

# 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.

|   |  |   |   |
|---|--|---|---|
| <b>1/00</b>   | <b>Coin dispensers (devices delivering paper currency <a href="#">G07D 11/00</a>)</b>  | 5/02  | • Testing the dimensions, e.g. thickness, diameter;<br>Testing the deformation  |
| 1/02  | • giving change ( <a href="#">(coin-actuated mechanisms in general G07F)</a> )   | 5/04  | • Testing the weight  |
| 1/04  | • . . dispensing change equal to a sum deposited   | 5/06  | • Testing the hardness or elasticity  |
| 1/06  | • . . dispensing the difference between a sum paid and a sum charged   | 5/08  | • Testing the magnetic or electric properties   |
| 1/08  | • . . hand actuated  | 5/10  | • Testing the rim, e.g. the milling of the rim  |
| <b>3/00</b>   | <b>Sorting a mixed bulk of coins into denominations</b>  | <b>7/00</b>   | <b>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</b> |
| 3/02  | • Sorting coins by means of graded apertures   | <b><u>NOTE</u></b>  |   |
| 3/04  | • . . arranged on an inclined rail   | In this group, groups <a href="#">G07D 7/16</a> - <a href="#">G07D 7/20</a> take precedence over groups <a href="#">G07D 7/02</a> - <a href="#">G07D 7/14</a> . |   |
| 3/06  | • . . arranged along a circular path   | 7/003   | • { <a href="#">using security elements (using digital security elements <a href="#">G07D 7/004</a>)</a> }  |
| 3/08  | • . . arranged on a helix  | 7/0032  | • . . { <a href="#">using holograms</a> }   |
| 3/10  | • . . provided by sieves arranged in series  | 7/0034  | • . . { <a href="#">using watermarks</a> }  |
| 3/12  | • Sorting coins by means of stepped deflectors   | 7/004   | • using digital security elements, e.g. information coded on a magnetic thread or strip   |
| 3/121   | • . . { <a href="#">arranged on inclined paths</a> }   | 7/0043  | • . . using barcodes  |
| 3/123   | • . . . { <a href="#">the coins being deflected off rails</a> }  | 7/0047  | • . . using checkcodes, e.g. coded numbers derived from serial number and denomination  |
| 3/125   | • . . . . { <a href="#">by moving deflectors</a> }   | 7/005   | • Testing security markings invisible to the naked eye, e.g. verifying thickened lines or unobtrusive markings or alterations   |
| 3/126   | • . . . { <a href="#">the coins being diverted by ramps in channels</a> }  | 7/0051  | • . . { <a href="#">involving markings removed from an original pattern</a> }   |
| 3/128   | • . . { <a href="#">Rotary devices</a> }   | 7/0053  | • . . { <a href="#">involving markings added to a pattern, e.g. interstitial points</a> }   |
| 3/14  | • Apparatus driven under control of coin-sensing elements  | 7/0054  | • . . { <a href="#">involving markings the properties of which are altered from original properties</a> }   |
| 3/16  | • in combination with coin-counting  | 7/0055  | • . . . { <a href="#">involving markings displaced slightly from original positions within a pattern</a> }  |
| <b>5/00</b>   | <b>Testing specially adapted to determine the identity or genuineness of coins, e.g. for segregating coins which are unacceptable or alien to a currency</b> | 7/0056  | • . . . { <a href="#">involving markings of altered colours</a> }   |
| <b><u>NOTE</u></b>  |  | 7/0057  | • . . . { <a href="#">involving markings which are altered in dimension, e.g. thickened lines</a> }   |
| In groups <a href="#">G07D 5/005</a> - <a href="#">G07D 5/10</a> , 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   | • { <a href="#">Testing the surface pattern, e.g. relief</a> }   |   |   |

|        |   |           |   |
|--------|---|-----------|---|
| 7/01   | • Testing electronic circuits therein   | 9/065     | • • {Devices for wrapping coins}  |
| 7/02   | • Testing electrical properties of the materials thereof<br>(G07D 7/01 takes precedence)  | 11/00     | <b>Devices accepting coins; Devices accepting, dispensing, sorting or counting valuable papers</b>  |
| 7/023  | • • Measuring conductivity by direct contact  | 11/0087   | • {Banknote changing devices}   |
| 7/026  | • • using capacitive sensors  | 11/009    | • {Depositing devices}  |
| 7/04   | • Testing magnetic properties of the materials thereof, e.g. by detection of magnetic imprint (G07D 7/01 takes precedence)                  | 11/0093   | • • {Drop boxes}  |
| 7/06   | • using wave or particle radiation  | 11/0096   | • • {Accepting paper currency or other valuables in containers, e.g. in code-marked envelopes}  |
| 7/08   | • • Acoustic waves  | 11/10     | • Mechanical details  |
| 7/10   | • • Microwaves  | 11/12     | • • Containers for valuable papers  |
| 7/12   | • • Visible light, infrared or ultraviolet radiation  | 11/125    | • • • Secure containers   |
| 7/1205 | • • • Testing spectral properties   | 11/13     | • • • with internal means for handling valuable papers  |
| 7/121  | • • • Apparatus characterised by sensor details   | 11/135    | • • • {Remote note containers}  |
| 7/128  | • • • Viewing devices   | 11/14     | • • Inlet or outlet ports   |
| 7/14   | • using chemical means  | 11/16     | • • Handling of valuable papers (within containers G07D 11/13)  |
| 7/15   | • using heating means   | 11/165    | • • • Picking   |
| 7/16   | • Testing the dimensions  | 11/17     | • • • Aligning  |
| 7/162  | • • Length or width   | 11/175    | • • • Flattening, e.g. straightening out folds  |
| 7/164  | • • Thickness   | 11/18     | • • • Diverting into different paths or containers  |
| 7/17   | • Apparatus characterised by positioning means or by means responsive to positioning  | 11/20     | • Controlling or monitoring the operation of devices; Data handling   |
| 7/181  | • Testing mechanical properties or condition, e.g. wear or tear (G07D 7/16 takes precedence)  | 11/22     | • • Means for sensing or detection  |
| 7/182  | • • Testing stiffness   | 11/225    | • • • for detecting or indicating tampering   |
| 7/183  | • • Detecting folds or doubles  | 11/23     | • • • for sensing the quantity of valuable papers in containers   |
| 7/185  | • • Detecting holes or pores  | 11/235    | • • • for monitoring or indicating operating conditions; for detecting malfunctions   |
| 7/187  | • • Detecting defacement or contamination, e.g. dirt  | 11/237    | • • • • for detecting transport malfunctions, e.g. jams or misfeeds   |
| 7/189  | • • Detecting attached objects, e.g. tapes or clips<br>(G07D 7/187 takes precedence)  | 11/24     | • • Managing the inventory of valuable papers   |
| 7/20   | • Testing patterns thereon (G07D 7/004, G07D 7/005 take precedence)   | 11/245    | • • • Replenishment   |
| 7/2008 | • • {using pre-processing, e.g. de-blurring, averaging, normalisation or rotation}  | 11/25     | • • • Relocation of valuable papers within devices  |
| 7/2016 | • • {using feature extraction, e.g. segmentation, edge detection or Hough-transformation}   | 11/26     | • • Servicing, repairing or coping with irregularities, e.g. power failure or vandalism   |
| 7/202  | • • using pattern matching  | 11/28     | • • Setting of parameters; Software updates   |
| 7/2033 | • • • Matching unique patterns, i.e. patterns that are unique to each individual paper  | 11/30     | • • Tracking or tracing valuable papers or cassettes  |
| 7/2041 | • • • {Matching statistical distributions, e.g. of particle sizes orientations}   | 11/32     | • • Record keeping (transaction aspects G07F 19/00)   |
| 7/205  | • • • {Matching spectral properties}  | 11/34     | • • • Monitoring the contents of devices, e.g. the number of stored valuable papers   |
| 7/206  | • • • Matching template patterns  | 11/36     | • • • Auditing of activities  |
| 7/207  | • • • Matching patterns that are created by the interaction of two or more layers, e.g. moiré patterns                                      | 11/40     | • Device architecture, e.g. modular construction  |
| 7/2075 | • • {Setting acceptance levels or parameters}   | 11/50     | • Sorting or counting valuable papers   |
| 7/2083 | • • • {Learning}  | 11/60     | • User-interface arrangements   |
| 7/2091 | • • • {Setting a plurality of levels}   | 13/00     | <b>Handling of coins or of valuable papers, characterised by a combination of mechanisms not covered by a single one of groups G07D 1/00 - G07D 11/00</b> |
| 9/00   | <b>Counting coins (in combination with coin-sorting G07D 3/16); Handling of coins not provided for in the other groups of this subclass</b> | 2201/00   | <b>Coin dispensers</b>  |
| 9/002  | • {Coin holding devices}  | 2205/00   | <b>Coin testing devices</b>   |
| 9/004  | • • {Coin packages}   | 2205/001  | • Reconfiguration of coin testing devices   |
| 9/006  | • • • {Coin wrappers}   | 2205/0011 | • • by downloading test parameters, e.g. remotely   |
| 9/008  | • {Feeding coins from bulk}   | 2205/0012 | • • automatic adjustment, e.g. self-calibration   |
| 9/02   | • Change trays  | 2207/00   | <b>Paper-money testing devices</b>  |
| 9/04   | • Hand- or motor-driven devices for counting coins<br>{(counting mechanisms in general G06M)}   | 2211/00   | <b>Paper-money handling devices</b>   |
| 9/06   | • Devices for stacking or otherwise arranging coins on a support, e.g. apertured plate for use in counting coins                            |           |   |