

CPC**COOPERATIVE PATENT CLASSIFICATION****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](#) to [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.

G06M 1/00**Design features of general application**

- G06M 1/02 . Housing (for measuring instruments in general [G01D](#))
- G06M 1/022 .. {Plates}
- G06M 1/024 ... {Bearings}
- G06M 1/026 .. {Connecting or supporting parts}
- G06M 1/028 .. {Arbors, drum fixing and adjusting means (arbor-fixing means [F16C 17/08](#))}
- G06M 1/04 . for driving the stage of lowest order (with variable ratio of drive [G06M 1/38](#))
- G06M 1/041 .. {for drum-type indicating means}
- G06M 1/042 ... {with click devices (electromagnetic driving means [G06M 1/102](#))}
- G06M 1/044 ... {with escapements (electromagnetic driving means [G06M 1/102](#))}
- G06M 1/045 .. {for dial, pointer, or similar type indicating means}
- G06M 1/047 .. {for arithmetical operations}
- G06M 1/048 .. {with switching means between two or more counting devices}
- G06M 1/06 .. producing continuous revolution of the stage, e.g. with gear train
- G06M 1/062 ... {for drum type indicating means}
- G06M 1/064 ... {for dial, pointer, or similar type indicating means}
- G06M 1/066 ... {for arithmetical operations}
- G06M 1/068 ... {with switching means between two or more counting devices}
- G06M 1/08 . for actuating the drive
- G06M 1/083 .. {by mechanical means (counting of stacked objects [G06M 9/00](#))}
- G06M 1/086 ... {including barriers (counting of conveyed objects [G06M 7/00](#))}
- G06M 1/10 .. by electric or magnetic means
- G06M 1/101 ... {by electro-optical means}

G06M 1/102	... {by magnetic or electromagnetic means}
G06M 1/104	.... {electromagnets, clicks}
G06M 1/105	..... {electronic circuits for actuating the electromagnets}
G06M 1/107	.... {electromotors}
G06M 1/108	... {by electronic means}
G06M 1/12	.. by fluid means
G06M 1/123	... {by pneumatic means}
G06M 1/126	... {by hydraulic means}
G06M 1/14	. for transferring a condition from one stage to a higher stage (with variable ratio of transfer G06M 1/38)
G06M 1/143	.. {with drums}
G06M 1/146	.. {with dials, pointers, or similar type indicating means}
G06M 1/16	.. self-operating, e.g. by Geneva mechanism
G06M 1/163	... {with drums}
G06M 1/166	... {with dials, pointers or similar type indicating means}
G06M 1/18	.. requiring external operation, e.g. by electromagnetic force
G06M 1/183	... {with drums}
G06M 1/186	... {with dials, pointers, or similar type indicating means}
G06M 1/20	.. specially adapted for denominations with unequal numbers in each stage, e.g. degrees and minutes of angle
G06M 1/22	. for visual indication of the result of count on counting mechanisms, e.g. by window with magnifying lens
G06M 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 })
G06M 1/241	... { Drums}
G06M 1/243	.... { Drums with presetting means}
G06M 1/245	... { Dials; Pointers}
G06M 1/246	... { Bands; Sheets}
G06M 1/248	... { Discs}
G06M 1/26	.. Aligning means
G06M 1/27	. for representing the result of count in the form of electric signals, e.g. by sensing markings on the counter drum
G06M 1/272	.. using photoelectric means
G06M 1/274	.. using magnetic means; using Hall-effect devices
G06M 1/276	.. using mechanically-actuated contacts
G06M 1/28	. for zeroising or setting to a particular value
G06M 1/283	.. {with drums}
G06M 1/286	.. {with dials, pointers, or similar type indicating means}
G06M 1/30	.. using heart-shaped or similar cams; using levers
G06M 1/303	... {with drums}
G06M 1/306	... {with dials, pointers, or similar type indicating means}

G06M 1/32	...	Actuating means, e.g. magnet, spring, weight
G06M 1/323	....	{with drums}
G06M 1/326	....	{with dials, pointers, or similar type indicating means}
G06M 1/34	..	using reset shafts
G06M 1/343	...	{with drums}
G06M 1/346	...	{with dials, pointers, or similar type indicating means}
G06M 1/36	...	Actuating means, e.g. magnet, spring, weight
G06M 1/363	....	{with drums}
G06M 1/366	....	{with dials, pointers, or similar type indicating means}
G06M 1/38	.	for varying ratio of drive or transfer mechanism, e.g. by using alternative counting trains
G06M 1/385	..	{differentials}

G06M 3/00 **Counters with additional facilities** (generating electric pulses at random intervals [H03K 3/84](#))

G06M 3/02	.	for performing an operation at a predetermined value of the count, e.g. arresting a machine {(G06M 3/04 takes precedence)}
G06M 3/021	..	{with drums type indicating means}
G06M 3/022	...	{by subtracting}
G06M 3/024	...	{by adding}
G06M 3/025	..	{with dial, pointer, or similar type indicating means}
G06M 3/027	...	{by subtracting}
G06M 3/028	...	{by adding}
G06M 3/04	..	with an additional counter train operating in the reverse direction
G06M 3/043	...	{with drums}
G06M 3/046	...	{with dials, pointers, or similar type indicating means}
G06M 3/06	.	for printing or separately displaying result of count (display systems G09)
G06M 3/062	..	{for printing}
G06M 3/065	...	{with drums}
G06M 3/067	...	{with dials, pointers, or similar type indicating means}
G06M 3/08	.	for counting the input from several sources; for counting inputs of different amounts
G06M 3/10	.	for counting denominations with unequal numbers in each stage, e.g. degrees and minutes of angle (transfer mechanism therefor G06M 1/20)
G06M 3/12	.	for preventing incorrect actuation, e.g. for preventing falsification
G06M 3/14	.	for registering difference of positive and negative actuations

Guidance heading: **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](#))

G06M 7/00 **Counting of objects carried by a conveyer**

G06M 7/02	<ul style="list-style-type: none"> wherein objects ahead of the sensing element are separated to produce a distinct gap between successive objects
G06M 7/04	<ul style="list-style-type: none"> Counting of piece goods, e.g. of boxes
G06M 7/06	<ul style="list-style-type: none"> Counting of flat articles, e.g. of sheets of paper
G06M 7/08	<ul style="list-style-type: none"> wherein the direction of movement of the objects is changed at the station where they are sensed
G06M 7/10	<ul style="list-style-type: none"> Counting of flat overlapped articles, e.g. of cards
G06M 9/00	Counting of objects in a stack thereof
G06M 9/02	<ul style="list-style-type: none"> by using a rotating separator incorporating pneumatic suction nozzles
G06M 9/025	<ul style="list-style-type: none"> {the rotation axis being substantially parallel to the stacking direction}
G06M 11/00	Counting of objects distributed at random, e.g. on a surface
G06M 11/02	<ul style="list-style-type: none"> using an electron beam scanning a surface line by line, e.g. of blood cells on a substrate
G06M 11/04	<ul style="list-style-type: none"> with provision for distinguishing between different sizes of objects (investigating particle size in general G01N 15/00)
G06M 2207/00	Indexing scheme relating to counting of objects carried by a conveyer
G06M 2207/02	<ul style="list-style-type: none"> Counting of generally flat and overlapped articles, e.g. cards, newspapers