

CPC**COOPERATIVE PATENT CLASSIFICATION****G07D****HANDLING OF COINS OR OF PAPER CURRENCY OR SIMILAR 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;
 "paper currency or similar valuable papers" covers banknotes, bills, cheques, vouchers, securities, bonds or the like.

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 used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups: [G07D 13/00](#) covered by [G07D 11/00](#) and subgroup.

G07D 1/00**Coin dispensers** (devices delivering paper currency [G07D 11/00](#))

G07D 1/02

- . giving change {(coin-actuated mechanisms in general [G07F](#))}

G07D 1/04

- . . dispensing change equal to a sum deposited

G07D 1/06

- . . dispensing the difference between a sum paid and a sum charged

G07D 1/08

- . . hand actuated

G07D 3/00**Sorting a mixed bulk of coins into denominations** {(sorting paper currency [G07D 11/0084](#); sorting by coin weight [G01G](#))}**WARNING**

Not complete pending a reclassification. See also groups [G07F 3/00](#) and [G07F 3/04](#)

G07D 3/02

- . Sorting coins by means of graded apertures

G07D 3/04

- . . arranged on an inclined rail

G07D 3/06

- . . arranged along a circular path

G07D 3/08

- . . arranged on a helix

G07D 3/10

- . . provided by sieves arranged in series

- G07D 3/12 . Sorting coins by means of stepped deflectors
- G07D 3/121 . . {arranged on inclined paths}
- G07D 3/123 . . . {the coins being deflected off rails}
- G07D 3/125 {by moving deflectors}
- G07D 3/126 . . . {the coins being diverted by ramps in channels}
- G07D 3/128 . . {Rotary devices}
- G07D 3/14 . Apparatus driven under control of coin-sensing elements
- G07D 3/16 . in combination with coin-counting

G07D 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](#))}**

WARNING

Not complete pending a reclassification. See also groups [G07F 3/00](#) to [G07F 3/027](#)

- G07D 5/005 . { Testing the surface pattern, e.g. relief}

WARNING

Not complete pending a reclassification. See also groups [G07F 3/02](#) and [G07F 3/027](#)

- G07D 5/02 . Testing the dimensions, e.g. thickness, diameter; Testing the deformation

WARNING

Not complete pending a reclassification. See also groups [G07F 3/02](#) and [G07F 3/022](#)

- G07D 5/04 . Testing the weight
- G07D 5/06 . Testing the hardness or elasticity

WARNING

Not complete pending a reclassification. See also groups [G07F 3/02](#) and [G07F 3/025](#)

- G07D 5/08 . Testing the magnetic or electric properties

WARNING

Not complete pending a reclassification. See also groups [G07F 3/02](#) and [G07F 3/025](#)

- G07D 5/10 . Testing the rim, e.g. the milling of the rim

WARNING

Not complete pending a reclassification. See also groups [G07F 3/02](#) and [G07F 3/027](#)

G07D 7/00

Testing specially adapted to determine the identity or genuineness of paper currency or similar valuable papers, e.g. for segregating those which are unacceptable or alien to a currency {(arrangements for verifying the correctness of markings on a record carrier [G06K 5/00](#))}

NOTE

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

WARNING

Groups [G07D 7/0006](#), [G07D 7/0046](#) and [G07D 7/0093](#) are not complete pending a reclassification. See also group [G07D 7/004](#)

G07D 7/0006

- . { Security markings visible to the naked eye}

WARNING

Groups [G07D 7/0006](#) to [G07D 7/002](#) are not complete pending a reorganisation. See also groups [G07D 7/124](#) to [G07D 7/127](#)

G07D 7/0013

- .. { Holograms}

G07D 7/002

- .. { Watermarks}

G07D 7/0026

- .. { Barcodes}

G07D 7/0033

- .. { Checkcodes, e.g. coded number derived from serial number and value}

G07D 7/004

- . { using digital security elements}

WARNING

This group is no longer used for classification of new documents as from January 1st, 2011. The backlog of this group is being continuously reclassified to groups [G07D 7/0006](#), [G07D 7/0046](#), [G07D 7/0093](#)

G07D 7/0046

- . {Security markings invisible to the naked eye, e.g. "digital watermarks"}

G07D 7/0053

- .. { involving markings added to a pattern, e.g. interstitial points}

G07D 7/006

- .. { involving markings removed from an original pattern}

G07D 7/0066

- .. { involving markings the properties of which are altered from original properties}

G07D 7/0073

- ... { involving markings displaced slightly from original positions within a pattern}

G07D 7/008

- ... { involving markings of altered colours}

G07D 7/0086

- ... { involving markings which are altered in dimension, e.g. thickened lines}

G07D 7/0093

- . { Circuits in note}

G07D 7/02

- . using electric means, {e.g. detecting electric properties of banknotes ([G07D 7/004](#), [G07D 7/04](#), [G07D 7/06](#) take precedence)}

G07D 7/023

- .. {Measuring conductivity by direct contact}

- G07D 7/026 .. {using capacitive sensors}
- G07D 7/04 . using magnetic means, e.g. detection of magnetic imprint, {detecting magnetic properties of banknotes ([G07D 7/004](#) takes precedence)}
- G07D 7/06 . using wave or particle radiation, {e.g. radiating waves onto the banknote ([G07D 7/004](#) takes precedence)}
- G07D 7/08 .. Acoustic waves
- G07D 7/10 .. Microwaves
- G07D 7/12 .. Visible light, infra-red or ultra violet radiation
- G07D 7/121 ... {Illumination assembly details}
- G07D 7/122 ... {Spectral properties}
- G07D 7/124 ... { Optical security elements}

WARNING

Groups [G07D 7/124](#) to [G07D 7/127](#) are no longer used for the classification of new documents as from March 1, 2008. The backlog of these groups is being continuously reclassified to groups [G07D 7/0006](#) to [G07D 7/002](#)

- G07D 7/125 { Holograms or other interface patterns}
- G07D 7/127 { Watermarks}
- G07D 7/128 ... { Viewing devices}
- G07D 7/14 . using chemical means
- G07D 7/16 . Testing the dimensions
- G07D 7/162 .. {Length or width}
- G07D 7/164 .. {Thickness}
- G07D 7/166 .. {Folds or doubles}
- G07D 7/168 .. {Position of banknote}
- G07D 7/18 . Testing the stiffness { or other mechanical properties, e.g. wear or tear ([G07D 7/16](#) takes precedence)}
- G07D 7/182 .. {Testing stiffness}
- G07D 7/185 .. {Detecting holes or pores}
- G07D 7/187 .. {Detecting dirt}
- G07D 7/20 . Testing patterns thereon { e.g. recognition of patterns, image processing, comparing to a reference in a memory}
- G07D 7/2008 .. { preprocessing, e.g. deblurring, averaging, normalisation, rotation}
- G07D 7/2016 .. { feature extraction, e.g. segmentation, edge detection, Hough transformation}
- G07D 7/2025 .. { Pattern matching}
- G07D 7/2033 ... { matching unique patterns, e.g. fingerprinting}
- G07D 7/2041 ... { matching a statistical distribution, e.g. of particle sizes orientations}
- G07D 7/205 ... { matching spectral properties}
- G07D 7/2058 ... { matching a template}
- G07D 7/2066 ... { matching with an overlay, e.g. by interference}

- G07D 7/2075 . . { setting acceptance levels or parameters}
- G07D 7/2083 . . . { learning}
- G07D 7/2091 . . . { where a plurality of levels are set}

G07D 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](#)

- G07D 9/002 . {Coin holding devices}
- G07D 9/004 . . {Coin packages}
- G07D 9/006 . . . {Coin wrappers}
- G07D 9/008 . {Feeding coins from bulk}
- G07D 9/02 . Change trays
- G07D 9/04 . Hand- or motor-driven devices for counting coins {(counting mechanisms in general [G06M](#))}
- G07D 9/06 . Devices for stacking or otherwise arranging coins on a support, e.g. apertured plate for use in counting coins
- G07D 9/065 . . {Devices for wrapping coins}

G07D 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](#))}**

NOTE

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](#)

Informative reference:

- devices dispensing coins [G07D 1/00](#)

- G07D 11/0003 . { Mechanical details}
- G07D 11/0006 . . { Note containers}
- G07D 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](#))}
- G07D 11/0012 . . . {incorporating note handling devices within the containers}
- G07D 11/0015 . . . {Remote note containers}
- G07D 11/0018 . . {Inlet or outlet ports}

G07D 11/0021 .. { Handling paper currency, e.g. banknotes ([handling paper sheets in general B65H](#))}

NOTE

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

G07D 11/0024 ... {Note picking}

G07D 11/0027 ... { Aligning ([position of banknote G07D 7/168](#))}

G07D 11/003 ... {Flattening, e.g. straightening out folds}

G07D 11/0033 ... {Diverting}

G07D 11/0036 . {Electronic and sensing details}

G07D 11/0039 .. {for detection of transport malfunction, e.g. jams, misfeeds}

G07D 11/0042 .. {for tamper detection and indication}

G07D 11/0045 .. {for cassette fill-level sensing}

G07D 11/0048 .. { for checking and indicating machine condition, fault detection ([registering or indicating the working of machines in general G07C 3/00](#))}

G07D 11/0051 . {Means for managing operation, e.g. data handling with apparatus}

G07D 11/0054 .. {for managing stock of banknotes}

G07D 11/0057 ... {Replenishment}

G07D 11/006 ... {Relocation of banknotes within apparatus}

G07D 11/0063 .. {for servicing, repairing or coping with irregularities, e.g. power failure, vandalism}

G07D 11/0066 .. {for tracking or tracing banknotes or cassettes}

G07D 11/0069 .. {for record keeping ([indicating machine condition G07D 11/0048](#); [transaction aspects G07F 19/00](#))}

G07D 11/0072 ... {Contents of apparatus, e.g. number of stored banknotes}

G07D 11/0075 ... {Audit trail of performed activities}

G07D 11/0078 .. {for transmitting data, e.g. software updates, parameter settings}

G07D 11/0081 . {Device architecture, e.g. modular construction}

G07D 11/0084 . { [Sorting or counting paper currency \(sorting coins G07D 3/00 - counting coins G07D 9/00\)](#)}

G07D 11/0087 . {Banknote changing devices}

G07D 11/009 . {Depositing devices ([safes E05G](#))}

G07D 11/0093 .. {Drop boxes}

G07D 11/0096 .. {Accepting paper currency or other valuables in containers, e.g. in code-marked envelopes}

G07D 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](#)**

G07D 2201/00 **Coin dispensers**

G07D 2205/00 **Coin testing devices**

G07D 2205/001 . Reconfiguration of coin testing devices

- G07D 2205/0011 . . . by downloading test parameters, e.g. remotely
- G07D 2205/0012 . . . automatic adjustment, e.g. self-calibration

G07D 2207/00 **Paper-money testing devices**

G07D 2211/00 **Paper-money handling devices**