

# CPC COOPERATIVE PATENT CLASSIFICATION

## G PHYSICS (NOTES omitted)

### INSTRUMENTS

#### G07 CHECKING-DEVICES

#### G07D HANDLING OF COINS OR VALUABLE PAPERS, e.g. TESTING, SORTING BY DENOMINATIONS, COUNTING, DISPENSING, CHANGING OR DEPOSITING

##### NOTE

In this subclass, the following terms or expressions are used with the meaning indicated:

- "coins" also covers tokens of similar nature;
- "valuable papers" covers paper currency, banknotes, bills, cheques, vouchers, securities, bonds or similar valuable papers, irrespective of the material used for these, which represent monetary value that can be measured or verified.

##### 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.

- 1/00** **Coin dispensers** (devices delivering paper currency [G07D 11/00](#))
- 1/02 . giving change ({coin-actuated mechanisms in [general G07F](#)})
- 1/04 . . dispensing change equal to a sum deposited
- 1/06 . . dispensing the difference between a sum paid and a sum charged
- 1/08 . . hand actuated
- 3/00** **Sorting a mixed bulk of coins into denominations**
- 3/02 . Sorting coins by means of graded apertures
- 3/04 . . arranged on an inclined rail
- 3/06 . . arranged along a circular path
- 3/08 . . arranged on a helix
- 3/10 . . provided by sieves arranged in series
- 3/12 . Sorting coins by means of stepped deflectors
- 3/121 . . {arranged on inclined paths}
- 3/123 . . . {the coins being deflected off rails}
- 3/125 . . . . {by moving deflectors}
- 3/126 . . . {the coins being diverted by ramps in channels}
- 3/128 . . {Rotary devices}
- 3/14 . Apparatus driven under control of coin-sensing elements
- 3/16 . in combination with coin-counting
- 5/00** **Testing specially adapted to determine the identity or genuineness of coins, e.g. for segregating coins which are unacceptable or alien to a currency**

##### NOTE

In groups [G07D 5/005](#) - [G07D 5/10](#), the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the last appropriate place.

- 5/005 . {Testing the surface pattern, e.g. relief}

- 5/02 . Testing the dimensions, e.g. thickness, diameter; Testing the deformation
- 5/04 . Testing the weight
- 5/06 . Testing the hardness or elasticity
- 5/08 . Testing the magnetic or electric properties
- 5/10 . Testing the rim, e.g. the milling of the rim

#### **7/00** **Testing specially adapted to determine the identity or genuineness of valuable papers or for segregating those which are unacceptable, e.g. banknotes that are alien to a currency**

##### NOTE

In this group, groups [G07D 7/16](#) - [G07D 7/20](#) take precedence over groups [G07D 7/02](#) - [G07D 7/14](#).

##### WARNING

Group [G07D 7/00](#) is impacted by reclassification into group [G07D 7/15](#).

Groups [G07D 7/00](#) and [G07D 7/15](#) should be considered in order to perform a complete search.

- 7/003 . {using security elements (using digital security elements [G07D 7/004](#))}
- 7/0032 . . {using holograms}
- 7/0034 . . {using watermarks}
- 7/004 . using digital security elements, e.g. information coded on a magnetic thread or strip

##### WARNING

Groups [G07D 7/004](#) - [G07D 7/0043](#) are incomplete pending reclassification of documents from group [G07D 7/20](#).

Groups [G07D 7/004](#), [G07D 7/0043](#) and [G07D 7/20](#) should be considered in order to perform a complete search.

- 7/0043 . . using barcodes
- 7/0047 . . using checkcodes, e.g. coded numbers derived from serial number and denomination

- 7/005 . Testing security markings invisible to the naked eye, e.g. verifying thickened lines or unobtrusive markings or alterations

**WARNING**

Groups [G07D 7/005](#) – [G07D 7/0057](#) are incomplete pending reclassification of documents from group [G07D 7/20](#).

Groups [G07D 7/005](#) – [G07D 7/0057](#) and [G07D 7/20](#) should be considered in order to perform a complete search.

- 7/0051 . . {involving markings removed from an original pattern}
- 7/0053 . . {involving markings added to a pattern, e.g. interstitial points}
- 7/0054 . . {involving markings the properties of which are altered from original properties}
- 7/0055 . . . {involving markings displaced slightly from original positions within a pattern}
- 7/0056 . . . {involving markings of altered colours}
- 7/0057 . . . {involving markings which are altered in dimension, e.g. thickened lines}
- 7/01 . Testing electronic circuits therein

**WARNING**

Group [G07D 7/01](#) is incomplete pending reclassification of documents from group [G07D 7/02](#) and [G07D 7/04](#).

Groups [G07D 7/01](#), [G07D 7/02](#) and [G07D 7/04](#) should be considered in order to perform a complete search.

- 7/02 . Testing electrical properties of the materials thereof ([G07D 7/01](#) takes precedence)

**WARNING**

Group [G07D 7/02](#) is impacted by reclassification into group [G07D 7/01](#).

Groups [G07D 7/02](#) and [G07D 7/01](#) should be considered in order to perform a complete search.

- 7/023 . . Measuring conductivity by direct contact
- 7/026 . . using capacitive sensors
- 7/04 . Testing magnetic properties of the materials thereof, e.g. by detection of magnetic imprint ([G07D 7/01](#) takes precedence)

**WARNING**

Group [G07D 7/04](#) is impacted by reclassification into group [G07D 7/01](#).

Groups [G07D 7/04](#) and [G07D 7/01](#) should be considered in order to perform a complete search.

- 7/06 . using wave or particle radiation
- 7/08 . . Acoustic waves
- 7/10 . . Microwaves

- 7/12 . . Visible light, infra-red or ultraviolet radiation

**WARNING**

Group [G07D 7/12](#) is incomplete pending reclassification of documents from group [G07D 7/121](#).

Groups [G07D 7/12](#) and [G07D 7/121](#) should be considered in order to perform a complete search.

- 7/1205 . . . Testing spectral properties
- 7/121 . . . Apparatus characterised by sensor details

**WARNING**

Group [G07D 7/121](#) is impacted by reclassification into group [G07D 7/12](#).

Groups [G07D 7/121](#) and [G07D 7/12](#) should be considered in order to perform a complete search.

- 7/128 . . . Viewing devices
- 7/14 . using chemical means
- 7/15 . using heating means

**WARNING**

Group [G07D 7/15](#) is incomplete pending reclassification of documents from group [G07D 7/00](#).

Groups [G07D 7/00](#) and [G07D 7/15](#) should be considered in order to perform a complete search.

- 7/16 . Testing the dimensions
- 7/162 . . Length or width
- 7/164 . . Thickness
- 7/17 . Apparatus characterised by positioning means or by means responsive to positioning
- 7/181 . Testing mechanical properties or condition, e.g. wear or tear ([G07D 7/16](#) takes precedence)

**WARNING**

Group [G07D 7/181](#) is impacted by reclassification into group [G07D 7/189](#).

Groups [G07D 7/181](#) and [G07D 7/189](#) should be considered in order to perform a complete search.

- 7/182 . . Testing stiffness
- 7/183 . . Detecting folds or doubles
- 7/185 . . Detecting holes or pores
- 7/187 . . Detecting defacement or contamination, e.g. dirt
- 7/189 . . Detecting attached objects, e.g. tapes or clips ([G07D 7/187](#) takes precedence)

**WARNING**

Group [G07D 7/189](#) is incomplete pending reclassification of documents from group [G07D 7/181](#).

Groups [G07D 7/181](#) and [G07D 7/189](#) should be considered in order to perform a complete search.

7/20	<ul style="list-style-type: none"> <li>Testing patterns thereon (<a href="#">G07D 7/004</a>, <a href="#">G07D 7/005</a> take precedence)</li> </ul> <p><b>WARNING</b></p> <p>Group <a href="#">G07D 7/20</a> is impacted by reclassification into groups <a href="#">G07D 7/004</a> – <a href="#">G07D 7/005</a>.</p> <p>Groups <a href="#">G07D 7/20</a> and <a href="#">G07D 7/004</a> – <a href="#">G07D 7/005</a> should be considered in order to perform a complete search.</p>	11/16	<ul style="list-style-type: none"> <li>Handling of valuable papers (<a href="#">within containers G07D 11/13</a>)</li> </ul>
7/2008	<ul style="list-style-type: none"> <li>{using pre-processing, e.g. de-blurring, averaging, normalisation or rotation}</li> </ul>	11/165	<ul style="list-style-type: none"> <li>Picking</li> </ul>
7/2016	<ul style="list-style-type: none"> <li>{using feature extraction, e.g. segmentation, edge detection or Hough-transformation}</li> </ul>	11/17	<ul style="list-style-type: none"> <li>Aligning</li> </ul>
7/202	<ul style="list-style-type: none"> <li>using pattern matching</li> </ul>	11/175	<ul style="list-style-type: none"> <li>Flattening, e.g. straightening out folds</li> </ul>
7/2033	<ul style="list-style-type: none"> <li>Matching unique patterns, i.e. patterns that are unique to each individual paper</li> </ul>	11/18	<ul style="list-style-type: none"> <li>Diverting into different paths or containers</li> </ul>
7/2041	<ul style="list-style-type: none"> <li>{Matching statistical distributions, e.g. of particle sizes orientations}</li> </ul>	11/20	<ul style="list-style-type: none"> <li>Controlling or monitoring the operation of devices; Data handling</li> </ul>
7/205	<ul style="list-style-type: none"> <li>{Matching spectral properties}</li> </ul>	11/22	<ul style="list-style-type: none"> <li>Means for sensing or detection</li> </ul>
7/206	<ul style="list-style-type: none"> <li>Matching template patterns</li> </ul>	11/225	<ul style="list-style-type: none"> <li>for detecting or indicating tampering</li> </ul>
7/207	<ul style="list-style-type: none"> <li>Matching patterns that are created by the interaction of two or more layers, e.g. moiré patterns</li> </ul>	11/23	<ul style="list-style-type: none"> <li>for sensing the quantity of valuable papers in containers</li> </ul>
7/2075	<ul style="list-style-type: none"> <li>{Setting acceptance levels or parameters}</li> </ul>	11/235	<ul style="list-style-type: none"> <li>for monitoring or indicating operating conditions; for detecting malfunctions</li> </ul>
7/2083	<ul style="list-style-type: none"> <li>{Learning}</li> </ul>	11/237	<ul style="list-style-type: none"> <li>for detecting transport malfunctions, e.g. jams or misfeeds</li> </ul>
7/2091	<ul style="list-style-type: none"> <li>{Setting a plurality of levels}</li> </ul>	11/24	<ul style="list-style-type: none"> <li>Managing the stock of valuable papers</li> </ul>
<b>9/00</b>	<b>Counting coins (in combination with coin-sorting <a href="#">G07D 3/16</a>); Handling of coins not provided for in the other groups of this subclass</b>	11/245	<ul style="list-style-type: none"> <li>Replenishment</li> </ul>
9/002	<ul style="list-style-type: none"> <li>{Coin holding devices}</li> </ul>	11/25	<ul style="list-style-type: none"> <li>Relocation of valuable papers within devices</li> </ul>
9/004	<ul style="list-style-type: none"> <li>{Coin packages}</li> </ul>	11/26	<ul style="list-style-type: none"> <li>Servicing, repairing or coping with irregularities, e.g. power failure or vandalism</li> </ul>
9/006	<ul style="list-style-type: none"> <li>{Coin wrappers}</li> </ul>	11/28	<ul style="list-style-type: none"> <li>Setting of parameters; Software updates</li> </ul>
9/008	<ul style="list-style-type: none"> <li>{Feeding coins from bulk}</li> </ul>	11/30	<ul style="list-style-type: none"> <li>Tracking or tracing valuable papers or cassettes</li> </ul>
9/02	<ul style="list-style-type: none"> <li>Change trays</li> </ul>	11/32	<ul style="list-style-type: none"> <li>Record keeping (<a href="#">transaction aspects G07F 19/00</a>)</li> </ul>
9/04	<ul style="list-style-type: none"> <li>Hand- or motor-driven devices for counting coins (<a href="#">counting mechanisms in general G06M</a>)</li> </ul>	11/34	<ul style="list-style-type: none"> <li>Monitoring the contents of devices, e.g. the number of stored valuable papers</li> </ul>
9/06	<ul style="list-style-type: none"> <li>Devices for stacking or otherwise arranging coins on a support, e.g. apertured plate for use in counting coins</li> </ul>	11/36	<ul style="list-style-type: none"> <li>Auditing of activities</li> </ul>
9/065	<ul style="list-style-type: none"> <li>{Devices for wrapping coins}</li> </ul>	11/40	<ul style="list-style-type: none"> <li>Device architecture, e.g. modular construction</li> </ul>
<b>11/00</b>	<b>Devices accepting coins; Devices accepting, dispensing, sorting or counting valuable papers</b>	11/50	<ul style="list-style-type: none"> <li>Sorting or counting valuable papers</li> </ul>
	<b>WARNING</b>	11/60	<ul style="list-style-type: none"> <li>User-interface arrangements</li> </ul>
	Group <a href="#">G07D 11/00</a> is impacted by reclassification into group <a href="#">G07D 11/60</a> .		<b>WARNING</b>
	Groups <a href="#">G07D 11/00</a> and <a href="#">G07D 11/60</a> should be considered in order to perform a complete search.		Group <a href="#">G07D 11/60</a> is incomplete pending reclassification of documents from group <a href="#">G07D 11/00</a> .
			Groups <a href="#">G07D 11/00</a> and <a href="#">G07D 11/60</a> should be considered in order to perform a complete search.
11/0087	<ul style="list-style-type: none"> <li>{Banknote changing devices}</li> </ul>	<b>13/00</b>	<b>Handling of coins or of valuable papers, characterised by a combination of mechanisms not covered by a single one of groups <a href="#">G07D 1/00</a> - <a href="#">G07D 11/00</a></b>
11/009	<ul style="list-style-type: none"> <li>{Depositing devices}</li> </ul>	<b>2201/00</b>	<b>Coin dispensers</b>
11/0093	<ul style="list-style-type: none"> <li>{Drop boxes}</li> </ul>	<b>2205/00</b>	<b>Coin testing devices</b>
11/0096	<ul style="list-style-type: none"> <li>{Accepting paper currency or other valuables in containers, e.g. in code-marked envelopes}</li> </ul>	2205/001	<ul style="list-style-type: none"> <li>Reconfiguration of coin testing devices</li> </ul>
11/10	<ul style="list-style-type: none"> <li>Mechanical details</li> </ul>	2205/0011	<ul style="list-style-type: none"> <li>by downloading test parameters, e.g. remotely</li> </ul>
11/12	<ul style="list-style-type: none"> <li>Containers for valuable papers</li> </ul>	2205/0012	<ul style="list-style-type: none"> <li>automatic adjustment, e.g. self-calibration</li> </ul>
11/125	<ul style="list-style-type: none"> <li>Secure containers</li> </ul>	<b>2207/00</b>	<b>Paper-money testing devices</b>
11/13	<ul style="list-style-type: none"> <li>with internal means for handling valuable papers</li> </ul>	<b>2211/00</b>	<b>Paper-money handling devices</b>
11/135	<ul style="list-style-type: none"> <li>{Remote note containers}</li> </ul>		
11/14	<ul style="list-style-type: none"> <li>Inlet or outlet ports</li> </ul>		