067 . . . {with dials, pointers, or similar type indicating means}
- 3/08 . for counting the input from several sources; for counting inputs of different amounts
- 3/10 . for counting denominations with unequal numbers in each stage, e.g. degrees and minutes of angle ([transfer mechanism therefor G06M 1/20](#))
- 3/12 . for preventing incorrect actuation, e.g. for preventing falsification
- 3/14 . for registering difference of positive and negative actuations

Counting of objects (in machines for shaping metal without removing material [B21C 51/00](#); in printing machines or presses [B41F 33/02](#); in office copying machines [B41L 39/02](#); of axles of rail vehicles [B61L 1/16](#); in packaging machines [B65B 65/08](#); of objects conveyed through a pipe or tube [B65G 51/36](#); entry or exit registers [G07C 9/00](#))

7/00 Counting of objects carried by a conveyor

- 7/02 . wherein objects ahead of the sensing element are separated to produce a distinct gap between successive objects
- 7/04 . . Counting of piece goods, e.g. of boxes
- 7/06 . . Counting of flat articles, e.g. of sheets of paper
- 7/08 . wherein the direction of movement of the objects is changed at the station where they are sensed
- 7/10 . . Counting of flat overlapped articles, e.g. of cards

9/00 Counting of objects in a stack thereof

- 9/02 . by using a rotating separator incorporating pneumatic suction nozzles
- 9/025 . . {the rotation axis being substantially parallel to the stacking direction}

11/00 Counting of objects distributed at random, e.g. on a surface

- 11/02 . using an electron beam scanning a surface line by line, e.g. of blood cells on a substrate
- 11/04 . . with provision for distinguishing between different sizes of objects ([investigating particle size in general G01N 15/00](#))

2207/00 Indexing scheme relating to counting of objects carried by a conveyor

- 2207/02 . Counting of generally flat and overlapped articles, e.g. cards, newspapers