

CPC COOPERATIVE PATENT CLASSIFICATION

G PHYSICS (NOTES omitted)

INSTRUMENTS

G06 COMPUTING; CALCULATING OR COUNTING (NOTES omitted)

G06Q INFORMATION AND COMMUNICATION TECHNOLOGY [ICT] SPECIALLY ADAPTED FOR ADMINISTRATIVE, COMMERCIAL, FINANCIAL, MANAGERIAL OR SUPERVISORY PURPOSES; SYSTEMS OR METHODS SPECIALLY ADAPTED FOR ADMINISTRATIVE, COMMERCIAL, FINANCIAL, MANAGERIAL OR SUPERVISORY PURPOSES, NOT OTHERWISE PROVIDED FOR

NOTES

1. Groups [G06Q 10/00](#) - [G06Q 50/00](#) and [G06Q 99/00](#) only cover systems or methods that involve significant data processing operations, i.e. data processing operations that need to be carried out by a technological, e.g. computing, system or device.
2. Group [G06Q 90/00](#) covers systems or methods that do not involve significant data processing, when both of the following conditions are fulfilled:
 - the systems or methods are specially adapted for the purposes mentioned in the subclass title or the titles of groups [G06Q 10/00](#) - [G06Q 50/00](#); and
 - the systems or methods cannot be classified elsewhere, for example by applying the principles described in paragraph 96 of the Guide to the IPC.

When classifying such systems or methods in group [G06Q 90/00](#), additional classification may be made in the most closely related group of this or any other subclass, if this classification gives information about the application of the systems or methods that could be of interest for search. Such non-obligatory classification must be given as "additional information".

WARNINGS

1. [G06Q](#) has been largely refined to bring most of the former USPC 705 groups into ECLA, prior to CPC launch. Therefore, most of the new [G06Q](#) subdivisions are not complete pending reclassification. Users are invited to systematically consult also the hierarchically higher groups, up to the first valid IPC group. For example, while searching in [G06Q 50/2053](#), it is appropriate to consult also [G06Q 50/205](#) and [G06Q 50/20](#)
2. 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.

10/00	Administration; Management	10/063112	{Skill-based matching of a person or a group to a task}
10/02	. Reservations, e.g. for tickets, services or events	10/063114	{Status monitoring or status determination for a person or group}
10/025	. . {Coordination of plural reservations, e.g. plural trip segments, transportation combined with accommodation}	10/063116	{Schedule adjustment for a person or group}
10/04	. Forecasting or optimisation specially adapted for administrative or management purposes, e.g. linear programming or "cutting stock problem" (market predictions or forecasting for commercial activities G06Q 30/0202)	10/063118	{Staff planning in a project environment}
		10/06312	{Adjustment or analysis of established resource schedule, e.g. resource or task levelling, or dynamic rescheduling}
10/043	. . {Optimisation of two dimensional placement, e.g. cutting of clothes or wood}	10/06313	{Resource planning in a project environment}
10/047	. . Optimisation of routes or paths, e.g. travelling salesman problem	10/06314	{Calendar for a resource}
10/06	. Resources, workflows, human or project management; Enterprise or organisation planning; Enterprise or organisation modelling	10/06315	{Needs-based resource requirements planning or analysis}
10/063	. . Operations research, analysis or management	10/06316	{Sequencing of tasks or work}
10/0631	. . . Resource planning, allocation, distributing or scheduling for enterprises or organisations	10/0633	Workflow analysis
		10/0635	Risk analysis of enterprise or organisation activities
10/06311	. . . . {Scheduling, planning or task assignment for a person or group}	10/0637	Strategic management or analysis, e.g. setting a goal or target of an organisation; Planning actions based on goals; Analysis or evaluation of effectiveness of goals

10/06375	. . . . {Prediction of business process outcome or impact based on a proposed change}	20/02	. involving a neutral party, e.g. certification authority, notary or trusted third party [TTP]
10/0639	. . . Performance analysis of employees; Performance analysis of enterprise or organisation operations	20/023	. . {the neutral party being a clearing house}
		20/027	. . {involving a payment switch or gateway}
10/06393	. . . . {Score-carding, benchmarking or key performance indicator [KPI] analysis}	20/04	. Payment circuits
10/06395	. . . . {Quality analysis or management}	20/042	. . {characterized in that the payment protocol involves at least one cheque}
10/06398	. . . . {Performance of employee with respect to a job function}	20/0425	. . . {the cheque being electronic only}
10/067	. . Enterprise or organisation modelling	20/045	. . {using payment protocols involving tickets}
10/08	. Logistics, e.g. warehousing, loading or distribution; Inventory or stock management	20/0457	. . . {the tickets being sent electronically}
10/083	. . Shipping	20/047	. . {using payment protocols involving electronic receipts}
		20/06	. . Private payment circuits, e.g. involving electronic currency used among participants of a common payment scheme
		20/065	. . . {using e-cash}
		20/0652	. . . . {e-cash with decreasing value according to a parameter, e.g. time}
		20/0655	. . . . {e-cash managed centrally}
		20/0658	. . . . {e-cash managed locally}
		20/08	. Payment architectures
		20/085	. . {involving remote charge determination or related payment systems}
		20/0855	. . . {involving a third party}
		20/10	. . specially adapted for electronic funds transfer [EFT] systems; specially adapted for home banking systems
		20/102	. . . {Bill distribution or payments}
		20/105	. . . {involving programming of a portable memory device, e.g. IC cards, "electronic purses"}
		20/108	. . . {Remote banking, e.g. home banking}
		20/1085	. . . . {involving automatic teller machines [ATMs]}
		20/12	. . specially adapted for electronic shopping systems
		20/123	. . . {Shopping for digital content}
		20/1235	. . . . {with control of digital rights management [DRM]}
		20/127	. . . {Shopping or accessing services according to a time-limitation}
		20/14	. . specially adapted for billing systems
		20/145	. . . {Payments according to the detected use or quantity}
		20/16	. . Payments settled via telecommunication systems
		20/18	. . involving self-service terminals [SST], vending machines, kiosks or multimedia terminals
		20/20	. . Point-of-sale [POS] network systems
		20/201	. . . {Price look-up processing, e.g. updating}
		20/202	. . . {Interconnection or interaction of plural electronic cash registers [ECR] or to host computer, e.g. network details, transfer of information from host to ECR or from ECR to ECR}
			NOTE
			Features of the apparatus <u>per se</u> should be classified in G07G 1/14
		20/203	. . . {Inventory monitoring}
		20/204	. . . {comprising interface for record bearing medium or carrier for electronic funds transfer or payment credit}
		20/206	. . . {comprising security or operator identification provisions, e.g. password entry}
		20/207	. . . {Tax processing}
20/00	Payment architectures, schemes or protocols (apparatus for performing or posting payment transactions G07F 7/08 , G07F 19/00 ; electronic cash registers G07G 1/12)		

20/208	. . . {Input by product or record sensing, e.g. weighing or scanner processing}	20/343	. . . {Cards including a counter}
20/209	. . . {Specified transaction journal output feature, e.g. printed receipt or voice output}	20/3433	. . . . {the counter having monetary units}
20/22	. Payment schemes or models	20/3437	. . . . {the counter having non-monetary units, e.g. trips}
20/223	. . {based on the use of peer-to-peer networks}	20/346	. . . {Cards serving only as information carrier of service}
20/227	. . {characterised in that multiple accounts are available, e.g. to the payer}	20/347	. . . {Passive cards}
20/229	. . {Hierarchy of users of accounts}	20/348	. . . {Single-use cards, i.e. without possibility of recharging}
20/2295	. . . {Parent-child type, e.g. where parent has control on child rights}	20/349	. . . {Rechargeable cards}
20/24	. . Credit schemes, i.e. "pay after"	20/351	. . . {Virtual cards}
20/26	. . Debit schemes, e.g. "pay now"	20/352	. . . {Contactless payments by cards}
20/28	. . Pre-payment schemes, e.g. "pay before"	20/353	. . . {Payments by cards read by M-devices}
20/29	. . {characterised by micropayments}	20/354	. . . {Card activation or deactivation}
20/30	. characterised by the use of specific devices {or networks}	20/355	. . . {Personalisation of cards for use}
20/305	. . {using wired telephone networks}	20/3552	. . . . {Downloading or loading of personalisation data}
20/306	. . {using TV related infrastructures (external card used for payment with client device H04N 21/4185)}	20/3555	. . . . {Personalisation of two or more cards}
20/308	. . {using the Internet of Things}	20/3558	. . . . {Preliminary personalisation for transfer to user}
20/32	. . using wireless devices	20/356	. . . {Aspects of software for card payments}
20/321	. . . {using wearable devices}	20/3563	. . . . {Software being resident on card}
20/322	. . . {Aspects of commerce using mobile devices [M-devices]}	20/3567	. . . . {Software being in the reader}
20/3221	. . . . {Access to banking information through M-devices}	20/357	. . . {Cards having a plurality of specified features}
20/3223	. . . . {Realising banking transactions through M-devices}	20/3572	. . . . {Multiple accounts on card}
20/3224	. . . . {Transactions dependent on location of M-devices}	20/3574	. . . . {Multiple applications on card}
20/3226	. . . . {Use of secure elements separate from M-devices}	20/3576	. . . . {Multiple memory zones on card}
20/3227	. . . . {using secure elements embedded in M-devices}	20/35765	. . . . . {Access rights to memory zones}
20/3229	. . . . {Use of the SIM of a M-device as secure element}	20/36	. . using electronic wallets or electronic money safes
20/325	. . . {using wireless networks}	20/363	. . . {with the personal data of a user}
20/3255	. . . . {using mobile network messaging services for payment, e.g. SMS}	20/367	. . . {involving electronic purses or money safes}
20/326	. . . {Payment applications installed on the mobile devices}	20/3672	. . . . {initialising or reloading thereof}
20/3263	. . . . {characterised by activation or deactivation of payment capabilities}	20/3674	. . . . {involving authentication}
20/3265	. . . . {characterised by personalisation for use}	20/3676	. . . . {Balancing accounts}
20/3267	. . . . {In-app payments}	20/3678	. . . . {e-cash details, e.g. blinded, divisible or detecting double spending}
20/327	. . . {Short range or proximity payments by means of M-devices}	20/38	. Payment protocols; Details thereof
20/3272	. . . . {using an audio code}	20/381	. . {Currency conversion}
20/3274	. . . . {using a pictured code, e.g. barcode or QR-code, being displayed on the M-device}	20/382	. . {insuring higher security of transaction}
20/3276	. . . . {using a pictured code, e.g. barcode or QR-code, being read by the M-device}	20/3821	. . . {Electronic credentials}
20/3278	. . . . {RFID or NFC payments by means of M-devices}	20/38215	. . . . {Use of certificates or encrypted proofs of transaction rights}
20/34	. . using cards, e.g. integrated circuit [IC] cards or magnetic cards	20/3823	. . . {combining multiple encryption tools for a transaction}
20/341	. . . {Active cards, i.e. cards including their own processing means, e.g. including an IC or chip}	20/3825	. . . {Use of electronic signatures}
20/3415	. . . . {Cards acting autonomously as pay-media}	20/3827	. . . {Use of message hashing}
20/342	. . . {Cards defining paid or billed services or quantities}	20/3829	. . . {involving key management}
		20/383	. . {Anonymous user system}
		20/384	. . {using social networks}
		20/385	. . {using an alias or single-use codes}
		20/386	. . {using messaging services or messaging apps (using mobile network messaging services for payment, e.g. SMS G06Q 20/3255)}
		20/387	. . {Payment using discounts or coupons (relating to marketing G06Q 30/02)}
			NOTE
			This group <u>covers</u> only the usage of discounts or coupons interacting with the payment of the protocol
		20/388	. . {using mutual authentication without cards, e.g. challenge-response}

20/389	. . {Keeping log of transactions for guaranteeing non-repudiation of a transaction}	30/0202	. . . Market predictions or forecasting for commercial activities
20/40	. . Authorisation, e.g. identification of payer or payee, verification of customer or shop credentials; Review and approval of payers, e.g. check credit lines or negative lists	30/0203	. . . Market surveys; Market polls
20/401	. . . {Transaction verification}	30/0204	. . . Market segmentation
20/4012	. . . . {Verifying personal identification numbers [PIN]}	30/0205	. . . . {Location or geographical consideration}
20/4014	. . . . {Identity check for transactions}	30/0206	. . . . {Price or cost determination based on market factors}
20/40145	. . . . . {Biometric identity checks}	30/0207	. . Discounts or incentives, e.g. coupons or rebates
20/4015	. . . . . {using location information}	30/0208	. . . Trade or exchange of goods or services in exchange for incentives or rewards
20/40155	. . . . . {for triggering transactions}	30/0209	. . . {Incentive being awarded or redeemed in connection with the playing of a video game}
20/4016	. . . . . {involving fraud or risk level assessment in transaction processing}	30/0211	. . . Determining the effectiveness of discounts or incentives
20/4018	. . . . . {using the card verification value [CVV] associated with the card}	30/0212	. . . {Chance discounts or incentives}
20/403	. . . {Solvency checks}	30/0213	. . . {Consumer transaction fees}
20/4033	. . . . {Local solvency checks}	30/0214	. . . Referral reward systems
20/4037	. . . . {Remote solvency checks}	30/0215	. . . . {Including financial accounts}
20/405	. . . {Establishing or using transaction specific rules}	30/0216	. . . . . {Investment accounts}
20/407	. . . {Cancellation of a transaction}	30/0217	. . . involving input on products or services in exchange for incentives or rewards
20/409	. . . {Device specific authentication in transaction processing}	30/0218	. . . . . {based on score}
20/4093	. . . . {Monitoring of device authentication}	30/0219	. . . {based on funds or budget}
20/4097	. . . . {using mutual authentication between devices and transaction partners}	30/0221	. . . {Re-usable coupons}
20/40975	. . . . . {using encryption therefor}	30/0222	. . . {During e-commerce, i.e. online transactions}
20/42	. . Confirmation, e.g. check or permission by the legal debtor of payment	30/0223	. . . {based on inventory}
20/425	. . . {using two different networks, one for transaction and one for security confirmation}	30/0224	. . . {based on user history}
30/00	Commerce	30/0225	. . . {Avoiding frauds}
30/01	. Customer relationship services	30/0226	. . . Incentive systems for frequent usage, e.g. frequent flyer miles programs or point systems
	WARNING	30/0227	. . . . {Frequent usage incentive value reconciliation between diverse systems}
	Group G06Q 30/01 is impacted by reclassification into group G06Q 30/015 .	30/0228	. . . . . {On-line clearing houses}
	Groups G06Q 30/01 and G06Q 30/015 should be considered in order to perform a complete search.	30/0229	. . . . . {Multi-merchant loyalty card systems}
30/012	. . Providing warranty services	30/0231	. . . . . {Awarding of a frequent usage incentive independent of the monetary value of a good or service purchased, or distance travelled}
30/014	. . Providing recall services for goods or products	30/0232	. . . . . {Frequent usage rewards other than merchandise, cash or travel}
30/015	. . Providing customer assistance, e.g. assisting a customer within a business location or via helpdesk	30/0233	. . . . . {Method of redeeming a frequent usage reward}
	WARNING	30/0234	. . . Rebates after completed purchase
	Group G06Q 30/015 is incomplete pending reclassification of documents from group G06Q 30/01 .	30/0235	. . . constrained by time limit or expiration date
	Groups G06Q 30/01 and G06Q 30/015 should be considered in order to perform a complete search.	30/0236	. . . {Incentive or reward received by requiring registration or ID from user}
30/016	. . . After-sales	30/0237	. . . {at kiosk}
30/018	. Certifying business or products	30/0238	. . . at point-of-sale [POS]
30/0185	. . {Product, service or business identity fraud}	30/0239	. . . {Online discounts or incentives}
30/02	. Marketing; Price estimation or determination; Fundraising	30/0241	. . Advertisements
30/0201	. . Market modelling; Market analysis; Collecting market data	30/0242	. . . Determining effectiveness of advertisements
		30/0243	. . . . {Comparative campaigns}
		30/0244	. . . . . {Optimization}
		30/0245	. . . . . {Surveys}
		30/0246	. . . . . {Traffic}
		30/0247	. . . {Calculate past, present or future revenues}
		30/0248	. . . {Avoiding fraud}
		30/0249	. . . {based upon budgets or funds}
		30/0251	. . . Targeted advertisements
		30/0252	. . . . {based on events or environment, e.g. weather or festivals}
		30/0253	. . . . . {During e-commerce, i.e. online transactions}
		30/0254	. . . . . {based on statistics}

- 30/0255 {based on user history}
- 30/0256 {User search}
- 30/0257 {User requested}
- 30/0258 {Registration}
- 30/0259 {based on store location}
- 30/0261 {based on user location}
- 30/0262 {during computer stand-by mode}
- 30/0263 {based upon Internet or website rating}
- 30/0264 {based upon schedule}
- 30/0265 {Vehicular advertisement}
- 30/0266 {based on the position of the vehicle}
- 30/0267 {Wireless devices}
- 30/0268 {at point-of-sale [POS]}
- 30/0269 {based on user profile or attribute}
- 30/0271 {Personalized advertisement}
- 30/0272 Period of advertisement exposure
- 30/0273 Determination of fees for advertising
- 30/0274 {Split fees}
- 30/0275 {Auctions}
- 30/0276 {Advertisement creation}
- 30/0277 {Online advertisement}
- 30/0278 {Product appraisal}
- 30/0279 Fundraising management
- 30/0281 {Customer communication at a business location, e.g. providing product or service information, consulting}
- 30/0282 Rating or review of business operators or products
- 30/0283 Price estimation or determination
- 30/0284 {Time or distance, e.g. usage of parking meters or taximeters}

NOTE

Constructional aspects of time meters are classified in groups [G07B 13/00](#), [G07B 15/00](#) or [G07F 17/24](#)

- 30/04 Billing or invoicing
- 30/06 Buying, selling or leasing transactions
- 30/0601 Electronic shopping [e-shopping]
- 30/0603 {Catalogue ordering}
- 30/0605 {Supply or demand aggregation}
- 30/0607 {Regulated}
- 30/0609 {Buyer or seller confidence or verification}
- 30/0611 {Request for offers or quotes}
- 30/0613 {Third-party assisted}
- 30/0615 {Anonymizing}
- 30/0617 {Representative agent}
- 30/0619 {Neutral agent}
- 30/0621 {Item configuration or customization}
- 30/0623 {Item investigation}
- 30/0625 {Directed, with specific intent or strategy}
- 30/0627 {using item specifications}
- 30/0629 {for generating comparisons}
- 30/0631 {Item recommendations}
- 30/0633 {Lists, e.g. purchase orders, compilation or processing}
- 30/0635 {Processing of requisition or of purchase orders}
- 30/0637 {Approvals}
- 30/0639 {Item locations}
- 30/0641 {Shopping interfaces}

- 30/0643 {Graphical representation of items or shoppers}
- 30/0645 Rental transactions; Leasing transactions
- 30/08 Auctions
- 40/00 Finance; Insurance; Tax strategies; Processing of corporate or income taxes**
- 40/02 Banking, e.g. interest calculation or account maintenance ([credit or loans G06Q 40/03](#))
- 40/03 Credit; Loans; Processing thereof
- 40/04 Trading; Exchange, e.g. stocks, commodities, derivatives or currency exchange
- 40/06 Asset management; Financial planning or analysis
- 40/08 Insurance
- 40/10 Tax strategies
- 40/12 Accounting
- 40/123 {Tax preparation or submission}
- 40/125 {Finance or payroll}
- 40/128 {Check-book balancing, updating or printing arrangements}

50/00 Information and communication technology [ICT] specially adapted for implementation of business processes of specific business sectors, e.g. utilities or tourism ([healthcare informatics G16H](#))

WARNING

Group [G06Q 50/00](#) is impacted by reclassification into groups [G06Q 50/02](#), [G06Q 50/06](#) and [G06Q 50/22](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 50/01 {Social networking}
- 50/02 Agriculture; Fishing; Forestry; Mining

WARNING

Group [G06Q 50/02](#) is incomplete pending reclassification of documents from group [G06Q 50/00](#).

Groups [G06Q 50/00](#) and [G06Q 50/02](#) should be considered in order to perform a complete search.

- 50/04 Manufacturing
- 50/06 Energy or water supply

WARNING

Group [G06Q 50/06](#) is incomplete pending reclassification of documents from group [G06Q 50/00](#).

Groups [G06Q 50/00](#) and [G06Q 50/06](#) should be considered in order to perform a complete search.

- 50/08 Construction
- 50/10 Services
- 50/12 Hotels or restaurants
- 50/14 Travel agencies
- 50/16 Real estate
- 50/163 Real estate management
- 50/165 {Land development}
- 50/167 {Closing}
- 50/18 Legal services
- 50/182 {Alternative dispute resolution}
- 50/184 {Intellectual property management}

G06Q

- 50/186 . . . {Estate planning}
- 50/188 . . . {Electronic negotiation}
- 50/20 . . Education
- 50/205 . . . {Education administration or guidance}
- 50/2053 {Education institution selection, admissions, or financial aid}
- 50/2057 {Career enhancement or continuing education service}
- 50/22 . . Social work or social welfare, e.g. community support activities or counselling services

WARNING

Group [G06Q 50/22](#) is incomplete pending reclassification of documents from group [G06Q 50/00](#).
Groups [G06Q 50/00](#) and [G06Q 50/22](#) should be considered in order to perform a complete search.

- 50/26 . . Government or public services ([business processes related to the transportation industry G06Q 50/40](#))

WARNING

Group [G06Q 50/26](#) is impacted by reclassification into group [G06Q 50/40](#).
Groups [G06Q 50/26](#) and [G06Q 50/40](#) should be considered in order to perform a complete search.

- 50/265 . . . {Personal security, identity or safety}
- 50/34 . . Betting or bookmaking, e.g. Internet betting

NOTE

When classifying in this group, classification should also be made in group [G07F 17/32](#)

- 50/40 . . Business processes related to the transportation industry ([shipping G06Q 10/083](#))

WARNING

Group [G06Q 50/40](#) is incomplete pending reclassification of documents from group [G06Q 50/26](#). Group [G06Q 50/40](#) is also impacted by reclassification into groups [G06Q 10/083](#), [G06Q 50/43](#), [G06Q 50/47](#), [G06Q 50/50](#), [H04L 12/14](#), [H04M 3/00](#), [H04M 15/00](#), [H04M 17/00](#) and [H04W 4/24](#).
All groups listed in this Warning should be considered in order to perform a complete search.

- 50/43 . . Business processes related to the sharing of vehicles, e.g. car sharing

WARNING

Groups [G06Q 50/43](#) and [G06Q 50/47](#) are incomplete pending reclassification of documents from group [G06Q 50/40](#).
Groups [G06Q 50/40](#), [G06Q 50/43](#) and [G06Q 50/47](#) should be considered in order to perform a complete search.

- 50/47 . . . Passenger ride requests, e.g. ride-hailing

- 50/50 . Business processes related to the communications industry ([metering or billing arrangements H04L 12/14](#); [telephonic communication involving automatic or semi-automatic exchanges H04M 3/00](#); [arrangements for metering, time-control or time indication H04M 15/00](#); [prepayment telephone systems H04M 17/00](#); [accounting or billing for wireless communication networks H04W 4/24](#))

WARNING

Group [G06Q 50/50](#) is incomplete pending reclassification of documents from group [G06Q 50/40](#).
Groups [G06Q 50/40](#) and [G06Q 50/50](#) should be considered in order to perform a complete search.

- 50/60 . Business processes related to postal services ([shipping G06Q 10/083](#); [franking apparatus G07B 17/00](#))

WARNING

Group [G06Q 50/60](#) is impacted by reclassification into group [G06Q 10/083](#).
Groups [G06Q 50/60](#) and [G06Q 10/083](#) should be considered in order to perform a complete search.

90/00 Systems or methods specially adapted for administrative, commercial, financial, managerial or supervisory purposes, not involving significant data processing

- 90/20 . {Destination assistance within a business structure or complex}
- 90/205 . . {Building evacuation}

99/00 Subject matter not provided for in other groups of this subclass

2220/00 Business processing using cryptography

- 2220/10 . Usage protection of distributed data files
- 2220/12 . . Usage or charge determination
- 2220/123 . . . involving third party for collecting or distributing payments, e.g. clearinghouse
- 2220/127 . . . Adding plural layers of rights or limitations by other than the original producer
- 2220/14 . . Requiring a supplemental attachment or input, e.g. a dongle, to open
- 2220/145 . . . Specific computer ID, e.g. serial number, configuration
- 2220/16 . . Copy protection or prevention
- 2220/165 . . . Having origin or program ID
- 2220/18 . . Licensing

2230/00 Voting or election arrangements

2240/00 Transportation facility access, e.g. fares, tolls or parking

2250/00 Postage metering systems

- 2250/05 . using cryptography
- 2250/053 . . Reloading or recharging
- 2250/057 . . comprising printing details, e.g. verification of marks
- 2250/10 . Special services or fees, e.g. discounts, surcharges or adjustments
- 2250/20 . Recharging

G06Q

- 2250/30 . Record keeping
- 2250/40 . Data protection
- 2250/50 . with specific mail handling means
- 2250/60 . involving mailed item weight
- 2250/70 . Specific printing
- 2250/80 . Rate updating
- 2250/90 . Specialized function performed
- 2250/905 . . Display controlling