

CPC COOPERATIVE PATENT CLASSIFICATION

G PHYSICS (NOTES omitted)

INSTRUMENTS

G07 CHECKING-DEVICES

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

NOTES

1. In this subclass, the following terms or expressions are used with the meaning indicated:
 - "coins" also covers tokens of similar nature;
 - "paper currency or similar valuable papers" covers banknotes, bills, cheques, vouchers, securities, bonds or the like.
2. This subclass covers handling of "coins" or "paper currency" insofar as they carry distinctive value features representative of money or the like.

Informative references:

- sorting in general [B07C](#)
- handling paper sheets in general [B65H](#)
- counting by weighing [G01G](#)
- counting of objects in general, i.e. without discriminating of denominations, [G06M](#)

WARNING

The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

[G07D 13/00](#) covered by [G07D 11/00](#) and subgroup.

1/00	Coin dispensers (devices delivering paper currency G07D 11/00)	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 {(in combination with apparatus freed or actuated by coins or the like G07F 3/00)}
1/02	• giving change {(coin-actuated mechanisms in general G07F)}	5/005	• {Testing the surface pattern, e.g. relief}
1/04	• . dispensing change equal to a sum deposited	5/02	• Testing the dimensions, e.g. thickness, diameter; Testing the deformation
1/06	• . dispensing the difference between a sum paid and a sum charged	5/04	• Testing the weight
1/08	• . hand actuated	5/06	• Testing the hardness or elasticity
3/00	Sorting a mixed bulk of coins into denominations {(sorting paper currency G07D 11/0084; sorting by coin weight G01G)}	5/08	• Testing the magnetic or electric properties
3/02	• Sorting coins by means of graded apertures	5/10	• Testing the rim, e.g. the milling of the rim
3/04	• . arranged on an inclined rail	7/00	Testing specially adapted to determine the identity or genuineness of paper currency or similar valuable papers or for segregating those which are alien to a currency or otherwise unacceptable
3/06	• . arranged along a circular path	<u>NOTE</u>	
3/08	• . arranged on a helix		In this group, groups G07D 7/16 - G07D 7/20 take precedence over groups G07D 7/02 - G07D 7/14 .
3/10	• . provided by sieves arranged in series	<u>WARNING</u>	
3/12	• Sorting coins by means of stepped deflectors		Group G07D 7/00 is impacted by reclassification into group G07D 7/15 .
3/121	• . {arranged on inclined paths}		Groups G07D 7/00 and G07D 7/15 should be considered in order to perform a complete search.
3/123	• . . {the coins being deflected off rails}		
3/125	• . . . {by moving deflectors}	7/003	• {using security elements (using digital security elements G07D 7/004)}
3/126	• . . . {the coins being diverted by ramps in channels}	7/0032	• . {using holograms}
3/128	• . {Rotary devices}		
3/14	• Apparatus driven under control of coin-sensing elements		
3/16	• in combination with coin-counting		

- 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 . . Testing patterns thereon ([G07D 7/004](#), [G07D 7/005](#) take precedence)
WARNING
Group [G07D 7/20](#) is impacted by reclassification into groups [G07D 7/004](#) – [G07D 7/005](#).
Groups [G07D 7/20](#) and [G07D 7/004](#) – [G07D 7/005](#) should be considered in order to perform a complete search.
- 7/2008 . . {using pre-processing, e.g. de-blurring, averaging, normalisation or rotation}
- 7/2016 . . {using feature extraction, e.g. segmentation, edge detection or Hough-transformation}
- 7/202 . . using pattern matching
- 7/2033 . . . Matching unique patterns, i.e. patterns that are unique to each individual paper
- 7/2041 . . . {Matching statistical distributions, e.g. of particle sizes orientations}
- 7/205 . . . {Matching spectral properties}
- 7/206 . . . Matching template patterns
- 7/207 . . . Matching patterns that are created by the interaction of two or more layers, e.g. moiré patterns
- 7/2075 . . {Setting acceptance levels or parameters}
- 7/2083 . . . {Learning}
- 7/2091 . . . {Setting a plurality of levels}
- 9/00 Counting coins (in combination with coin-sorting [G07D 3/16](#)); Handling of coins not provided for in the other groups of this subclass**
NOTE
Informative references
• handling of paper currency [G07D 11/0021](#)
• counting paper currency [G07D 11/0084](#)
- 9/002 . {Coin holding devices}
- 9/004 . . {Coin packages}
- 9/006 . . . {Coin wrappers}
- 9/008 . {Feeding coins from bulk}
- 9/02 . Change trays
- 9/04 . Hand- or motor-driven devices for counting coins
{(counting mechanisms in general [G06M](#))}
- 9/06 . Devices for stacking or otherwise arranging coins on a support, e.g. apertured plate for use in counting coins
- 9/065 . . {Devices for wrapping coins}

11/00 Devices accepting coins or {accepting or dispensing} paper currency, e.g. depositing machines (apparatus freed or actuated by coins or the like [G07F](#); apparatus freed or actuated by paper currency [G07F 7/04](#); complete banking systems [G07F 19/00](#) ; arrangements actuated by a coded-card for receiving or dispensing monies or the like and posting such transactions to existing accounts, e.g. automatic teller machines [ATMs] [G07F 19/20](#))}

NOTES

1. This group covers constructional or functioning aspects of devices handling paper currency, including of so-called Automatic Teller Machines [ATMs]; other aspects of ATMs, e.g. posting transactions to existing accounts or aspects related to the interaction with users, are covered by group [G07F 19/20](#)
2. Informative reference:
3. - devices dispensing coins [G07D 1/00](#)

- 11/0003 . {Mechanical details}
- 11/0006 . . {Note containers}
- 11/0009 . . . {Secure note containers, e.g. for transport (coin boxes [G07F 9/06](#); locking means [E05B](#); safes [E05G](#); currency invalidating means [E05G 1/14](#))}
- 11/0012 . . . {incorporating note handling devices within the containers}
- 11/0015 . . . {Remote note containers}
- 11/0018 . . {Inlet or outlet ports}
- 11/0021 . . {Handling paper currency, e.g. banknotes (handling paper sheets in general [B65H](#))}

NOTE

Informative reference- handling paper sheets in general [B65H](#)

- 11/0024 . . . {Note picking}
- 11/0027 . . . {Aligning (apparatus characterised by positioning means or by means responsive to positioning [G07D 7/17](#))}
- 11/003 . . . {Flattening, e.g. straightening out folds}
- 11/0033 . . . {Diverting}
- 11/0036 . {Electronic and sensing details}
- 11/0039 . . {for detection of transport malfunction, e.g. jams, misfeeds}
- 11/0042 . . {for tamper detection and indication}
- 11/0045 . . {for cassette fill-level sensing}
- 11/0048 . . {for checking and indicating machine condition, fault detection (registering or indicating the working of machines in general [G07C 3/00](#))}
- 11/0051 . {Means for managing operation, e.g. data handling with apparatus}
- 11/0054 . . {for managing stock of banknotes}
- 11/0057 . . . {Replenishment}
- 11/006 . . . {Relocation of banknotes within apparatus}
- 11/0063 . . {for servicing, repairing or coping with irregularities, e.g. power failure, vandalism}
- 11/0066 . . {for tracking or tracing banknotes or cassettes}
- 11/0069 . . {for record keeping (indicating machine condition [G07D 11/0048](#); transaction aspects [G07F 19/00](#))}
- 11/0072 . . . {Contents of apparatus, e.g. number of stored banknotes}
- 11/0075 . . . {Audit trail of performed activities}

G07D

- 11/0078 . . {for transmitting data, e.g. software updates, parameter settings}
- 11/0081 . {Device architecture, e.g. modular construction}
- 11/0084 . {Sorting or counting paper currency ([sorting coins G07D 3/00](#) - [counting coins G07D 9/00](#))}
- 11/0087 . {Banknote changing devices}
- 11/009 . {Depositing devices ([safes E05G](#))}
- 11/0093 . . {Drop boxes}
- 11/0096 . . {Accepting paper currency or other valuables in containers, e.g. in code-marked envelopes}

- 13/00** **Handling of coins or of paper currency or similar valuable papers, characterised by a combination of mechanisms not covered by a single one of groups [G07D 1/00-G07D 11/00](#)**

2201/00 Coin dispensers

2205/00 Coin testing devices

- 2205/001 . Reconfiguration of coin testing devices
- 2205/0011 . . by downloading test parameters, e.g. remotely
- 2205/0012 . . automatic adjustment, e.g. self-calibration

2207/00 Paper-money testing devices

2211/00 Paper-money handling devices