

SECTION G — PHYSICS

G07 CHECKING-DEVICES

G07B TICKET-ISSUING APPARATUS; TAXIMETERS; ARRANGEMENTS OR APPARATUS FOR COLLECTING FARES, TOLLS OR ENTRANCE FEES AT ONE OR MORE CONTROL POINTS; FRANKING APPARATUS

Subclass index

MACHINES FOR PRINTING OR ISSUING TICKETS; DETAILS THEREOF.....	1/00, 3/00, 5/00
OTHER APPARATUS OR SYSTEMS CONCERNING TICKETS	
Holders; punches; validating; cancelling.....	7/00, 9/00, 11/00
TAXIMETERS.....	13/00
ARRANGEMENTS OR APPARATUS FOR COLLECTING FARES, TOLLS OR ENTRANCE FEES AT ONE OR MORE CONTROL POINTS.....	15/00
FRANKING APPARATUS.....	17/00

1/00	Machines for printing and issuing tickets (printing mechanisms <i>per se</i> B41; output mechanisms of digital computers G06C 11/00)	13/02	• Details; Accessories
1/02	• employing selectable printing plates	13/04	• • for indicating fare or state of hire
1/04	• • wherein the plates are inserted	13/06	• • Driving arrangements
1/06	• without selectable printing plates	13/08	• • Tariff-changing arrangements
1/08	• portable	13/10	• • • automatically actuated
3/00	Machines for issuing preprinted tickets	15/00	Arrangements or apparatus for collecting fares, tolls or entrance fees at one or more control points (handling coins or paper currency G07D; apparatus for vending or hiring articles or services activated by coins, credit cards, paper currency or the like G07F 7/00, G07F 17/00) [1, 2011.01]
3/02	• from stock in wound strip form		
3/04	• from a stack		
5/00	Details of, or auxiliary devices for, ticket-issuing machines (for validating inserted tickets G07B 11/02)		Note(s) [2011.01] <i>Data processing aspects of payment systems or protocols relating to toll, entrance fee or fare collection, e.g. in road pricing or congestion charging, are also classified in G06Q 20/00.</i>
5/02	• for cutting-off or separating tickets	15/02	• taking into account a variable factor such as distance or time, e.g. for passenger transport, parking systems or car rental systems (G07B 15/06 takes precedence; taximeters G07B 13/00; parking meters <i>per se</i> G07F 17/24) [1, 2011.01]
5/04	• for recording or registering tickets issued		
5/06	• for preventing fraudulent operation		
5/08	• for avoiding incorrect action of the machine		
5/10	• • indicating when ticket supply is exhausted	15/04	• • comprising devices to free a barrier, turnstile, or the like (coin-freed turnstiles in general G07C 9/00)
5/12	• allowing manual writing on the tickets	15/06	• Arrangements for road pricing or congestion charging of vehicles or vehicle users, e.g. automatic toll systems [2011.01]
7/00	Holders providing direct manual access to the tickets		Note(s) [2011.01] <i>This group covers the identification or tracking of vehicles or vehicle users for the purpose of road pricing or congestion charging, which means that vehicles or vehicle users are not necessarily channelled through fixed control points, e.g. toll booths or overhead gantries, but may be detected at a number of places when they travel in normal fashion in a pre-defined locality, e.g. a defined area in a city centre or an expressway, and where the information so generated is then used to determine a charge to be paid.</i>
9/00	Ticket punches (perforating pliers B26F 1/36; marking record carriers in digital fashion by punching G06K 1/02)		
9/02	• Toy ticket-punches		
11/00	Apparatus for validating or cancelling issued tickets [2]		
11/02	• for validating inserted tickets		
11/03	• • by printing [2]		
11/05	• • by perforating [2]		
11/07	• • by separating part of ticket [2]		
11/09	• • • combined with receptacle for separated part of ticket (refuse receptacles in general B65F 1/00) [2]		
11/11	• for cancelling tickets [2]		
13/00	Taximeters (measuring distance travelled G01C; measuring time G04)		

G07B

- 17/00** **Franking apparatus** (printing aspects B41) 17/04 • with means for avoiding misuse
 17/02 • with means for computing or counting

G07C **TIME OR ATTENDANCE REGISTERS; REGISTERING OR INDICATING THE WORKING OF MACHINES; GENERATING RANDOM NUMBERS; VOTING OR LOTTERY APPARATUS; ARRANGEMENTS, SYSTEMS, OR APPARATUS FOR CHECKING NOT PROVIDED FOR ELSEWHERE** (identification of persons, e.g. finger-printing, foot-printing, A61B 5/117; indicating or recording apparatus for measuring in general, analogous apparatus but in which the input is not a variable to be measured, e.g. a hand operation, G01D; clocks, clock mechanisms G04B, G04C; time-interval measuring G04F; counting mechanisms per se G06M)

Subclass index

REGISTERING TIME OF EVENTS OR ELAPSED TIME.....1/00
 REGISTERING THE WORKING OF MACHINES; OF VEHICLES; DETAILS THEREOF.....3/00, 5/00, 7/00
 INDIVIDUAL ENTRY OR EXIT REGISTERS.....9/00
 CHECKING APPARATUS NOT PROVIDED FOR ELSEWHERE.....11/00
 VOTING APPARATUS; GENERATING RANDOM NUMBERS, LOTTERY APPARATUS.....13/00, 15/00

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- 1/00** **Registering, indicating, or recording the time of events or elapsed time, e.g. time-recorders for work people** (registering or indicating the working of machines or vehicles G07C 3/00, G07C 5/00)
Note(s)
 Groups G07C 1/20-G07C 1/32 take precedence over groups G07C 1/02-G07C 1/10.
- 1/02 • not involving the registering, indicating, or recording of other data
- 1/04 • • wherein the time is indicated in figures
- 1/06 • • • with apparatus adapted for use with individual cards
- 1/08 • • wherein the time is indicated by marking an element, e.g. a card or tape, in a position determined by the time
- 1/10 • together with the recording, indicating, or registering of other data, e.g. of signs of identity (together with the recording of a continuously-varying variable G01D or the appropriate other subclass of class G01, dependent on the variable)
- 1/12 • • wherein the time is indicated in figures
- 1/14 • • • with apparatus adapted for use with individual cards
- 1/16 • • wherein the time is indicated by marking an element, e.g. a card or tape, in a position determined by the time
- 1/18 • • • with apparatus adapted for use with individual cards
- 1/20 • Checking timed patrols, e.g. of watchman
- 1/22 • in connection with sports or games
- 1/24 • • Race time-recorders (race-finish cameras G03B 41/00)
- 1/26 • • Pigeon-timing or like equipment
- 1/28 • • Indicating playing time
- 1/30 • Parking meters (registering or indicating waiting time of vehicles by means driven by the vehicle G07C 5/02; coin-freed parking meters G07F 17/24)
- 1/32 • Time-recording locks (locks giving indication of unauthorised unlocking E05B 39/00)
- 3/00** **Registering or indicating the condition or the working of machines or other apparatus, other than vehicles** (engine indicators G01L; testing apparatus incident to its manufacture G01M; signalling arrangements per se, indicating undesired or abnormal working conditions G08B)
- 3/02 • Registering or indicating working or idle time only
- 3/04 • • using counting means or digital clocks
- 3/06 • • in graphical form
- 3/08 • Registering or indicating the production of the machine either with or without registering working or idle time
- 3/10 • • using counting means
- 3/12 • • in graphical form
- 3/14 • Quality control systems
- 5/00** **Registering or indicating the working of vehicles** (for measuring distance travelled or combinations of speed and distance G01C; engine indicators G01L; devices for measuring speed or acceleration G01P; apparatus forming part of taximeters G07B)
- 5/02 • Registering or indicating driving, working, idle, or waiting time only
- 5/04 • • using counting means or digital clocks
- 5/06 • • in graphical form
- 5/08 • Registering or indicating performance data other than driving, working, idle, or waiting time, with or without registering driving, working, idle, or waiting time
- 5/10 • • using counting means or digital clocks
- 5/12 • • in graphical form
- 7/00** **Details or accessories common to the registering or indicating apparatus of groups G07C 3/00 and G07C 5/00**
- 9/00** **Individual entry or exit registers**
- 9/02 • Turnstiles with registering means (coin-freed aspects G07F)
- 11/00** **Arrangements, systems, or apparatus for checking, e.g. the occurrence of a condition, not provided for elsewhere** (for checking lottos or bingo games A63F 3/06; signalling or alarm arrangements G08B)
- 13/00** **Voting apparatus**
- 13/02 • Ballot boxes
- 15/00** **Generating random numbers; Lottery apparatus** (digital computer arrangements for generating random or pseudo-random numbers G06F 7/58; generating electric pulses at random intervals H03K 3/84) [3]

G07D HANDLING OF COINS OR OF PAPER CURRENCY OR SIMILAR VALUABLE PAPERS, e.g. TESTING, SORTING BY DENOMINATIONS, COUNTING, DISPENSING, CHANGING OR DEPOSITING [2]**Note(s)**

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.

1/00 Coin dispensers

- 1/02 • giving change
- 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 [1, 7]

- 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
- 3/14 • 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 [1, 7]**Note(s)**

In groups G07D 5/02-G07D 5/10, in the absence of an indication to the contrary, classification is made in the last appropriate place.

- 5/02 • Testing the dimensions, e.g. thickness, diameter; Testing the deformation [3]
- 5/04 • Testing the weight [3]
- 5/06 • Testing the hardness or elasticity [3]
- 5/08 • Testing the magnetic or electric properties [3]
- 5/10 • Testing the rim, e.g. the milling of the rim [3]

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 [2]**Note(s)**

Groups G07D 7/16-G07D 7/20 take precedence over groups G07D 7/02-G07D 7/14

- 7/02 • using electric means (G07D 7/04, G07D 7/06 take precedence) [7]
- 7/04 • using magnetic means, e.g. detection of magnetic imprint [7]
- 7/06 • using wave or particle radiation [7]
- 7/08 • • Acoustic waves [7]
- 7/10 • • Microwaves [7]
- 7/12 • • Visible light, infra-red or ultra-violet radiation [7]
- 7/14 • using chemical means [7]
- 7/16 • Testing the dimensions [7]
- 7/18 • Testing the stiffness [7]
- 7/20 • Testing patterns thereon [7]

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

- 9/02 • Change trays
- 9/04 • Hand- or motor-driven devices for counting coins
- 9/06 • Devices for stacking or otherwise arranging coins on a support, e.g. apertured plate for use in counting coins

11/00 Devices accepting coins or 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) [5]**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 [5]****G07F COIN-FREED OR LIKE APPARATUS (coin sorting G07D 3/00; coin testing G07D 5/00) [1, 7]****Note(s)**

1. This subclass does not cover constructions or details of apparatus which includes, or is combined with, coin-actuated mechanisms but is not specially adapted or modified for use therewith. Such constructions or details are covered by the relevant subclass for the particular apparatus.
2. In this subclass, the following term is used with the meaning indicated:
 - "coins" covers also tokens or the like.

Subclass index

ARRANGEMENTS OR MECHANISMS IN GENERAL

Coin inlet; coin actuation; others.....1/00, 5/00, 7/00

APPARATUS CHARACTERISED BY THE APPLICATION

Dispensing; metering; hiring.....11/00, 13/00, 15/00, 17/00

COMPLETE BANKING SYSTEMS.....19/00

1/00	Coin inlet arrangements; Coins specially adapted to operate coin-freed mechanisms (coins in general A44C)	9/08	• Counting total of coins inserted
1/02	• Coin slots	9/10	• Casings, e.g. with means for heating or cooling
1/04	• Coin chutes		
1/06	• Coins specially adapted to operate coin-freed mechanisms	11/00	Coin-freed apparatus for dispensing, or the like, discrete articles
5/00	Coin-actuated mechanisms; Interlocks	11/02	• from non-movable magazines
5/02	• actuated mechanically by coins, e.g. by a single coin	11/04	• • in which magazines the articles are stored one vertically above the other
5/04	• • wherein two or more coins of the same denomination are required for each transaction	11/06	• • • supported individually on pivotally-mounted flaps or shelves
5/06	• • wherein two or more coins of different denominations are required for each transaction	11/08	• • • arranged in two columns in staggered relationship
5/08	• • wherein the use of two or more coins or an equivalent single coin is optional for each transaction; wherein the use of two or more coins or an alternative equivalent combination of coins is optional for each transaction	11/10	• • • two or more magazines having a common delivery chute
5/10	• actuated electrically by the coin, e.g. by a single coin	11/12	• • • with means for automatically changing to reserve stacks
5/12	• • wherein two or more coins of the same denomination are required for each transaction	11/14	• • • with means for raising the stack of articles to permit delivery of the topmost
5/14	• • wherein two or more coins of different denominations are required for each transaction	11/16	• • • Delivery means
5/16	• • wherein the use of two or more coins or an equivalent single coin is optional for each transaction; wherein the use of two or more coins or an alternative equivalent combination of coins is optional for each transaction	11/18	• • • • Recessed drawers
5/18	• specially adapted for controlling several coin-freed apparatus from one place (interlocks G07F 5/26)	11/20	• • • • Pushers actuated directly by hand
5/20	• specially adapted for registering coins as credit, e.g. mechanically actuated	11/22	• • • • Pushers actuated indirectly by hand, e.g. through cranks or levers
5/22	• • electrically actuated	11/24	• • • • Rotary or oscillatory members
5/24	• with change-giving (coin-changing mechanisms <u>per se</u> G07D)	11/26	• • • • Endless bands
5/26	• Interlocks, e.g. for locking the doors of compartments other than that to be used	11/28	• • in which the magazines are inclined
7/00	Mechanisms actuated by objects other than coins to free or to actuate vending, hiring, coin or paper currency dispensing or refunding apparatus (complete banking systems G07F 19/00; handling coins or paper currencies apart from coin-freed or like apparatus G07D) [2]	11/30	• • • two or more magazines having independent delivery
7/02	• by keys or other credit registering devices (for producing a coded signal for use together with coded identity cards G07F 7/10) [2]	11/32	• • • two or more magazines having a common delivery chute
7/04	• by paper currency	11/34	• • in which the magazines are of zig-zag form
7/06	• by returnable containers, e.g. bottles	11/36	• • in which the magazines are of helical or spiral form
7/08	• by coded identity card or credit card [2]	11/38	• • in which the magazines are horizontal
7/10	• • together with a coded signal [2]	11/40	• • • the articles being delivered by hand-operated means
7/12	• • Card verification [5]	11/42	• • • the articles being delivered by motor-driven means
9/00	Details other than those peculiar to special kinds or types of apparatus (coin inlet arrangements G07F 1/00; coin-actuated mechanisms, interlocks G07F 5/00)	11/44	• • in which magazines the articles are stored in bulk
9/02	• Devices for alarm or indication, e.g. when empty; Advertising arrangements in coin-freed apparatus (alarms or warning devices indicating the interruption of flow to be metered G07F 15/10)	11/46	• from movable storage containers or supports
9/04	• Means for returning surplus or unused coins	11/48	• • the storage containers or supports, e.g. magazine, being pivotally mounted (articles supported on pivotally-mounted flaps or shelves in magazines G07F 11/06)
9/06	• Coin boxes	11/50	• • the storage containers or supports being rotatably mounted
		11/52	• • • about horizontal axes
		11/54	• • • about vertical axes
		11/56	• • • • the storage containers or supports both rotating and moving axially
		11/58	• • the articles being supported on or by endless belts or like conveyers
		11/60	• • the storage containers or supports being rectilinearly movable (endless belts or like conveyers G07F 11/58)
		11/62	• in which the articles are stored in compartments in fixed receptacles
		11/64	• in which the articles are individually suspended from stationary supports
		11/66	• in which the articles are dispensed by cutting from a mass

- 11/68 • in which the articles are torn or severed from strips or sheets
- 11/70 • in which the articles are formed in the apparatus from components, blanks, or material constituents
- 11/72 • Auxiliary equipments, e.g. for lighting cigars, opening bottles
- 13/00 Coin-freed apparatus for controlling dispensing of fluids, semiliquids or granular material from reservoirs**
- 13/02 • by volume
- 13/04 • by weight
- 13/06 • with selective dispensing of different fluids or materials or mixtures thereof
- 13/08 • in the form of a spray
- 13/10 • with associated dispensing of containers, e.g. cups or other articles (dispensing discrete articles per se G07F 11/00)
- 15/00 Coin-freed apparatus with meter-controlled dispensing of liquid, gas, or electricity** (tariff-metering apparatus in general G01D 4/00)
- 15/02 • in which the quantity mechanism is set forward by hand after insertion of a coin
- 15/04 • in which the quantity mechanism is set forward automatically by the insertion of a coin
- 15/06 • with means for prepaying basic charges, e.g. rent for meters
- 15/08 • with means for varying the tariff or changing the price
- 15/10 • with alarm or warning devices, e.g. indicating the interrupting of the supply
- 15/12 • in which metering is on a time basis
- 17/00 Coin-freed apparatus for hiring articles; Coin-freed facilities or services** (picture juke-boxes G03B; prepayment telephone systems H04M 17/00)
- 17/02 • for optical devices, e.g. telescopes
- 17/04 • for anthropometrical measurements such as weight, height, strength
- 17/06 • for inflating-pumps
- 17/08 • for seats or footstools
- 17/10 • for means for safe-keeping of property, left temporarily, e.g. by fastening the property
- 17/12 • • comprising lockable containers, e.g. for accepting clothes to be cleaned
- 17/14 • for fastenings for doors (of containers for safe-keeping G07F 17/12); for turnstiles
- 17/16 • for devices exhibiting advertisements, announcements, pictures, or the like
- 17/18 • for washing or drying persons
- 17/20 • for washing or drying articles, e.g. clothes, motor cars
- 17/22 • for cleaning and polishing boots or shoes
- 17/24 • for parking meters (devices for checking parking time G07C 1/30)
- 17/26 • for printing, stamping, franking, typing, or teleprinting apparatus (ticket printing or like apparatus G07F 17/42)
- 17/28 • for radio apparatus
- 17/30 • for musical instruments (recording or playback apparatus G11B)
- 17/32 • for games, toys, sports, or amusements
- 17/34 • • depending on the stopping of moving members, e.g. "fruit" machines
- 17/36 • • Age, character, or fortune telling apparatus
- 17/38 • • Ball games; Shooting apparatus
- 17/40 • for devices for accepting orders, advertisements, or the like
- 17/42 • for ticket printing or like apparatus
- 19/00 Complete banking systems; Coded card-freed arrangements adapted for dispensing or receiving monies or the like and posting such transactions to existing accounts, e.g. automatic teller machines** (mechanisms in general actuated by objects other than coins G07F 7/00; data processing equipment for bank accounting G06Q 40/00; handling coins or paper currencies apart from coin-freed or like apparatus G07D) [5]

G07G REGISTERING THE RECEIPT OF CASH, VALUABLES, OR TOKENS (digital computing in general G06C, G06F) [4]

- 1/00 Cash registers** (alarm indicators G07G 3/00)
- 1/01 • Details for indicating (displaying information in general G09F, G09G) [4]
- 1/06 • • with provision for the noting of the money to be paid [4]
- 1/08 • • with rotating drums which display the money entered [4]
- 1/10 • mechanically operated [4]
- 1/12 • electronically operated (digital data processing aspects G06Q 20/00) [4]
- 1/14 • • Systems including one or more distant stations co-operating with a central processing unit (data transmission in general H04L; telemetry systems for selectively calling a substation from a main station H04Q 9/00) [4]
- 3/00 Alarm indicators, e.g. bells**
- 5/00 Receipt-giving machines** (cash registers giving receipts G07G 1/00)