

This heading comprises three Parts:

- P A R T A :Coin mechanisms, coin control units, associations thereof with other apparatus and various sub-systems of coin-freed apparatus. The remote (e.g. te internet) buying and selling of goods and services and concerned with payment (e.g. cash, cheques, electronic money or tokens etc)
- P A R T B :Prepayment meters
- P A R T C :Testing coins or tokens, preventing fraudulent operation of coin or token mechanisms and coin freed apparatus

Each part of this heading is provided individually with explanatory notes on its subject-matter, its relationship with other headings and other parts of this heading

Relationship with the Universal Indexing Schedules (heading U1S)

U1S is used, subject to its indexing rules, to record uses and applications of inventions classified here, except insofar as these are inherent in the assigned classifying terms of this heading. Terms from U1S are assigned in addition to any terms from Indexing Schedule 2 of Part A of this heading which denote use or application

Note

The exclusion references in this heading are not exhaustive. Reference should be made to the appropriate general heading/s for processes, materials, elements or devices which may be more widely applicable than can appropriately be classified in this heading

Operative dates for Key entries

The operative dates of the terms in this heading are:

1. for terms annotated by a marginal code, that of the Edition corresponding to that code
2. for all other terms, earlier than that of Edition A

PART A

Explanation of subject matter of Part A and relationship with other Parts of this heading and other headings

This Part of the heading is primarily concerned with:

- . mechanisms actuated, freed for actuation or enabled to operate effectively by insertion of coins or coin-resembling checks and tokens (*ie* "coin mechanisms") and similar mechanisms actuated, freed, &c by tokens of special form
- . control units and systems incorporating a coin mechanism as an essential component
- . the remote provision of goods and services involving payment (e.g. via the internet or using portable communication devices such as mobile telephone, PDA (personal digital assistant))
- . dispensing and certain other service providing systems controlled by coded information devices and includes the use of ATM type devices for providing goods and services (the constructional details of ATMs are the subject matter of G4X). The use of vouchers for the provision of goods and services can also be found in this heading. Vouchers, tokens per se are the subject matter of G4X, G4H (when concerned with validation)
- . apparatus associated with and actuated or freed for actuation by a coin mechanism where the interest resides in the means effecting the association or merely the novel provision of such an association, and any coin-freed apparatus for which there is no adequate provision elsewhere (*ie* "coin-freed apparatus")
- . auxiliary sub-systems and elements of particular concern to coin mechanisms and coin-freed apparatus and for which there is no adequate provision elsewhere

For many years G4V was a so-called "priority" heading with the result that disclosures were located there for the merest mention, or in some cases implication, that the apparatus disclosed was coin-freed. This part of the heading is now residual for such subject-matter and coin-freed apparatus is only classified here provided that the criteria stated in the fourth entry above are met

Among the headings dealing with apparatus commonly associated with a coin mechanism are:

- A6H, Indoor games &c
- B8N, Metering fluent material &c
- B8U, Dispensing discrete articles
- G4T, Checking cash, attendances &c
- H4K, Telecommunications switching &c

Part A—*cont*

The ways in which an inserted coin acts are various and include serving as a mechanical coupling element to transmit drive; displacing blocking elements to permit full travel of a member by which the coin is carried; directly completing an electric circuit; and acting by weight or momentum *eg* on an electric switch arm or on a blocking element which when shifted allows movement of another member. In mechanical arrangements, particularly, the boundary between what can be considered as the immediate coin mechanism and the means linking it with associated apparatus is often indistinct. As the emphasis of a disclosure moves away from the coin mechanism itself towards the relationship of the mechanism with other apparatus there will be an increasing tendency for the disclosure to be classified either as coin-freed apparatus or coin-freed control system. The latter systems are usually fairly general as to the apparatus they control and are commonly concerned with such functions as enabling vending at different established credit levels and computing change to be paid

This heading takes subject matter where the interest lies in the remote (e.g. internet) provision of goods and services which involve a payment. Where the invention lies in the authentication or validation of a payment then this is the subject matter of G4H. All other business type transactions per se (using computers) and not concerned with paying for the goods and services are the subject matter of G4A(U) e.g. stock control, office automation, trading in goods and services, data processing, name and address management, database management.

Part A—contExplanation of subject matter—cont

Although prepayment meters constitute a particular kind of coin-freed apparatus reference should be made to the explanation of the scope of Part B of this heading to determine where disclosures of such meters are classified

This Part of the heading is a main location for disclosures concerned with the overall organisation of dispensing and certain other service providing systems controlled by coded information devices presented to the system to initiate a transaction

The auxiliary operations and sub-systems with which this part of the heading is concerned are listed in the classifying schedule hereunder. Testing coins and otherwise preventing fraudulent operation of coin freed apparatus are classified in Part C of this heading. The relationship between Part A and Part C is dealt with more fully in the explanatory notes to Part C

Excluded are:

- . constructions of counting-mechanisms—G4D, Counting-apparatus
- . apparatus and methods for bulk sorting of coins by denomination—G4X, Coins &c

Classifying, indexing and searching note

This Part of the heading is provided with a classifying schedule and two indexing schedules. Indexing schedule 1 is only applied in this Part to disclosures classified under terms VAA, VAB, VAC, VAD, and VBB. Indexing Schedule 2 is applied generally throughout this part of the heading. Where in a single disclosure there is described both a significant association between a coin mechanism and other apparatus and also auxiliary equipment, within or without the significant association, which equipment could be separately indexed with terms from Indexing Schedule 2, then only the significant association is so indexed. Thus a coin-freed voice recording apparatus which delivered the record made would not be indexed as an article delivery apparatus. Similarly a coin mechanism disclosed as controlling an electric switch which supplies power to lights over a billiard table would not be indexed with an amusement apparatus term

Classifying Schedule

VAA	coin-freed apparatus
VAB	effecting interconnection between plural apparatus units and common coin mechanism
VBB	association of plural coin mechanisms
VAC	overall organisation of control units incorporating at least one coin mechanism
v VAKA	dispensing and service providing systems controlled by coded information devices (e.g. ATMs)
v VAKB	self-service terminals such as vending machines
v VAKC	the remote provision of goods and services involving payment
VAD	coin mechanisms
VAL	mechanisms actuated, freed &c by tokens of special form
VAE	holding coins to escrow <i>en bloc</i> until transaction is initiated or completed, providing for return of these coins
VAF	releasing coins individually from store to a coin mechanism as transaction proceeds
VAG	organisation of apparatus dispensing change from coin-freed apparatus
VBC	collecting inserted coins into cash boxes, removing such coins therefrom
VBD	exhibiting coins after insertion
VBE	preventing or inhibiting insertion of coins into empty or faulty apparatus, or apparatus still engaged in a previous operating cycle; returning coins inserted into such apparatus
VBF	registering the total number or value of coins inserted over a series of transactions, the total number of operations of an apparatus, or similar accounting information
VBH	casings and housings of coin mechanisms and coin-freed apparatus, mounting arrangements there for
VBJ	refunding for returnable bottles, packages, &c
VBK	determining winning conditions of coin-freed gaming apparatus, computing and paying out prizes therefrom
VHH	other functional and structural subjects
VJJ	elements of interest <i>per se</i> for use in or with coin mechanisms

Part A—contIndexing Schedule 1 (applicable with terms VAA, VAB, VAC, VAD and VBB only of the Classifying Schedule of Part A and with all terms of the Classifying Schedule of Part B)

coin action—

- . *coin action by weight is not separately provided for*
- . coin acts by thrust or forms mechanical connection—
 - .. coin moved by rotary member
 - .. coin moved by sliding member
 - .. coin operates while being thrust in
 - .. coin supported in fixed position acts as abutment
- . coin acts otherwise than by weight and thrust or by forming mechanical or electric connection
- . coin closes electric circuit directly
- . more than one coin—
 - .. different single coins, optional use of, with change-giving
 - .. setting-mechanism (under control of official) for different coins and numbers of coins
- VP1D2 . . two or more coins acting in succession
- VP1D1 . . two or more coins required for every operation
- VP1D3 . . use of two or more coins or one equivalent coin optional

Indexing Schedule 2 (applicable with all terms of the Classifying Schedule of Part A)

kinds or types of coin-freed apparatus, or coin mechanism disclosed in association with—

- . apparatus delivering or releasing individual articles or predetermined number of articles from a supply thereof—
 - .. with positive displacement of article from supply
 - .. with article merely released to fall by gravity
 - .. with closures, gates or the like released to allow manual article removal
 - .. other or unspecified release or delivery means
- V105 . . articles stored in stacks or non-ordered assemblage
- V106 . . articles stored separately in or on movable member
- V107 . . articles held on or in individual supports or containers
- V108 . apparatus delivering articles without regard to the precise number of articles in the delivered quantity (for the delivery of fluent solids effectively handled as liquids *See below*)
- V109 . apparatus delivering lengths of strip severed or severable from supply reel or like
- V110 . apparatus separating out and delivering a measured quantity of liquid or fluent solid from a supply
- V111 . apparatus supplying metered or time controlled quantity of electricity, fluid or fluent solid
- V112 . apparatus supplying electricity, fluid or fluent solid *otherwise than by* above techniques
- V113 . apparatus preparing and supplying food
- V114 . apparatus exhibiting advertisements, announcements, information, pictures, figures and other objects
- V115 . apparatus making anthropometrical measurements (*eg* weight, height, strength)
- . amusement, gaming and sporting apparatus—
 - .. ball games played with moving figures (*eg* table football)
 - .. billiards, Tivoli billiards (“pin tables”), roulette and like games *including* scoring equipment &c therefor
 - .. guessing or attempting to control the stopping of movable members or the quiescent state of electrical equivalent circuits (*eg* “fruit machines”)
- V119 . . other
- V120 . clocks and calendars
- V121 . door fastenings
- V122 . means for safekeeping of property left temporarily
- V123 . parking meters and like meters in which purchased time is merely indicated to an appropriate authority
- V124 . apparatus physically controlling entry and exit of vehicles to or from parking spaces
- V125 . turnstiles and like barriers
- V126 . franking, postmarking, printing apparatus
- V127 . musical instruments, sound recording and reproducing apparatus
- V128 . radio, telegraph, telephone and television apparatus
- V129 . seats, footstools and appurtenances therefor
- V130 . other apparatus hired or made available for use by coin deposition, *including* apparatus which collects hire-purchase or like payments

Indexing Schedule 3 (applicable with all terms of the Classifying Schedule of Part A, especially VAKA, VAKB, VAKC)

- v V301 . using the internet
- v . communication means
- v V302A . . computers
- v V302B . . information kiosk
- v V302C . . mobile phones
- v V302D . . pda and other portable communication devices

Part A— Indexing schedule 3 cont

v	V302E	. . involving networks (e.g. computer networks, communication networks)
v	V302F	. . atm devices and the like
v	V302G	. . other
v	V303	. vouchers, coupons, promotions, e-money, other financial instruments and the like
v	V304	. e-mail
v	V305	. downloading.e.g. software, multimedia files such as music (e.g. MP3), video etc . involving authentication and security (PIN, encryption, digital signatures, biometrics etc..)
v	V306A	. . pin
v	V306B	. . digital signatures
v	V306C	. . biometrics
v	V306D	. . keys
v	V306E	. . other
v	V307	. involving other communication protocols, formats such as sms, wap, internet protocols, HTML, etc..
v	V308	. involving smart cards and the like
v	V309	. . used in other roles such as permit, pass, id etc..
v	V310	. involving the manipulation of memory (e.g. in communication devices)
v	V311	. involving micropayments
v	V312	. trusted intermediaries
v	V313	. involving time sensitive factors (e.g. expiry times)
v	V314	. involving location sensitive factors (e.g. promotional offers sent to a user within a predetermined distance of vendor)
v	V315	. involving receipts or other proof of purchaseetc..
v	V316	. involving goods and services of special interest (e.g. stamps)
v	V317	. involving account manipulation of special interest (e.g. linked accounts)
v	V318	. involving methods of delivery of goods and services other than downloading (e.g. delivery to home, third party)
v	V319	. involving payment methods not otherwise provided for
v	V320	.other feature of interest to the remote buying and selling of goods and services

PART BExplanation of subject-matter of Part B and relationship with other Parts of this heading and other headings

This Part of the heading is primarily concerned with apparatus which on the receipt of coinage controls the delivery of a metered quantity of a commodity or the delivery of a commodity for a predetermined time. Such apparatus essentially consists of a coin receiving device, a quantity mechanism, a metering device or clock, and a commodity delivery control element although in particular disclosures various ones of these may be mentioned purely nominally. The quantity mechanism, to the condition of which the delivery control element is responsive, is arranged to monitor the difference between the credit established by coin deposition and the value of, or time for which, the commodity has been delivered, the normal arrangement being that delivery is terminated when credit is exhausted. The operation of the quantity mechanism in this mode falls within the general ambit of "counting" and in some respects there are strong affinities with the subject-matter of heading G4D, Counting-apparatus

In so far as the general principles of constructing quantity mechanisms have long been established a large proportion of the subject-matter in this part of the heading is concerned with the achievement of generally commercial objectives such as collection of basic rent, operation of multi-part tariff systems, tariff rate changing and enabling optional use of differently valued coins. These objectives are usually achieved by complex designs of the quantity mechanism or the couplings between it and the metering device or coin receiving device

The bulk of the subject-matter is old and of a mechanical character. Although some analogous electrical systems have been developed these are usually of sufficient general interest to warrant classification in Part A of this heading

This heading is also concerned with the central or remote (e.g. internet) monitoring of meters

This part of the heading is also concerned with elements and sub-systems occurring in prepayment meters for which no adequate provision exists elsewhere or which are so limited by their context of use as not to be of general interest

Coin mechanisms, testing coins and other features and subjects of general interest to coin-free apparatus are classified in Parts A or C of this heading as appropriate. Apparatus combined with a prepayment meter and controlled thereby, where the interest resides merely in the provision of such a combination, and time dependent meters in which the purchased time remaining is merely indicated to an appropriate authority (*eg* parking meters) are classified in Part A

Classifying, searching and indexing note

Indexing terms V201-203 are only assigned to disclosures classified under terms VMF and VMH, and VC8-terms only to disclosures classified under term VMD. Disclosures classified in this Part are also indexed with terms from Indexing Schedule I of Part A of this heading

Classifying Schedule

	overall organisation of prepayment meters—
VMA	. in which the commodity is delivered solely on a time dependent basis
VML	. the remote or central monitoring of meters
VMB	. other
VMC	converting non-prepaid metering apparatus to prepaid mode of operation and vice versa, converting prepayment meters between different modes of operation
VMD	changing tariff-rate or basic rental rate (Multi-rate tariff systems in which the rate is periodically automatically changed, <i>eg</i> in dependence on aggregated amount consumed, are classified in VME)
VME	collecting basic rent, operating multi-part tariff systems
VMF	enabling optional use of differently valued coins
VMG	zeroizing quantity mechanism, terminating delivery <i>otherwise than by</i> exhaustion of credit
VMH	quantity mechanisms (those designed to achieve the above listed functions are classified under the appropriate function term)
VMJ	interconnecting quantity mechanism and delivery control device
VMK	indicating and warning devices and sub-systems
VMX	other subjects

Part B—contIndexing Schedule

- quantity mechanism—
 - . rotary-disc or epicyclic type
- V201 . screw-and-nut or pinion-and-worm type
- V202 . other
- V203 price-change mechanism—
 - . change-wheel type—
 - .. with removable change-wheels
 - .. unclassified
 - . other than change-wheel type—
 - ... with means for adjusting extent quantity mechanism is set forward by coin mechanism—
 - ... by means other than varying travel of coin
 - ... by varying point at which coin in coin carrier becomes, or ceases to be, active, point of insertion or discharge remaining constant
 - ... by varying point at which coin is inserted into, or discharged from, coin carrier
 - ... with means for adjusting rate of return of quantity mechanism by meter mechanism
- VC8A1
- VC8A2
- VC8A3C
- VC8A3B
- VC8A3A
- VC8A4

PART CExplanation of subject-matter of Part C and relationship with other Parts of this heading and other headings

This Part of the heading is concerned with apparatus and methods for testing coins or tokens and preventing fraudulent operation of coin or token mechanisms and coin-freed apparatus

The inherent character of the majority of coin mechanisms is such that for satisfactory operation they require the insertion of a coin or coins of particular dimension or properties and to this extent these mechanisms can be said to “test” the coins inserted. Coin mechanisms are generally classified in Part A of this heading and are only classified here when there is particular concern with coin testing, for example, where in a coin mechanism operating according to known principles additional means are provided to prevent operation by bogus coins. The bulk of the subject-matter in this part of the heading relates to apparatus which tests coins before passing them to a coin mechanism or which evaluates the genuineness or denomination of coins and passes the information gained to a control unit. The disclosures classified in this part of the heading are usually very specific to the field of coin testing. However, elements and sub systems of general interest to the testing of physical properties may be classified additionally or alternatively in headings such as:

- G1N, Electrophysical and electrochemical measurement &c
- G1S, Measuring and testing physical properties

The bulk sorting of coins by denomination is dealt with in heading G4X, Coins, &c

Classifying Schedule

- j VPBA preventing fraudulent obstruction of return shoot for rejected coins or tokens
preventing fraudulent operation of coin mechanisms by the use of wire or instruments; severing string attached to coins or tokens—
- j VPBB . employing baffles or knife edges
- j VPBC . employ coin traps
- j VPBD . other
- j VPBE preventing fraudulent operation of coin mechanisms *not provided for above, other than* by employing test(s) on the coin or token inserted into the mechanism
. by employing test(s) on the coin or token inserted into the mechanism—*See terms VPCA-VPG below*
apparatus for clearing jammed coins or tokens—
- j VPAA . automatic
- j VPAB . non-automatic
- j VPL diverting coins or tokens within a coin mechanism in response to one or more tests made upon the coin or token; enabling diverting arrangement selectively in response to the result of one or more tests; positional relationship of diverting and testing arrangements within a coin mechanism
. diverting arrangements inherent in a test performed on a coin or token—*See terms VPCA-VPG below*
. combinations of tests leading to a diverting operation where the interest lies in the test combination—*See term VPN below*
. construction of diverting arrangements—*See Part A of this heading, term VHH*
. sorting coins or tokens—*See G4X, Coins &c*

Part C—contClassifying Schedule—cont

- j VPB coin mechanisms characterised by the performance of two or more different tests upon a coin or token
- . combinations of tests in which all of the tests are covered by the same term VPCA, VPCB, VPCX, VPD, VPEA, VPEX, VPF, VPK below—*See* the relevant term
 - . combinations of tests where the interest lies in one of the tests rather than in the combination *per se* are classified according to the test wherein the interest lies by terms VPCA-VPG *below*, and are not repeated here
 - . combinations of tests leading to a coin diverting operation and where the interest lies in the selective enabling of the diverting arrangement or in the positional relationship of the testing and diverting arrangements within a coin mechanism—*See* term VPL *above*
- testing coins or tokens—
- . the nature of the test being—
 - . . electrical—
- j VPCA . . . employing bridge circuits, *eg* balancing the bridge
- j VPCB . . . employing oscillatory circuits, *other than* provided for by term VPCA *above*
- j VPCC . . . powering up upon arrival of coin or token
- j VPCD . . . mountings of components; mechanical aspects of electrical testing arrangements
- j VPCX . . . other
- j VPD . . magnetic
- . . mechanical—
- j VPEA . . . sizing; weighing
- . . . detecting dimensions using optical technique—*See* term VPF *below*
- j VPEX . . . other, *eg* detecting milled edges
- j VPF . . optical
- j VPK . . other test, *eg* detecting radioactivity
- j VPG . calibrating the testing arrangement *including* setting for different coins or tokens; checking or testing the testing arrangement; compensating for temperature changes; compensating for aging of components

Indexing Schedule (applicable with all terms of the Classifying Schedule of Part C)

- apparatus for clearing jammed coins or tokens—
- . automatic
- VP2C . . . non-automatic
- VP2D . . . preventing fraudulent obstruction of return shoot for rejected coins
- VP2X2 . . . preventing rapid manual operation of article-delivery member, to ensure time for remainder of apparatus to operate fully
- VP2X5 . . . preventing fraudulent actuation by shaking or tilting
- VP2X4 . . . preventing operation by wire and instruments, and severing string attached to coin—
- . baffles and knife-edges (*including* curved and perforated shoots)—
 - . . fixed or pivoted to fixed part of apparatus
 - . . moved mechanically
- VP2B2A . . coin traps
- VP2B2B . . . deflected iron and nickel discs by magnets
- VP2B1 . . testing material
- j VP2A9 . . testing by ringing
- VP2AX1 . . testing character or intensity of radioactive emission
- VP2AX4 . . testing condition of coin or its material by friction
- VP2AX2 . . testing electrical and magnetic properties—
- . by means of oscillator circuits—
 - . . by means of shift of phase
 - . . by means of shift of amplitude
 - . . by means of shift of frequency
- j VP2AX5 . . testing contours of faces
- j VP2AX6 . . testing edge for milling
- j VP2AX7 . . testing elasticity (by rebound)
- VP2A1 . . testing rigidity of material—
- VP2A8 . . cutters engaging edge
- VP2A7 . . plungers applied to face
- VP2A2B . . testing size (*including* sizing-devices for preventing insertion of bent coins)—
- VP2A2A . . diameter
- VP2A3A . . thickness
- VP2A3B . . other dimensions
- VP2A3X . . testing weight
- VP2A4 . . special means for detecting washers
- VP2A6 . . .