

# CPC COOPERATIVE PATENT CLASSIFICATION

## G PHYSICS (NOTES omitted)

### INSTRUMENTS

## G06 COMPUTING; CALCULATING OR COUNTING (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.

#### 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.}

<b>1/00</b>	<b>Design features of general application</b>	1/101	. . . {by electro-optical means}
1/02	. Housing (for measuring instruments in general <a href="#">G01D</a> )	1/102	. . . {by magnetic or electromagnetic means}
1/022	. . {Plates}	1/104	. . . . {electromagnets, clicks}
1/024	. . . {Bearings}	1/105	. . . . . {electronic circuits for actuating the electromagnets}
1/026	. . {Connecting or supporting parts}	1/107	. . . . . {electromotors}
1/028	. . {Arbors, drum fixing and adjusting means (arbor-fixing means <a href="#">F16C 17/08</a> )}	1/108	. . . {by electronic means}
1/04	. for driving the stage of lowest order (with variable ratio of drive <a href="#">G06M 1/38</a> )	1/12	. . by fluid means
1/041	. . {for drum-type indicating means}	1/123	. . . {by pneumatic means}
1/042	. . . {with click devices (electromagnetic driving means <a href="#">G06M 1/102</a> )}	1/126	. . . {by hydraulic means}
1/044	. . . {with escapements (electromagnetic driving means <a href="#">G06M 1/102</a> )}	1/14	. for transferring a condition from one stage to a higher stage (with variable ratio of transfer <a href="#">G06M 1/38</a> )
1/045	. . {for dial, pointer, or similar type indicating means}	1/143	. . {with drums}
1/047	. . {for arithmetical operations}	1/146	. . {with dials, pointers, or similar type indicating means}
1/048	. . {with switching means between two or more counting devices}	1/16	. . self-operating, e.g. by Geneva mechanism
1/06	. . producing continuous revolution of the stage, e.g. with gear train	1/163	. . . {with drums}
1/062	. . . {for drum type indicating means}	1/166	. . . {with dials, pointers or similar type indicating means}
1/064	. . . {for dial, pointer, or similar type indicating means}	1/18	. . requiring external operation, e.g. by electromagnetic force
1/066	. . . {for arithmetical operations}	1/183	. . . {with drums}
1/068	. . . {with switching means between two or more counting devices}	1/186	. . . {with dials, pointers, or similar type indicating means}
1/08	. for actuating the drive	1/20	. . specially adapted for denominations with unequal numbers in each stage, e.g. degrees and minutes of angle
1/083	. . {by mechanical means (counting of stacked objects <a href="#">G06M 9/00</a> )}	1/22	. for visual indication of the result of count on counting mechanisms, e.g. by window with magnifying lens
1/086	. . . {including barriers (counting of conveyed objects <a href="#">G06M 7/00</a> )}		
1/10	. . by electric or magnetic means		

<p>1/24</p> <p>1/241</p> <p>1/243</p> <p>1/245</p> <p>1/246</p> <p>1/248</p> <p>1/26</p> <p>1/27</p> <p>1/272</p> <p>1/274</p> <p>1/276</p> <p>1/28</p> <p>1/283</p> <p>1/286</p> <p>1/30</p> <p>1/303</p> <p>1/306</p> <p>1/32</p> <p>1/323</p> <p>1/326</p> <p>1/34</p> <p>1/343</p> <p>1/346</p> <p>1/36</p> <p>1/363</p> <p>1/366</p> <p>1/38</p> <p>1/385</p> <p><b>3/00</b></p> <p>3/02</p> <p>3/021</p> <p>3/022</p> <p>3/024</p> <p>3/025</p> <p>3/027</p> <p>3/028</p> <p>3/04</p> <p>3/043</p> <p>3/046</p> <p>3/06</p> <p>3/062</p> <p>3/065</p>	<ul style="list-style-type: none"> <li>. . Drums; 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})</li> <li>. . . {Drums}</li> <li>. . . . {Drums with presetting means}</li> <li>. . . {Dials; Pointers}</li> <li>. . . {Bands; Sheets}</li> <li>. . . {Discs}</li> <li>. . Aligning means</li> <li>. for representing the result of count in the form of electric signals, e.g. by sensing markings on the counter drum</li> <li>. . using photoelectric means</li> <li>. . using magnetic means; using Hall-effect devices</li> <li>. . using mechanically-actuated contacts</li> <li>. for zeroising or setting to a particular value</li> <li>. . {with drums}</li> <li>. . {with dials, pointers, or similar type indicating means}</li> <li>. . using heart-shaped or similar cams; using levers</li> <li>. . . {with drums}</li> <li>. . . {with dials, pointers, or similar type indicating means}</li> <li>. . . Actuating means, e.g. magnet, spring, weight</li> <li>. . . . {with drums}</li> <li>. . . . {with dials, pointers, or similar type indicating means}</li> <li>. . using reset shafts</li> <li>. . . {with drums}</li> <li>. . . {with dials, pointers, or similar type indicating means}</li> <li>. . . Actuating means, e.g. magnet, spring, weight</li> <li>. . . . {with drums}</li> <li>. . . . {with dials, pointers, or similar type indicating means}</li> <li>. for varying ratio of drive or transfer mechanism, e.g. by using alternative counting trains</li> <li>. . {differentials}</li> <li><b>Counters with additional facilities (generating electric pulses at random intervals H03K 3/84)</b></li> <li>. for performing an operation at a predetermined value of the count, e.g. arresting a machine {(G06M 3/04 takes precedence)}</li> <li>. . {with drums type indicating means}</li> <li>. . . {by subtracting}</li> <li>. . . {by adding}</li> <li>. . {with dial, pointer, or similar type indicating means}</li> <li>. . . {by subtracting}</li> <li>. . . {by adding}</li> <li>. . with an additional counter train operating in the reverse direction</li> <li>. . . {with drums}</li> <li>. . . {with dials, pointers, or similar type indicating means}</li> <li>. for printing or separately displaying result of count (display systems G09)</li> <li>. . {for printing}</li> <li>. . . {with drums}</li> </ul>	<p>3/067</p> <p>3/08</p> <p>3/10</p> <p>3/12</p> <p>3/14</p> <p><b>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)</b></p> <p><b>7/00</b></p> <p>7/02</p> <p>7/04</p> <p>7/06</p> <p>7/08</p> <p>7/10</p> <p><b>9/00</b></p> <p>9/02</p> <p>9/025</p> <p><b>11/00</b></p> <p>11/02</p> <p>11/04</p> <p><b>15/00</b></p> <p><b>Indexing scheme relating to counting of objects carried by a conveyor</b></p> <p>2207/00</p> <p>2207/02</p>	<ul style="list-style-type: none"> <li>. . . {with dials, pointers, or similar type indicating means}</li> <li>. for counting the input from several sources; for counting inputs of different amounts</li> <li>. for counting denominations with unequal numbers in each stage, e.g. degrees and minutes of angle (transfer mechanism therefor G06M 1/20)</li> <li>. for preventing incorrect actuation, e.g. for preventing falsification</li> <li>. for registering difference of positive and negative actuations</li> <li><b>Counting of objects carried by a conveyor</b></li> <li>. wherein objects ahead of the sensing element are separated to produce a distinct gap between successive objects</li> <li>. . Counting of piece goods, e.g. of boxes</li> <li>. . Counting of flat articles, e.g. of sheets of paper</li> <li>. wherein the direction of movement of the objects is changed at the station where they are sensed</li> <li>. . Counting of flat overlapped articles, e.g. of cards</li> <li><b>Counting of objects in a stack thereof</b></li> <li>. by using a rotating separator incorporating pneumatic suction nozzles</li> <li>. . {the rotation axis being substantially parallel to the stacking direction}</li> <li><b>Counting of objects distributed at random, e.g. on a surface</b></li> <li>. using an electron beam scanning a surface line by line, e.g. of blood cells on a substrate</li> <li>. . with provision for distinguishing between different sizes of objects (investigating particle size in general G01N 15/00)</li> <li><b>Counting of objects, not otherwise provided for</b></li> <li><b>Indexing scheme relating to counting of objects carried by a conveyor</b></li> <li>. Counting of generally flat and overlapped articles, e.g. cards, newspapers</li> </ul>
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