G06Q  DATA PROCESSING SYSTEMS OR METHODS, SPECIALLY ADAPTED FOR ADMINISTRATIVE, COMMERCIAL, FINANCIAL, MANAGERIAL, SUPERVISORY OR FORECASTING PURPOSES; SYSTEMS OR METHODS SPECIALLY ADAPTED FOR ADMINISTRATIVE, COMMERCIAL, FINANCIAL, MANAGERIAL, SUPERVISORY OR FORECASTING PURPOSES, NOT OTHERWISE PROVIDED FOR

NOTES
1. Groups G06Q 10/00 - G06Q 40/00 and G06Q 90/00 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. 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 in the IPC, for example by applying the principles described in paragraph 96 of the Guide.

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 searching. Such non-obligatory classification must be given as "additional information".

2. When classifying in groups G06Q 10/00 - G06Q 40/00, systems or methods that are specially adapted for a specific business sector must also be classified in group G06Q 50/00, when the special adaptation is determined to be novel and non-obvious.

3. In this subclass, the first place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the first appropriate place.

WARNING
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.

10/00 Administration; Management
10/02 Reservations, e.g. for tickets, services or events
10/025 {Coordination of plural reservations, e.g. plural trip segments, transportation combined with accommodation}
10/04 Forecasting or optimisation, e.g. linear programming, "travelling salesman problem" or "cutting stock problem" { (data collection specially adapted for marketing, price determination or demand forecasting G06Q 30/02)}
10/043 {Optimisation of two dimensional placement, e.g. cutting of clothes or wood}
10/047 {Optimisation of routes, e.g. "travelling salesman problem"}

10/06 Resources, workflows, human or project management, e.g. organising, planning, scheduling or allocating time, human or machine resources; Enterprise planning; Organisational models { (financial asset management G06Q 40/06) }
10/063 {Operations research or analysis}
10/0631 {Resource planning, allocation or scheduling for a business operation}
10/06311 {Scheduling, planning or task assignment for a person or group}
10/063112 {Skill-based matching of a person or a group to a task}
10/063114 {Status monitoring or status determination for a person or group}
10/063116 {Schedule adjustment for a person or group}
10/063118 {Staff planning in a project environment}
01/06312 . . . . (Adjustment or analysis of established resource schedule, e.g. resource or task levelling, or dynamic rescheduling)
01/06313 . . . . (Resource planning in a project environment)
01/06314 . . . . (Calendaring for a resource)
01/06315 . . . . (Needs-based resource requirements planning or analysis)
01/06316 . . . . (Sequencing of tasks or work)
01/0633 . . . . (Workflow analysis)
01/0635 . . . . (Risk analysis)
01/0637 . . . . (Strategic management or analysis)
01/06375 . . . . (Prediction of business process outcome or impact based on a proposed change)
01/0639 . . . . (Performance analysis)
01/06393 . . . . (Score-carding, benchmarking or key performance analysis [KPI] analysis)
01/06395 . . . . (Quality analysis or management)
01/06398 . . . . (Performance of employee with respect to a job function)
01/067 . . . . (Business modelling)
01/068 . . . . (Logistics, e.g. warehousing, loading, distribution or shipping; Inventory or stock management, e.g. order filling, procurement or balancing against orders)
01/063 . . . . (Shipping)
01/0831 . . . . (Overseas transactions)
01/0832 . . . . (Special goods or special handling procedures)
01/0833 . . . . (Tracking)
01/0834 . . . . (Choice of carriers)
01/08345 . . . . (Pricing)
01/0835 . . . . (Relationships between shipper or supplier and carrier)
01/08355 . . . . (Routing methods)
01/0836 . . . . (Central recipient pick-ups)
01/0837 . . . . (Return transactions)
01/0838 . . . . (Historical data)
01/087 . . . . (Inventory or stock management, e.g. order filling, procurement, balancing against orders)
01/0875 . . . . (Itemization of parts, supplies, or services, e.g. bill of materials)
01/010 . . . . (Office automation, e.g. computer aided management of electronic mail or groupware (electronic mail protocols H04L 29/06; arrangements for user-to-user messaging in packet-switching networks, e.g. e-mail or instant messages, H04L 41/00)); Time management, e.g. calendars, reminders, meetings or time accounting (organizing, planning, scheduling or allocating time G06Q 10/06)

**WARNING**

Group G06Q 10/10 is incomplete pending reclassification of documents from group G06F 19/328. Groups G06Q 10/10 and G06F 19/328 should be considered in order to perform a complete search.

10/101 . . . . (Collaborative creation of products or services)
10/103 . . . . (Workflow collaboration or project management)
10/105 . . . . (Human resources)
10/1053 . . . . (Employment or hiring)
10/1057 . . . . (Benefits package)

20/107 . . . . (Computer aided management of electronic mail (electronic mail protocols H04L 29/06; arrangements for user-to-user messaging in packet-switching networks, e.g. e-mail or instant messages, H04L 41/00))
20/109 . . . . (Time management, e.g. calendars, reminders, meetings, time accounting (organizing, planning, scheduling or allocating time G06Q 10/06))
20/1091 . . . . (Recording time for administrative purposes)
20/1093 . . . . (Calendar-based scheduling for a person or group)
20/1095 . . . . (Meeting or appointment)
20/1097 . . . . (Task assignment)
20/20 . . . . (Product repair or maintenance administration)
20/30 . . . . (Product recycling or disposal administration)

### 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)

20/02 . . . . (involving a neutral party, e.g. certification authority, notary or trusted third party [TTP])
20/023 . . . . (characterized in that the neutral party is a clearing house)
20/027 . . . . (involving a payment switch or gateway)
20/04 . . . . (Payment circuits)
20/042 . . . . (characterized in that the payment protocol involves at least one cheque)
20/0425 . . . . (the cheque being electronic only)
20/045 . . . . (characterized in that the payment protocol involves at least one ticket)
20/0453 . . . . (the ticket being an electronic receipt)
20/0457 . . . . (characterized in that the ticket is sent electronically)
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)
... Payments settled via telecommunication systems
... involving self-service terminals [SSTs], vending machines, kiosks or multimedia terminals
... Point-of-sale [POS] network systems \{(POS per se G07E or G07G)\}
... [Price look-up processing, e.g. updating]
... [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 per se should be classified in G07G 1/14

...\{inventory monitoring\}
...\{comprising interface for record bearing medium or carrier for electronic funds transfer or payment credit\}
...\{comprising security or user identification provision, e.g. password entry\}
...\{Tax processing\}
...\{Input by product or record sensing, e.g. weighing or scanner processing\}
...\{Specified transaction journal output feature, e.g. printed receipt or voice output\}
...\{Payment schemes or models\}
...\{based on the use of peer-to-peer networks\}
...\{characterized in that multiple accounts are available to the payer\}
...\{Credit schemes, i.e. "pay after"\}
...\{Debit schemes, e.g. "pay now"\}
...\{Pre-payment schemes, e.g. "pay before"\}
...\{characterised by micropayments\}
...\{characterised by the use of specific devices\}
...\{using a wired telephone network to facilitate payment\}
...\{using wireless devices\}
...\{Aspects of commerce using mobile devices [M-devices]\}
...\{Access to banking information through M-devices\}
...\{Realising banking transactions through M-devices\}
...\{Transactions dependent on location of M-devices\}
...\{Use of secure elements separate from M-devices\}
...\{Use of a security embedded in M-devices\}
...\{Use of the SIM of a M-device as secure element\}
...\{using wireless networks\}
...\{using an SMS for payment\}
...\{Short range or proximity payments by means of M-devices\}
...\{using an audio code\}
...\{using a pictured code, e.g. barcode or QR-code, being displayed on the M-device\}
...\{using a pictured code, e.g. barcode or QR-code, being read by the M-device\}
...\{RFID or NFC payments by means of M-devices\}

...\{using cards, e.g. integrated circuit [IC] cards or magnetic cards\}
...\{Active cards, i.e. cards including their own processing means, e.g. including an IC or chip\}
...\{Cards acting autonomously as pay-media\}
...\{Cards defining paid or billed services or quantities\}
...\{Cards including a counter\}
...\{the counter having monetary units\}
...\{the counter having non-monetary units, e.g. trips\}
...\{Cards serving only as information carrier of service\}
...\{Passive cards\}
...\{Single-use cards, i.e. without possibility of recharging\}
...\{Rechargeable cards\}
...\{Virtual cards\}
...\{Contactless payments by cards\}
...\{Payments by additional cards plugged into M-devices\}
...\{Card activation or deactivation\}
...\{Personalisation of cards for use\}
...\{Downloading or loading of personalisation data\}
...\{Personalisation of two or more cards\}
...\{Preliminary personalisation for transfer to user\}
...\{Aspects of software for card payments\}
...\{Software being resident on card\}
...\{Software being in the reader\}
...\{Cards having a plurality of specified features\}
...\{Multiple accounts on card\}
...\{Multiple applications on card\}
...\{Multiple memory zones on card\}
...\{Access rights to memory zones\}
...\{Hierarchy of users of cards\}
...\{Parent-child type, i.e. where parent has control on child rights\}
...\{using electronic wallets or electronic money safes\}
...\{with the personal data files for a user\}
...\{involving intelligent token, e.g. electronic purse\}
...\{Intelligent token initializing or reloading\}
...\{involving authentication\}
...\{Balancing accounts\}
...\{e-cash details, e.g. blinded, divisible or detecting double spending\}
NOTE

This group covers only the usage of discounts or coupons interacting with the payment of the protocol.

20/387 . . . [Payment using discounts or coupons (relating to marketing G06Q 30/021)]

20/388 . . . [Mutual authentication without cards]
20/389 . . . [Keeping log of transactions for guaranteeing non-repudiation of a transaction]
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]
20/401 . . . [Transaction verification]
20/4012 . . . [Verifying personal identification number [PIN]]
20/4014 . . . [Identity check for transaction]
20/40145 . . . . [Biometric identity checks]
20/4016 . . . . [Involving fraud or risk level assessment in transaction processing]
20/4018 . . . . [Using the card verification value [CVV] associated with the card]
20/403 . . . [Solvency checks]
20/4033 . . . [Local solvency checks]
20/4037 . . . [Remote solvency checks]
20/405 . . . [Establishing or using transaction specific rules]
20/407 . . . [Cancellation of a transaction]
20/409 . . . [Card specific authentication in transaction processing]
20/4093 . . . [Monitoring of card authentication]
20/4097 . . . [Mutual authentication between card and transaction partners]
20/40975 . . . . [Use of encryption for mutual authentication]
20/42 . . Confirmation, e.g. check or permission by the legal debtor of payment
20/425 . . [Using two different networks, one for transaction and one for security confirmation]

30/00 Commerce, e.g. shopping or e-commerce

30/01 . . [Customer relationship, e.g. warranty]
30/012 . . [Product or service warranty]
30/014 . . [Product recall]
30/016 . . [Customer service, i.e. after purchase service]
30/018 . . [Business or product certification or verification]
30/0185 . . . [Product, service or business identity fraud]
30/02 . . Marketing, e.g. market research and analysis, surveying, promotions, advertising, buyer profiling, customer management or rewards; Price estimation or determination
30/0201 . . [Market data gathering, market analysis or market modelling]
30/0202 . . [Market predictions or demand forecasting]
30/0203 . . [Market surveys or market polls]
30/0204 . . [Market segmentation]
30/0205 . . . [Location or geographical consideration]
30/0206 . . . [Price or cost determination based on market factors]
30/0207 . . . [Discounts or incentives, e.g., coupons, rebates, offers or upsales]

30/0208 . . . [Trade or exchange of a good or service for an incentive]
30/0209 . . . [Incentive being awarded or redeemed in connection with the playing of a video game]
30/0211 . . . [Determining discount or incentive effectiveness]
30/0212 . . . [Chance discounts or incentives]
30/0213 . . . [Consumer transaction fees]
30/0214 . . . [Referral award systems]
30/0215 . . . [Including financial accounts]
30/0216 . . . [Investment accounts]
30/0217 . . . [Giving input on a product or service or expressing a customer desire in exchange for an incentive or reward]
30/0218 . . . [Based on score]
30/0219 . . . [Based on funds or budget]
30/0221 . . . [Re-usable coupons]
30/0222 . . . [During e-commerce, i.e. online transactions]
30/0223 . . . [Based on inventory]
30/0224 . . . [Based on user history]
30/0225 . . . [Avoiding frauds]
30/0226 . . . [Frequent usage incentive systems, e.g., frequent flyer miles programs or point systems]
30/0227 . . . [Frequent usage incentive value reconciliation between diverse systems]
30/0228 . . . [On-line clearing houses]
30/0229 . . . [Multi-merchant loyalty card systems]
30/0231 . . . [Awarding of a frequent usage incentive independent of the monetary value of a good or service purchased, or distance travelled]
30/0232 . . . [Frequent usage rewards other than merchandise, cash or travel]
30/0233 . . . [Method of redeeming a frequent usage reward]
30/0234 . . . [Rebate after completed purchase, i.e. post transaction awards]
30/0235 . . . [Including timing, i.e. limited awarding or usage time constraint]
30/0236 . . . [Incentive or reward received by requiring registration or ID from user]
30/0237 . . . [At kiosk]
30/0238 . . . [At point-of-sale [POS]]
30/0239 . . . [Online discounts or incentives]
30/0241 . . . [Advertisement]
30/0242 . . . [Determination of advertisement effectiveness]
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 advertisement]
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]
Systems or methods specially adapted for specific business sectors, e.g. utilities or tourism (healthcare informatics G16H)

50/00

50/01 . . . (Social networking)
50/02 . . . Agriculture; Fishing; Mining
50/04 . . . Manufacturing
50/06 . . . Electricity, gas or water supply
50/08 . . . Construction
50/10 . . . Services
50/12 . . . Hotels or restaurants
50/14 . . . Travel agencies
50/16 . . . Real estate
50/163 . . . {Property management}
50/165 . . . {Land development}
50/167 . . . {Closing}
50/18 . . . Legal services; Handling legal documents
50/182 . . . {Alternative dispute resolution}
50/184 . . . [Intellectual property management]
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

**WARNING**

Group **G06Q 50/22** is impacted by reclassification into groups **G06Q 50/22** and **G16H 10/00** – **G16H 80/00**. Groups **G06Q 50/22** and **G16H 10/00** – **G16H 80/00** should be considered in order to perform a complete search.

50/24 . . . Patient record management (processing of medical or biological data for scientific purposes **G06F 19/00**)

**WARNING**

Group **G06Q 50/24** is no longer used for the classification of documents as of January 1, 2018. The content of this group is being reclassified into groups **G16H 10/00** – **G16H 80/00**. Groups **G06Q 50/24** and **G16H 10/00** – **G16H 80/00** should be considered in order to perform a complete search.

50/26 . . . Government or public services
50/265 . . . [Personal security, identity or safety]
50/28 . . Logistics, e.g. warehousing, loading, distribution or shipping
50/30 . . Transportation; Communications
50/32 . . Post and telecommunications (franking apparatus **G07B 17/00**)
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**

90/00 **Systems or methods specially adapted for administrative, commercial, financial, managerial, supervisory or forecasting 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** (postage metering system using cryptography **G06Q 2250/05**)
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