

# 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](#))  
(NOTE 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.

#### WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

[G06M 15/00](#) covered by

<b>1/00</b>	<b>Design features of general application</b>	<b>1/086</b>	. . . {including barriers (counting of conveyed objects <a href="#">G06M 7/00</a> )}
1/02	. Housing (for measuring instruments in general <a href="#">G01D</a> )	1/10	. . by electric or magnetic means
1/022	. . {Plates}	1/101	. . . {by electro-optical means}
1/024	. . . {Bearings}	1/102	. . . {by magnetic or electromagnetic means}
1/026	. . {Connecting or supporting parts}	1/104	. . . . {electromagnets, clicks}
1/028	. . {Arbors, drum fixing and adjusting means (arbor-fixing means <a href="#">F16C 17/08</a> )}	1/105	. . . . . {electronic circuits for actuating the electromagnets}
1/04	. for driving the stage of lowest order (with variable ratio of drive <a href="#">G06M 1/38</a> )	1/107	. . . . {electromotors}
1/041	. . {for drum-type indicating means}	1/108	. . . {by electronic means}
1/042	. . . {with click devices (electromagnetic driving means <a href="#">G06M 1/102</a> )}	1/12	. . by fluid means
1/044	. . . {with escapements (electromagnetic driving means <a href="#">G06M 1/102</a> )}	1/123	. . . {by pneumatic means}
1/045	. . {for dial, pointer, or similar type indicating means}	1/126	. . . {by hydraulic means}
1/047	. . {for arithmetical operations}	1/14	. for transferring a condition from one stage to a higher stage (with variable ratio of transfer <a href="#">G06M 1/38</a> )
1/048	. . {with switching means between two or more counting devices}	1/143	. . {with drums}
1/06	. . producing continuous revolution of the stage, e.g. with gear train	1/146	. . {with dials, pointers, or similar type indicating means}
1/062	. . . {for drum type indicating means}	1/16	. . self-operating, e.g. by Geneva mechanism
1/064	. . . {for dial, pointer, or similar type indicating means}	1/163	. . . {with drums}
1/066	. . . {for arithmetical operations}	1/166	. . . {with dials, pointers or similar type indicating means}
1/068	. . . {with switching means between two or more counting devices}	1/18	. . requiring external operation, e.g. by electromagnetic force
1/08	. for actuating the drive	1/183	. . . {with drums}
1/083	. . {by mechanical means (counting of stacked objects <a href="#">G06M 9/00</a> )}	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	3/062	• • {for printing}
1/24	• • Drums; Dials; Pointers (for measuring instruments in general <a href="#">G01D</a> ; {for time measuring instruments <a href="#">G04B 19/00</a> , including drums <a href="#">G04B 19/21</a> , <a href="#">G04C 19/04</a> ; date indicating <a href="#">G04B 19/24</a> })	3/065	• • • {with drums}
1/241	• • • {Drums}	3/067	• • • {with dials, pointers, or similar type indicating means}
1/243	• • • • {Drums with presetting means}	3/08	• for counting the input from several sources; for counting inputs of different amounts
1/245	• • • {Dials; Pointers}	3/10	• for counting denominations with unequal numbers in each stage, e.g. degrees and minutes of angle (transfer mechanism therefor <a href="#">G06M 1/20</a> )
1/246	• • • {Bands; Sheets}	3/12	• for preventing incorrect actuation, e.g. for preventing falsification
1/248	• • • {Discs}	3/14	• for registering difference of positive and negative actuations
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	<b>Counting of objects</b> (in machines for shaping metal without removing material <a href="#">B21C 51/00</a> ; in printing machines or presses <a href="#">B41F 33/02</a> ; in office copying machines <a href="#">B41L 39/02</a> ; of axles of rail vehicles <a href="#">B61L 1/16</a> ; in packaging machines <a href="#">B65B 65/08</a> ; of objects conveyed through a pipe or tube <a href="#">B65G 51/36</a> ; entry or exit registers <a href="#">G07C 9/00</a> )	
1/272	• • using photoelectric means	<b>7/00</b>	<b>Counting of objects carried by a conveyor</b>
1/274	• • using magnetic means; using Hall-effect devices	7/02	• wherein objects ahead of the sensing element are separated to produce a distinct gap between successive objects
1/276	• • using mechanically-actuated contacts	7/04	• • Counting of piece goods, e.g. of boxes
1/28	• for zeroising or setting to a particular value	7/06	• • Counting of flat articles, e.g. of sheets of paper
1/283	• • {with drums}	7/08	• wherein the direction of movement of the objects is changed at the station where they are sensed
1/286	• • {with dials, pointers, or similar type indicating means}	7/10	• • Counting of flat overlapped articles, e.g. of cards
1/30	• • using heart-shaped or similar cams; using levers	<b>9/00</b>	<b>Counting of objects in a stack thereof</b>
1/303	• • • {with drums}	9/02	• by using a rotating separator incorporating pneumatic suction nozzles
1/306	• • • {with dials, pointers, or similar type indicating means}	9/025	• • {the rotation axis being substantially parallel to the stacking direction}
1/32	• • • Actuating means, e.g. magnet, spring, weight	<b>11/00</b>	<b>Counting of objects distributed at random, e.g. on a surface</b>
1/323	• • • • {with drums}	11/02	• using an electron beam scanning a surface line by line, e.g. of blood cells on a substrate
1/326	• • • • {with dials, pointers, or similar type indicating means}	11/04	• • with provision for distinguishing between different sizes of objects (investigating particle size in general <a href="#">G01N 15/00</a> )
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}		
<b>3/00</b>	<b>Counters with additional facilities</b> (generating electric pulses at random intervals <a href="#">H03K 3/84</a> )	<b>2207/00</b>	<b>Indexing scheme relating to counting of objects carried by a conveyor</b>
3/02	• for performing an operation at a predetermined value of the count, e.g. arresting a machine ({ <a href="#">G06M 3/04</a> takes precedence})	2207/02	• Counting of generally flat and overlapped articles, e.g. cards, newspapers
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 <a href="#">G09</a> )		