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

Definition statement

This place covers:

Data processing systems or methods that are specially adapted for managing, promoting or practicing commercial or financial activities.

Systems or methods not involving significant data processing (see definition for group G06Q 90/00) and specially adapted for managing, promoting, or practicing commercial or financial activities, provided that:

- the systems or methods are specially adapted for the purposes covered by the groups G06Q 10/00

 G06Q 50/00; and
- the systems or methods cannot be classified elsewhere in the CPC.

Relationships with other classification places

Classification in this subclass is quite difficult, as the question whether a document qualifies for this place might rest to some extent on the intended use rather than on any "hardware"/technical features.

Further, documents here are often directed at complex systems where the interactions and the overall effect might be decisive, where no single technical, tangible feature will be a pointer to a particular group.

For example, information (e.g., a set of figures) may be displayed for the purpose of education or advertising (G09B vs. G06Q).

As another example, an application describing technical details particular to a resonant tag and its mode of operation or production that merely mentions that the tag can be used in automatic stock management (G06Q 10/08, G06Q 10/087) will probably not be classified here.

Special rules of classification

When different aspects/parts of a document should be classified in different subgroups, more than one symbol is to be allocated.

Attention is drawn to the special rules of classification in group <u>G06Q 90/00</u>, reserved for systems or methods not involving significant data processing, and for <u>G06Q 99/00</u>, reserved for new technologies (e.g. q-bits computers for a special business purpose).

Whenever a document does not contain more than general statements/information/notorious features (e.g. automation using a computer), and no particular technical adaptation can be understood/no particular combination of technical features is found or inferred, the document can be classified in one of the main groups, i.e. <u>G06Q 10/00</u>.

In this subclass, Indexing Codes <u>G06Q 2220/00</u> and subdivisions, as well as <u>G06Q 2250/00</u> and subdivisions, are used.

Due to their character of Indexing Codes, they can be used only for additional information and only in association with other symbols of G06Q.

Administration; Management

Definition statement

This place covers:

Information and Communication Technology (ICT) specially adapted for the management of an organisation or its employees, such as:

- automation of office work by using computers to assist in the production of documents containing standard clauses, e.g. contract documents;
- administration of reservations, e.g. for hotels, events or travel;
- co-ordination of multiple reservations, e.g. correspondence flights;
- time management in businesses, e.g. monitoring working time or billable hours;
- time management in an enterprise environment, e.g. monitoring billable hours, working time accounting for employees;
- project management in an enterprise environment, e.g. stages presented in the workflow;
- optimisation or forecasting for business or financial purposes, using mathematical or statistical models or optimisation methods, e.g. linear programming;
- inventory management, e.g. order filling, stock level control or bills of materials.

References

Informative references

Bill distribution or payments	G06Q 20/102
Buying, selling or leasing transactions	G06Q 30/06
Finance; Insurance; Tax strategies; Processing of corporate or income taxes	G06Q 40/00
Programme-control systems within control or regulating systems in general	G05B 19/00
Data processing specially adapted for complex mathematical operations	G06F 17/10
Security arrangements for protecting computers or components thereof, programs or data against unauthorised activity	G06F 21/00
Design optimisation, verification or simulation of computer-aided design [CAD]	G06F 30/20
Processing of natural language text	G06F 40/10
Information and communication technology specially adapted for the Internet of things [IoT]	<u>G16Y</u>
Arrangements for secret or secure communication; Network security protocols	H04L 9/00
Arrangements for maintenance, administration or management of data switching networks, e.g. of packet switching networks	H04L 41/00
Network architectures or network communication protocols for network security	H04L 63/00
Network arrangements, protocols or services for supporting real-time applications in data packet communication	H04L 65/00
Network arrangements or protocols for supporting network services or applications	H04L 67/00

Reservations, e.g. for tickets, services or events

Definition statement

This place covers:

Information and communication Technology (ICT) specially adapted for computerised record keeping systems for recording reservations, such as:

- Airplane, train or concert reservations;
- Administration of reservations in an enterprise environment;
- Tickets, services, events, travel reservations;
- · Hotels, restaurants, flights;
- · Coordination of multiple reservations, e.g. correspondence flights.

Relationships with other classification places

This group covers "reservations" per se, e.g. administration of reservations. For rental transactions or leasing transactions, see group <u>G06Q 30/0645</u>.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Payment architectures, schemes or protocols	G06Q 20/00
Systems or methods specially adapted for hotels or restaurants	G06Q 50/12
Transportation facility access, e.g. fares, tolls or parking	G06Q 2240/00
Information retrieval; Database structures therefor; File system structures therefor	G06F 16/00
Processing of natural language text; Electronic form filling	G06F 40/10, G06F 40/174
Arrangements or apparatus for collecting fares, tolls or entrance fees at one or more control points	G07B 15/00
Coin-freed apparatus or services, for hiring or rent of vehicles, e.g. cars, bicycles, or wheelchairs	G07F 17/0057
Visible signalling systems using electric or electromagnetic transmission, e.g. remote indication of seats occupied	G08B 5/22

G06Q 10/021

{Re-booking existing reservations}

Definition statement

This place covers:

ICT specially adapted for record keeping systems for recording reservations wherein the computerised system is adjusting existing reservation processes.

- Adjusting existing reservations based on factors such as: weather, changes in travel;
- · Adjusting or optimising dependent or downstream bookings;

• Adjusting reservations for a portion of customers based on priorities or customer importance.

G06Q 10/022

{Reservation systems with overbooking processing}

Definition statement

This place covers:

ICT specially adapted for record keeping systems for recording reservations that includes adaptations for overbooking or overselling reservations.

The following subjects are therefore covered, the list being non-exhaustive:

• Determining quantities of reservations that may be overbooked, such as based on historical bookings, cancellations and/or no-shows.

G06Q 10/025

{Coordination of plural reservations, e.g. plural trip segments, transportation combined with accommodation}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the processing system coordinating multiple distinct reservations for a single itinerary.

The term "multiple distinct reservations" is not intended to include a plurality of similar reservations, e.g. reservations for a plurality of seats.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT specially adapted for implementation of business processes for travel agencies	G06Q 50/14
ICT specially adapted for implementation of business processes related to the transportation industry	G06Q 50/40

G06Q 10/026

{for sport or leisure activities, e.g. booking tennis courts, athletic fields or a bike at a class or gymnasium}

Definition statement

This place covers:

ICT specially adapted for record keeping systems for recording reservations for sport or leisure activities.

- · Sport or leisure activity reservations such as booking an exercise class;
- Reserving time at a gymnasium, tennis court, golf course or field.

{Changing the assignment of an existing reservation}

Definition statement

This place covers:

ICT specially adapted for record keeping systems for recording reservations for changing the assignment of an existing reservation to another person or owner for the reservation.

G06Q 10/028

{for seating or spaces in a venue}

Definition statement

This place covers:

ICT specially adapted for record keeping systems for recording reservations for seating or rooms in a venue.

The following subjects are therefore covered, the list being non-exhaustive:

- · Restaurant seating locations or arrangements for groups of users; and
- · Pool-side seating.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Electronic shopping; Item investigation	G06Q 30/0623
Electronic shopping; Shopping interfaces	G06Q 30/0641
Theatre, auditorium or similar chairs adapted for special purposes with indicators or devices for reserving	A47C 1/13
Visible signalling systems, local indication of seats occupied in a facility	G08B 5/221
Traffic control systems for road vehicles, indicating individual free spaces in parking areas	G08G 1/14

G06Q 10/0281

{for arena or stadium seating}

Definition statement

This place covers:

ICT specially adapted for record keeping systems for recording reservations for arena or stadium seating.

- · Sporting event seating locations or seating arrangements for groups of users; and
- · Concert or event seating locations or arrangements.

{for travel seating}

Definition statement

This place covers:

ICT specially adapted for record keeping systems for recording reservations for assigning seating for travel arrangements operating on a fixed time schedule.

The following subjects are therefore covered, the list being non-exhaustive:

- · Aircraft or airplane seating;
- · Cruise ship seating or cabin reservations; and
- · Train seating reservations.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT specially adapted for implementation of business processes of	G06Q 50/14
specific business sector of travel agencies	

G06Q 10/0285

{for lodging}

Definition statement

This place covers:

ICT specially adapted for record keeping systems for recording reservations for lodging, e.g. vacation homes, hotels.

G06Q 10/0287

{for portions of office space}

Definition statement

This place covers:

ICT specially adapted for record keeping system for recording reservations for portions of office space.

The following subjects are therefore covered, the list being non-exhaustive:

- · Room reservations, e.g. conference room or private office; and
- Arrangement of multiple workspace reservations, e.g. to assist workers from similar teams or interests in reserving particular or adjacent spaces or offices.

References

Informative references

ICT specially adapted for calendar-based scheduling for persons or	G06Q 10/1093
groups	

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)

Definition statement

This place covers:

Information and communication Technology (ICT) specially adapted for forecasting or optimisation.

The following subjects are therefore covered, the list being non-exhaustive:

- Linear programming, "travelling salesman problem", "cutting stock problem";
- Optimisation or forecasting in an enterprise environment, achieved by algorithms based on mathematical or statistical models or theoretical solutions to optimization problems.

Relationships with other classification places

Optimisation in a specific technical field is usually not found this group and should be searched for in the specific field, e.g. optimisation of placement of servers in a data farm, optimisation for reducing fuel consumption, etc.

Group G06Q 10/04 covers mathematical methods for optimisation or forecast purpose specially adapted to as administrative/business application or context.

Group <u>G06F 17/11</u> covers mathematical methods for solving generic mathematical optimisation problems. Likewise, group <u>G06F 17/18</u> covers mathematical methods for analysing generic time series data for forecasting/extrapolation purposes.

References

Limiting references

This place does not cover:

Market predictions or forecasting for commercial activities	G06Q 30/0202

Informative references

Price estimation or determination	G06Q 30/0283
Finance; Insurance; Tax strategies; Processing of corporate or income taxes	G06Q 40/00
Devices for predicting weather conditions	G01W 1/10
Testing or monitoring, response to fault detection, predictive maintenance	G05B 23/0283
Data processing specially adapted for complex mathematical operations	G06F 17/10
Pattern recognition	G06F 18/00
Computer-aided design [CAD] including design optimisation, verification, or simulation	G06F 30/20
Editing of spreadsheets	G06F 40/18
Computing arrangements based on specific computational models, e.g. neural networks, knowledge-based models or machine learning	<u>G06N</u>

Computing arrangements using knowledge-based models; Dynamic search techniques; Heuristics; Dynamic trees; Branch-and-bound	G06N 5/01
Predictive alarm systems	G08B 31/00
Circuit arrangements or systems for supplying or distributing electric power; Systems for storing electric energy	<u>H02J</u>
Network analysis or design, e.g. simulation, network model or planning for prediction of network behaviour	H04L 41/147
Network planning tools for wireless communication networks	H04W 16/18

Special rules of classification

Optimisation in a specific technical field is usually not found here, and should be searched for in the specific field, e.g.: optimisation of placement of servers in a data farm, optimisation for reducing fuel consumption, etc... A document classified here should be forwarded to the relevant technical field of application.

G06Q 10/043

{Optimisation of two dimensional placement, e.g. cutting of clothes or wood}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for finding the optimal placement of shapes on stock material, e.g. for cutting of paper, leather or sheet metal.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Methods of drafting or marking-out patterns using computers	A41H 3/007
Soldering, welding or cutting by heat or laser; Holding or positioning work for planar work	B23K 37/0408
Severing cooled glass; Cutting or splitting sheet glass or ribbons; Apparatus or machines therefor	C03B 33/02
Programme-control systems, electric, numerical control, i.e. automatically operating machines, in particular machine tools, e.g. in a manufacturing environment	G05B 19/18
Computer aided design	G06F 30/00

G06Q 10/047

Optimisation of routes or paths, e.g. travelling salesman problem

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for finding an optimal route under certain constraints, e.g. salesperson visiting a number of customers.

This subgroup includes route finding algorithms in graphs (e.g. A* algorithm).

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT specially adapted for shipping and routing of goods	G06Q 10/08355
ICT specially adapted for inventory or stock management and positions of assets in a building	G06Q 10/087
ICT specially adapted for electronic shopping and graphical representations of items or shoppers	G06Q 30/0643
ICT specially adapted for business processes related to the transportation industry	G06Q 50/40
Steering of agricultural machines or implements; Guiding agricultural machines or implements on a desired track	A01B 69/00
Determining optimum path of, e.g. robot arm	B25J 9/1656
Dredgers or soil-shifting machines, control devices guiding machines along a predetermined path	E02F 9/2045
Route searching or route guidance within road network navigation systems	G01C 21/34
Navigation route searching algorithms, e.g. Dijkstra, A*, arc-flags	G01C 21/3446
Control of land, water, air or space vehicles; Intended control result, optimisation of travel parameters, e.g. of energy consumption, journey time or distance	G05D 1/644
Network design, e.g. design based on topological or interconnect aspects of utility systems, piping or cabling	G06F 30/18
Traffic control systems for road vehicles, arrangements for giving variable traffic instructions, having an indicator mounted inside the vehicle, e.g. giving voice messages and transmission of navigation instructions to the vehicle	G08G 1/0968
Traffic control systems for road vehicles, managing passenger vehicles circulating according to a fixed timetable	G08G 1/123
Traffic control systems for road vehicles, dispatching vehicles on the basis of a location	G08G 1/202

G06Q 10/06

Resources, workflows, human or project management; Enterprise or organisation planning; Enterprise or organisation modelling

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for resources, workflows, human or project management, e.g. organising, planning, scheduling or allocating time, human or machine resources; enterprise planning; organisational models.

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT adapted for administration of product repair or maintenance	G06Q 10/20
Electronic shopping using catalogue ordering	G06Q 30/0603
Programme-control systems for total factory control	G05B 19/418
Arrangements for transformation of program code	G06F 8/40
Allocation of resources in multiprogramming arrangements	G06F 9/50
Computer-aided design	G06F 30/00
Registering or indicating the condition or the working of machines or other apparatus, other than vehicles	G07C 3/00

G06Q 10/063

Operations research, analysis or management

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for applying systematic or scientific analysis, evaluation or other problem-solving technique to the operation(s) of an enterprise to understand the operation(s), improve effectiveness and guide decision making or management; or to the planning, organising, directing or controlling of an enterprise, i.e. a group of one or more people or entities, for the purpose of accomplishing a goal.

This subject matter is applied to problems that concern understanding, conducting, coordinating or optimising the operations or activities within an enterprise.

The operations and activities of the organisation are business level operations and activities and are not specifically network or computer operations related.

References

Informative references

ICT specially adapted for enterprise or organisation modelling	G06Q 10/067
ICT specially adapted for office automation; Time management; Recording time for administrative purposes, e.g. analysis or allocation of time worked by an individual	G06Q 10/1091
Arrangements for executing specific programs; Emulation; Interpretation; Software simulation	G06F 9/455
Complex mathematical operations for solving equations, e.g. nonlinear equations, general mathematical optimisation problems	G06F 17/11
Computing arrangements based on specific computational models, e.g. neural networks, knowledge-based models, machine learning	<u>G06N</u>
Registering, indicating or recording the time of events or elapsed time, e.g. time-recorders for work people	G07C 1/00

Resource planning, allocation, distributing or scheduling for enterprises or organisations

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for planning or assigning of resources in an optimal or systemic way in order to achieve a business goal or drawn to the management or planning of a business task or operation.

This group includes planning, allocating, distributing or scheduling resources among various projects or business units in a business or commercial environment based on analysis of operations of the enterprise.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT specially adapted for logistics; Shipping; Arranging for the delivery of goods between parties or monitoring the status of delivery	G06Q 10/083
ICT specially adapted for logistics; Inventory management; Establishing, maintaining or updating the enterprise resource of inventory	G06Q 10/087
ICT specially adapted for social work or social welfare, e.g. community support activities or counselling services	G06Q 50/22
Control or regulating systems in general; Programme-control systems; Total factory control, i.e. centrally controlling a plurality of machines; Characterised by job scheduling, process planning, material flow	G05B 19/41865
Electric digital data processing; Arrangements for program control; Using stored programs; Multiprogramming arrangements	G06F 9/46
ICT specially adapted for the management of healthcare resources or facilities, e.g. managing hospital staff or surgery rooms	G16H 40/20

G06Q 10/06311

{Scheduling, planning or task assignment for a person or group}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the scheduling or assigning of tasks to an individual or group, the scheduling or assigning based on analysis of factors such as the needs or requirements of the enterprise, the task and the individual or groups qualifications or availability, schedules of individuals or groups or the goal of a specific task.

The designation of an individual may be either by name or other designation, e.g. position.

The individual or group may be either internal or external to the organisation, such as a current employee, job candidate or contractor.

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT specially adapted for administration for office automation, for human resources	G06Q 10/105
Electronic shopping; Request for offers or quotes	G06Q 30/0611
ICT specially adapted for business processes related to the transportation industry	G06Q 50/40

G06Q 10/063112

{Skill-based matching of a person or a group to a task}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for optimally matching an individual or group to a job based on factors such as the individuals or groups qualification(s) and the requirement(s) defined by the particular type of work.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT specially adapted for performance analysis of an employee with respect to a job function	G06Q 10/06398
ICT for shipping, choice of carriers	G06Q 10/0834
ICT specially adapted for employment or hiring	G06Q 10/105

G06Q 10/063114

Status monitoring or status determination for a person or group

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the monitoring or tracking of work performed or assigned to an individual or group to provide an indication of work that is in queue to be started, work in-progress or work that is completed.

References

Informative references

ICT specially adapted for recording time for administrative or management purposes	G06Q 10/1091
Centralised call answering arrangements requiring operator intervention; Using call or contact centers supervision arrangements	<u>H04M 3/5175</u>

{Schedule adjustment for a person or group}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for reassessing an established staff task schedule to ensure that the schedule is still valid, and then optionally rescheduling a task to an available individual or group, in order to improve efficiency, accommodate employees or achieve a business goal or objective.

This area includes subject matter where evaluation of whether or not a change to the initial task schedule is needed, even if no change is claimed or the result of the evaluation is that no change is needed.

This area includes staff driven adjustment or reassignment of a shift or work schedule, such as by way of staff trading or swapping of shifts or other means.

G06Q 10/063118

{Staff planning in a project environment}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for scheduling, assigning roles, tasks or responsibilities, or the sequence of tasks executed by a team or a team member with respect to a unified managed undertaking.

For classification herein, this group requires a process, method, system, apparatus or program that is associated with a project, e.g. establishing of goals, deliverables, roles, calendar schedules or considered constraints, such as cost or time.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT specially adapted	for resource planning in a project environment	G06Q 10/06313
	for workflow collaboration or project management, ng of projects between workforce units or for	G06Q 10/103

G06Q 10/063119

{Staff planning or adjustment in a physical establishment based on arrival predictions or arrival tracking}

Definition statement

This place covers:

ICT specially adapted for planning or adjustment of the allocation or distribution of staff, e.g. cashiers or salespersons, at a location or physical establishment, e.g. retail store, where the planning or adjustment is based on the tracking or predicting of arrivals of individuals at the establishment.

Definition statement

The individuals may be customers, staff or any other individual that impacts the staffing needs at the physical establishment.

The tracked or predicted arrival data can include consideration of arrival rates, crowd congestion, wait times, queue length.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Market predictions or forecasting for commercial activities	G06Q 30/0202
Image or video recognition or understanding, context or environment of the image, surveillance or monitoring and recognition of crowd images	G06V 20/53
Arrangements, systems or apparatus for checking, e.g. the occurrence of a condition, including determination of waiting time in the queue	G07C 11/00
Services making use of location information	H04W 4/02

G06Q 10/06312

{Adjustment or analysis of established resource schedule, e.g. resource or task levelling, or dynamic rescheduling}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for reassessment of the established asset utilisation plan or schedule to ensure the plan is still optimal or valid and then to optionally reschedule or reassign asset usage in order to improve efficiency, or achieve a business goal or objective, accomplished by techniques such as resource or task leveling or dynamic rescheduling.

This area includes applications where evaluation of whether or not a change to the initial schedule is needed, even if no change is claimed or the result of the evaluation is that no change is needed.

The reassessment may be based on consideration of factors such as cost, failure or maintenance in order to optimally reschedule or plan resource utilisation through workload balancing, leveling or other means.

G06Q 10/06313

{Resource planning in a project environment}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for organising or allocating resources, such as time, equipment or money, within a defined scope or constraints in order to meet an objective associated with a unified managed undertaking.

For classification herein, this group requires a process, method, system, apparatus or program that is associated with a project, e.g. establishing of goals, deliverables, roles, calendar schedules or considered constraints, such as cost or time.

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT specially adapted for scheduling, planning or task assignment for a person or group; Staff planning in a project environment	G06Q 10/063118
ICT specially adapted for workflow collaboration or project management, e.g. routing or approving of projects between workforce units or for project management	G06Q 10/103

G06Q 10/06314

{Calendaring for a resource}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for a calendar-based means which facilitates time planning associated with business resources, operations, production planning or other administrative activities.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT specially adapted for reservations, e.g. for tickets, services or events	G06Q 10/02
ICT specially adapted for resource planning for a business operation; Adjustment or analysis of established resource schedule	G06Q 10/06312
Calendar based systems for scheduling a person or group to related tasks	G06Q 10/1097

G06Q 10/06315

{Needs-based resource requirements planning or analysis}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the evaluation or determination of resources required by the organisation to satisfy an internal or market-driven need.

Market-driven demand herein includes planning associated with consumer demand that require various resources of a business to meet the consumer order demand, which may include planning for anticipated future orders.

Market research or market demand prediction which does not also involve resource planning or resource adjustment is classified elsewhere.

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT specially adapted for inventory or stock management	G06Q 10/087
Market modelling; Market analysis; Collecting market data	G06Q 30/0201

G06Q 10/06316

{Sequencing of tasks or work}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for planning or governing the order of steps for completing a task, for planning or governing the order of plural tasks performed by the resources of a business, or for using problem solving techniques such as network analysis, e.g. shortest path, minimum spanning trees, maximum flow problems, precedence graphs, job dispatch prioritisation or minimum cost flow problems, to determine the most optimal sequence or ordering of entities or resources.

Classified herein are systems that control workflow, automated systems that process tasks or that display instructions directing the order of task execution or a template with a series of required fields for execution of the task.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT specially adapted for enterprise or organisation modelling	G06Q 10/067
ICT specially adapted for shipping; Determining routing of goods in an existing delivery system or to identify the appropriate delivery route	G06Q 10/08355
ICT specially adapted for workflow collaboration or project management, e.g. routing or approval of work between workforce units	G06Q 10/103

G06Q 10/06317

{Resource planning based on arrival predictions or arrival tracking}

Definition statement

This place covers:

ICT specially adapted for planning or adjustment of the allocation or distribution of resources, e.g. assets or equipment, at a location or physical establishment, e.g. retail store, where the planning or adjustment is based on the tracking or predicting of arrivals of individuals at the establishment.

The individuals may be customers, staff or any other individual that impacts the resource needs at the physical establishment.

The tracked or predicted arrival data can include consideration of arrival rates, crowd congestion, wait times, queue length.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Market predictions or forecasting for commercial activities	G06Q 30/0202
Image or video recognition or understanding, context or environment of the image, surveillance or monitoring and recognition of crowd images	G06V 20/53
Arrangements, systems or apparatus for checking, e.g. the occurrence of a condition, including determination of waiting time in the queue	G07C 11/00
Services making use of location information	H04W 4/02

G06Q 10/0633

Workflow analysis

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for analysis or evaluation of a model or other abstract representation of the flow or sequence of real work in order to understand or optimise a work process performed by entities within an enterprise or organisation.

This subject matter is applied to problems that concern understanding, conducting, coordinating or optimising the operations or activities within an enterprise or organisation.

The operations and activities of the organisation are business level operations and activities and are not specifically network or computer operations related.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT specially adapted for enterprise or organisation modelling	G06Q 10/067
ICT specially adapted for workflow collaboration or project management, e.g. routing or approval of work between workforce units	G06Q 10/103
Arrangements for software engineering	G06F 8/00
ICT specially adapted for the management or administration of healthcare resources or facilities, e.g. managing hospital staff or surgery rooms	G16H 40/20

G06Q 10/06332

{using business process templates}

Definition statement

This place covers:

ICT specially adapted for workflow analysis where the workflow is based on a template or standardised definition of a business process.

Subject matter covered includes (1) an analysis of a business process for the creation of templates or standardised definitions for future workflow implementation; or (2) the analysis of whether existing

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templates or standardised process definitions are still valid or need to be modified in order to optimise a workflow.

This area includes applications where evaluation of whether or not a change is needed to the initial template or standardised business process definition, even if no change is claimed or the result of the evaluation is that no change is needed.

G06Q 10/06334

{using forecasting or predicting}

Definition statement

This place covers:

ICT specially adapted for forecasting or predicting aspects of a workflow or its stages, e.g. forecasting completion, predicting outcomes or predicting duration of the workflow.

The stages of a workflow may include individual steps, tasks or sub-processes.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT for forecasting or optimisation specially adapted for administrative or	G06Q 10/04
management	

G06Q 10/0635

Risk analysis of enterprise or organisation activities

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for applying techniques to identify and analyze or assess factors that may adversely affect the success of a business undertaking or the achievement of a business goal.

This subject matter includes identifying preventive measures to reduce the probability of these factors occurring or identifying countermeasures to successfully minimise possible negative effects on a business or an entity.

Evaluation of risk factors with respect to credit, loan or other financial matters is not classified herein.

References

Informative references

Payment protocols for authorisation or transaction verification involving fraud or risk level assessment for payment in transaction processing	G06Q 20/4016
Credit; Loans; Processing thereof	G06Q 40/03
Insurance	G06Q 40/08
Monitoring users, programs or devices to maintain the integrity of platforms, e.g. of processors, firmware or operating systems	G06F 21/50
For detecting or protecting against malicious traffic	H04L 63/14

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

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for providing overall direction to a business by (1) developing a business mission, vision or objective; (2) formulating a planned course of action based on a business mission, vision or objective; or (3) evaluating or reevaluating whether the developed mission, vision or objective or planned course of action was effective, produced a desired outcome or needs to be modified.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT specially adapted for enterprise or organisation modelling	G06Q 10/067
ICT specially adapted for workflow collaboration or project management, e.g. routing or approval of work between workforce units	G06Q 10/103

G06Q 10/06375

{Prediction of business process outcome or impact based on a proposed change}

Definition statement

This place covers:

Subject matter drawn to a computerised arrangement for forecasting how a business will perform under potential scenarios including identifying an outcome or impact of a proposed change or estimating what changes are needed to accomplish desired goal(s) or outcome(s), including techniques such as change impact analysis or return on investment.

This group includes subject matter where analysis occurs, even when none of current or proposed plans, processes or practices are implemented in the operation of an enterprise.

References

Informative references

Calculating price, cost, or charges	G06Q 30/0283

Performance analysis of employees; Performance analysis of enterprise or organisation operations

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for evaluating the efficiency, productivity or performance of an employee or other entity employed by an enterprise or an organisational operation.

The efficiency, productivity or job performance of the employee or other entity occurs within the enterprise and thus explicitly or implicitly impacts the operations of that enterprise.

The evaluations may include recommendations for performance improvement.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Certifying business or products	G06Q 30/018
Rating or review of business operators or products	G06Q 30/0282
Insurance	G06Q 40/08
Methods and systems that measure the performance of a system or device through modelling	G06G 7/48
ICT specially adapted for therapies or health-improving plans, relating to physical therapies or activities, e.g. exercising	G16H 20/30

G06Q 10/06393

{Score-carding, benchmarking or key performance indicator [KPI] analysis}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for (1) comparing business performance with a known standard of excellence; or (2) analysis of an operational activity of a company, in order to establish a performance standard or to determine if actual performance is aligned with the goals or objectives of the business.

References

Informative references

ICT specially adapted for marketing; Market analysis	G06Q 30/0201
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{Quality analysis or management}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for applying systematic and scientific evaluation related to standards set or required for various business practices, operations, processes, incoming materials, products or services.

This subject matter may include analysis of test data from suppliers, internal incoming inspection, inline test, final test data or other data associated with analysis of business operation standards, and may also include determination of corrective actions.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Market modelling market analysing; Collecting market data	G06Q 30/0201
ICT specially adapted for rating or review of business operators or products	G06Q 30/0282
Programme-control systems, total factory control, characterised by quality surveillance of production	G05B 19/41875
Machine learning	G06N 20/00

G06Q 10/06398

{Performance of employee with respect to a job function}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for evaluating individual or group performance with respect to an assigned job or task.

This area includes applications that include evaluations such as end of year reviews.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Accounting, finance or payroll	G06Q 40/125

G06Q 10/067

Enterprise or organisation modelling

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for modelling of a business operation or a function.

Definition statement

The following subjects are therefore covered, the list being non-exhaustive:

- Modelling business operations that can be independent of organisations or groups performing each operation or function;
- Modelling relationships between business functions.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT specially adapted for operations research, analysis or management; Workflow analysis	G06Q 10/0633
Computer-aided design [CAD] including design optimisation, verification or simulation	G06F 30/20
Machine learning	G06N 20/00

G06Q 10/0672

{using organisation reporting relationships}

Definition statement

This place covers:

ICT specially adapted for the generation of a model or other abstract representation of the reporting relationships or business hierarchy of an organisation or enterprise, e.g. organisational charts.

G06Q 10/0674

{using process simulation}

Definition statement

This place covers:

ICT specially adapted for the modelling of a business using simulation of organisation processes or organisational activities.

G06Q 10/08

Logistics, e.g. warehousing, loading or distribution; Inventory or stock management

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for logistics, e.g. warehousing, loading, distribution or shipping (involving movement of material/products between different locations), as well as inventory or stock management.

References

Informative references

Transport or storage devices	<u>B65G</u>
Geographical information databases	G06F 16/29

Informative references

Record carriers for use with machines and with at least a part designed to carry digital markings	G06K 19/00
Alarm systems	<u>G08B</u>
Traffic control systems	<u>G08G</u>

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

stock products or goods held in supply and available for sale and/distribution.	or
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G06Q 10/083

Shipping

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the delivery of goods or items between parties, or for the monitoring of the status of that delivery.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT specially adapted for implementation of business processes related to the transportation industry	G06Q 50/40
Drive control systems of autonomous vehicle sub-units of different type or different function; Planning or execution of driving tasks; Delivery operations	B60W 60/00256
Control of position, course or altitude of land, water, air or space vehicles, e.g. using automatic pilots, intended control result, coordinated control of the position or course of two or more vehicles	G05D 1/69

G06Q 10/0831

Overseas transactions

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for managing the delivery of goods that are transported over international waters or across international borders.

Special goods or special handling procedures, e.g. handling of hazardous or fragile goods

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the handling of a shipment of goods that requires particular preparation measures or transport specifications.

This group includes such special goods or handling procedures, such as the shipping of goods in refrigerated vehicles or the special packing or transport measures for handling hazardous or delicate materials.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Arrangements or devices for indicating incorrect storage or transport	B65D 79/02
Containers, packaging elements or packages for contents presenting particular transport or storage problems	B65D 81/00
Data loggers attached to transport containers for perishable products	G01D 9/007

G06Q 10/0833

Tracking

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for systems allowing various parties in a delivery transaction to determine the location of goods during their preparation for delivery or during transport between destinations.

References

Informative references

Data loggers attached to transport containers for perishable products	G01D 9/007
Registering or indicating the working of vehicles including communicating information to a remotely located station	G07C 5/008
Indicating the position of vehicles, e.g. scheduled vehicles; Managing passenger vehicles circulating according to a fixed timetable, e.g. buses, trains, trams	G08G 1/123

Choice of carriers

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for determining which carrier a particular shipper or supplier should utilise for a specific delivery transaction.

One example includes selection of carriers based on locations of items or goods to be picked up, delivery location and communication with a device of a carrier. Carriers can include vehicles, employees, drivers, contractors, freelancers.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT specially adapted for operations research or analysis and task	G06Q 10/06311
assignment	

G06Q 10/08345

{Pricing}

Definition statement

This place covers:

Subject matter drawn to a computerised arrangement to assist shippers, suppliers or recipients of goods in managing the determination of an appropriate or established price for a delivery transaction.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Price LookUp processing in POS payment systems	G06Q 20/201
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G06Q 10/0835

Relationships between shipper or supplier and carriers

Definition statement

This place covers:

Subject matter drawn to a computerised arrangement directed at handling the transactions between a shipper or supplier of goods and the carrier who will deliver the goods.

{Routing methods}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for determining optimum routing of certain goods in an existing delivery system or to identify an appropriate route for delivery of specified goods.

The routing method is often directed at cost savings or delivery time minimisation.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT specially adapted for administration, management; Optimisation of routes or paths, e.g. "travelling salesman problem"	G06Q 10/047
Navigation; Specially adapted for navigation in a road network, route searching and route guidance	G01C 21/34

G06Q 10/0836

Recipient pick-ups

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for managing the handling of delivery of goods to allow recipients to pick up the goods at a location, such as a centralised location, a retail store or dedicated lockers.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Individual registration on entry or exit electronically operated locks	G07C 9/00896
specially adapted for particular uses	

G06Q 10/08365

{Deliveries to storage lockers}

Definition statement

This place covers:

ICT specially adapted for handling of delivery of goods to allow recipients to pick up the goods at a location involving data processing for pick-up from storage lockers.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Individual registration on entry or exit electronically operated locks specially adapted for particular uses	G07C 9/00896
Coin fed apparatus for safe-keeping of property left temporarily comprising lockable containers being a postal pick-up locker	G07F 17/13

G06Q 10/0837

Return transactions

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the sending of received goods back to a supplier or manufacturer.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT specially adapted for management of returned inventory	G06Q 10/08728
ICT specially adapted for providing recall services for goods or products	G06Q 30/014

G06Q 10/0838

{Historical data}

Definition statement

This place covers:

Subject matter drawn to a computerised arrangement for the maintenance or tracking of information collected in shipping transactions, such as customer data, established routes, load history and cost information.

G06Q 10/0841

(Compliance with shipping requirements)

Definition statement

This place covers:

ICT for managing compliance with shipping requirements. The following subjects are therefore covered, the list being non-exhaustive:

- Data processing regarding non-conforming goods received during shipping;
- Data processing regarding approval by parties during the course of shipment; and
- Data processing regarding acceptance or rejections of shipped items or goods.

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT specially adapted for operations research, performance analysis of organisational operations	G06Q 10/0639
ICT specially adapted for inventory or stock management	G06Q 10/087
ICT specially adapted for certifying business or products, e.g. includes subject matter associated with product compliance, regulatory compliance and safety compliance	G06Q 30/018

G06Q 10/0843

{using forecasting or optimisation}

Definition statement

This place covers:

ICT specially adapted for using forecasting or optimisation specially adapted for shipping.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT specially adapted for forecasting or optimisation specially adapted for administrative or management purposes	G06Q 10/04
Market predictions or forecasting for commercial activities	G06Q 30/0202

G06Q 10/087

Inventory or stock management, e.g. order filling, procurement or balancing against orders

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for inventory or stock management, e.g. order filling, procurement or balancing against orders.

- Inventory management in an enterprise environment;
- · Order filling from stock;
- Maintaining a register of the position of all assets in an enclosure (building, warehouse, parking lot);
- · Stock level control;
- Management of storage life of perishable/hazardous products;
- Establishing, maintaining or updating a record of a store of goods.

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT specially adapted for payment architectures inventory monitoring in POS payment systems	G06Q 20/203
Electronic shopping [e-shopping]	G06Q 30/0601
Intelligent shelves with arrangements or automatic control means for selecting which articles are to be removed	B65G 1/137
Healthcare informatics, ICT specially adapted for the management or administration of healthcare resources or facilities, e.g. managing hospital staff or surgery rooms	G16H 40/20
Supply management, e.g. supply of components or of substrates for assembling of electronic components	H05K 13/086

G06Q 10/0872

{using inventory planning}

Definition statement

This place covers:

ICT specially adapted for inventory planning to guide future inventory management actions, procedures or decision making.

G06Q 10/08724

{by shelf level inventory management, e.g. planograms}

Definition statement

This place covers:

ICT specially adapted for shelf level or retail level inventory management. The management includes analysis such as visual representations of a retail store's arrangement of products, such as a planogram that can indicate the location and quantities of products to be placed on display or that are on display for customers. The visual representations can be planograms, realograms, schematics.

This subgroup also covers plans or data processing for displaying or recommending how workers should physically arrange merchandise or items in a retail environment to maximise sales.

References

Informative references

Electronic shopping, identifying item locations	G06Q 30/0639
Image or video recognition or understanding, scenes or scene-specific elements	G06V 20/00

{for replenishment processing, procedures, or recommendations using forecasting or optimisation}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for inventory replenishment processing, procedures or recommendations using forecasting or optimisation.

The following subjects are therefore covered, the list being non-exhaustive:

- Data processing for predicting needed inventory;
- Product storage location optimisation such as by optimising placement of an item having a low turnover frequency to a different rack or aisle position, e.g. placement within a warehouse, or cargo space or relative to exits or entry ways in aisles or within buildings;
- Reordering points, regarding the level of inventory for triggering replenishment, based on demand and/or periodic ordering;
- Economic order quantity [EOQ] to determine optimal order timing and order sizes; can also consider holding costs;
- Lean inventory or just-in-time inventory procedures or recommendations; and
- Considering service-levels and/or timing such as to avoid running out of inventory on-hand.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT specially adapted for needs-based resource requirement	ts planning or <u>G06Q 10/06315</u>
analysis	

G06Q 10/08728

{of returned inventory}

Definition statement

This place covers:

ICT specially adapted for returning inventory processing. This can include procedures, processing or planning for how organisations handle the return of merchandise and/or re-stock the merchandise and update inventory on-hand. This can also include how inventory is sorted, such as broken or damaged inventory from a vendor or supplier.

References

Informative references

ICT specially adapted for providing recall services for goods or products	G06Q 30/014

{Inventory fulfillment (shipping G06Q 10/083)}

Definition statement

This place covers:

ICT specially adapted for inventory fulfillment. This covers data processing for managing the fulfilment of ordering inventory and moving inventory in a facility as needed.

References

Limiting references

This place does not cover:

ICT specially adapted for shipping	G06Q 10/083
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Electronic shopping, processing of requisition or of purchase orders	G06Q 30/0635
Transport or storage devices, with control means for selecting articles to be removed, for fulfilling orders in warehouses	B65G 1/1373

G06Q 10/08741

{by picking of items from inventory for fulfillment}

Definition statement

This place covers:

ICT specially adapted for inventory selection methods or data processing for managing the selection or picking of inventory. The following subjects are therefore covered, the list being non-exhaustive:

- Determining which inventory an organisation or workers should select next based on product attribute, frequency of sales; and
- Selecting or picking inventory to reduce stale inventory, e.g. based on age attributes.

G06Q 10/08743

{using optimisation of routes}

Definition statement

This place covers:

ICT specially adapted for the optimisation of routes or paths for inventory management.

- Optimising routes for movement or picking of inventory by organisations or workers such as within a warehouse or facility;
- · Optimising for correcting routes or paths for inventory fulfillment; and
- Optimising between multiple parties at different locations to improve overall organisation of inventory.

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT specially adapted for optimisation of routes or paths, e.g. travelling salesman problem	G06Q 10/047
ICT specially adapted for shipping, routing methods	G06Q 10/08355
Electronic shopping and item locations	G06Q 30/0639
Instruments for performing navigational calculations	G01C 21/20
Services specially adapted for wireless communication networks, related to particular areas, e.g. point of interest [POI] services, venue services or geofences	H04W 4/021
Location-based management or tracking services	H04W 4/029

G06Q 10/08744

{by distributed inventory management}

Definition statement

This place covers:

ICT specially adapted for identifying or managing inventory items available at distributed locations. Examples of distributed inventory as used herein include:

- Identifying multiple inventory locations for the same items, and multiple inventory locations in a supply chain;
- · Managing the inventory across multiple locations of one or more organisations; and
- Inventory locations such as vehicles, trucks or kiosks that sell items.

G06Q 10/0875

Itemisation or classification of parts, supplies or services, e.g. bill of materials

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for generating an itemised listing of the components needed either totally or based on specific tasks in an organisation.

G06Q 10/0877

{by inventory control or reporting using inventory tracking or counting}

Definition statement

This place covers:

ICT specially adapted for inventory control or inventory reporting. The following subjects are therefore covered, the list being non-exhaustive:

- Inventory auditing;
- · Inventory traceability;
- Inventory or asset traceability, e.g. from origin source, to manufacturers, to retailers and/or to consumers:
- Inventory compliance with goals or target levels of inventory;

Definition statement

- Tracking inventory or assets inside of an area or zone such as inventory in a shelf, in a shopping cart.
- Processes for verifying, storing, tracing and/or tracking inventory even when inventory is changing locations;
- · Safety stock;
- · Inventory levels; and
- Managing inventory with volume considerations in containers or boxes.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Arrangement for effecting co-operative working between equipment consisting of a wireless interrogation device in combination with a device for optically marking the record carrier	G06K 17/0022
Image or video recognition or understanding, context or environment of the image, surveillance or monitoring of activities	G06V 20/52
Healthcare informatics relating to drugs or medications delivered from dispensers	G16H 20/13
Wireless communication networks specially adapted for particular environments for the management of goods or merchandise	<u>H04W 4/35</u>

G06Q 10/08772

{Inventory counting methods}

Definition statement

This place covers:

ICT specially adapted for inventory counting. The following subjects are therefore covered, the list being non-exhaustive:

- · Cycle counts of inventory;
- · Accurate counting or checking methods of inventory;
- · Managing workers and/or consumers to assist with inventory counting; and
- Inventory counting relative to various concerns or categories, e.g. location, timestamps, orders or sales.

G06Q 10/08774

{using consumer inventory reporting}

Definition statement

This place covers:

ICT specially adapted for consumer inventory monitoring or reporting. The special adaptation here is focused on the inventory belonging to the consumer or located at one or more consumer locations. The following subjects are therefore covered, the list being non-exhaustive:

- Reporting or monitoring items in consumer or household closets or pantries:
- Reporting or monitoring items in consumer or household refrigerators; and
- · Reporting or monitoring household consumables, e.g. food, groceries, cleaning supplies, toiletries.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Electronic shopping, item recommendations based on usage history	G06Q 30/0631
Dedicated interfaces to print systems, facilitating error detection of consumables depleted	G06F 3/121

G06Q 10/08776

{by management of storage life of perishable or hazardous products}

Definition statement

This place covers:

ICT specially adapted for management of inventory considering the storage life of perishable or hazardous inventory.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT specially adapted for shipping with special handling procedures, e.g. fragile goods	G06Q 10/0832
Data loggers attached to transport containers for perishable products	G01D 9/007

G06Q 10/08778

{for managing mis-shipments, lost items or stolen goods}

Definition statement

This place covers:

ICT specially adapted for inventory reporting for managing mis-shipments, lost items, stolen goods or adulteration of goods.

References

Informative references

Burglar, theft or intruder alarms by electrical actuation by interference	G08B 13/2402
with electromagnetic field distribution of electronic article surveillance for	
detecting removal of a tagged item for a secure area	

Office automation; Time management

Definition statement

This place covers:

Office automation; human resources in the sense of employee administration, contracts, reporting, job applications, etc.; office software especially for collaborative work (groupware) for instance for the electronic equivalent of an office paper flow (drafting, approval, archival).

The following subjects are therefore covered, the list being non-exhaustive:

- Automation of office environment, e.g. Document production/workflow using computers or use of standard clauses;
- Automation of contracts, patent applications or insurance policies;
- · Processing of claims for an insurance;
- Collaborative creation, e.g. joint development of products or services;
- · Version control of documents;
- · Human resources.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT specially adapted for the business sector of legal services	G06Q 50/18
File sharing support within file systems	G06F 16/176
File systems types; versioning file systems	G06F 16/1873
Document management systems	G06F 16/93
Version control of natural language text processing	G06F 40/197
User-to-user messaging in packet-switching networks, transmitted according to store-and-forward or real-time protocols, e.g. e-mail	H04L 51/00

G06Q 10/101

Collaborative creation, e.g. joint development of products or services

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for initial conceptual development, through cooperation between plural parties, e.g. brainstorming, idea development, of a commodity or of work that can be performed for another.

{Workflow collaboration or project management}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the routing or approving of projects between workforce units or for organising and managing of resources, e.g. people, in such a way that a planned undertaking is completed within defined scope, quality, time and cost constraints.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Operations	research	analysis	٥r	management
Operations	research.	anaivsis	UΙ	manauement

G06Q 10/063

G06Q 10/105

Human resources

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for keeping of records, e.g. benefits, of the departments or employees of an organisation or hiring of employees.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Performance of employee with respect to a job function, e.g. evaluations	G06Q 10/06398
such as end of year reviews	

G06Q 10/1053

Employment or hiring

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for engaging the services of a person or persons for wages or other payment either directly or through a third party.

References

Informative references

Scheduling, planning or task assignment for a person or group	G06Q 10/06311
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G06Q 10/1057

Benefits or employee welfare, e.g. insurance, holiday or retirement packages

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the maintenance, regulation or the monitoring of non-monetary employment compensation provided to employees by an organisation, e.g. health insurance, leave or retirement.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Insurance G060

G06Q 10/107

Computer-aided management of electronic mailing [e-mailing]

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for document workflow and groupware based upon e-mail, computer aided management of electronic mail (essentially on the client side).

The following subjects are therefore covered, the list being non-exhaustive:

- automation of office environment, e.g. document workflow using message-based systems (e-mails);
- archiving of e-mails for administrative purpose;
- automation of e-mail processing (essentially on the client side), messaging, spam filtering, actions performed before receiving or after sending e-mails.

References

Informative references

User-to-user messaging in packet-switching networks, transmitted according to store-and-forward or real-time protocols; Monitoring or handling of messages	H04L 51/21
User-to-user messaging in packet switching networks, mailbox-related details	H04L 51/42
Network architectures or network communication protocols for network security	H04L 63/00
Network arrangements, protocols or services for supporting real-time applications in data packet communication	H04L 65/00
Network arrangements or protocols for supporting network services or applications	H04L 67/00

G06Q 10/109

Time management, e.g. calendars, reminders, meetings or time accounting

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for management of appointments, e.g. calendars, reminders, meetings or time accounting.

The following subjects are therefore covered, the list being non-exhaustive:

- Appointment management, e.g. indicating available time slot, computer assistants, reminders, meetings;
- · Electronic business cards:
- GUI particularly adapted for processing calendars and appointments.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Digital computers in general manually operated with input through	G06F 15/0266
keyboard and computation using a built-in program adapted to a specific	
application for time management, e.g. calendars, diaries	

G06Q 10/1091

Recording time for administrative or management purposes

Definition statement

This place covers:

Special adaptations of time recording for administrative or management purposes. Subject matter includes analysis or allocation of time worked by an individual.

For example, this includes time management in businesses, e.g. monitoring working time or billable hours or time management in an enterprise environment, e.g. monitoring billable hours or working time accounting for employees.

Relationships with other classification places

Time recording is to be understood here from an application perspective in this group, e.g. recorded time used for management purposes. Group <u>G07C 1/00</u> covers time registers, i.e. devices for time recording.

References

Informative references

Editing natural language text within of spreadsheets	G06F 40/18
Devices for registering, indicating or recording the time of events or elapsed time, e.g. time-recorders for work people	G07C 1/00

G06Q 10/1093

Calendar-based scheduling for persons or groups

Definition statement

This place covers:

Information and communication technology [ICT] specially for the creation or maintenance of a list or schedule of planned events or activities giving dates and details which is used by an individual or group for planning or assigning a time and optionally a place for meetings, appointments or tasks.

Calendar-based systems that allow the client or the business entity to schedule appointments in a place of business are classified herein.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT specially adapted for reservations, e.g. for tickets, services or events	G06Q 10/02
ICT specially adapted for schedule adjustment for a person or group	G06Q 10/063116
	G06F 15/02, G06F 15/0266

G06Q 10/1097

{using calendar-based scheduling for task assignment}

Definition statement

This place covers:

Subject matter drawn to a computerised calendar-based operation used by an individual or group for determining the availability of a person or group for a task, or for assigning a time or a place for a task.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Scheduling /planning in association with a business operation G06Q 10/0631

G06Q 10/20

Administration of product repair or maintenance

Definition statement

This place covers:

Subject matter drawn to a computerised arrangement for the development or the utilization of a system for notifying the customer of servicing which is due on his product or to the tracking or monitoring of services performed on a product, e.g. car maintenance.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Monitoring or controlling charging stations for electric vehicles	B60L 53/60
Trackside diagnosis or maintenance for railway traffic	B61L 27/50
Monitoring parameters of shipping vessels for controlling operation, e.g. for determining maintenance schedule	B63B 79/40
Maintaining or repairing aircraft	B64F 5/40
Maintenance or repair of elevators	B66B 5/00
Maintenance or repair of wind motors	F03D 80/50
Testing or monitoring of control systems; response to fault detection; Predictive maintenance	G05B 23/0283
Maintenance of databases	G06F 16/21
Registering or indicating the working of vehicles	G07C 5/00
ICT specially adapted for the management of repair or maintenance for medical devices and equipment	G16H 40/00
Maintenance of data switching networks	H04L 41/00

G06Q 10/30

Administration of product recycling or disposal

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the creation or maintenance of a system for taking used or waste commodities and either (1) treating or processing them so as to make them suitable for reuse; or (2) getting rid of them.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Vehicles particularly adapted for collecting refuse	B65F 3/00
Systems for rewarding return of articles	G07F 7/00

G06Q 20/00

Payment architectures, schemes or protocols (apparatus for performing or posting payment transactions <u>G07F 7/08</u>, <u>G07F 19/00</u>; electronic cash registers <u>G07G 1/12</u>)

Definition statement

This place covers:

Data processing systems or processes, i.e. information and communication technology [ICT], specially adapted to implement procedures for fulfilling a financial obligation or debt.

Definition statement

Complete systems involving payment protocols, e.g.:

- · using electronic money systems;
- payment protocols for electronic shopping systems;
- payment protocols involving point-of-sale devices [POS];
- payment protocols involving a telephone service provider;
- · payment protocols for billing systems;
- payment protocols involving IC cards, magnetic cards, electronic wallets, or electronic money safe;
- payment protocols using wireless devices, e.g. mobile phones;
- · payment aspects of banking applications;
- · complete pre-payment systems;
- · secured payment transactions.

Relationships with other classification places

This group covers "payment protocols" with the meaning explained in the Glossary below.

It does not cover the generic network protocols, e.g. Internet protocols, which are instead classified in <u>H04L 9/40</u>, but it covers those network/secure protocols specially adapted for payments, which may be of lower layer or be security oriented.

References

Limiting references

This place does not cover:

Apparatus for performing or posting payment transactions	G07F 7/08, G07F 19/00
Electronic cash registers	G07G 1/12

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Billing or payment related to telephone services	H04M 15/00
Billing or payment related to wireless services	H04W 4/24

Informative references

Data processing, i.e. information and communication technology [ICT], specially adapted for the specific activities for which the payment is required but not relating to the payment itself	G06Q 10/00, G06Q 99/00
Billing, shopping or e-commerce per se	G06Q 30/00
Security arrangements for protecting computers, components thereof, programs or data against unauthorised activity	G06F 21/00
Mechanisms actuated by coded identity card, credit card or IC card	G07F 7/08
Secret or secure communication, e.g. by cryptography	H04L 9/00
Network architectures or network communication protocols for network security	H04L 63/00
Wireless security arrangements; Authentication; Protecting privacy or anonymity	H04W 12/00

Special rules of classification

G06Q 20/02:

Subject matter drawn to an arrangement in which the involvement of a neutral third party is essential to implementing a payment protocol.

G06Q 20/04:

Subject matter drawn to the means with which payment is realised, e.g. cheques, electronic tickets, ecash.

G06Q 20/08:

Subject matter drawn to the infrastructure, or the configuration of systems and devices, involved in a payment procedure.

G06Q 20/22:

Subject matter drawn to the arrangement of a payment concept, e.g. peer-to-peer, multiple accounts, pay after, pay now, pay before, micropayments.

G06Q 20/30:

Subject matter drawn to payment protocols that are characterised by the use of specific devices.

G06Q 20/38:

Subject matter drawn to the steps involved in a payment protocol, e.g. authorising a payment or confirming the validity of a proposed transaction before realising it.

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Payment protocol	A procedure that allows executing a payment between a merchant, a bank, a user and sometimes a third party; the procedure usually including authorization and authentication of all parties involved.
Electronic wallet	A software application managing all kind of personal information, e.g. data for completing online forms. This term is often used to indicate an electronic purse (see below).
Electronic purse	A software application managing electronic currency.

Synonyms and Keywords

In patent documents, the word/expression in the first column is often used instead of the word/expression in the second column, which is used in the classification scheme of this place:

tokens	electronic currency
virtual money	electronic currency
electronic money	electronic currency

involving a neutral party, e.g. certification authority, notary or trusted third party [TTP]

Definition statement

This place covers:

The involvement of a neutral third party is an essential aspect of the payment protocol and it serves to coordinate the payment protocol.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Insuring higher security of transaction involving key management	G06Q 20/3829
Security arrangements for protecting computers or computer systems against unauthorised activity	G06F 21/00
Arrangements for secure communication	H04L 9/00

Special rules of classification

In case the third party manages the encryption keys, both the present group and G06Q 20/3829 should be allocated.

G06Q 20/023

{the neutral party being a clearing house}

Definition statement

This place covers:

Automated Clearing House (ACH) is accepted as a trusted authority for the bundling of payments between banks or payment authorities.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Finance	G06Q 40/02
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Special rules of classification

If the Administration and Accounting of the Banking is managed by the Automated Clearing House, $\underline{\text{G06Q 40/02}}$. If the Payment is managed, $\underline{\text{G06Q 20/023}}$.

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

ACH (Automated Clearing House)	A system, e.g. of the U.S. Federal Reserve Bank, that provides electronic funds transfer (EFT) between banks. It is used for all kinds of fund transfer transactions, including direct deposit of paychecks and monthly debits for routine payments to vendors. The ACH is separate and distinct from the various bank card networks that process credit card transactions. ACH operations are done in a batch mode, which can take up to 72 hours before the money is actually transmitted. A return notification is sent if there
	money is actually transmitted. A return notification is sent if there are insufficient funds in the account.

G06Q 20/027

{involving a payment switch or gateway}

Definition statement

This place covers:

Subject matter wherein the transfer of funds or payment due includes a communication node connecting two different financial networks.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Information security in computers or digital processing system	G06F 21/00
Cryptographic mechanisms or cryptographic; arrangements for secret or secure communications; Network security protocols	H04L 9/00
Network architectures or network communication protocols for network security	H04L 63/00
Network arrangements, protocols or services for supporting real-time applications in data packet communication	H04L 65/00
Network arrangements or protocols for supporting network services or applications	H04L 67/00

G06Q 20/04

Payment circuits

Definition statement

This place covers:

Subject matter the means with which payment is realised, e.g. cheques, electronic tickets, e-cash.

References

Informative references

Micropayments G06Q 20/29

{characterized in that the payment protocol involves at least one cheque}

Definition statement

This place covers:

Any payment scheme which requires a payment cheque.

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Cheque	A cheque (or check in US English) is a document or instrument (usually a piece of paper) that orders a payment of money from a bank account. The person writing the cheque, the drawer, usually has a current account (British and HK), or checking account (US), or chequing account (CAN) where the money was previously deposited. The drawer writes the various details including the money amount, date, and a payee on the cheque, and signs it, ordering their bank, known as the drawee, to pay that person or company the amount of money stated.
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G06Q 20/0425

{the cheque being electronic only}

Definition statement

This place covers:

Payment schemes in which (at least for a part of the procedure) the cheque is in electronic form, e.g. as an image.

G06Q 20/045

{using payment protocols involving tickets}

Definition statement

This place covers:

Payment schemes in which a ticket is defining rights such as access rights or payment rights e.g. payment done.

References

Informative references

Dispensing of tickets in paper form	G07F 17/42

{the tickets being sent electronically}

Definition statement

This place covers:

Payments by means of tickets sent in an electronic form.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Electronic wallets containing money units or electronic purses	G06Q 20/36
Dispensing of the physical ticket per se	G07F 17/42

G06Q 20/047

{using payment protocols involving electronic receipts}

Definition statement

This place covers:

Payments using an electronic form of a proof of payment.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Receipt generation and printing in a POS environment	G07G 5/00
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G06Q 20/06

Private payment circuits, e.g. involving electronic currency used among participants of a common payment scheme

Definition statement

This place covers:

Payment protocols for executing payments using rules defined, agreed and shared by all members within a private group of participants.

G06Q 20/065

{using e-cash}

Definition statement

This place covers:

Payments by means of electronic cash.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Cards having a counter for counting units for a specific purpose, e.g.	G06Q 20/34
copier cards	

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

E-cash	Discrete units or amounts of electronic currency which have a
	value by themselves and can be exchanged on a per-unit basis.

G06Q 20/0652

{e-cash with decreasing value according to a parameter, e.g. time}

Definition statement

This place covers:

Payments using e-cash of which the value decreases or changes according to a parameter, e.g. time.

G06Q 20/0655

{e-cash managed centrally}

Definition statement

This place covers:

Payment system where all transactions using e-cash are centrally monitored and checked.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Keeping log of transaction for guaranteeing non-repudiation of a	G06Q 20/389
transaction, e.g. notarization	

G06Q 20/0658

{e-cash managed locally}

Definition statement

This place covers:

Payment system where the bookkeeping of the e-cash is managed locally.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Using electronic wallets or electronic money safes	G06Q 20/36
Storing of e-cash on a card	G07F 7/08

G06Q 20/08

Payment architectures

Definition statement

This place covers:

Subject matter drawn to the infrastructure, or the configuration of systems and devices, involved in a payment procedure.

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Architecture	The configuration of systems and devices involved or used for
	implementing the payment protocol.

G06Q 20/085

{involving remote charge determination or related payment systems}

Definition statement

This place covers:

The determination at a remote vendor site of a payment due or a transfer of funds from a buyer to a remote vendor.

References

Informative references

Bill distribution or payment absent cryptography	G06Q 20/102
Payment protocols and concepts for insuring higher security e.g. encryption	G06Q 20/382
Electronic shopping absent encryption	G06Q 30/0601 - G06Q 30/08
Usage or charge determination of a protected distributed data file	G06Q 2220/12, G06Q 2220/127
Charging or billing for use of a telecommunication network based on a metering of data flow	H04L 12/14

{involving a third party}

Definition statement

This place covers:

Payment schemes in which a third party (neutrality is not mandatory) is essential to the remote charging.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

If the third party may be considered trusted or neutral and it is contributing to the inventive nature or the business functionalities of the scheme	G06Q 20/02
Usage or charge determination of a protected distributed data file involving a third party for collecting or distributing payments	G06Q 2220/123

G06Q 20/10

specially adapted for electronic funds transfer [EFT] systems; specially adapted for home banking systems

Definition statement

This place covers:

The implementation of payment protocols for the explicit user initiated fund transfers from one account to another account such as in home banking systems.

In this group, the term EFT is understood to include credit transactions.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Electronic payment protocols which by definition always involve some	G06Q 20/12 -
form of electronic fund transfer	G06Q 20/425

G06Q 20/102

{Bill distribution or payments}

Definition statement

This place covers:

Generating notices of payment due, or transferring funds in response thereto.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Subject matter particularly adapted for health insurance claims or payments	G06Q 10/10
Remote charge determination or payment system	G06Q 20/085
Payment architectures specially adapted for billing systems	G06Q 20/14
Bill or invoice establishment and accounting	G06Q 30/04

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Bill	In this field, bill means an "invoice", not a "banknote".
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G06Q 20/105

{involving programming of a portable memory device, e.g. IC cards, "electronic purses"}

Definition statement

This place covers:

User operated arrangement for programming an object having a value carrying memory, e.g. an ATM card, prior to use, with details of the desired transaction.

Such cards usually include an integrated circuit (IC) element, and are often referred to as "smart cards".

Included herein is a transaction specific card preprogramming arrangement.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Personalisation of IC cards for use	G06Q 20/355
Using electronic wallets or electronic money safes	G06Q 20/36
Cryptographic secure transaction including intelligent token	G06Q 20/367- G06Q 20/3678
Structural arrangements for semiconductor devices not otherwise provided for	H01L 23/58

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Electronic purses	Devices containing units of e-cash
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{Remote banking, e.g. home banking}

Definition statement

This place covers:

Arrangements for effecting the custody, loan, exchange, or issue of money for the extension of credit or for facilitating the transmission of funds from a computer at a location geographically spaced apart from a banking establishment.

Such a computer may be located in a user's residence or place of business.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Point of sale terminal requiring authorization or authentication	G06Q 20/206
Centrally controlled vending system	G07F 9/002
Record-sensing device in combination with a system that maintains financial accounts, i.e., banking system	G07F 19/00

G06Q 20/1085

{involving automatic teller machines [ATMs]}

Definition statement

This place covers:

Payments protocols which involve an ATM (in particular for EFT and banking payment transactions).

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Payment settlements involving self-service terminals [SSTs] vending machines, kiosks, or multimedia terminals	G06Q 20/18
Details of Automatic Teller Machines (ATM) as participating in a complete banking system or by themselves	G07F 19/20

G06Q 20/12

specially adapted for electronic shopping systems

Definition statement

This place covers:

Implementation of payment protocols for electronic shopping.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Ordering features of the electronic shopping procedure, in which the payment details have no technical merit or inventive contribution	G06Q 30/00
Point of Sale terminal (POS) or Electronic Cash Register (ECR)	G07G 1/00

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Electronic shopping from a personal computer device and not requiring a Point of Sale terminal (POS) or Electronic Cash
Register (ECR)

G06Q 20/123

{Shopping for digital content}

Definition statement

This place covers:

Payments for data files e.g. films, audio, pictures, software.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Payment and shopping for Digital Content in which any form of control on	G06Q 20/1235
the data rights management is required	

G06Q 20/1235

{with control of digital rights management [DRM]}

Definition statement

This place covers:

- Payment for Digital Content with Digital Rights Management [DRM], e.g. buying and selling content, license, contract or agreement management.
- Determining funds owed or to be paid for use of content; exchanging funds or other considerations for use of content; identifying and/or preventing illegal or impressible use of content.

References

Informative references

Electronic shopping	G06Q 30/0601
Security arrangements for protecting computers, components thereof, programs or data against unauthorised activity	G06F 21/00

Protecting distributed programs or content, e.g. vending or licensing of copyrighted material	G06F 21/10
Secret or secure communication, e.g. by cryptography	H04L 9/00
Protecting information, e.g. digital content from access by third parties, e.g. by encryption	H04L 63/00
Wireless security arrangements; Authentication; Protecting privacy or anonymity	H04W 12/00

Synonyms and Keywords

In patent documents, the following words/expressions are often used with the meaning indicated:

[DRM]	Concepts commonly used in relation to DRM are e.g. watermarking, biometrics, identifiers, cryptography, rights, dongles
	within a business or commercial framework

G06Q 20/127

(Shopping or accessing services according to a time-limitation)

Definition statement

This place covers:

Payments for billed time-usage or access permitted to service or object for a limited defined time, e.g. streaming video.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Payments according to the detected use or quantity	G06Q 20/145
Payment activated dispensing of liquids such as drinks or in petrol stations	G07F 13/00
Payment activated providing of facilities, such as gas, electricity	G07F 15/00
Charging or billing for use of a telecommunication network based on a metering of data flow	H04L 12/14

G06Q 20/14

specially adapted for billing systems

Definition statement

This place covers:

Protocols for the payment of bills.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Payment architectures involving remote charge determination or related payment systems	G06Q 20/085
Bill distribution or payments	G06Q 20/102
Accounting and bill establishment	G06Q 30/04

G06Q 20/145

{Payments according to the detected use or quantity}

Definition statement

This place covers:

Dispensed quantity or service provided metered in another way than by time-metering.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Shopping or accessing services according to a time-limitation	G06Q 20/127
Payment activated dispensing of liquids such as drinks or in petrol stations	G07F 13/02
Payment activated providing of facilities such as gas, electricity	G07F 15/00
Charging or billing for use of a telecommunication network based on a metering of data flow	H04L 12/14

G06Q 20/16

Payments settled via telecommunication systems

Definition statement

This place covers:

Payment protocols in which payments are settled by the telecommunication provider which serves as payment aggregator.

References

Informative references

Payments using a wired telephone network to facilitate payment	G06Q 20/305
Rating, charging or billing services for wireless communication networks, e.g. rating or charging for added value services, insofar as these services are billed by the network operator	

involving self-service terminals [SST], vending machines, kiosks or multimedia terminals

Definition statement

This place covers:

Payment protocols for payments made from Self-Service Terminals (SSTs) or for services provided by SSTs.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Details of the type of SST corresponding to the type of device, e.g. for	G07F 19/00,
ATMs	G06Q 20/1085,
	<u>G07F 9/00</u> - <u>G07F 17/00</u>

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Self Service Terminal (SST)	In particular also ATMs (Automatic Transaction/Teller Machines),
	which are also used for additional functions

G06Q 20/20

Point-of-sale [POS] network systems

Definition statement

This place covers:

Implementation of payment protocols for payments made by means of a POS or ECR (or Vending machine or Dispenser serving as POS device) within a network.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Aspects specific and essential to POS or ECR devices and terminals	G07G 1/12
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Special rules of classification

Data processing of payment transactions by means of such an apparatus or device are classified in $\underline{\text{G06Q 20/20}}$. In particular POS network systems are classified in $\underline{\text{G06Q 20/20}}$.

Synonyms and Keywords

In patent documents, the following abbreviations are often used:

ECR	Electronic Cash Register
POS	Point of Sale

{Price look-up processing, e.g. updating}

Definition statement

This place covers:

Subject matter including a feature of a memory or file arrangement for looking up the price of an item being purchased where an item designator is entered into the terminal.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

PLU tables in use by Electronic Cash Register (ECR) or Point of Sale	G07G 1/145
Terminal (POS)	

G06Q 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}

Definition statement

This place covers:

Subject matter wherein two or more spaced apart electronic cash registers (ECR) are connected for cooperation there-between; or a connection to an ECR is connected for cooperation with a host computer spaced apart there-from. The ECRs are most often connected in a network configuration.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Network for electronic funds transfer not claiming an electronic cash register or point of sale terminal	G06Q 20/10
Computer network of general utility	G06F 15/173
Centrally controlled vending systems	G07F 9/002
Features of the POS apparatus per se	G07G 1/12, G07G 1/145

G06Q 20/203

{Inventory monitoring}

Definition statement

This place covers:

Inventory monitoring within POS network systems.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Inventory or stock management	G06Q 10/00
Automated inventory management organisation not combined with a cash register or sales terminal	G06Q 10/087
Inventory for vending machines and dispensers	G07F 9/026

G06Q 20/204

{comprising interface for record bearing medium or carrier for electronic funds transfer or payment credit}

Definition statement

This place covers:

Payments by means of POS including an arrangement for reading a customer associated payment effecting data bearing medium or carrier.

Such a data bearing medium is intended to include a credit card, debit card or a value bearing ticket.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Payments characterised by the use of cards	G06Q 20/34
Card readers per se	G06K 7/00
Details of card readers used for payment purposes	G07F 7/0873
Cash register with a detail of record sensing control	G07G 1/00

G06Q 20/206

{comprising security or operator identification provisions, e.g. password entry}

Definition statement

This place covers:

Use of the point-of-sale device is dependent upon the identification of the user, possibly by user ID card, e.g. waiter key. The user is not limited to the operator of the point-of-sale device and can also include the customer.

References

Informative references

Funds transfer system requiring authorisation or authentication	G06Q 20/40
User authentication	G06F 21/31
Card payment apparatus involving password entry	G07F 7/10

Informative references

Cryptography, secure or secret communication using a predetermined code, e.g. password, passphrase or PIN	H04L 9/3226
Network architectures or network communication protocols for supporting authentication of entities using passwords	H04L 63/083
Authentication using credential vaults, e.g. password manager applications or one-time password [OTP] applications	H04W 12/068

G06Q 20/207

{Tax processing}

Definition statement

This place covers:

Subject matter in which the sales terminal system computes tax on the transaction.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Financial accounting; calculating earned income, interest, insurance, premium, taxes	G06Q 40/02
Tax preparation or submission system other than a part of a cash register or a sales terminal	G06Q 40/123

G06Q 20/208

{Input by product or record sensing, e.g. weighing or scanner processing}

Definition statement

This place covers:

Payment by means of a POS where the sales information is input by sensing a property of the product being purchased or a record attached thereto.

References

Informative references

Computerised weighing scale which also computes price	G01G 19/414
Coherence check of registered article data with parameters memorised for article	G07G 1/0054

{Specified transaction journal output feature, e.g. printed receipt or voice output}

Definition statement

This place covers:

Payment by means of a POS where a journal or transaction data overview is output.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Payment protocols involving a ticket, being an electronic receipt	G06Q 20/047
Cryptographic secure transaction verification	G06Q 20/401
Printing of receipt or journal of an ECR	<u>G07G 5/00</u>

G06Q 20/22

Payment schemes or models

Definition statement

This place covers:

Subject matter drawn to the arrangement of a payment concept, e.g. peer-to-peer, multiple accounts, pay after, pay now, pay before, micropayments.

G06Q 20/223

{based on the use of peer-to-peer networks}

Definition statement

This place covers:

Payments involving peer-to-peer networks with no participation of a third party.

G06Q 20/227

{characterised in that multiple accounts are available, e.g. to the payer}

Definition statement

This place covers:

During payment transaction, payer has the possibility to choose between multiple of his/her accounts for use during the transaction.

References

Informative references

Standard payments from any account to any account (where the	G06Q 20/10
"multiple" accounts each belong to a different party in the payment)	

Cards with multiple accounts	G06Q 20/3572
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{Hierarchy of users of accounts}

Definition statement

This place covers:

Payment accounts used by different users, with payment accounts having use rights particular to each user or a hierarchy of use-rights.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Payments schemes where the payer has access to multiple accounts	G06Q 20/227
Downloading or loading of personalisation data onto card	G06Q 20/3552
Establishing and using transaction specific rules, e.g. to automatically select a preferred account	G06Q 20/405
Tools and structures for managing or administering access control systems	G06F 21/604

G06Q 20/2295

{Parent-child type, e.g. where parent has control on child rights}

Definition statement

This place covers:

Payment accounts having parent-child type hierarchy of use-rights, where a parent user decides on the use conditions of the payment accounts applying to one or more dependent persons.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Establishing and using transaction specific rules, e.g. to automatically	G06Q 20/405
select a preferred account	

G06Q 20/24

Credit schemes, i.e. "pay after"

Definition statement

This place covers:

Implementation of protocols in which payment according to a pay-later, credit card or deferred payment scheme is an essential aspect contributing to the inventive concept or technical merit of the protocol.

Debit schemes, e.g. "pay now"

Definition statement

This place covers:

Implementation of protocols in which payment according to a pay-now, debit card or immediate payment scheme is an essential aspect contributing to the inventive concept or technical merit of the protocol.

G06Q 20/28

Pre-payment schemes, e.g. "pay before"

Definition statement

This place covers:

Implementation of protocols in which payment according to a pay-before or advance payment scheme is an essential aspect contributing to the inventive concept or technical merit of the protocol.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Cards defining paid	or billed services or o	quantities, pre-paid cards

G06Q 20/342

G06Q 20/29

{characterised by micropayments}

Definition statement

This place covers:

Payment schemes which include the use of micropayments or multiple small payments which get bundled and paid as a total of multiple micropayments, e.g. used for getting access to video, audio files or information.

G06Q 20/30

characterised by the use of specific devices {or networks}

Definition statement

This place covers:

Subject matter drawn to payment protocols using specific devices. This group and its subdivisions are based on details of the protocol based on the type of hardware used.

This group covers details of hardware used as a part of the protocol for the payment to be realised.

References

Informative references

Contactless cards	G06K 19/07
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Informative references

Electronic card	G06K 19/0723
Constructional details of contactless cards	G06K 19/07743

G06Q 20/305

{using wired telephone networks}

Definition statement

This place covers:

Payments where the wired telephone network plays an essential role in the transaction.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Payments settled via telecommunication systems	G06Q 20/16
Charging or billing for use of a telecommunication network based on a metering of data flow	H04L 12/14

G06Q 20/306

{using TV related infrastructures (external card used for payment with client device H04N 21/4185)}

References

Limiting references

This place does not cover:

External card used for payment with client device	H04N 21/4185

Informative references

Attention is drawn to the following places, which may be of interest for search:

Selling goods on TV	H04N 21/2542
Billing for subscription services	H04N 21/2543
Third party billing, e.g. advertiser	H04N 21/2547

G06Q 20/32

using wireless devices

Definition statement

This place covers:

Payment architectures, schemes or protocols characterised by the use of specific wireless devices.

The following are examples of the subject-matter covered by this group:

• payment transactions that are approved by using a mobile phone;

Definition statement

- payment transactions whereby a mobile phone replaces a credit card or stored value card;
- authorisations for payments by a mobile phone;
- banking transactions using a mobile phone.

Relationships with other classification places

Group G06Q 20/32 relates to the use of specific wireless devices for payment architectures, schemes or protocols.

Group <u>H04W 4/24</u> relates to rating, charging or billing services for wireless communication networks. This includes rating/charging for added value services, m-commerce, payment transactions using prepaid calling cards, SIM cards or the mobile phone itself, insofar as these services are billed by the network operator.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Use of the wireless network for the execution of the banking transaction or payment protocol	G06Q 20/325
Arrangements for metering, time-control or time-indication	H04M 15/00
Prepayment telephone systems	H04M 17/00
Accounting or billing of mobile application services or facilities	H04W 4/24

G06Q 20/322

{Aspects of commerce using mobile devices [M-devices]}

Definition statement

This place covers:

General details of payments by means of mobile apparatuses.

G06Q 20/3221

{Access to banking information through M-devices}

Definition statement

This place covers:

Banking information presentation by means of M-devices.

References

Informative references

Remote banking, e.g. home-banking	<u>G06Q 20/108</u>
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{Realising banking transactions through M-devices}

Definition statement

This place covers:

Banking transactions processed and realised by means of M-devices.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Remote banking, e.g. home-banking	G06Q 20/108

G06Q 20/3224

{Transactions dependent on location of M-devices}

Definition statement

This place covers:

Location of the mobile device used plays an essential role in executing or authorising a payment transaction.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Services making use of location of users or terminals <u>H04W 4/02</u>
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G06Q 20/3226

{Use of secure elements separate from M-devices}

Definition statement

This place covers:

Security aspects used during payments executed by an M-device are reliant on a secure element which does not form part of, or is not installed in the M-device, i.e. not the SIM or USIM.

References

Informative references

If the secure element is installed or embedded in the M-device	G06Q 20/3227
If the secure element is the SIM or USIM	G06Q 20/3229
Payments by additional cards plugged into M-devices	G06Q 20/353

{using secure elements embedded in M-devices}

Definition statement

This place covers:

Security aspects used during payments executed by an M-device are reliant on a secure element which does form part of, or is installed in the M-device.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

If the secure element is not installed or embedded in the M-device	G06Q 20/3226
If the secure element is the SIM or USIM	G06Q 20/3229
Payments by additional cards plugged into M-devices	G06Q 20/353

G06Q 20/3229

{Use of the SIM of a M-device as secure element}

Definition statement

This place covers:

Security aspects used during payments executed by an M-device are reliant on a secure element which forms part of the SIM or USIM.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

If the secure element is not installed or embedded in the M-device	G06Q 20/3226
If the secure element is installed or embedded in the M-device	G06Q 20/3227
Payments by additional cards plugged into M-devices	G06Q 20/353
Authentication in networks using a SIM	H04L 63/0853

G06Q 20/325

{using wireless networks}

Definition statement

This place covers:

Use of the wireless network forms an essential part of the execution of the banking transaction or payment protocol.

Informative references

Attention is drawn to the following places, which may be of interest for search:

If use of the wireless device forms an essential part of the execution of the banking transaction or payment protocol	G06Q 20/32
If the wireless network is used for communicating confirmation information relating to a transaction attempted via another telecommunication network, or vice versa.	G06Q 20/425

G06Q 20/3255

{using mobile network messaging services for payment, e.g. SMS}

Definition statement

This place covers:

Communication via a wireless messaging system, e.g. SMS, MMS, USSD forms an essential part of the payment protocol.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Mobile application service signalling using SMS	H04W 4/14

G06Q 20/327

(Short range or proximity payments by means of M-devices)

Definition statement

This place covers:

Payments by means of M-device using short range or proximity communication with the transaction partner or payment terminal.

References

Informative references

Point-of-sale [POS] network systems	G06Q 20/20
Cards using contactless communication means	G06Q 20/352
Details relating to card readers reading a card in a wireless manner	G07F 7/0893
Security of mobile devices; Security of mobile applications	H04W 12/30
Security arrangements using near field communication [NFC] or radio frequency identification [RFID] modules	H04W 12/47

{using an audio code}

Definition statement

This place covers:

Short range communication protocol where the device and the transaction partner communicate using an audio communication protocol, such as DTMF.

G06Q 20/3274

{using a pictured code, e.g. barcode or QR-code, being displayed on the M-device}

Definition statement

This place covers:

Short range communication protocol using a pictured code such as a barcode or QR-code displayed on the display of the M-device and read by the transaction partner.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

When the M-device takes a photograph of the optical code	G06Q 20/3276
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G06Q 20/3276

{using a pictured code, e.g. barcode or QR-code, being read by the M-device}

Definition statement

This place covers:

Short-range communication protocol using a pictured code such as a barcode or QR code, being read by the M-device.

References

Informative references

When the M-device displays the optical code that is subsequently read by a transaction partner	G06Q 20/3274
User authentication using graphic or iconic representation	G06F 21/36
2D barcode optical code recognition	G06K 7/1417
Digital marking, e.g. shape, nature, code	G06K 19/06009
Character recognition; Recognising digital ink; Document-oriented image-based pattern recognition	G06V 30/00

{RFID or NFC payments by means of M-devices}

Definition statement

This place covers:

Payments using RFID or NFC-technology to communicate between the transaction entities.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Cards using contactless communication means	G06Q 20/352
Wirelessly communicating dongles or smart cards used for authorisation	G06F 21/35
Checkout procedures using an RFID reader	G07G 1/009

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Near field communication (NFC)	Set of standards for smartphones and similar devices to establish radio communication with each other by touching them together or bringing them into close proximity, usually no more than a few centimetres.
Radio-frequency identification (RFID)	Use of a wireless non-contact system that uses radio-frequency electromagnetic fields to transfer data, for the purposes of automatic identification.

G06Q 20/34

using cards, e.g. integrated circuit [IC] cards or magnetic cards

Definition statement

This place covers:

This group and its subdivisions concern all aspects of data processing, i.e. information and communication technology [ICT], methods and protocols used for payments by means of cards.

References

Informative references

Payment architectures involving programming of a portable memory device, e.g. IC cards, "electronic purses"	G06Q 20/105
Methods or arrangements for sensing record carriers	G06K 7/00
Record carriers with integrated circuit chips	G06K 19/07
Details of the devices used for payment as such	<u>G07F 7/00</u>

{Active cards, i.e. cards including their own processing means, e.g. including an IC or chip}

Definition statement

This place covers:

Active cards, i.e. cards containing their own processing means, are used as payment medium in the payment protocol.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Record carriers with integrated circuit chips	G06K 19/07
Use of a card together with a coded signal (PIN)	<u>G07F 7/10</u>

G06Q 20/3415

{Cards acting autonomously as pay-media}

Definition statement

This place covers:

Payment by active payment card that can execute or authenticate (part of) a payment transaction autonomously, without intervention of the payment terminal.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Details relating to displays or keyboards integrated in the card as well as	G07F 7/0806
other constructional details relating to the card	

G06Q 20/342

{Cards defining paid or billed services or quantities}

Definition statement

This place covers:

Cards defining a quantity of service or facility or objects for which the payment already took place and which the bearer has a right to access: e.g. prepaid cards, gift cards or anonymous debit cards, which are received after payment.

References

Informative references

Pre-payment protocols, i.e. "pay before"	G06Q 20/28
Cards providing billing or transaction information at the time of purchase	G07F 7/025

{Cards including a counter}

Definition statement

This place covers:

Card includes a counter or memory with discrete units of value that change by increase or decrease when the card is used.

G06Q 20/3433

{the counter having monetary units}

Definition statement

This place covers:

Card includes a counter or memory with discrete units of money or payment units that change by increase or decrease when the card is used.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Electronic currency, e-cash, electronic money	G06Q 20/06
Electronic wallets or electronic purses	G06Q 20/36

G06Q 20/3437

{the counter having non-monetary units, e.g. trips}

Definition statement

This place covers:

Card includes a counter or memory with discrete units of number of actions registered, such as number of times card is used, which can change by increase or decrease when the card is used.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Photocopier cards	G07F 17/266
1 Hotocopici caras	<u>0011 117200</u>

G06Q 20/346

{Cards serving only as information carrier of service}

Definition statement

This place covers:

Card is only used as intermediate carrier for identification data of user or for transaction data.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Payment protocols involving electronic tickets	G06Q 20/045
Cards providing billing or transaction information at the time of purchase	G07F 7/025

G06Q 20/347

{Passive cards}

Definition statement

This place covers:

Payment using passive cards, i.e. cards that do not contain their own processing means. Card usually only contains a magnetic stripe or path.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Avoiding counterfeiting of passive cards G07F 7/086	voiding counterfeiting of passive cards	G07F 7/086
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G06Q 20/348

{Single-use cards, i.e. without possibility of recharging}

Definition statement

This place covers:

Single-use value tokens or cards, which cannot be recharged.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Pre-payment protocols	G06Q 20/28
Payment protocols involving pre-paid cards	G06Q 20/342
Mechanisms operated by keys or other credit registering devices	G07F 7/02

G06Q 20/349

{Rechargeable cards}

Definition statement

This place covers:

Rechargeable tokens or cards which may be recharged or have their value updated.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Electronic currency, e-cash, electronic money	G06Q 20/06
Pre-payment protocols	G06Q 20/28
Payment protocols involving pre-paid cards	G06Q 20/342
Electronic wallets or electronic purses	G06Q 20/36

G06Q 20/351

{Virtual cards}

Definition statement

This place covers:

Virtual cards used to access accounts or effectuate payments, without the user using any physical device, i.e. no physical card or mobile phone is used, but where the virtual cards emulate all the characteristics of its 'real' counterpart.

G06Q 20/352

{Contactless payments by cards}

Definition statement

This place covers:

Cards using contactless communication protocol to communicate.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Payments using wireless devices	G06Q 20/32
Details of card readers used for payment purposes where the card is in a read contactless manner	G07F 7/0893

G06Q 20/353

{Payments by cards read by M-devices}

Definition statement

This place covers:

Cards using contactless communication protocol to communicate, where the card is plugged into an M-device, but communicates using its own contactless communication means.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Aspects of commerce using mobile device, where a secure element embedded in M-devices is used	G06Q 20/3227
Mobile devices using contactless communication means	G06Q 20/327

G06Q 20/354

{Card activation or deactivation}

Definition statement

This place covers:

Locally or remotely enabling or disabling cards or tokens, e.g. blocked when stolen or after expiration.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Enabling cards after being secured during personalization, issuing, or transport	G06Q 20/355
Active cards with means to personalize their use	G07F 7/1008

G06Q 20/355

{Personalisation of cards for use}

Definition statement

This place covers:

General aspects relating to the personalisation of payment cards before use.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Payment systems involving programming of a portable memory device	G06Q 20/105
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G06Q 20/3552

(Downloading or loading of personalisation data)

Definition statement

This place covers:

Downloading of payment applications or user-related data into or onto the card before use.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Aspects of software being resident on card as used during payment	G06Q 20/3563
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G06Q 20/3555

{Personalisation of two or more cards}

Definition statement

This place covers:

Personalisation of two or more cards or personalisation of multiple users, possibly hierarchically.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Payment scheme where multiple accounts are available to the payor	G06Q 20/227
Use of cards having multiple users	G06Q 20/229

G06Q 20/3558

{Preliminary personalisation for transfer to user}

Definition statement

This place covers:

Personalisation of payment cards before they are transferred to the user.

G06Q 20/356

{Aspects of software for card payments}

Definition statement

This place covers:

Details relating to software used to execute card payments.

G06Q 20/3563

{Software being resident on card}

Definition statement

This place covers:

Details relating to the software residing on the (active) payment card, which plays a part in execution of the payment transaction.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Programming of a portable memory device, e.g. IC cards	G06Q 20/105
Downloading or loading of personalisation data onto card	G06Q 20/3552

G06Q 20/3567

{Software being in the reader}

Definition statement

This place covers:

Details relating to the software residing on the card reader used in a card payment and which plays a part in execution of the payment transaction.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Methods or arrangements for reading record carriers	G06K 7/00
Details of card readers used for payment purposes	G07F 7/0873

G06Q 20/357

{Cards having a plurality of specified features}

Definition statement

This place covers:

Cards having a multitude of a specific feature.

G06Q 20/3572

{Multiple accounts on card}

Definition statement

This place covers:

Token or card that can be used to execute payment from a multitude of payment accounts.

References

Informative references

Payments schemes where the payer has access to multiple accounts	G06Q 20/227
Downloading or loading of personalisation data onto card	G06Q 20/3552
Establishing and using transaction specific rules, e.g. to automatically select a preferred account	G06Q 20/405

{Multiple applications on card}

Definition statement

This place covers:

Cards which store or accommodate a multitude of software applications to be used in a payment context.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Payments schemes where the payer has access to multiple accounts	G06Q 20/227
Downloading or loading of personalisation data onto card	G06Q 20/3552
Establishing and using transaction specific rules, e.g. to automatically select a preferred account	G06Q 20/405

G06Q 20/3576

{Multiple memory zones on card}

Definition statement

This place covers:

Memory zones on a card assigned to one or more users and /or payment related services.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Payments schemes where the payer has access to multiple accounts	G06Q 20/227
Downloading or loading of personalisation data onto card	G06Q 20/3552

G06Q 20/35765

{Access rights to memory zones}

Definition statement

This place covers:

Zone-allocation conditions and setting access conditions of zones allocated to different payment related applications and/or users of payment related applications.

References

Informative references

Protection against unauthorised access of computer memory areas in	G06F 12/14
general	

Circuits for protecting data, e.g. PIN, in a card	G06K 19/073
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using electronic wallets or electronic money safes

Definition statement

This place covers:

Aspects of the data processing method and protocols of payments by means of electronic wallets and money safes, i.e. electronic purses.

The difference between "purses" and "wallets" is that the latter are the user's complete personal data files.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Private payment circuits using e-cash, e-currency	G06Q 20/065
Details of the devices used for payment	G07F 7/00

G06Q 20/363

{with the personal data of a user}

Definition statement

This place covers:

The electronic wallet stores the personal data file of the user, i.e. all his personal and payment related information.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Payments schemes where the payer has access to multiple accounts	G06Q 20/227
Downloading or loading of personalisation data onto card	G06Q 20/3552
Establishing and using transaction specific rules, e.g. to automatically select a preferred account	G06Q 20/405

G06Q 20/367

{involving electronic purses or money safes}

Definition statement

This place covers:

Aspects of the data processing method and protocols of payments by means of intelligent tokens including money safes e.g. electronic purses.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Programming of a portable memory device, e.g. IC cards, "electronic purses"	G06Q 20/105
Point of sale device having interface for record bearing medium or carrier for electronic funds transfer or payment credit	G06Q 20/204
Cards having a counter for counting monetary units	G06Q 20/3433

G06Q 20/3672

{initialising or reloading thereof}

Definition statement

This place covers:

Subject matter wherein the intelligent token is programmed prior to use or its value bearing data is increased.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Payment protocols involving pre-paid cards	G06Q 20/342
Cards having a counter for counting monetary units	G06Q 20/3433
Rechargeable cards	G06Q 20/349
Personalisation of payment cards	G06Q 20/355

G06Q 20/3674

{involving authentication}

Definition statement

This place covers:

Payment procedures in which the authentication of the intelligent token is pertinent for the inventive concept. The token being an electronic wallet involving an electronic purse.

References

Informative references

Authorisation in payment protocols	G06Q 20/40
Security arrangements for protecting computers, components thereof, programs or data against unauthorised activity	G06F 21/00

{Balancing accounts}

Definition statement

This place covers:

Subject matter including reconciliation of cumulative transaction data or synchronising account data on the portable data carrier with corresponding data from a host.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Payment system using e-cash managed centrally	G06Q 20/0655
Cheque-book balancing	G06Q 40/128

G06Q 20/3678

{e-cash details, e.g. blinded, divisible or detecting double spending}

Definition statement

This place covers:

Subject matter including specifics of e-cash or electronic purse value data stored on the intelligent token.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Electronic currency, e-cash, electronic money	G06Q 20/06
Security arrangements for protecting computers, components thereof, programs or data against unauthorised activity	G06F 21/00

Special rules of classification

According to the method of managing the electronic cash, a classification in <u>G06Q 20/065</u>-<u>G06Q 20/0658</u> should also be assigned. If details of the storage on a card itself are of importance, classify in <u>G07F 7/08</u>.

G06Q 20/38

Payment protocols; Details thereof

Definition statement

This place covers:

Subject matter drawn to the steps involved in a payment protocol, e.g. authorising a payment or confirming the validity of a proposed transaction before realising it.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Protecting data by securing the transmission between two devices or processes	G06F 21/606
Details of the devices used for payment	<u>G07F 7/00</u>
Arrangements for secret or secure communications	H04L 9/00
Network architectures or network communication protocols for network security	H04L 63/00

G06Q 20/381

{Currency conversion}

Definition statement

This place covers:

Aspects of a payment transaction relating to currency conversion and money exchanging.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Computers for unit and currency conversion	G06F 15/0258
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G06Q 20/382

(insuring higher security of transaction)

Definition statement

This place covers:

Concepts for insuring higher security of transaction in general.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Security arrangements for protecting computers against unauthorised activity	G06F 21/00
Security aspects in data telecommunication	H04L 9/00

Special rules of classification

In case cryptography of the business transaction for shopping digital content is specially pertinent also a classification in $\underline{\text{G06Q }2220/00}$ and subgroups may be given.

{Electronic credentials}

Definition statement

This place covers:

Subject matter wherein digital data authorising a particular user to participate in a payment transaction is provided.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Use of a card together with a coded signal (PIN)	G07F 7/10
Credentials such as time stamps and certificates in telecommunication	H04L 9/32

G06Q 20/38215

{Use of certificates or encrypted proofs of transaction rights}

Definition statement

This place covers:

Use of certificates or encrypted proofs of transaction rights as payment credentials.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Security arrangements for computers using certificates	G06F 21/33
Credentials such as time stamps and certificates in telecommunication	H04L 9/32
Certificates for authentication in telecommunication networks	H04L 63/0823

G06Q 20/3823

{combining multiple encryption tools for a transaction}

Definition statement

This place covers:

Multiple forms of encryption are used throughout the payment transaction to provide further security.

References

Informative references

Use of encryption for mutual authentication	G06Q 20/40975
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{Use of electronic signatures}

Definition statement

This place covers:

Use of electronic (blind) signatures as authentication of payment or payment tokens.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Blind signatures in data telecommunication	H04L 9/32

G06Q 20/3827

{Use of message hashing}

Definition statement

This place covers:

Hash or message digest of transaction details is created and checked to ensure authenticity and integrity.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Protecting data integrity	G06F 21/00
Hashing in data telecommunication	H04L 9/32

G06Q 20/3829

{involving key management}

Definition statement

This place covers:

Management, e.g. by a certification authority, of the encryption keys used within the payment scheme.

References

Informative references

Payment scheme using neutral trusted third party, e.g. certification authority	G06Q 20/02
Computer Security	G06F 21/00
Encryption in Telecommunications	H04L 9/32, H04L 63/00

Special rules of classification

If a Trusted third party or certification authority is required, classify also in G06Q 20/02.

G06Q 20/383

{Anonymous user system}

Definition statement

This place covers:

Protection of consumer privacy during payment transaction, e.g. enabling anonymous transactions.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

If a single-use account alias or transaction code is used	G06Q 20/385
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G06Q 20/385

{using an alias or single-use codes}

Definition statement

This place covers:

An alias or single-use transaction code is used as a reference to an account or credit card number, i.e. as a substitute account number only valid for a given transaction.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Anonymous user system	G06Q 20/383
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G06Q 20/386

{using messaging services or messaging apps (using mobile network messaging services for payment, e.g. SMS G06Q 20/3255)}

References

Limiting references

This place does not cover:

Using a mobile network messaging service for payment, e.g. SMS	G06Q 20/3255
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{Payment using discounts or coupons (relating to marketing G06Q 30/02)}

Definition statement

This place covers:

Discounts or coupons used within a payment transaction.

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

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Marketing aspects of discounts or coupons	G06Q 30/02
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G06Q 20/388

{using mutual authentication without cards, e.g. challenge-response}

Definition statement

This place covers:

Mutual authentication between two parties of a payment transaction without using cards, for example, using a challenge response mechanism.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Identity check for transaction	G06Q 20/4014
Mutual authentication between card and transaction partners	G06Q 20/4097

G06Q 20/389

{Keeping log of transactions for guaranteeing non-repudiation of a transaction}

Definition statement

This place covers:

Non-repudiation of a transaction is guaranteed by a notary-like third-party keeping a log of the transaction data as proof.

References

Informative references

Payment scheme using a trusted third party (TTP)	G06Q 20/02
Electronic receipts	G06Q 20/047

Special rules of classification

If trusted third party or notary plays important role in transaction, also classify in G06Q 20/02.

G06Q 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

Definition statement

This place covers:

Specific steps of a protocol relating to authorising a payment and which define the technical contribution or inventive concept.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Active credit-cards with PIN-introduction	G07F 7/10
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G06Q 20/401

{Transaction verification}

Definition statement

This place covers:

Subject matter wherein the details of a transaction are cryptographically processed to allow subsequent confirmation thereof.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Point of sale terminal with transaction journal output	G06Q 20/209
Keeping log of transaction for guaranteeing non repudiation	G06Q 20/389
Information security in computers or digital processing systems	G06F 21/00

Special rules of classification

Cryptographic aspects of payment protocols should also be classified under $\underline{\text{G06Q 20/382}}$ and subgroups.

G06Q 20/4012

{Verifying personal identification numbers [PIN]}

Definition statement

This place covers:

Subject matter wherein the personal identification number is confirmed for transaction verification.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Point of sale network systems comprising security or user identification provision e.g. password entry.	G06Q 20/206
Authorisation details of a payment protocol.	G06Q 20/40
Identity checks in computer security	G06F 21/31
Coded identity card as such, combined with a coded signal, e.g. PIN	<u>G07F 7/10</u>
Electronic cash registers	G07G 1/12

G06Q 20/4014

{Identity check for transactions}

Definition statement

This place covers:

Verification of the identity of the payer or payee in payment procedures, not making use of biometric identity checks which is classified in <u>G06Q 20/40145</u>.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Authentication	G06F 21/30
Identity verification for access	G07C 9/00
Payment by coded identity card combined with a coded signal, e.g. PIN or biometric	G07F 7/10
Secret or secure communication including means for verifying the identity or authority of a user of the system	H04L 9/32
Authentication in networks	H04L 63/08
Wireless authentication	H04W 12/06

G06Q 20/40145

{Biometric identity checks}

Definition statement

This place covers:

Verification of the identity of the payer or payee in payment procedures, making use of biometric identity checks.

References

Informative references

User authentication using biometric data	G06F 21/32
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Payment by coded identity card combined with a coded signal, e.g. PIN or biometric	G07F 7/1008
Authentication involving biological data, e.g. fingerprint voice or retina	H04L 9/3231
Network architectures or network communication protocols for supporting authentication of entities using biometrical features	H04L 63/0861
Authentication	H04W 12/06

{involving fraud or risk level assessment in transaction processing}

Definition statement

This place covers:

Evaluating the risk of a transaction, e.g. credit card payment or fraud detection.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Credit (risk) processing or loan processing	G06Q 40/02
Insurance risk analysis	G06Q 40/08

G06Q 20/4018

{using the card verification value [CVV] associated with the card}

Definition statement

This place covers:

Using the Card/Conventional Verification Value (CVV) to verify a transaction made using the card.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Credit schemes, i.e. "pay after"	G06Q 20/24
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G06Q 20/403

{Solvency checks}

Definition statement

This place covers:

General aspects of verifying credit validity and/or solvency, without risk assessment, or system where a combination of offline and online solvency check methods are used.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Private payment circuits using e-cash, managed centrally or locally	G06Q 20/065
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Special rules of classification

If only offline or online verification is used, classify in one of the subgroups.

G06Q 20/4033

{Local solvency checks}

Definition statement

This place covers:

Verifying credit validity or solvency, without risk assessment and without connecting to a server, e.g. offline.

G06Q 20/4037

{Remote solvency checks}

Definition statement

This place covers:

Verifying credit validity or solvency, without risk assessment and with connecting to a server, e.g. online.

G06Q 20/405

{Establishing or using transaction specific rules}

Definition statement

This place covers:

Establishing and using transaction specific rules that are managed locally or remotely, that both limit the (type of) allowed transactions or select between multiple accounts, e.g. if the amount is greater than \$1,000, then use my credit account because the interest rate is lower.

References

Informative references

Payment scheme where multiple accounts are available to the payor	G06Q 20/227
Downloading or loading of personalisation data onto card	G06Q 20/3552
Cards having multiple accounts.	G06Q 20/3572

{Cancellation of a transaction}

Definition statement

This place covers:

Payment features relevant specifically to cancelled transactions, e.g. reimbursement of funds.

G06Q 20/409

{Device specific authentication in transaction processing}

Definition statement

This place covers:

Device authentication in transaction processing.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

User authentication for computer access using smart card	G06F 21/34
Program or device authentication	G06F 21/44
Payment by coded identity card combined with a coded signal, e.g. PIN or biometric	G07F 7/1008
Authentication involving additional secure or trusted devices	H04L 9/3234
Authentication arrangements for network security	H04L 63/08
Authentication	H04W 12/06

G06Q 20/4093

(Monitoring of device authentication)

Definition statement

This place covers:

Monitoring while authenticating a transaction by use of a transaction authentication number or the use of a security access module (SAM).

References

Informative references

Monitoring in computer security	G06F 21/00
Security modules in smart cards	G07F 7/0826

{using mutual authentication between devices and transaction partners}

Definition statement

This place covers:

Mutual authentication between a device identifying or held by the user and the transaction partner, e.g. terminal, with which transaction is taking place.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Mutual authentication without cards	G06Q 20/388
Cryptographic mutual authentication	H04L 9/3273
Network communication protocols for achieving mutual authentication	H04L 63/0869

Special rules of classification

Details of the devices used for card payments should also be classified in G07F 7/10.

G06Q 20/40975

{using encryption therefor}

Definition statement

This place covers:

The two parties to the transaction exchange encrypted mutual challenge-response(s) for authentication.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Combining multiple encryption tools for transaction	G06Q 20/3823

G06Q 20/42

Confirmation, e.g. check or permission by the legal debtor of payment

Definition statement

This place covers:

Specific steps of the protocol for confirming the validity of a proposed transaction before realising it, which define the technical contribution or inventive concept of the payment protocol, also including parent/child confirmation.

This group covers confirmation of a proposed transaction, e.g. card holder receives notification or message via mobile phone or personal computer for confirmation and locally verifies that the transaction is known to him or her and continues with a payment made with his or her card.

Special rules of classification

Not to be confused with authorisation by a remote authority, such as a credit company.

If the payment network or the confirmation network is wireless, classification in <u>G06Q 20/30</u> is required.

G06Q 20/425

(using two different networks, one for transaction and one for security confirmation)

Definition statement

This place covers:

To insure that the transaction attempted on a network is known and accepted by the user or customer use is made of a network which is different from the network to effectuate the transaction. The second network is associated with the user or customer and is used to get a confirmation to realise the transaction.

Special rules of classification

If the payment network or the confirmation network is wireless, classification under <u>G06Q 20/30</u> is also required.

G06Q 30/00

Commerce

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the marketing, promoting, buying or selling of goods or services, or for billing.

The following subjects are therefore covered, the list being non-exhaustive:

- · on-line catalogues;
- matching systems, for goods or persons;
- systems to match buyers and sellers, e.g. systems for group purchasing or collaborative buying;
- collaborative browsing, where, e.g. a sales representative suggests web pages to a prospective customer.

References

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Billing or payment related to telephone services	H04M 15/00
Billing or payment related to services specially adapted for wireless communication networks	H04W 4/24

Informative references

Shipping	G06Q 10/083
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Inventory or stock management, e.g. order filling, procurement or balancing against orders	G06Q 10/087
Electronic payment architectures, schemes or protocols	G06Q 20/00
Banking, e.g. interest calculation, or account maintenance	G06Q 40/02
Credit; Loans; Processing thereof	G06Q 40/03
Trading; Exchange, e.g. stocks, commodities, derivatives or currency exchange	G06Q 40/04
Asset management; Financial planning or analysis	G06Q 40/06
Information retrieval from the web	G06F 16/95
Security arrangements for protecting computers, components thereof, programs or data against unauthorised activity	G06F 21/00
Protecting distributed programs or content, e.g. vending or licensing of copyrighted material	G06F 21/10
Displaying; Advertising; Signs; Labels or name-plates; Seals	<u>G09F</u>
Labels, tag tickets or similar identification or indication means	G09F 3/00
Arrangements for secret or secure communications; Network security protocols	H04L 9/00
Network arrangements, protocols or services for supporting real-time applications in data packet communication	H04L 65/00
Protocols in which an application is distributed across nodes in the network	H04L 67/10
Selective content distribution, e.g. interactive television or video on demand [VOD]	H04N 21/00
On-line shopping through varieties of electronic devices, e.g. TV network	H04N 21/47815
Security arrangements for wireless communication networks	H04W 12/00

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

	any of buying, selling, marketing or servicing of products or services over computer networks.
stock	products or goods held in supply and available for sale and/or distribution.

G06Q 30/01

Customer relationship services

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for enabling customer services to foster or maintain relationships between businesses and their existing or prospective customers.

Relationships with other classification places

Details for market analysis regarding relationships between businesses and its customers, e.g. analysing purchase journey, predicting prospective customers, or customer retention analysis, are classified in G06Q 30/0201.

G06Q 30/012

Providing warranty services

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the registration or status of an agreement, in which a provider will, for a limited period of time, repair or replace an article or rework a service, if that article or service is deemed to be defective within the terms of that agreement.

G06Q 30/014

Providing recall services for goods or products

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for requesting the return to the maker, of a batch or an entire production run of a product, usually due to the discovery of safety issues, or to the maintenance of the status of such a request.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Administration of product repair or maintenance	G06Q 10/20
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G06Q 30/015

Providing customer assistance, e.g. assisting a customer within a business location or via helpdesk

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for implementing business processes that enable customer service providers to aid customers requiring assistance, e.g. assisting a customer within a business location or via a helpdesk.

Relationships with other classification places

Electronic shopping or shopping in stores through devices that are shopper operated are classified in G06Q 30/0601.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Discounts or incentives at a point of sale [POS]	G06Q 30/0238
Targeted advertisement based on user location	G06Q 30/0261
Advertisement at a point-of-sale [POS]	G06Q 30/0268
Electronic shopping; Third-party assisted	G06Q 30/0613
Network service management characterised by the interaction between service providers and their network customers, e.g. customer relationship management	H04L 41/5061
User-to-user messaging in packet-switching networks using automatic reactions or user delegation, e.g. automatic replies or chatbot-generated messages	H04L 51/02
Centralised call answering arrangements requiring operator intervention, e.g. call or contact centres for telemarketing	H04M 3/51

G06Q 30/016

After-sales

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the planning or utilising of assistance or other resources that a company may provide to the people who bought or used its products or services, e.g. customer technical support.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Electronic shopping; Representative agents	G06Q 30/0617
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G06Q 30/018

Certifying business or products

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for documentation, data collection, processing or monitoring to ensure the veracity or factuality of the status of an entity's qualifications, either required or claimed by that entity in execution of a business requirement or legal process.

Included herein is subject matter for certifying, e.g. land use by an entity, carbon credits, emissions, abatement, product compliance, clinical trials, trade agreements, business licensing, degree verification, government test, regulatory compliance, continuing education requirements and safety compliance and documentation of legal proceedings, such as courtroom transcripts.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Rating or review of business operators or products	G06Q 30/0282
Legal services	G06Q 50/18
Career enhancement or continuing education service	G06Q 50/2057
Healthcare for electronic clinical trials or questionnaires	G16H 10/20

G06Q 30/0185

{Product, service or business identity fraud}

Definition statement

This place covers:

Subject matter drawn to a computerised arrangement for the analysis or detection of (1) illegitimate use of a product or service, misrepresentation of the authenticity of products or services, (2) approved sources of products or services, or (3) the coding or marking of product with data used for authentication.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Fraud prevention in connection with a coupon or other incentive	G06Q 30/0225
Fraud detection in advertising	G06Q 30/0248
Fraud prevention involving financial transactions	G06Q 40/00
Detection of illicit use of personal information, such as identity fraud analysis or detection means for determining that a person or business entity is who they say they are	G06Q 50/265
Technical details of records carriers (RFIDs, bubble codes, etc)	G06K 19/00

G06Q 30/02

Marketing; Price estimation or determination; Fundraising

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for implementing marketing processes, price estimation or determination, or fundraising.

Marketing processes include operations or activities for understanding markets or promoting products or services to markets.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Displaying; Advertising; Signs; Labels or name-plates; Seals	<u>G09F</u>
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G06Q 30/0201

Market modelling; Market analysis; Collecting market data

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for collecting, organising or analysing data concerning a market in order to understand or predict the impact of market factors on the operation or activity of the enterprise.

This group includes formulating strategies or representations related to the market, which are used for analysis and planning.

Market data can include various factors, trends or relationships reflecting customer behaviour, competitor behaviour, market influences or market activity.

A market factor is a feature or characteristic in a market that is related to the demand for a product or service, e.g. number of households.

A market is an environment where products and services are offered for sale to a group of potential consumers and includes the parties of potential consumer, sellers, producers or competitors.

Subject matter herein may include market data collection or the routing of market research data by (1) data mining; (2) monitoring transmitted communications; or (3) accessing data from stored databases or other sources.

References

Informative references

Market research related to resource optimisation or planning	G06Q 10/0631
Market demand data, such as order data used to plan resource allocation to meet the demand	G06Q 10/06315
Analysis of discount or incentive effectiveness	G06Q 30/0211
Analysis of advertisement effectiveness	G06Q 30/0242
Targeted advertisement	G06Q 30/0251
Electronic shopping with supply or demand aggregation	G06Q 30/0605
Electronic shopping with item investigation	G06Q 30/0623
Financial markets and trading	G06Q 40/00
General collection of data into a database schema or structure for applying database schemas or structures to commercial and scientific fields	G06F 16/00

{Profiling or inferring profiles of users or market based on their behaviour}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the creation of profiles or other representations of sets of characteristics regarding the behaviors or impacts of entities in the market.

Included herein is the development of buyer personas.

Market entities includes customers, shoppers, sellers, sales representatives and competitors.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Market segmentation	G06Q 30/0204

G06Q 30/020112

{Analysing events leading to purchases, e.g. "purchase journey" or attribution}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the analysis of events leading to customer purchases or conversions, e.g. customer journey or attribution.

Events include the interactions or touchpoints engaged in by the customer along a path to a desired outcome. The analysis may include identification of areas for improvement based on previous events, e.g. next best action recommendations.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Monitoring; Recording of computer activity, monitoring of user actions	G06F 11/3438
Network services for tracking the activity of the user	H04L 67/535

G06Q 30/02012

{Customer valuation}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the determination or prediction of the value of customer relationships, e.g. customer lifetime value or an analysis of the perceived value a customer places in a product or service.

{Sales lead analysis}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the analysis or prediction of potential sales contacts, e.g. identification of prospective customers or sales leads scoring.

Sales contacts include individuals or organisations that express interests in products or service offerings.

G06Q 30/020122

{Customer attrition, renewal, or retention analysis, e.g. churn}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the analysis or prediction of customer attrition, renewal or retention, e.g. churn propensity or subscriber analysis.

G06Q 30/02013

{Brand analysis}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the analysis of a brand and its perception or impact in the market.

Included herein is the development, evaluation and adjustment of brand strategies.

G06Q 30/02014

{Product or service effects analysis, e.g. item cannibalisation}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for identifying and analysing the competitive effects or impacts between products or services, e.g. item cannibalisation, halo, lift and price elasticity.

G06Q 30/020141

{Competitive analysis}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the competitive analysis of the strengths and weaknesses of current or potential competitors or rivals including the identification of competitors or peers in order to gain insights and develop strategies.

The following subjects are therefore covered, the list being non-exhaustive:

Definition statement

• Goal-oriented decision making that considers the choices of multiple parties including competitors, e.g. using game theory.

G06Q 30/02015

{Benchmarking or competitor scoring}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for (1) comparing market performance against levels or standards set by competitors or peers, or (2) for scoring the performance of competitors within the market.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Performance analysis of enterprise or organisation operations; Score-
carding, benchmarking or key performance indicator [KPI] analysis

G06Q 10/06393

G06Q 30/02016

{Product or service lifecycle models or analysis, e.g. growth (product repair or maintenance administration G06Q 10/20)}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for modelling or analysis of a product or service market lifecycle for the optimisation of at least one phase within the lifecycle through market data-driven decision-making.

For classification herein, "lifecycle" refers to the stages of management of a product or service that include development, introduction, growth, maturity and decline of the product or service in the market.

References

Limiting references

This place does not cover:

Product repair or maintenance administration	G06Q 10/20
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Informative references

Predictive maintenance of controls systems or parts thereof	G05B 23/0283
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{Market opportunity analysis, e.g. gap analysis}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the identification and analysis of potential opportunities or gaps in a market. For example, the opportunity or gap can refer to the market potential from existing providers or offerings not meeting current demand or interest.

G06Q 30/02018

{Market share analysis}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the analysis of the shares or sizes of organisations or products within the market, e.g. market penetration analysis.

G06Q 30/0202

Market predictions or forecasting for commercial activities

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the processing of market data in order to (1) forecast the future demand and the size of the market for a product or service; (2) use market data to predict a value for a product or service; or (3) predict the impact of market factors on the operation or activity of the enterprise.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Calculating price, cost or charges	G06Q 30/0283
Circuit arrangements for electric power or electric energy with load forecast	H02J 3/003

G06Q 30/02022

{based on correlations between customers, products, or services}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for market predictions or forecasting based on correlations between customers, products or services, e.g. similarity scoring.

{based on movement or presence behaviour at a physical establishment, e.g. customer movement}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for market predictions or forecasting based on the monitoring or tracking of customer movement or presence activity or behaviour at a physical location or establishment.

The following subjects are therefore covered, the list being non-exhaustive:

- Customer movement or trajectories to predict interest or likelihood of purchase or picking of products;
- Customer count, traffic or arrival rates at a location or establishment to assess demand for products or services.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Staff planning in a physical establishment based on arrival predictions or arrival tracking (e.g. customer arrivals)	G06Q 10/063119
Image or video recognition or understanding; Context or environment of the image; Surveillance or monitoring and recognition of crowd images	G06V 20/53
Arrangements, systems or apparatus for checking, e.g. the occurrence of a condition, including determination of waiting time in the queue	G07C 11/00
Services making use of location information	H04W 4/02

G06Q 30/02024

{based on temporal or time series analysis, e.g. seasonality or cyclical}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for market predictions or forecasting based on a temporal or time series model or analysis, e.g. seasonality or cyclical patterns.

G06Q 30/0203

Market surveys; Market polls

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for collecting or analysing data elicited from a participant or user, e.g. a questionnaire.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Giving input on a product or service or expressing a customer desire in exchange for an incentive or reward	G06Q 30/0217
Surveys for determination of advertisement effectiveness	G06Q 30/0245
Ratings or reviews of business operator or product	G06Q 30/0282
Healthcare informatics with electronic clinical trials or questionnaires	G16H 10/20

G06Q 30/0204

Market segmentation

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for analysis of the market, based on a breakdown of that market into homogeneous groups, e.g. by demographic, geographic, psychographic or behavioural characteristics.

G06Q 30/02043

{based on spending or purchase history}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for market segmentation based on customer spending or purchase history or behaviour.

G06Q 30/0205

{based on location or geographical consideration}

Definition statement

This place covers:

Subject matter drawn to a computerised arrangement for analysis of the market, based on a breakdown of that market into homogeneous groups, e.g. by demographic, geographic, psychographic or behavioural characteristics.

This group includes formulating strategies related to the market factors specific to a geographical location or plural geographical locations, such as analysis of customer buying habits relative to location, geographical factors considered relative to a planned business location, geographical factor relative to product or service offerings in a particular business location or the need for sales representatives coverage in a geographic region.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Data processing or calculating computer that is designed for or utilised to calculate price, cost or charges	G06Q 30/0283
Location based service using target	H04M 3/42348

G06Q 30/0206

{Price or cost determination based on market factors}

Definition statement

This place covers:

Information and communication technology [ICT] for analysing market data which influence demand for a product or service in order to determine how to value a product or service.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Shipping pricing	G06Q 10/08345
Point of sales systems with price look-up processing	G06Q 20/201
Product appraisals	G06Q 30/0278
Data processing or calculating computer that is designed for or utilised to calculate price, cost or charges	G06Q 30/0283
Energy or water supply (e.g. pricing for energy or water)	G06Q 50/06

G06Q 30/0207

Discounts or incentives, e.g. coupons or rebates

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for price reduction of, or premium credit resulting from, the purchase of a good or service, or a commercial offer to incite, stimulate or provoke an increase in business, through a commercial transaction.

The recitation of a discount or incentive in name only, e.g. "coupon", "rebate") is insufficient to classify a document in this group.

References

Informative references

Payments using discounts or coupons	G06Q 20/387
Data switching networks; Charging tariffs involving discounts	H04L 12/1496

Selective content distribution; Supplemental services, e.g. shopping	H04N 21/4784
application; Receiving rewards	

Trade or exchange of goods or services in exchange for incentives or rewards

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for enabling users to acquire inducements or rewards resulting from trading or exchanging commercial goods or services with merchants or service providers.

For classification herein, an exchange of currency for the purchase of an incentive, e.g. purchase of reward points by itself, does not constitute trading or exchanging goods or services and is therefore classified elsewhere.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Private payment circuits, e.g. involving electronic currency used among	G06Q 20/06
participants of a common payment scheme	

G06Q 30/0209

{Incentive being awarded or redeemed in connection with the playing of a video game}

Definition statement

This place covers:

Subject matter in which a user participates in a competitive activity according to a set of rules to play a video entertainment involving skill, chance or endurance, i.e. video game, in which a merchant provides a discount or incentive to the user, or an incentive, e.g. points, can be used in order to play a video game.

The term "video entertainment" is intended to cover only video games.

References

Informative references

Electronic data processing including means for providing a monetary-type accounting for the purpose of: (a) payment to start or continue a game; or (b) wagering	
Gaming systems	G07F 17/32

Determining the effectiveness of discounts or incentives

Definition statement

This place covers:

Subject matter in which an analysis is conducted in order to ascertain the degree to which the intended or expected result of offering a discount or incentive is achieved.

G06Q 30/0212

{Chance discounts or incentives}

Definition statement

This place covers:

Subject matter in which the incentive is the opportunity to participate in a random event, e.g. sweepstakes, jackpots, games, lotteries, to obtain a reward or prize, e.g. a discount.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Incentive or award obtained through participation in an electronic game	G06Q 30/0209
Evaluation of answer or responses from a participant to possibly obtain an incentive or award	G06Q 30/0218
Board games, pieces, or boards, per se, for a contest of skill or chance	A63F 3/00
Printed matter having revealable concealed information	B42D 15/00
Casino games, online gambling or betting	G07F 17/32

G06Q 30/0213

{Consumer transaction fees}

Definition statement

This place covers:

Subject matter wherein a payment from an individual is required to participate in a program to gain an incentive or discount award.

G06Q 30/0214

Referral reward systems

Definition statement

This place covers:

Subject matter wherein an individual is given an incentive after meeting a predetermined criterion of directing, e.g. inviting or referring, an individual to a business, program, or product or service.

(Including financial accounts)

Definition statement

This place covers:

Subject matter wherein the incentive reward is in the form of money or credit applied to a user's monetary account.

The term "account" is defined as a formal business arrangement providing for regular dealings or services.

G06Q 30/0216

{Investment accounts}

Definition statement

This place covers:

Subject matter wherein an individual has the opportunity to invest a reward provided by the merchant, e.g. money market or securities, in order to realise a financial gain.

G06Q 30/0217

involving input on products or services in exchange for incentives or rewards

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for providing inducements to individuals for exchanging information with a merchant or third party about a good, or work done or duty performed for the individual or others, or something that the individuals wish for.

This input is often acquired by giving the individuals a quiz or having the individuals fill out a questionnaire or survey.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Market survey	G06Q 30/0203
Ratings or reviews of business operators or products	G06Q 30/0282

G06Q 30/0218

{based on score}

Definition statement

This place covers:

Subject matter wherein an incentive or award is based on an evaluation or grade of a participants answer or response.

{based on funds or budget}

Definition statement

This place covers:

Subject matter wherein a discount or incentive for a purchase of a commodity or service is provided to the public based on a monetary limit or cap established by a merchant.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

1
G06Q 30/0249

G06Q 30/0221

{Re-usable coupons}

Definition statement

This place covers:

Subject matter drawn to an offer which can be used more than once to receive a discount or incentive.

G06Q 30/0222

{During e-commerce, i.e. online transactions}

Definition statement

This place covers:

Subject matter in which a discount or incentive is provided or redeemed during the course of an electronic transaction.

The "term electronic" transaction covers a transaction wherein the user uses any kind of network having at one end a terminal to execute the transaction consisting of buying or selling goods or services.

References

Informative references

Payment in electronic shopping systems	G06Q 20/12
Promotion provided during an electronic transaction	G06Q 30/0253

{based on inventory}

Definition statement

This place covers:

Subject matter wherein a discount or incentive is provided based on a tracking or counting of goods or services available or sold by merchant.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Inventory or stock management	G06Q 10/087
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G06Q 30/0224

{based on user history}

Definition statement

This place covers:

Subject matter in which a past purchase or interest of an individual is considered to provide a present or future discount or incentive to the individual.

User history may be obtained through cookies, discount cards, user search.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Recording user activity	G06F 11/34
Communication control involving user profiles	<u>G10B</u>
Cryptographic mechanisms or cryptographic; arrangements for secret or secure communications; Network security protocols	H04L 9/00
Network architectures or network communication protocols for network security	H04L 63/00
Network arrangements, protocols or services for supporting real-time applications in data packet communication	H04L 65/00
Network arrangements or protocols for supporting network services or applications	H04L 67/00

G06Q 30/0225

{Avoiding frauds}

Definition statement

This place covers:

Subject matter drawn to the prevention of unfair, dishonest, or deceitful action by a consumer to acquire an incentive or discount for a commodity or service.

Definition statement

This group provides for methods of preventing fraudulent redemption of coupons or incentives in combination with a nominal recitation of cryptographic methods, e.g. encrypting, scrambling, or other means such as barcodes or watermarks, which may be used to identify the authenticity of an incentive or discount.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Transaction verification	G06Q 20/401
Details of cryptographic apparatus or methods uniquely designed for, or utilised in the practice, administration, or management of an enterprise, the processing of financial data, or where a charge for goods or services is determined	G06Q 2220/00
Printed matter having revealable concealed information, fraud preventer or detector, use preventer or detector, or identifier	B42D 15/00
Avoiding fraud in POS payment systems	G07G 3/00

G06Q 30/0226

Incentive systems for frequent usage, e.g. frequent flyer miles programs or point systems

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for providing individuals a frequent usage incentive after meeting predetermined criteria for demonstrating loyalty towards a product, merchant or service.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Coin-freed apparatus involving participation in a loyalty or discount	G07F 17/0035
scheme	

G06Q 30/0227

{Frequent usage incentive value reconciliation between diverse systems}

Definition statement

This place covers:

Subject matter wherein a computer system calculates the fair return or equivalent in goods, services or money for a frequent usage incentive in order to make that frequent usage incentive consistent with a frequent usage incentive from a different program.

(On-line clearing houses)

Definition statement

This place covers:

Subject matter wherein a computer system on a network is designed for the reconciliation and trading of frequent usage incentive points or miles.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Payment architectures involving a third party being a clearing house, e.g.	G06Q 20/023
ACH	

G06Q 30/0229

{Multi-merchant loyalty card systems}

Definition statement

This place covers:

Subject matter wherein operators of separate retail establishments each operate their own frequent usage incentive system under a single card which certifies customer membership.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Details of multi-account cards	<u>G07F 7/00</u>
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G06Q 30/0231

{Awarding of a frequent usage incentive independent of the monetary value of a good or service purchased, or distance travelled}

Definition statement

This place covers:

Subject matter wherein a frequent usage incentive, e.g. point, mile, is awarded on the basis of criteria which are not a function of the monetary amount of merchandise or services bought, or distance traversed.

A frequent usage incentive based on the number of transactions, rather than the monetary amount of transactions, or the number of trips, rather than the distance travelled, is classified here.

{Frequent usage rewards other than merchandise, cash or travel}

Definition statement

This place covers:

Subject matter wherein the frequent usage reward does not come in the form of a commodity or good that is normally bought or sold in the business giving the frequent usage incentive, nor in the form of currency or a check, or free or discounted travel services.

For purposes of this group definition, cash is paper money, coins or checks.

Gift certificates and gift cards are not considered cash and are therefore included in this group.

G06Q 30/0233

{Method of redeeming a frequent usage reward}

Definition statement

This place covers:

Subject matter which describes the manner in which a user selects or receives their frequent usage reward.

G06Q 30/0234

Rebates after completed purchase

Definition statement

This place covers:

Subject matter wherein, at some time after the purchase of merchandise or services, part of the purchase price paid is returned to the purchaser.

G06Q 30/0235

constrained by time limit or expiration date

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for enabling discounts or incentives to be provided or redeemed within time limits or by expiration dates.

For purposes of classification herein, time limits include time frames or periods of time for provision or redemption, start dates, end dates or expiration dates, or the like.

G06Q 30/0236

{Incentive or reward received by requiring registration or ID from user}

Definition statement

This place covers:

Subject matter in which an individual receives a discount or incentive for enrolling in a program sponsored by or for identifying themselves to a merchant.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

E-cash with decreasing value according to a parameter, e.g. time	G06Q 20/0652
Customer buying in into an incentive program	G06Q 30/0213

G06Q 30/0237

{at kiosk}

Definition statement

This place covers:

Subject matter wherein a discount or incentive is provided or redeemed at a small standalone structure.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Discount or incentive provided during an online transaction	G06Q 30/0222
·	

G06Q 30/0238

at point-of-sale [POS]

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for providing or redeeming discounts or incentives at a place where transfer of goods or services is executed.

A coupon dispensing or redeeming electronic cash register is classified in this group.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Point of sale payment systems	G06Q 20/20

G06Q 30/0239

(Online discounts or incentives)

Definition statement

This place covers:

Subject matter wherein a discount or incentive is provided through the use of the World Wide Web.

Advertisements

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the action of promoting or calling to the attention of the public any goods or services to induce the public to buy or use the goods or services.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Video games using advertising information	A63F 13/61
Advertising arrangements in coin-freed apparatus	G07F 9/023
Coin-freed apparatus for hiring articles; Coin-freed facilities or services; For devices exhibiting advertisements, announcements, pictures or the like	G07F 17/16
Coin-freed apparatus for hiring articles; Coin-freed facilities or services; For devices for accepting orders, advertisements or the like	G07F 17/40
Illuminated signs; Luminous advertising	G09F 13/00
Telephonic communication; Automatic or semi-automatic exchanges providing advertising messages	H04M 3/4878

G06Q 30/0242

Determining effectiveness of advertisements

Definition statement

This place covers:

Subject matter in which an analysis is conducted in order to ascertain the degree to which the intended or expected result of a promotion is achieved.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Development of an advertisement	G06Q 30/0276
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G06Q 30/0243

{Comparative campaigns}

Definition statement

This place covers:

Subject matter drawn to a side-by-side examination of two or more promotions in order to determine which one attains the highest degree of intended or expected results.

{Optimization}

Definition statement

This place covers:

Subject matter drawn to an analysis of a constraint of a promotion resulting in a reworking of that promotion to improve the current or future effectiveness thereof.

G06Q 30/0245

{Surveys}

Definition statement

This place covers:

Subject matter drawn to the collection of public opinion about a promotion in order to determine the effectiveness of a promotion.

G06Q 30/0246

{Traffic}

Definition statement

This place covers:

Subject matter wherein the commercial activity generated by a promotion is analyzed.

G06Q 30/0247

{Calculate past, present or future revenues}

Definition statement

This place covers:

Subject matter drawn to a determination of monetary gain from a promotion at a point of time.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Determination of compensation or billing for promotional goods or	G06Q 30/0273
services.	

G06Q 30/0248

{Avoiding fraud}

Definition statement

This place covers:

Subject matter drawn to the prevention of unfair dishonest or deceitful action by an individual to acquire or obtain a better promotion for goods or services.

Definition statement

This group provides for methods of fraud prevention in combination with a nominal recitation of cryptographic methods, e.g. encrypting scrambling, or other means such as barcodes watermarks, which may be used to identify the authenticity of a promotion.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Details of cryptographic apparatus or methods uniquely designed for or utilised in the practice administration or management of an enterprise the processing of financial data or where a charge for goods or services is determined	G06Q 2220/00
Printed matter having revealable concealed information fraud preventer or detector use preventer or detector or identifier	B42D 15/00

G06Q 30/0249

{based upon budgets or funds}

Definition statement

This place covers:

Subject matter wherein a promotion is provided to the public based on a monetary limit or cap established by a merchant.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Discount or incentive provided based on a budget or funds	G06Q 30/0219
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G06Q 30/0251

Targeted advertisements

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for directing promotions at or to an individual or individuals based on predetermined criteria.

References

Informative references

Electronic shopping with item recommendations	G06Q 30/0631
Network arrangements or protocols for supporting network services or applications using user profiles	H04L 67/306
Creating a channel for a dedicated end-user group, e.g. insertion of targeted commercials based on end-user profiles	H04N 21/2668

Services specially adapted for wireless communication network; Facilities	H04W 4/23
therefor for mobile advertising	

{based on events or environment, e.g. weather or festivals}

Definition statement

This place covers:

Subject matter in which an organised activity or atmospheric or climatic condition is used in order to promote goods or services.

G06Q 30/0253

{During e-commerce, i.e. online transactions}

Definition statement

This place covers:

Subject matter in which a promotion is provided during the course of an electronic transaction.

The term "electronic transaction" covers a transaction wherein the user uses any kind of network having at one end a terminal to execute the transaction consisting of buying or selling goods or services

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Payments for electronic shopping	G06Q 20/12
Discount or incentive provided during an electronic transaction	G06Q 30/0222

G06Q 30/0254

{based on statistics}

Definition statement

This place covers:

Subject matter drawn to the compilation collection analysis or interpretation of numerical facts or data to distribute or produce a promotion that reaches a targeted group.

The term "numerical facts" is intended to include any logistic or mathematical conclusion or process that helps to determine probabilities or theories of behaviour or conditions of state of a predetermined group.

{based on user history}

Definition statement

This place covers:

Subject matter drawn to the analysis or interpretation of user data related to past interests, purchases, or preferences of a user or group of users in order to provide a present or future promotion to a target user or group.

Notes:

- For classification herein, the user data may include data of the target user or group, or may include data of a user or users other than the target user or group.
- User data may include data obtained from online sources (e.g., website cookies, social networks, etc.) or offline sources (e.g., discount cards, in-store activity, etc.).

G06Q 30/0256

{User search}

Definition statement

This place covers:

Subject matter wherein an individual uses a computer system looking for some information and a promotion is presented due to the entered key word.

G06Q 30/0257

{User requested}

Definition statement

This place covers:

Subject matter wherein a user selects a promotion.

G06Q 30/0258

{Registration}

Definition statement

This place covers:

Subject matter in which an individual exchanges information with a merchant in order to receive future promotions.

References

Limiting references

This place does not cover:

Customer buying in into an incentive program	G06Q 30/0213
Incentive or reward received by requiring registration from user	G06Q 30/0236

{based on store location}

Definition statement

This place covers:

Subject matter wherein the position of a store is used to determine a type of promotion to present to an individual.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Transactions dependent on location of mobile device	G06Q 20/3224

G06Q 30/0261

{based on user location}

Definition statement

This place covers:

Subject matter wherein the position of an individual is used to determine a type of promotion to present.

This group is not intended to cover any location wherein the individual is in a vehicle.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Payment transactions dependent on location of mobile device	G06Q 20/3224
Targeted advertisement directed to an individual inside a vehicle	G06Q 30/0266

G06Q 30/0262

{during computer stand-by mode}

Definition statement

This place covers:

Subject matter wherein a promotion is displayed on a computer while the computer is in an idle or hibernation mode.

{based upon Internet or website rating}

Definition statement

This place covers:

Subject matter wherein a promotion is presented on at least one worldwide page based on quality performance or weighting factor of the World Wide Web page.

G06Q 30/0264

{based upon schedule}

Definition statement

This place covers:

Subject matter drawn to the specific time or day that a promotion is going to be available or exposed to the public.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Subject matter wherein the duration of time a consumer spends viewing
an advertisement is measured or wherein the time an advertisement is
available for viewing is measured

G06Q 30/0272

G06Q 30/0265

{Vehicular advertisement}

Definition statement

This place covers:

Subject matter wherein the targeted promotion is located within on the exterior surface or attached to an apparatus for carrying or transporting individuals or goods.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Mobile visual advertising	G09F 21/00
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G06Q 30/0266

{based on the position of the vehicle}

Definition statement

This place covers:

Subject matter in which the location of the vehicle is used to determine a type of promotion to present.

{Wireless devices}

Definition statement

This place covers:

Subject matter in which a promotion is transmitted to or received on an electronic contrivance which uses radio waves to transmit or receive data.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Payments using wireless devices	G06Q 20/32
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G06Q 30/0268

{at point-of-sale [POS]}

Definition statement

This place covers:

Subject matter wherein a promotion is used to target individuals at a place where the exchange of goods or services for money is executed.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Point of Sale payment systems	G06Q 20/20
Promotion provided during an electronic transaction	G06Q 30/0253
Printing of coupons at a Point of Sales	G07G 1/12

G06Q 30/0269

{based on user profile or attribute}

Definition statement

This place covers:

Subject matter wherein a set of data or a characteristic of an individual is used to increase interest in a promotion.

G06Q 30/0271

{Personalized advertisement}

Definition statement

This place covers:

Subject matter wherein at least one personal characteristic, e.g. name, birthday, age, phone number, or address, of an individual is added to a promotion.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Payment transactions dependent on location of mobile device	G06Q 20/3224
Advertisement for registered users	G06Q 30/0213, G06Q 30/0258
Controlling access to network resources using entity or user profiles	H04L 63/102

G06Q 30/0272

Period of advertisement exposure

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for measuring the duration of time a consumers spend viewing advertisements or measuring the time advertisements are available for viewing.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Selective content distribution involving the time of distribution, e.g. the	H04N 21/26241
best time of the day for inserting an advertisement	

G06Q 30/0273

Determination of fees for advertising

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for providing compensation or billing for the promotion of a good or a service.

References

Informative references

Selective content distribution; Third-party billing, e.g. billing of advertiser	H04N 21/2547
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{Split fees}

Definition statement

This place covers:

Subject matter in which a compensation or billing for promotional goods or services is divided between two or more parties.

G06Q 30/0275

{Auctions}

Definition statement

This place covers:

Subject matter drawn to a sale at which promotions for goods or services are sold to the highest bidder.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Auctions of items/services per se	G06Q 30/08
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G06Q 30/0276

{Advertisement creation}

Definition statement

This place covers:

Subject matter drawn to the design development of a promotion.

G06Q 30/0277

(Online advertisement)

Definition statement

This place covers:

Subject matter wherein a promotion is presented on the World Wide Web.

G06Q 30/0278

{Product appraisal}

Definition statement

This place covers:

Subject matter drawn to a computerised arrangement for the determination of a monetary value for a particular item, e.g. cars, antiques or houses.

Fundraising management

Definition statement

This place covers:

Subject matter drawn to a computerised arrangement for a system for developing, organising or monitoring the organised activity of soliciting and collecting money for a non-profit or political organisation.

G06Q 30/0281

{Customer communication at a business location, e.g. providing product or service information, consulting}

Definition statement

This place covers:

Subject matter drawn to a computerised arrangement for communications directed to client in a place of business by means of a wired or a wireless network.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Application including analysis of business processes or operations research	G06Q 10/063
Mechanism for effecting a transaction and determining the amount of a sale which may also be a terminal in a system	G06Q 20/20
Coupon or other incentive	G06Q 30/0207
Advertising	G06Q 30/0241
System which enables a purchaser to inspect or select from a plurality of different items or make a purchase of one or more items at a location geographically separated from the system user	G06Q 30/0623
Computer conferencing communications distribution, without means for business data distribution, processing or usage in a business environment	G06F 15/16
Telephone apparatus and communications, e.g. without means for business data distribution, processing or usage in a business environment	H04W 4/00

G06Q 30/0282

Rating or review of business operators or products

Definition statement

This place covers:

Subject matter drawn to a computerised arrangement Information and communication technology [ICT] specially adapted for collecting ratings or reviews regarding business operators or their products or services, or ranking business operators or their products or services.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Application including analysis of business processes or operations research	G06Q 10/063
Market surveys or market polls	G06Q 30/0203

G06Q 30/0283

Price estimation or determination

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for or utilised in determining charges for goods or services.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Reservation, e.g. for tickets, services or events	G06Q 10/02
Point-of-sale [POS] network systems; Price look-up processing, e.g. updating	G06Q 20/201
Price or cost determination based on market factors	G06Q 30/0206
Billing or invoicing	G06Q 30/04
Energy or water supply (e.g. determining charges reflecting consumed quantity of electricity, water, gas)	G06Q 50/06
Arrangements for road pricing or congestion charging of vehicles or vehicle users, e.g. automatic toll systems	G07B 15/06
PLU [price look-up table] processing in cash register	G07G 1/145

G06Q 30/0284

{Time or distance, e.g. usage of parking meters or taximeters}

Definition statement

This place covers:

Subject matter wherein the charge reflects a purchased activity period or is determined using the units of miles or kilometres travelled.

The charge may include special fee or surcharge due to special time of day or year, location.

References

Limiting references

This place does not cover:

Taximeters (e.g. constructional aspects)	<u>G07B 13/00</u>
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Limiting references

Arrangements or apparatus for collecting fares, tolls or entrance fees at one or more control points	G07B 15/00
Parking meters	G07F 17/24

Informative references

Attention is drawn to the following places, which may be of interest for search:

Reservations, e.g. for tickets, services or events	G06Q 10/02
Time duration or rate measuring	G04F 1/00

G06Q 30/04

Billing or invoicing

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for billing, i.e. aggregating and presenting bills to consumers of goods or services, billing models.

This does not cover the metering of consumption of electricity/water or communication units, but only the billing activity per se.

The following subjects are therefore covered, the list being non-exhaustive:

Billing or invoicing for bought goods, content or services: it concerns the preparation and sending of the bill, either by mail or online, including shipping costs and tax.

References

Informative references

Billing system in payments	G06Q 20/14
Banking, e.g. interest calculation or account maintenance	G06Q 40/02
Finance or payroll	G06Q 40/125
Energy or water supply (e.g. determining charges reflecting consumed quantity of electricity, water, gas)	G06Q 50/06
Tariff metering apparatus	G01D 4/00
Charging, metering or billing arrangements specially adapted for data communications, e.g. authentication, authorisation and accounting [AAA] framework	H04L 12/14
Arrangements for metering, time-control or time indication; Metering, charging or billing arrangements for voice wireline or wireless communications, e.g. VoIP	H04M 15/00
Video on demand servers; Management at additional server; Billing	H04N 21/2543
Billing or payment related to wireless services	H04W 4/24

Buying, selling or leasing transactions

Definition statement

This place covers:

Information and communication Technology [ICT] specially adapted for buying, selling, or leasing goods or services.

The following subjects are therefore covered, the list being non-exhaustive:

- systems for ordering, i.e. enabling the selection of a product;
- collaborative browsing, where e.g. a sales representative pushes web pages to a prospect
 (collaborative editing of documents is however to be found in G06Q 10/10), but it might as well be
 found in G06Q 40/02 (for banking) or in H04M 3/51 (hotline arrangement).

Relationships with other classification places

Transactions relating to financial commodities or financial instruments are classified in group G06Q 40/00.

Payment transactions or payment protocols are classified in group G06Q 20/00.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Shipping	G06Q 10/083
Inventory or stock management, e.g. order filling, procurement or balancing against orders	G06Q 10/087
Payment architectures, schemes or protocols	G06Q 20/00
Customer relationship services	G06Q 30/01
Marketing; Price estimation or determination; Fundraising	G06Q 30/02
Discounts or incentives, e.g. coupons or rebates	G06Q 30/0207
Advertisements	G06Q 30/0241
Billing or invoicing	G06Q 30/04
Finance; Insurance; Tax strategies; Processing of corporate or income taxes	G06Q 40/00
Website navigation, e.g. using categorised browsing	G06F 16/954

G06Q 30/0601

Electronic shopping [e-shopping]

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for enabling shoppers to investigate, locate, specify, order, purchase or to make/receive offers for goods or services for sale or trade using a device configured to include telecommunications functionality for the exchange of information concerning the goods or services.

Relationships with other classification places

Investigating, buying, selling, trading, or exchanging fungible items, e.g. financial items such as stocks, bonds, options, mutual funds, securities, currency or the like, are classified in groups <u>G06Q 40/04</u> or <u>G06Q 40/06</u>.

Promotional offers that do not enable shoppers to enter into a binding purchase agreement, such as offers for the promotion of goods or services through advertisements, are classified in group G06Q 30/0241. Discount offers, e.g. rebates or coupons, are classified in group G06Q 30/0207.

This place covers shopping in stores through devices that are shopper operated. Arrangements for customer assistance in stores that are not shopper operated are classified in group <u>G06Q 30/015</u>.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Payments in electronic shopping	G06Q 20/12
Discounts or incentives during e-commerce, i.e. online transactions	G06Q 30/0222
Discounts or incentives at point-of-sale	G06Q 30/0238
Advertisements	G06Q 30/0241
Targeted advertisements	G06Q 30/0251
Ratings or reviews of business operator or product	G06Q 30/0282
Supplemental services within end-user applications for the selective distribution of content, e.g. a shopping application	H04N 21/478

G06Q 30/0603

{Catalogue creation or management}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the creation or management of catalogues for goods or services.

For purposes of classification herein, a catalogue is understood as having a specific organization of product records or listings. Mere mention of a catalogue is not sufficient for classification herein.

The following subjects are therefore covered, the list being non-exhaustive:

- Creating or modifying entries or listings for goods or services within catalogues;
- Modifying titles, images or descriptions of goods or services within catalogue entries;
- · Creating categories;
- · Filling categories with goods or services.

References

Informative references

Details of database functions for navigation, e.g. using categorised	G06F 16/954
browsing	

{Aggregating catalogue data from multiple providers}

Definition statement

This place covers:

Subject matter wherein the information within the catalogues is gathered from multiple providers of the goods or services, e.g. from multiple merchants.

G06Q 30/06032

{Customer-specific catalogues}

Definition statement

This place covers:

Subject matter wherein the catalogues are tailored to customers based on customer-specific data, e.g. personalised catalogues.

G06Q 30/0605

{Pooling transaction partners, e.g. group buying or group selling}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for pooling or grouping trading partners based upon their mutual desire for one or more items or upon their ability to satisfy at least a portion of the desire for the one or more items.

G06Q 30/0607

{Regulating the sale of restricted items, e.g. alcohol}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the sale or trade of goods or services requiring special considerations due to a restrictive nature of their sale or trade, e.g. restricting sales based on jurisdiction or age of customers.

References

Informative references

Identity check for transactions	G06Q 20/4014
User authentication	G06F 21/31

{Qualifying participants for shopping transactions (payment transaction verification G06Q 20/401)}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for ensuring that commerce participants conform to specified standards or requirements for entry or participation in shopping transactions within online marketplaces.

The following subjects are therefore covered, the list being non-exhaustive:

- Removing buyers or sellers from online marketplaces based on rating or behaviour;
- Allowing participation in online marketplaces based on a business status, e.g. receiving offers from only licensed contractors.

References

Limiting references

This place does not cover:

Transaction verification	G06Q 20/401

Informative references

Attention is drawn to the following places, which may be of interest for search:

Certifying business or products	G06Q 30/018
Ratings or reviews of business operator or product	G06Q 30/0282

G06Q 30/0611

{Request for offers or quotes}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for implementing one or more competitive trading protocols that enable a buyer to request offers or quotes from one or more competing providers by defining requirements of a request, e.g. particulars of goods or services to be acquired, pricing constraints and deadlines.

Relationships with other classification places

Risk analysis or insurance claim processing is classified in G06Q 40/08.

References

Informative references

Certifying business or products	G06Q 30/018
Product appraisal	G06Q 30/0278
Auctions	G06Q 30/08

{using intermediate agents}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for utilising intermediate agents, e.g. people or computerised agents such as shopping bots to perform shopping activities.

For classification herein only those agents with an active role in the shopping activity are classified here, i.e. the shopping activity cannot be completed without their participation.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Payment architectures, schemes or protocols involving a neutral party	G06Q 20/02
Providing customer assistance, e.g. assisting a customer within a business location or helpdesk	G06Q 30/015
Real estate	G06Q 50/16
Legal services	G06Q 50/18

G06Q 30/0615 (Frozen)

{Anonymizing}

Definition statement

This place covers:

Subject matter wherein the third party participant in a transaction acts to hide the identity of either the buyer or seller.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Anonymous user systems in payment systems	G06Q 20/383
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G06Q 30/0617

{Representative agent}

Definition statement

This place covers:

Subject matter wherein the intermediate agents facilitate shopping activities on behalf of the buyer or seller according to agreed-upon rules or conditions.

{Neutral agent}

Definition statement

This place covers:

Subject matter wherein the intermediate agents complete shopping activities in a manner which equally supports all participants.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Neutral trusted third party being a clearing house in payment systems	G06Q 20/023
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G06Q 30/0621

{by configuring or customising goods or services}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for designing or modifying goods or services for assembly or production in order to meet shopper specifications or based on shopper preferences or profiles.

This subgroup covers shopping item configuration or customization details but not engineering or manufacturing per se.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Manufacturing	G06Q 50/04
Computer-aided design [CAD]	G06F 30/00

G06Q 30/06211

{using personal content of shoppers, e.g. personal photographs}

Definition statement

This place covers:

Subject matter wherein the designing or modifying of the goods or services is performed using personal contents provided by shoppers, e.g. personalised messages or personal photographs received from the shoppers.

For classification herein, personal contents are distinct from system-provided attributes, e.g. merchant-provided images or graphics.

{using seller-selected customisations}

Definition statement

This place covers:

Subject matter wherein sellers or merchants select attributes, characteristics, features or components of the goods or services for shoppers.

G06Q 30/0623

{by investigating goods or services}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for enabling shoppers to systematically search, discover, or inquire into the particulars of goods or services.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Targeted advertisement based on user history; User search	G06Q 30/0256
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G06Q 30/0624

{using guided investigation, e.g. hierarchical browsing of shopping information}

Definition statement

This place covers:

Subject matter drawn to enable shoppers to investigate goods or services using guided processes having predefined paths that are navigated based upon shopper selections, e.g. hierarchical browsing of a catalogue or categorical browsing of a webpage.

References

Informative references

Navigation, e.g. using categorised browsing	G06F 16/954
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{by formulating product or service queries, e.g. using keywords or predefined options}

Definition statement

This place covers:

Subject matter drawn to enabling shoppers to formulate queries for goods or services by specifying parameters of the queries, e.g. using keywords or predefined options.

G06Q 30/0627

{by specifying product or service characteristics, e.g. product dimensions}

Definition statement

This place covers:

Subject matter wherein the specified parameters define the features or qualities belonging to the goods or services, e.g. brand, model, colour or dimension.

G06Q 30/0629

{by pre-processing results, e.g. ranking or ordering results}

Definition statement

This place covers:

Subject matter drawn to applying criteria to modify initial results of queries for goods or services prior to their final transmission to shoppers, e.g. ranking goods or services by popularity or filtering unavailable goods from results.

G06Q 30/06291

{for generating comparative results}

Definition statement

This place covers:

Subject matter wherein pre-processing the results includes identifying similarities or differences between goods or services and transmitting the similarities or differences as part of the results.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Search customisation based on user profiles and personalisation

G06F 16/9535

{Recommending goods or services}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the referral of goods or services as advisable or alternative, e.g. based on shopper profiles or ratings of goods or services.

G06Q 30/06311

{based on purchase or browsing history}

Definition statement

This place covers:

Subject matter wherein the referral of goods or services is based upon previous purchases made by shoppers or browsing histories of shoppers, e.g. history of products viewed by a shopper.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

User profiles	H04L 67/306
Tracking the activity of the user	H04L 67/535

G06Q 30/06312

{based on similarity with other shoppers}

Definition statement

This place covers:

Subject matter wherein the referral of goods or services to target shoppers is based on comparisons to one or more other shoppers who have shared or similar characteristics.

G06Q 30/06314

{by determining complementary or compatible goods or services, e.g. accessory goods}

Definition statement

This place covers:

Subject matter wherein the referral of goods or services is based upon determinations that goods or services are configured to be used together or are advisable as usable together, e.g. accessory goods.

{gift recommendations, e.g. for a specific gift recipient}

Definition statement

This place covers:

Subject matter wherein the referral of goods or services is made to gift givers based upon characteristics or profiles of gift recipients.

G06Q 30/0633

{Managing shopping lists, e.g. compiling or processing purchase lists (shipping orders G06Q 10/083; order filling G06Q 10/087)}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for creating, updating, editing, or processing shopping lists for goods or services.

For purposes of classification herein, a shopping list is understood as electronic record of one or more goods or service desired for acquisition.

References

Limiting references

This place does not cover:

Shipping	G06Q 10/083
Inventory or stock management	G06Q 10/087

G06Q 30/06331

{wish lists; gift lists; product registries, e.g. wedding registries}

Definition statement

This place covers:

Subject matter wherein the shopping lists record one or more goods or services desired for acquisition by gift recipients that are accessible by other shoppers in order to enable purchases of the goods or services by the other shoppers for the gift recipients.

G06Q 30/06332

{comprising goods or services offered by multiple providers, e.g. multiple merchants}

Definition statement

This place covers:

Subject matter wherein the wish lists, gift lists or product registries are composed of goods or services that are available for purchase from multiple distinct providers, e.g. multiple merchants or multiple websites.

{virtual shopping carts}

Definition statement

This place covers:

Subject matter where the shopping lists comprise functionality for initiating checkout for the goods or services recorded by the shopping lists, e.g. digital or online carts or baskets.

G06Q 30/06334

{comprising goods or services offered by multiple providers, e.g. multiple merchants}

Definition statement

This place covers:

Subject matter wherein the virtual shopping carts are comprised of goods or services that are available for purchase from multiple distinct providers, e.g. universal shopping carts.

G06Q 30/0635

{replenishment orders; recurring orders}

Definition statement

This place covers:

Subject matter wherein shopping lists are managed based on determined or predicted consumption of goods or services, or based on regular interval of time.

The following subjects are therefore covered, the list being non-exhaustive:

- Replenishing consumable goods, e.g. groceries or personal hygiene products based on level of consumption;
- · Processing monthly orders.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Inventory or stock management, e.g. order filling, procurement or balancing against orders	G06Q 10/087
Cryptographic remote charge determination or payment systems	G06Q 20/085

G06Q 30/0637

{requiring approval before final submission, e.g. parental approval}

Definition statement

This place covers:

Subject matter wherein the shopping lists are provided to one or more additional users who take subsequent action to approve, deny or modify the shopping lists prior to their final submission.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Payment schemes or models; Hierarchy of users of accounts; Parent-	G06Q 20/2295
child type, e.g. where parent has control on child rights	

G06Q 30/0639

{Locating goods or services, e.g. based on physical position of the goods or services within a shopping facility}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for electronic shopping processes for identifying positions of one or more goods or services relative to positions of shoppers, other goods or fulfilment locations.

The following subjects are therefore covered, the list being non-exhaustive:

- Methods for identifying the physical position of a good within a retail store, e.g. aisle or shelf;
- · Generating a shopping path through a retail store in relation to a shopping list;
- Determining sources of a desired goods or services, e.g. merchants based on location.

Relationships with other classification places

Post-purchase order filling or fulfilment operations, e.g. order picking in a warehouse, is classified in G06Q 10/087.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Optimisation of routes or paths, e.g. "travelling salesman problem"	G06Q 10/047
Instruments for performing navigational calculations specially adapted for indoor navigation	G01C 21/206
Services making use of location information	H04W 4/02

G06Q 30/0641

{utilising user interfaces specially adapted for shopping}

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for presenting, depicting or representing shopping information to users using interfaces or interface elements.

For classification herein or its indented subgroups, shopping information can include audible, visual or other sensory information concerning goods or services for sale, shopping environments or the like.

A shopping interface designed or intended for use by a customer, e.g. at an in-store kiosk, is classified in this or its indented subgroups.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Interaction techniques based on graphical user interfaces [GUI]	G06F 3/048
interaction techniques based on graphical aser interaces [e-er]	0001 0/040

G06Q 30/0643

{graphically representing goods, e.g. 3D product representation}

Definition statement

This place covers:

Subject matter where the user interfaces are specially adapted for the graphical presentation of goods or services that enables shoppers to view or interact with representations of the goods or services.

The following subjects are therefore covered, the list being non-exhaustive:

- 3D product representations;
- Product comparison displays, e.g. side-by-side;
- · Virtual fitting rooms.

For classification herein or its indented subgroups, details with respect to the particular manner of representing or enabling interaction with the graphical representation of goods or services must be present.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Three dimensional [3D] modelling, e.g. data description of 3D objects	G06T 17/00
Manipulating 3D models or images for computer graphics	G06T 19/00

G06Q 30/06431

{relative to a shopper model}

Definition statement

This place covers:

Subject matter where the user interfaces are specially adapted for representing goods on or proximate to photographic or digital representations of shoppers, e.g. shopper avatars.

The following subjects are therefore covered, the list being non-exhaustive:

- Superimposing a garment onto a shopper model;
- · Visualization of applied cosmetics.

{by virtually fitting wearable articles}

Definition statement

This place covers:

Subject matter where the user interfaces are specially adapted for representing goods fitted onto the shopper models using measurements or physical properties particular to the goods or shoppers, e.g. product dimensions or fabric elasticity.

G06Q 30/06433

{relative to real-world environments}

Definition statement

This place covers:

Subject matter where the user interfaces are specially adapted for augmenting real-world scenes with representations of goods.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Interaction with a metaphor-based environment or interaction object displayed as three-dimensional, e.g. changing the user viewpoint with respect to the environment or object	G06F 3/04815
Mixed reality	G06T 19/006

G06Q 30/06434

{by previewing changes to the physical appearance of goods, e.g. altering colour}

Definition statement

This place covers:

Subject matter where the user interfaces are specially adapted for graphically representing the selection of options or alterations for goods prior to purchase.

The following subjects are therefore covered, the list being non-exhaustive:

- · Changing colour or pattern of a selected good;
- Applying ornamentations, e.g. decals or graphics;
- · Swapping parts;
- · Adding accessories.

References

Informative references

Interaction techniques based on graphical user interfaces [GUI] for image	G06F 3/04845
manipulation, e.g. dragging, rotation, expansion or change of colour	

Editing of 3D images, e.g. changing shapes or colours, aligning objects or	G06T 19/20
positioning parts	

{by graphically simulating physical shopping environments, e.g. virtual malls}

Definition statement

This place covers:

Subject matter where the user interfaces are specially adapted for graphically simulating physical shopping environments, e.g. shopping malls or supermarkets.

G06Q 30/06442

{by representing shoppers within virtual shopping environments, e.g. using shopper avatars}

Definition statement

This place covers:

Subject matter where the user interfaces are specially adapted for enabling representations of users to interact with the simulated shopping environments.

G06Q 30/06443

{by displaying shopping information with special effects, e.g. highlighting items in view}

Definition statement

This place covers:

Subject matter where the user interfaces are specially adapted for representing goods or services by applying special effects to enhance the appearance of the goods or services, e.g. highlighting goods or animating images of goods.

G06Q 30/06444

{for multi-user collaboration}

Definition statement

This place covers:

Subject matter where the user interfaces are specially adapted for enabling additional shopping participants to collaborate via a shared interface with one or more purchasers for a specific shopping task.

References

Informative references

For computer conferences, e.g. chat rooms	H04L 12/1813
Arrangements for multi-party communication, e.g. for conferences	H04L 65/403

Rental transactions; Leasing transactions

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for commercial transactions for enabling the temporary use of goods or services for a period of time in accordance with one or more defined terms of a transaction.

Relationships with other classification places

Subject matter directed to commercial transactions for rentals or leasing is classified in this group. Subject matter directed to reservations per se, e.g. administration of reservations, is classified in group G06Q 10/02.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Reservations, e.g. for tickets, services or events	G06Q 10/02
Payment transactions	G06Q 20/00
Electronic shopping	G06Q 30/0601
Finance; Insurance; Tax strategies; Processing of corporate or income taxes	G06Q 40/00
Hotels or restaurants	G06Q 50/12
Real-estate	G06Q 50/16
Coin-freed apparatus for hiring articles	G07F 17/00

G06Q 30/08

Auctions

Definition statement

This place covers:

Subject matter specifically configured to facilitate and support a competitive trading protocol for the presentation and sale or trade of at least one item and having predefined rules for bid submission, bid consideration, and winner determination.

The following subjects are therefore covered, the list being non-exhaustive:

matching systems, both applicable to goods or persons;

time-stamping of bids;

price or winner determination in an auction.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Inventory or delivery of goods bought in an electronic auction	G06Q 10/08, G06Q 50/00
Electronic payment	G06Q 20/00
Electronic finance, e.g. buying, selling or trading of financial instruments like stocks, options or futures per se	G06Q 40/00

G06Q 40/00

Finance; Insurance; Tax strategies; Processing of corporate or income taxes

Definition statement

This place covers:

Subject matter drawn to a computerised arrangement for planning the disposition or use of funds or securities, or extension of credit.

Information communication technology [ICT] specially adapted for financial applications, e.g. management of monetary assets.

ICT specially adapted for management of a binding contract to indemnify a party against a specific loss in exchange for a paid premium.

The following subjects are therefore covered, the list being non-exhaustive:

- financial applications, e.g. for preparation of bank statements, interest calculations, saving
 accounts, mortgage calculation, credit ratings, home-banking, on-line banking, electronic funds
 transfer [EFT] systems; electronic wallet systems; account maintenance; credit or loan processing;
- investment or stock exchange applications, e.g. for trading stocks, options, ordering of stocks, index balancing; financial asset management or planning;
- investment, e.g. fund management, portfolio management;
- insurance or pension applications, e.g. for premium calculations, insurable risk assessment or actuarial computations;
- tax applications, e.g. for preparing corporate or income taxes or tax strategies;
- accounting applications, e.g. for corporate accounting or auditing.

References

Informative references

Electronic payment or payment aspects of banking applications	G06Q 20/00
Payment architectures, schemes or protocols characterised by using cards	G06Q 20/34
Commerce	G06Q 30/00
Buying, selling or leasing transactions	G06Q 30/06
Financial accounting	G06Q 40/12
Record-sensing devices in combination with a system that maintain financial accounts; i.e. a banking system	G07F 19/00

Arrangements for secret or secure communications; Network security protocols	H04L 9/00
Network architectures or network communication protocols for network security	H04L 63/00
Network arrangements, protocols or services for supporting real-time applications in data packet communication	H04L 65/00
Network arrangements or protocols for supporting network services or applications	H04L 67/00

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

annuity	an income stream that provides fixed payments at regular intervals until a specific date of termination
asset	an item owned by a company or person that has value such as stocks, bonds or property
binary option	a financial product that sets fixed payout and loss amounts that depends on the outcome of a yes or no proposition
bonds	financial securities issued by companies, governments and other organizations that pay interest
capital gains/loss	the increase or decrease in value that an asset owner experiences when the price of the asset rises or falls below the original purchase price
charge	financial obligation
commodity	a fungible product such as oil or metal which has a price and can be measured, that is traded on an exchange like a financial security
credit	deferred payment of a debt or purchase
cryptocurrency	math based digital currency that uses a decentralized system or digital ledger to record transactions, verify parties to the transaction and manage the issuance of new units
equity	ownership interest in a company; ownership of a company's shares
fiat currency	a type of money that is not backed by gold or silver but only by government trust; modern money, e.g. paper bills
fungible	an asset or commodity that one unit is substitutable, interchangeable or exchangeable by another equal unit in paying a debt or settling an account. Example: shares of common stock and commodities like oil or wheat are fungible because they have the same value no matter who owns them.
hedge funds	a private investment partnership that uses aggressive techniques usually prohibited in other funds
mortgage-backed security	a type of asset backed security that pools cashflow from mortgages
mutual funds	a type of collective investment product that provides investors diversification of the investment such as a combination of stocks, bonds and other investment products managed by a fund manager

Glossary of terms

non-fungible	not substitutable, interchangeable or exchangeable. Example: assets like land or baseball cards are not fungible because each unit has unique qualities that add or subtract value.
revolving line of credit	a line of credit that remains open even as payments are made
securities	fractional ownership, bonds and other investments
stock	a financial instrument that represents the fractional ownership of an issuing corporation
stock market	an organized exchange where securities and other financial instruments are traded
trading system/exchange	a marketplace where financial instruments are traded

G06Q 40/02

Banking, e.g. interest calculation or account maintenance (credit or loans G06Q 40/03)

Definition statement

This place covers:

ICT specially adapted for banking applications, e.g. for interest calculations, home banking, on-line banking or account maintenance.

The following subjects are therefore covered, the list being non-exhaustive:

- banking applications, e.g. preparation of bank statements, interest calculation, saving accounts, mortgage calculation, credit ratings, home-banking, on-line banking;
- · processing of tax refunds;
- financial accounting, e.g. account balancing.

References

Limiting references

This place does not cover:

Credit or loans	G06Q 40/03
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Informative references

Payment architectures, schemes or protocols	G06Q 20/00
Payments in home banking	G06Q 20/108
Payment architectures, schemes or protocols characterised by using cards	G06Q 20/34
Commerce	G06Q 30/00
Buying, selling or leasing transactions	G06Q 30/06
Auctions	G06Q 30/08
Circuit arrangements for AC mains or AC distribution networks	H02J 3/00
Arrangements for secret or secure communications; Network security protocols	H04L 9/00

Network architectures or network communication protocols for network security	H04L 63/00
Network arrangements, protocols or services for supporting real-time applications in data packet communication	H04L 65/00
Network arrangements or protocols for supporting network services or applications	H04L 67/00

{Management of bank accounts, e.g. opening or closing of bank accounts, new customer bank accounts}

Definition statement

This place covers:

ICT specially adapted for bank account creation, transferring account information at financial institutions or maintaining account information.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Payments circuits	G06Q 20/04
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G06Q 40/0221

{Intra-bank account relationships, e.g. sub-accounts, linked or joint accounts}

Definition statement

This place covers:

ICT specially adapted for managing multiple bank accounts tied together at the same bank or financial institution and controlled by a cardholder.

Non-exhaustive list of accounts:

- · child accounts;
- · vacation accounts;
- · special purpose savings account;
- · holiday account.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Credit and loan accounts	<u>G06Q 40/03</u>
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Special rules of classification

Electronic funds transfer transactions between linked accounts, e.g. electronic funds transfers between multiple linked accounts including bank transfers into a savings account, money market

Special rules of classification

account, credit account, vacation account, child account or school account are to be classified in G06Q 40/0221.

ICT specially adapted to implement procedures for fulfilling a financial obligation or debt should be classified in $\underline{G06Q\ 20/00}$, e.g. payment accounts relating to the hierarchy of user (i.e. child/parent account used in payment transactions) are to be classified in $\underline{G06Q\ 20/229}$ and payment accounts where the payer has access to multiple payment accounts are to be classified in $\underline{G06Q\ 20/227}$

G06Q 40/0222

{Monitoring, detecting or alert notifications of bank account events}

Definition statement

This place covers:

ICT specially adapted for alerting or notifying the user of bank account activity.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Confirmation, e.g. check or permission by the legal debtor of payment	G06Q 20/42
Detecting local intrusion or implementing countermeasures	G06F 21/55

G06Q 40/0223

For planning or pre-staging a bank account transaction

Definition statement

This place covers:

ICT specially adapted for scheduling bank account transactions on a first device or at a first location and finalizing transactions on a second device or second location.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Bill distribution or payments	G06Q 20/102
Specially adapted for billing systems	G06Q 20/14
Characterised in that multiple accounts are available, e.g. to the payer	G06Q 20/227
Solvency check	G06Q 20/403
Establishing or using transaction specific rules	G06Q 20/405

Special rules of classification

Transactions that are scheduled or initiated in one location or on a first device and finalized at a different location or on a different device are to be classified herein.

ICT specially adapted for transactions involving the fulfilment of a financial obligation or debt should be classified in <u>G06Q 20/00</u> only. For example, payment transactions involving payment due or transfer of funds for payment of a debt or for a service from a buyer or payer to a vendor or merchant are

to be classified in their respective sections in $\underline{G06Q\ 20/00}$: via a third-party in $\underline{G06Q\ 20/0855}$, via remote vendor in $\underline{G06Q\ 20/085}$, via peer-to-peer network in $\underline{G06Q\ 20/223}$, involving payments using remote banking networks in $\underline{G06Q\ 20/108}$, involving a payment network at an ATM in $\underline{G06Q\ 20/1085}$ or payments using point of sale networks in $\underline{G06Q\ 20/20}$.

G06Q 40/0225

{Bank transfers not related to payment transactions}

Definition statement

This place covers:

ICT specially adapted for bank transfer of funds into an account at a different bank or financial institution not related to payment for product or services, e.g. reconciliation of account transfers.

Non-exhaustive list of non-payment bank transfers:

- transferring funds into and out of a savings account, investment account or checking account from a different bank or financial institution;
- · donation to a charity.

Special rules of classification

Transactions involving transfer of funds into an account at a different bank or financial institution not related to payment of a debt or for a service are to be classified herein. Examples includes transfer of funds into and out of a savings account, investment account or checking account from a different bank or financial institution, transfers or donations to a charity.

ICT specially adapted for payment accounts relating to the hierarchy of user (i.e. child/parent account used in payment transactions) should be classified in <u>G06Q 20/229</u>, electronic funds transfer [EFT] systems; specially adapted for home banking systems should be classified in <u>G06Q 20/10</u> and payment accounts where the payer has access to multiple payment accounts should be classified in <u>G06Q 20/227</u>.

G06Q 40/023

{specially adapted for online banking}

Definition statement

This place covers:

ICT specially adapted for online banking, e.g. remote or mobile banking.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Bill distribution or payments	G06Q 20/102
Specially adapted for billing systems	G06Q 20/14
Access to banking information through M-devices	G06Q 20/3221

Special rules of classification

Classify financial aspects of online banking applications or mobile banking herein. Online banking transactions are transactions that are remote from the financial institution such as mobile transactions. Examples include remote balance inquiries, online account creation, mobile banking applications.

Special rules of classification

ICT specially adapted for payment transactions involving payment due or transfer of funds for payment of a debt or for a service from a buyer or payer to a vendor or merchant should be classified in G06Q 20/00, e.g. involving payments using remote banking networks in G06Q 20/108, involving a payment network at an ATM in G06Q 20/1085 or payment applications using specific devices in G06Q 20/30.

G06Q 40/024

{Anti-fraud, anti-money laundering or know-your-customer}

Definition statement

This place covers:

ICT specially adapted for monitoring or detecting suspicious activity or people, e.g. unauthorized account activity or unauthorized person.

Relationships with other classification places

Only classify ICT specially adapted for payment transaction involving fraud or risk assessment in G06Q 20/4016, payment authorizations in G06Q 20/04 or identity checks for payment transactions in G06Q 20/4014.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Involving fraud or risk assessment in transaction processing	G06Q 20/4016
Security arrangements for protecting computers, components thereof, programs or data against unauthorised activity	G06F 21/00
Network architectures or network communication protocols for network security	H04L 63/00
Security arrangements; Authentication; Protecting privacy or anonymity	H04W 12/00

Special rules of classification

Classify suspicious account activity or suspicious people herein. For example, transaction outside of normal spending patterns, unauthorized use of a financial account by an unauthorized user.

G06Q 40/026

{Banking interfaces}

Definition statement

This place covers:

Graphical user interfaces specially adapted for banking including specialized user interfaces designed and tailored for seamless interaction with banking systems to access and manage account information, transactions or financial services.

References

Informative references

User interfaces	G06F 3/01
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{Processing paper cheques}

Definition statement

This place covers:

ICT specially adapted for processing paper cheques involving handling and verification of physical paper-based financial instruments covering activities not limited to verification, recording, handling, transporting or updating financial records.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Characterized in that the payment protocol involves at least one cheque	G06Q 20/042
The cheque being electronic only	G06Q 20/0425

G06Q 40/029

{Banking at kiosks, computers, point of sale [POS] terminals or automated teller machines [ATM]}

Definition statement

This place covers:

ICT specially adapted for processing bank transactions involving user interactions at kiosks, point of sale [POS] terminals or automated teller machines [ATMs].

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

ATM (for payment transactions)	G06Q 20/1085
Kiosk, vending machines (for payment transactions)	G06Q 20/18

Special rules of classification

Classify processing bank transactions involving user interactions at a kiosk, point of sale terminal [POS] or automated teller machines [ATM] herein. For example, withdrawals or electronic funds transfers by a user interacting at a kiosk, POS or ATM.

ICT specially adapted for payment transactions involving using remote banking networks are classified in <u>G06Q 20/108</u>, payment transactions involving a payment network at an ATM are classified in <u>G06Q 20/1085</u> and payment transactions using point of sale networks are classified in <u>G06Q 20/20</u>.

Credit; Loans; Processing thereof

Definition statement

This place covers:

ICT specially adapted for managing or processing financial debt applications, e.g. for credit risk or loan evaluation of borrower.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Risk analysis, e.g. for insurance or pensions	G06Q 40/08
Record-sensing device in combination with a system that includes the ascertaining of credit	G06K 7/00

G06Q 40/0305

{Platforms for credit or lending product research, comparison or matching}

Definition statement

This place covers:

Credit or lending marketplaces specially adapted for research, comparing or matching customers to credit or lending products based on user or product criteria.

ICT specially adapted for credit or loan extension or refinancing.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Electronic shopping	G06Q 30/0601
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G06Q 40/03055

{using artificial intelligence, machine learning or neural networks}

Definition statement

This place covers:

Credit or loan marketplaces specially adapted for recommending credit of lending products or customers using artificial intelligence, machine learning or neural networks.

References

Informative references

Neural networks <u>G06N 3/02</u>

{Credit restrictions on particular classes of purchases or children accounts}

Definition statement

This place covers:

ICT specially adapted for limiting or restricting the use of credit or loans based on transaction details, e.g. user criteria, location or product.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

	0000 00/405
Establishing or using transaction specific rules	<u>G06Q 20/405</u>

G06Q 40/032

{Account notification, monitoring, detecting, or reporting therefor}

Definition statement

This place covers:

ICT specially adapted for alerting or notifying the user of credit or lending activity, e.g. monitoring or reporting credit charges or loan activity by third-party monitoring service.

G06Q 40/0325

{specially adapted for detecting or preventing credit or loan fraud}

Definition statement

This place covers:

ICT specially adapted for notifying or reporting credit or loan fraud, e.g. notifying or reporting of charges by a third-party fraud detection service.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Detecting local intrusion or implementing counter-measures	G06F 21/55
Neural networks	G06N 3/02

G06Q 40/03251

{using artificial intelligence, machine learning or neural networks}

Definition statement

This place covers:

ICT specially adapted for detecting or preventing credit or loan fraud using artificial intelligence, machine learning or neural networks.

{Analysing or forecasting financial condition of borrowers}

Definition statement

This place covers:

ICT specially adapted for determining qualified or eligible borrowers for lending.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

English of the conflict of the	0000 40/04
Forecasting optimisation	<u>G06Q 10/04</u>

G06Q 40/034

{Loan servicing}

Definition statement

This place covers:

ICT specially adapted for performing day-to-day administrative functions for a loan from the time of creation to when the loan is paid off.

Non-exhaustive list of administrative functions for a loan:

- · sending monthly statements;
- · collecting monthly statements
- maintaining records of payments and balances;
- · collecting or paying taxes or insurance;
- · managing escrow;
- · reporting delinquencies.

G06Q 40/035

{using financial equations or formulas}

Definition statement

This place covers:

ICT specially adapted for performing day-to-day administrative functions using financial equations or formulas.

G06Q 40/036

{Mortgages}

Definition statement

This place covers:

ICT specially adapted for performing day-to-day administrative functions of mortgages.

{Revolving line of credit}

Definition statement

This place covers:

ICT specially adapted for performing day-to-day administrative functions of revolving line of credit.

G06Q 40/038

{Car or vehicle loans}

Definition statement

This place covers:

ICT specially adapted for performing day-to-day administrative functions of auto or vehicle loans.

G06Q 40/039

{Personal or business loans}

Definition statement

This place covers:

ICT specially adapted for performing day-to-day administrative functions of personal or business loans.

G06Q 40/04

Trading; Exchange, e.g. stocks, commodities, derivatives or currency exchange

Definition statement

This place covers:

ICT specially adapted for trading securities or commodities within an organised system, e.g. for trading of stocks, commodities, order entry and currency exchange within a stock exchange.

ICT specially adapted for bidding in a stock exchange, e.g. for broker tools for entering or managing orders.

The following subjects are therefore covered, the list being non-exhaustive:

- Stock exchange applications, e.g. for trading stocks, options, ordering of stocks, general stock trading administration, order entry, bid or ask;
- Foreign exchange, e.g. for currency trading and currency exchange;
- Trading or exchanging CO₂ carbon credits or renewable energy certificates.

Note:

This group includes trading or bidding of energy using a securities exchange system.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Payment architectures, schemes or protocols	G06Q 20/00
Auctions	G06Q 30/08
Asset management; Financial planning or analysis	G06Q 40/06
Electricity, gas or water supply	G06Q 50/06
Circuit arrangements for AC mains or AC distribution networks	H02J 3/00

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

stock	a financial instrument that represents the fractional ownership of
	an issuing corporation

G06Q 40/042

{using financial market analysis, e.g. trading predictions, or forecasting}

Definition statement

This place covers:

ICT specially adapted for analysing past or present trade data or analysing trends to predict market direction or behaviour.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Market modelling; Market analysis; Collecting market data	G06Q 30/0201

G06Q 40/0421

{using artificial intelligence, machine learning or neural networks}

Definition statement

This place covers:

ICT specially adapted for trade predictions or forecasting using artificial intelligence, machine learning or neural networks.

References

Informative references

Neural networks	G06N 3/02
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{Tools or interfaces specially adapted for trading or brokering}

Definition statement

This place covers:

ICT specially adapted for trade or order entry involving receiving, validating and executing trade orders.

G06Q 40/0431

{Displaying financial market data}

Definition statement

This place covers:

ICT specially adapted for presenting or displaying financial market data on a graphical user interface involving the presentation of visualisation of relevant financial information rendered on a graphical user interface [GUI].

Non-exhaustive list of displaying market data:

- · charts:
- graphs;
- GUI;
- 3D or virtual reality.

G06Q 40/0432

{using pricing grids or ladders}

Definition statement

This place covers:

ICT specially adapted for displaying or setting price grids or ladders involving displaying and adjusting price-related information within a format that facilitates a clear and organized view of pricing tiers, changes and trends.

G06Q 40/044

{using tick sizes or order constraints}

Definition statement

This place covers:

ICT specially adapted for using tick sizes or setting order constraints involving the application of predefined tick sizes, specific price increments or order restraints.

{Accepting or processing orders in an exchange}

Definition statement

This place covers:

ICT specially adapted for accepting or processing trade orders in a trading exchange involving facilitating the validation, acceptance and execution of trades within the trading exchange.

G06Q 40/0451

{Prioritising, queuing or matching trade orders in an exchange}

Definition statement

This place covers:

ICT specially adapted for matching, prioritising or queuing trade orders in a trading exchange involving facilitating the matching, assigning priority by price or time and queuing of trades within the trading exchange.

G06Q 40/046

{Trading across multiple trading exchanges or platforms}

Definition statement

This place covers:

ICT specially adapted for managing trade orders across multiples trading platforms or trading systems, e.g. linking trade orders or coordinating between trading and open cry.

G06Q 40/047

{including trading crash mitigation or circuit breakers}

Definition statement

This place covers:

ICT specially adapted for halting, freezing or pausing trade orders based on sudden changes in trading activity or market volatility.

G06Q 40/048

{Trading margin, collateral, or credit worthiness of trading partners}

Definition statement

This place covers:

ICT specially adapted for trading margin, trade collateral, or credit worthiness of trading parties involving the evaluation of margin requirements, collateral obligations and the credit worthiness of the involved trading parties.

{Trading or exchanging carbon credits or renewable energy certificates}

Definition statement

This place covers:

ICT specially adapted for trading or exchanging CO₂ carbon credits or renewable energy certificates involves transferring quantifiable units representing an amount of carbon emission or renewable energy generation.

G06Q 40/05

{Trading or analysing debt instruments}

Definition statement

This place covers:

ICT specially adapted for buying or selling or analysing debt instruments, e.g. mortgages, bonds, student loans and negotiable certificates of deposits [CDs].

G06Q 40/051

{Trading or analysing equity instruments}

Definition statement

This place covers:

ICT specially adapted for buying or selling or analysing equity instruments, e.g. preferred stock, equity options, equity warrants, equity hybrids, exchange traded funds [EFTs] and equity swaps.

G06Q 40/052

{Trading or analysing derivatives}

Definition statement

This place covers:

ICT specially adapted for buying or selling or analysing derivatives, e.g. forward contracts, future contracts, options contracts and swap contracts.

G06Q 40/0525

{using binary options or trading in prediction markets}

Definition statement

This place covers:

ICT specially adapted for buying and selling or analysing derivatives using binary options or trading in prediction markets, e.g. payouts that are dependent on an outcome of a yes/no position.

{Trading fiat currency}

Definition statement

This place covers:

ICT specially adapted for buying and selling fiat currency, e.g. trading government backed financial currencies on the open market.

G06Q 40/054

{Trading investment funds, e.g. mutual funds or hedge funds}

Definition statement

This place covers:

ICT specially adapted for buying and selling investment funds, e.g. mutual funds, hedge funds.

G06Q 40/0545

{Trading exchange traded funds}

Definition statement

This place covers:

ICT specially adapted for buying and selling funds traded on public exchanges, e.g. ETFs.

G06Q 40/055

{Trading non-fungible tokens [NFT]}

Definition statement

This place covers:

ICT specially adapted for buying and selling non-fungible tokens [NFTs], e.g. digital assets that can be bought and sold in the same manner as a stock.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Using hash chains, e.g. blockchains or hash trees

H04L 9/50

G06Q 40/06

Asset management; Financial planning or analysis

Definition statement

This place covers:

ICT specially adapted for investment applications, e.g. for management of financial portfolios or institutional investments, planning for retirement or budgeting.

Definition statement

ICT specially adapted for financial modelling applications, e.g. for financial forecasting or prediction models.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT specially adapted for management in general	G06Q 10/00
Forecasting or optimisation specially adapted for administrative or management purposes in general	G06Q 10/04
Payment architectures, schemes or protocols	G06Q 20/00
Buying, selling or leasing transactions	G06Q 30/06
Electronic payment using cards	G07F 7/08
Arrangements for secret or secure communications; Network security protocols	H04L 9/00
Data switching in stock quotation systems	H04L 12/1804
Network architectures or network communication protocols for network security	H04L 63/00
Network arrangements, protocols or services for supporting real-time applications in data packet communication	H04L 65/00
Network arrangements or protocols for supporting network services or applications	H04L 67/00

G06Q 40/062

{Investment screening, selection or watchlist}

Definition statement

This place covers:

ICT specially adapted for investment research or tracking investments or assets involving comprehensive research and continuous monitoring, providing valuable insights to inform investment decisions and portfolio optimization by in-dept analysis or utilizing tracking mechanizes.

G06Q 40/063

{Asset management predictions or forecasting}

Definition statement

This place covers:

ICT specially adapted for analysing past or present investments to predict direction or behaviour.

References

Informative references

Market predictions or forecasting for commercial activities	G06Q 30/0202

{Asset management predictions or forecasting using artificial intelligence, machine learning or neural networks}

Definition statement

This place covers:

ICT specially adapted for asset management predictions or forecasting using artificial intelligence, machine learning or neural networks.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Neural networks <u>G06N 3/02</u>

G06Q 40/064

{including visualisation for planning or analysis}

Definition statement

This place covers:

ICT specially adapted for charting, or reporting investments or asset trends, e.g. investment 3D modelling, virtual reality, candlestick charts, sparklines.

G06Q 40/065

{Budgeting}

Definition statement

This place covers:

ICT specially adapted for budgeting involving the creation, evaluation and management of a strategic planning and the allocation of financial resources by encompassing income, expenses and investment to achieve a financial goal.

G06Q 40/066

{Retirement planning}

Definition statement

This place covers:

ICT specially adapted for retirement planning involving the preparation and setting of financial goals, assessing income, estimating expenses and implementing investment strategies to sustain a desired lifestyle post-employment by considering inflation, life expectancy and individual preferences.

{Financial business planning}

Definition statement

This place covers:

ICT specially adapted for financial business planning involving outlining goals, objectives and operational strategies by utilising market analysis, financial forecasting and an action plan to guide organisational growth.

G06Q 40/068

{Investment funding including crowdfunding or crowdlending}

Definition statement

This place covers:

ICT specially adapted for investment funding or financing investments in exchange for ownership, e.g. peer-to-peer funding, crowdfunding, crowdlending or donations.

G06Q 40/082

G06Q 40/08

Insurance

Definition statement

This place covers:

ICT specially adapted for insurance applications, e.g. for writing insurance policies, processing insurance claims, calculating insurable risk, premium calculations, insurance backed securities or pensions.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Office automation: Time management <u>G06Q 10/10</u>

G06Q 40/082

{platforms for insurance research, comparison or matching insurance customers and providers using insurance risk factors}

Definition statement

This place covers:

Insurance marketplace specially adapted for insurance brokering using risk profile factors including matching, pricing or policy information.

Non-exhaustive list of risk profile factors:

- · health factors, e.g. age;
- driving factors, e.g. driving history;
- environmental factors, e.g. weather.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Marketing; Price estimation or determination; Fundraising	G06Q 30/02
Electronic shopping (e-shopping)	G06Q 30/0601

G06Q 40/0821

{by recommending insurance products, customers or providers based on risk analysis}

Definition statement

This place covers:

ICT specially adapted for recommending insurance products to customers, or connecting customers with insurance providers based on the evaluation of risk factors, coverage needs and insurance market dynamics, e.g. underwriting or actuary.

G06Q 40/0822

{by determining insurance risk or fault}

Definition statement

This place covers:

ICT specially adapted for underwriting insurance policies involving evaluating the risk factors associated with acceptance, modification or rejection of an insurance application based on analysing health factors and other relevant information to determine insurability.

G06Q 40/08221

{using vehicle data and driving data}

Definition statement

This place covers:

ICT specially adapted for improving personalized risk assessment accuracy and premium calculations in underwriting an insurance policy using risk data originating from telematics, on-board devices or mobile platforms.

Non-exhaustive list of risk data:

- road conditions data, e.g. icy conditions or accident frequency;
- · traffic data:
- · routes data;
- · breaking or accelerations data.

{by calculating actual insurance loss value}

Definition statement

This place covers:

ICT specially adapted for calculating actual insurance loss, e.g. total loss involving determining if market value of the insured property exceeds the repair or recovery cost by evaluating the extent of damages.

G06Q 40/08223

{by calculating potential insurance loss value}

Definition statement

This place covers:

ICT specially adapted for calculating potential insurance loss by estimating potential financial or material damages that may occur from environmental factors, market fluctuation, operational risk or unforeseen events.

G06Q 40/084

{by insurance claims processing}

Definition statement

This place covers:

ICT specially adapted for insurance claims processing involving the submission, validation, assessment and settlement of insurance claim requests made by policyholders for covered loss or damages.

Non-exhaustive list of insurance claims processing:

- property damage;
- · incidental;
- worker's compensation.

G06Q 40/0841

{using image analysis}

Definition statement

This place covers:

ICT specially adapted for insurance claims processing using images, photographs or other visual data to evaluate damages, incidents or losses for the assessment, validation and settlement of insurance claims.

{using sensors}

Definition statement

This place covers:

ICT specially adapted for insurance claims processing using sensors or other detection devices to evaluate damages, incidents or losses for the assessment, validation and settlement of insurance claims.

G06Q 40/085

{for coordinating insurance risk prevention measures for insurance policy coverage}

Definition statement

This place covers:

ICT specially adapted for coordinating insurance risk prevention measures for insurance policy coverage involving identifying vulnerabilities, formulating risk prevention strategies and implementing proactive countermeasures aimed at preventing or mitigating potential risk covered by insurers.

G06Q 40/086

{by calculating insurance premiums for insurance policies}

Definition statement

This place covers:

ICT specially adapted for calculating insurance premiums or policy discounts or managing insurance coverage options including the assessment of risk factors to determine premium rates, applying discounts or customizing coverages options.

Non-exhaustive list of insurance discount calculations:

- · discounts for changing driving behaviour;
- · discounts for hazard detection devices or sensors.

G06Q 40/0861

{using sensors}

Definition statement

This place covers:

ICT specially adapted for calculating insurance premiums or policies using sensors or other detection devices to assess risk factors used in determining premium rates.

Non-exhaustive list of sensors:

- · speed;
- · acceleration;
- · telematics:
- health;
- · cameras.

{using annuities}

Definition statement

This place covers:

ICT specially adapted for creating annuities involving collecting period payment made or received over a specified period of time and considering interest rates, payment frequency and duration.

G06Q 40/09

{using artificial intelligence, machine learning or neural networks}

Definition statement

This place covers:

ICT specially adapted for insurance processing using artificial intelligence [AI], machine learning or neural networks involving the assessment, underwriting, fraud detection and customer interaction by integrating AI, machine learning or neural networks.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

leural networks	<u>G06N 3/02</u>
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G06Q 40/10

Tax strategies

Definition statement

This place covers:

ICT specially adapted for strategies for addressing future tax liability, risk or payment of taxes to a government entity.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Tax preparation or submission	G06Q 40/123

G06Q 40/12

Accounting

Definition statement

This place covers:

ICT specially adapted for recording, analysing, verifying or reporting of funds or other quantitatively innumerable factors used in a business.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Counters with additional facilities

G06M 3/00

G06Q 40/123

{Tax preparation or submission}

Definition statement

This place covers:

Subject matter drawn to a computerised arrangement for determining or submitting a tax or tax form to a governmental entity.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Tax processing in POS payment systems

G06Q 20/207

G06Q 40/124

{Auditing}

Definition statement

This place covers:

ICT specially adapted for auditing involving recording, evaluating and verifying financial records, or compliance measures within an organization.

G06Q 40/125

{Finance or payroll}

Definition statement

This place covers:

Subject matter for analysis or allocation of time utilised by and billable to an individual or other entity.

G06Q 40/126

{Corporate accounting}

Definition statement

This place covers:

ICT specially adapted for recording, analysing, verifying or reporting of corporate funds.

{Check-book balancing, updating or printing arrangements}

Definition statement

This place covers:

Subject matter including an arrangement for attaching a data processing device to a checkbook, which processes transaction data to verify, or carry forward, the checkbook balance, or to print a check (or a cheque), upon to entry of an account transaction.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Online banking	G06Q 40/02
Checkbook attached digital calculator, in which the transaction information is limited to the date or transaction amount	G06F 15/025
Receipt giving machines	<u>G07G 5/00</u>

G06Q 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)

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for implementation of business processes of a specific business sector. For purposes of classification herein, a business sector is understood as a grouping of businesses that perform similar operations or activities within a particular field.

Relationships with other classification places

Healthcare-related subject matter specially adapted for administrative, commercial, financial, managerial or supervisory purposes is classified under <u>G06Q 50/00</u>, while subject matter for other purposes, such as digital computing or data processing equipment or methods specially adapted for calculating or processing of patient-related data is classified under <u>G16H</u>. Genetic or protein-related data for scientific purposes is classified under <u>G16B</u>.

Take care that as soon as medical considerations are relevant, e.g. making appointments with a doctor, <u>G16H</u> takes precedence, e.g. order of a series of appointments, such as blood test, then tomography, then doctor consultation.

References

Limiting references

This place does not cover:

Healthcare informatics	<u>G16H</u>

Special rules of classification

When no special adaptation has taken place, no group under G06Q 50/00 should be allocated.

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

·	business operations or activities performed by entities, e.g. organisations or enterprises, that operate for commercial, financial, industrial or professional purposes
	an area of the economy in which entities share the same or related business activities, products or services

G06Q 50/01

{Social networking}

Definition statement

This place covers:

Subject matter drawn to a computerised arrangement for the management of interaction between individuals or entities who are connected by one or more common relations or interests.

G06Q 50/02

Agriculture; Fishing; Forestry; Mining

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for implementation of business processes for the business sectors of agriculture, fishing, forestry or mining.

The following business processes are therefore covered, the list being non-exhaustive:

- managing the production of crops or the raising of animals, e.g. livestock or fish;
- catching or harvesting aquatic animals, or managing aquatic animals or the areas in which they live, e.g. fisheries;
- planting, harvesting, or managing forests or woodlands, or the resources therein, e.g. wildlife, timber, or water resources;
- managing or planning for the extraction of valuable minerals or other geological materials from the earth.

References

Informative references

Methods for working soil in agriculture or forestry	A01B 79/00
Methods of fertilising	A01C 21/00
Forestry	A01G 23/00
Control of watering gardens, fields, sports grounds or thelike	A01G 25/16
Animal husbandry; Fishing	<u>A01K</u>

	·
Automatic control systems specially adapted for earth orrock drilling operations, i.e. self-operating systems	E21B 44/00
Survey of boreholes or wells	E21B 47/00
Investigating or analysing earth materials by determining their chemical or physical properties	G01N 33/24
Sonar systems specially adapted for locating fish	G01S 15/96
Seismic or acoustic prospecting specially adaptedfor well-logging	G01V 1/40
Devices used for predicting weather conditions, other than computers, e.g. rainfall sensors, radar	G01W 1/10
Programme-control systems	G05B 19/00
Computer-aided design	G06F 30/00
Image or video recognition or understanding of terrestrial scenes	G06V 20/10
Image or video recognition or understanding, scene-specific elements, food, e.g. fruit or vegetables	G06V 20/68
Information and communication technology [ICT] speciallyadapted for the internet of things [IoT] for the agricultureeconomic sector	G16Y 10/05
Information and communication technology [ICT] speciallyadapted for the internet of things [IoT] for the forestryeconomic sector	G16Y 10/10
Information and communication technology [ICT] speciallyadapted for the internet of things [IoT] for the fishingeconomic sector	G16Y 10/15
Information and communication technology [ICT] speciallyadapted for the internet of things [IoT] for the miningeconomic sector	G16Y 10/20

Manufacturing

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for implementation of business processes of the business of manufacturing.

References

Informative references

Performance analysis of enterprise or organization operations, quality analysis or management	G06Q 10/06395
Data acquisition or data processing for additive manufacturing of workpieces or articles from metallic powder	B22F 10/80
Data acquisition or data processing for additive manufacturing of plastics	B29C 64/386
Data acquisition or data processing for additive manufacturing	B33Y 50/00
Machine control in manufacturing	G05B 19/00
Using design data to control Numerical control [NC] machines, e.g. CAD/CAM	G05B 19/4097
Total factory control, i.e. centrally controlling a plurality of machines	G05B 19/418

Information and communication technology [ICT] specially adapted for the	G16Y 10/25
internet of things [IoT] for the manufacturing economic sector	

Energy or water supply

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for implementation of business processes for the business of supplying energy or water.

The following business processes are therefore covered, the list being non-exhaustive:

- determining charges reflecting a consumed quantity of power or energy or water;
- administrative or economic planning of energy or water supply;
- · management of water rights;
- pricing for energy or water.

For purposes of classification herein, energy is understood as including the following subjects, the list being non-exhaustive:

- electricity, e.g. solar or wind;
- hydrogen energy;
- gas.

References

Informative references

Monitoring or controlling charging stations for electric vehicles, optimising energy costs	B60L 53/64
Apparatus or devices for transferring liquids from bulk storage containers or reservoirs into vehicles or into portable containers, e.g. for retail sale purposes	B67D 7/00
Arrangements of devices for controlling, indicating, metering or registering quantity or price of liquid transferred	B67D 7/08
Treatment of water, waste water, sewage or sludge	<u>C02F</u>
Installations or methods for obtaining, collecting or distributing water	E03B
Gas-turbine plants; Air intakes for jet-propulsion plants; Controlling fuel supply in airbreathing jet-propulsion	F02C
Wind Motors	<u>F03D</u>
Air-conditioning control or safety arrangements responding to energy costs	F24F 11/47
Tariff metering apparatus	G01D 4/00
Measuring volume, volume flow, mass flow or liquid level; Metering by volume	G01F
Power logging, e.g. metering	G01R 21/00
Meteorology	<u>G01W</u>
Apparatus with meter-controlled dispensing	G07F 15/00

Information and communication technology [ICT] specially adapted for the internet of things [IoT] for the utilities economic sector	G16Y 10/35
Systems for supplying, distributing, or storing electric power or energy	<u>H02J</u>
Arrangements for controlling electric generators for the purpose of obtaining a desired output	H02P 9/00
Generation of electric power by conversion of infrared radiation, visible light or ultraviolet lights, e.g. using photovoltaic [PV] modules	<u>H02S</u>

Construction

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for implementation of business processes of the business of construction.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Preparing, conveying or working-up building materialsor building elements in situ; Other devices or measures forconstructional work	E04G 21/00
Buildings or groups of buildings for public or similar purpose	E04H 3/00
Architectural design, e.g. computer-aided architecturaldesign [CAAD] related to design of buildings, bridges,landscapes, production plants or roads	G06F 30/13
Image data processing; Manipulating 3D models or images; Mixed reality	G06T 19/006
Information and communication technology [ICT] speciallyadapted for the internet of things [IoT] for the constructioneconomic sector	G16Y 10/30
Information and communication technology [ICT] speciallyadapted for the internet of things [IoT] for homes orbuildings economic sector	G16Y 10/80

G06Q 50/10

Services

Definition statement

This place covers:

Subject matter covering the business sector specially adapted for providing assistance or helpful activities required or requested by customers or public.

Hotels or restaurants

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for lodging or particularly designed for use in an establishment serving food or drink to buyers.

Note:

Classification in this group requires some relationship to either the preparation or serving of food or drink. Incidental placement of a system in such an environment, e.g. an electronic cash register in a restaurant, does not of itself cause classification in this group.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Reservations, e.g. for tickets, services or events	G06Q 10/02
Furniture or installations specially adapted for restaurant service systems	A47F 10/06
Individual registration on entry or exit; Electronically operated locks	G07C 9/00174

G06Q 50/14

Travel agencies

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the business sector specially adapted for providing necessary arrangements or accommodation for travellers, e.g. tour guide planning.

References

Informative references

Reservations, e.g. for tickets, services or events	G06Q 10/02
Navigation in a road network, calculating itineraries, i.e. routes leading from starting point to series of destinations	G01C 21/343
Touring guides, maps	G09B 29/00
Mobile services, location-based services	H04W 4/02

Real estate

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the development or construction of buildings or to the process of buying and selling of land, including the natural resources and permanent buildings.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Product appraisal, e.g. houses	G06Q 30/0278
Rental transactions; Leasing transactions	G06Q 30/0645
Loans	G06Q 40/03
Insurance, e.g. against loss or damage	G06Q 40/08
Architectural design, e.g. computer-aided architectural design [CAAD] related to design of buildings	G06F 30/13

G06Q 50/163

Real estate management

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for implementation of business processes for the business of managing or overseeing real estate properties.

Included herein is the management of real estate properties such as apartments, single family homes, condominium units, shopping centres, industrial centres and the like. The management may be by owners of the real estate properties or on behalf of owners of the real estate properties.

References

Informative references

Insurance, e.g. against loss or damage	G06Q 40/08
Systems controlled by a computer	G05B 15/00
Information and communication technology [ICT] speciallyadapted for the internet of things [IoT] for Homes orBuildings economic sector	G16Y 10/80
Home automation networks	H04L 12/2803

{Land development}

Definition statement

This place covers:

Subject matter drawn to a computerised arrangement for the development or construction of buildings or to the process of buying and selling of land, including the natural resources and permanent buildings.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Agriculture; Fishing; Forestry; Mining	G06Q 50/02
Energy or water supply	G06Q 50/06

G06Q 50/167

{Closing}

Definition statement

This place covers:

Subject matter drawn to a computerised arrangement for the transfer of ownership of and title to property from one person to another for a price.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Legal services associated with a real estate sale	G06Q 50/18
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G06Q 50/18

Legal services

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for implementation of business processes for the business sector of providing legal services, e.g. work performed by a lawyer.

References

Informative references

Office automation, e.g. automation of office environment; Automation of contracts	G06Q 10/10
Database functions, document management systems	G06F 16/93

Handling of natural language data	G06F 40/00
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{Alternative dispute resolution}

Definition statement

This place covers:

Subject matter drawn to a computerised arrangement for the development or maintenance of procedures or processes, e.g. arbitration, re conciliation, mediation, that are voluntarily adopted to resolve controversies (or to settle disagreements) before taking recourse to legal action, i.e. litigation.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Electronic negotiation including an offer and acceptance or counteroffer	G06Q 50/188
among parties	

G06Q 50/184

{Intellectual property management}

Definition statement

This place covers:

Subject matter drawn to a computerised arrangement for the creation or maintenance of a rights management system for intangible property which protects the products of human intelligence and creation, i.e. as copyrightable works, patented inventions, trademarks or trade secrets.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Portfolio valuation	G06Q 40/06, G06Q 40/10
Digital Rights Management with encryption	G06Q 2220/00
Computer security, data protection	G06F 21/00

G06Q 50/186

{Estate planning}

Definition statement

This place covers:

Subject matter drawn to a computerised arrangement for the drawing up of a will, the setting up of a trust, or (if it minimizes estate taxes) for the passing of property to one's heirs before one's death as well as for the setting up post-life arrangements e.g. funerals.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Computerised arrangement for planning the disposition or use of funds or	G06Q 40/00
securities, or extension of credit	

G06Q 50/188

{Electronic negotiation}

Definition statement

This place covers:

Subject matter including an offer and acceptance or counteroffer among parties.

G06Q 50/20

Education

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for implementation of business processes for the business sector of providing educational services.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Teaching equipment	<u>G09B</u>
Information and communication technology [ICT] specially adapted for the internet of things [IoT] for the education economic sector	G16Y 10/55

G06Q 50/205

{Education administration or guidance}

Definition statement

This place covers:

Subject matter drawn to a computerised arrangement for (1) the business of conducting, organising, or maintaining the management functions of an organisation concerned with teaching, (2) the management of the process of institution or course selection or (3) the management of assistance programs.

This group includes continuing education planning.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Arrangement for planning the disposition or use of funds or securities, or extension of credit	G06Q 40/00
Arrangement for recording, analyzing, verifying or reporting of funds or other quantitatively innumerable factors used in a business	G06Q 40/12
Subject matter dealing with instruction, demonstration or grading of students	G09B 25/00

G06Q 50/2053

{Education institution selection, admissions, or financial aid}

Definition statement

This place covers:

Subject matter drawn to a computerised arrangement for analysis or assistance in the process of selection of an educational resource, course selection, entry requirements or assistance associated with payment or reimbursement for tuition.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Arrangement for planning the disposition or use of funds or securities, or extension of credit	G06Q 40/00
Arrangement for recording, analyzing, verifying or reporting of funds or other quantitatively innumerable factors used in a business	G06Q 40/12

G06Q 50/2057

{Career enhancement or continuing education service}

Definition statement

This place covers:

Subject matter drawn to a computerised arrangement for analysis or assistance associated with career change or advancement.

This group includes computerised arrangements for analyzing or tracking credit for work experience.

Social work or social welfare, e.g. community support activities or counselling services

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for providing services for engaging with individuals or communities in order to solve social problems, personal problems or promote social welfare.

Relationships with other classification places

Details for social work or social welfare provided specifically by government entities may also be classified in group G06Q 50/26.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

ICT specially adapted for handling or processing of patient-related medical or healthcare data for patient-specific data	G16H 10/60
ICT specially adapted for therapies or health-improving plans relating to mental therapies, e.g. psychological therapy or autogenous training	G16H 20/70
ICT specially adapted for management or administration of healthcare resources or facilities, e.g. managing hospital staff or surgery rooms	G16H 40/20

G06Q 50/26

Government or public services (business processes related to the transportation industry <u>G06Q 50/40</u>)

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the implementation of business processes for the provision of government or public services. For classification herein, a government or public service is a service provided by the government or for use by general public.

Relationships with other classification places

Details for social work or social welfare may also be classified in group G06Q 50/22.

References

Limiting references

This place does not cover:

Business processes related to transportation industry	G06Q 50/40
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{Personal security, identity or safety}

Definition statement

This place covers:

Subject matter drawn to a computerised arrangement for (1) ensuring the legal or uninterrupted enjoyment by a person of their life, their body, their health or their reputation, e.g. TSA airport screening, public venue admission screening, in order to bar an individual who may cause harm to another, (2) for the detection of illicit use of personal information, such as analysis or detection means for determining that a person or business entity is who they say they are or (3) for protective measures or protocol to prevent injury.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Fraud associated with business products or services	G06Q 30/0185
Fraud prevention or detection during financial transactions	G06Q 40/00
Access control or authentication, involving biometrics	G06F21/00474
Image analysis for personnel identification, e.g. biometrics	G06K19/07349

G06Q 50/34

Betting or bookmaking, e.g. Internet betting

Definition statement

This place covers:

Subject matter covering the business sector specially adapted for gambling or the wagering of money or something of material value on an event with an uncertain outcome with the primary intent of winning additional money and/or material goods.

Special rules of classification

Documents must also be classified in G07F 17/32

G06Q 50/40

Business processes related to the transportation industry (shipping G06Q 10/083)

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for implementation of business processes for the transportation sector.

The following business processes are therefore covered, the list being non-exhaustive:

 managing schedules for public transportation services or mass transit, e.g. planning bus schedules.

References

Limiting references

This place does not cover:

	1
Shipping	G06Q 10/083

Informative references

Attention is drawn to the following places, which may be of interest for search:

Reservations, e.g. for tickets, services or events	G06Q 10/02
Logistics	G06Q 10/08
Monitoring or controlling charging stations using data transfer between charging stations and vehicles	B60L 53/66
Arrangements or apparatus for collecting fares, tolls or entrance fees at one or more control points	G07B 15/00
Collecting fares, tolls or entrance fees taking into account a variable factor such as distance or time, e.g. for passenger transport, parking systems or car rental systems	G07B 15/02
Registering or indicating the working of vehicles	G07C 5/00
Traffic control systems for road vehicles	G08G 1/00
Traffic control systems for road vehicles indicating the position of vehicles, e.g. scheduled vehicles	G08G 1/123
Information and communication technology [ICT] specially adapted for the internet of things [IoT] for the Transportation economic Sector	G16Y 10/40
Wireless communication networks services specially adapted for vehicles, e.g. vehicle-to-pedestrians [V2P]	H04W 4/40

G06Q 50/43

Business processes related to the sharing of vehicles, e.g. car sharing

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the implementation of business processes for sharing one or more vehicles, e.g. cars, bicycles, scooters, boats, etc., by multiple users.

The following business processes are therefore covered, the list being non-exhaustive:

- providing multiple users temporary access to one or more vehicles for intermittent use, e.g. car sharing, bike sharing or scooter sharing;
- requesting use of a vehicle by a driver or operator of the vehicle.

References

Informative references

Individual registration on entry or exit	<u>G07C 9/00</u>

Traffic control systems for road vehicles indicating the position of	G08G 1/123
vehicles, e.g. scheduled vehicles	

G06Q 50/47

Passenger ride requests, e.g. ride-hailing

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for the implementation of business processes for handling requests for transportation received from passengers.

For classification herein, a passenger is understood as a user other than a driver or operator of a vehicle used in providing transportation.

The following business processes are therefore covered, the list being non-exhaustive:

- handling requests from passengers for transportation by drivers of personal vehicles, e.g. ride sharing or ride hailing;
- pooling passengers for transportation to one or more destinations, e.g. carpooling or ride splitting.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Route searching; Route guidance	G01C 21/34
Taximeters	G07B 13/00

G06Q 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)

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for implementation of business processes for the communications sector.

References

Limiting references

This place does not cover:

Data switching networks; Charging arrangements	H04L 12/14
Telephonic communication involving automatic or semiautomatic exchanges	H04M 3/00
Arrangements for metering, time-control or time indication	H04M 15/00

Limiting references

Prepayment telephone systems	H04M 17/00
Services specially adapted for wireless communications networks; Accounting or billing	H04W 4/24

Informative references

Attention is drawn to the following places, which may be of interest for search:

Information and communication technology [ICT] specially adapted for the internet of things [IoT] for the Information technology or communications economic sector	<u>G16Y 10/75</u>
Network arrangements or protocols for supporting network services or applications	H04L 67/00
Services specially adapted for particular environments, situations or purposes; for the management of goods or merchandise	<u>H04W 4/35</u>
Services specially adapted for particular environments, situations or purposes; for mass transport vehicles, e.g. buses, trains or aircraft	H04W 4/42

G06Q 50/60

Business processes related to postal services (shipping G06Q 10/083; franking apparatus G07B 17/00)

Definition statement

This place covers:

Information and communication technology [ICT] specially adapted for implementation of business processes for the postal services sector.

References

Limiting references

This place does not cover:

Shipping	G06Q 10/083
Franking apparatus	G07B 17/00

Informative references

	*
Sorting postal items	<u>B07C</u>

G06Q 90/00

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

Definition statement

This place covers:

Systems or methods not involving significant data processing specially adapted for managing, promoting, or practicing commercial, financial, supervisory or forecasting activities, provided that:

No significant data processing is involved

systems or methods are specially adapted for the purposes covered by the groups G06Q 10/00-G06Q 50/00; and

systems or methods cannot be classified elsewhere in the CPC.

The following subjects are therefore covered, the list being non-exhaustive:

systems or methods not involving significant data processing for conducting polls or referendums, e.g. paper based systems;

systems or methods not involving significant data processing for carrying out interviews, e.g. a method of interviewing people in the street;

layout for a particular store;

rules for placing products, e.g. toys placed in the bottom of a shelf.

Special rules of classification

When classifying systems or methods as in the definition in this group, additional classification may be made in the most closely related group of this or any other subclass, if the classification gives information about the application of the systems or methods that could be interest for search. Such non-obligatory classification must be given as "additional information".

G06Q 90/20

{Destination assistance within a business structure or complex}

Definition statement

This place covers:

Subject matter drawn to a computerised arrangement for providing direction information at a business location or the creation of direction plan for a business location.

G06Q 90/205

{Building evacuation}

Definition statement

This place covers:

Subject matter drawn to a computerised arrangement for the removal of people from a structure for protective purposes.

Included herein is a computerised arrangement for the creation of a removal plan.

G06Q 99/00

Subject matter not provided for in other groups of this subclass

Definition statement

This place covers:

Subject matter not provided for in other groups of this subclass.

Subject-matter that falls under subclass <u>G06Q</u> but is not otherwise provided for in groups <u>G06Q 10/00</u> - <u>G06Q 90/00</u>, i.e. it is a residual group which covers new technologies.

This group also includes subject matter under the group in which the data processing is not clearly described as electrical or being performed by a computer.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

	-
Business processing using cryptography	G06Q 2220/00

Special rules of classification

As the title of the subclass covers exactly the titles of the groups $\underline{G06Q\ 10/00}$ - $\underline{G06Q\ 90/00}$, it is hard to imagine any technology that would fit the subclass but none of the groups, hence this group should probably remain empty.

It might be used temporarily for new technologies (e.g. q-bit computers) provided a special use/ adaptation has taken place that makes the technology specially adapted for a particular purpose. However, such technology should most probably be classified elsewhere, and when the technology becomes widely used, an adaptation of the scheme G06Q 90/00 should be envisaged.

G06Q 2220/00

Business processing using cryptography

Definition statement

This place covers:

Subject matter including cryptographic apparatus or methods uniquely designed for or utilised in the practice, administration, or management of an enterprise, the processing of financial data, or where a charge for goods or services is determined.

References

Informative references

Postage metering systems using cryptography	G06Q 2250/05
Data protection via encryption	G06F 21/00
Electronic cash registers other than digital data processing aspects thereof	G07G 1/12
Ciphering or deciphering apparatus for cryptographic or other purposes involving the need for secrecy	<u>G09C</u>
Transmission	<u>H04B</u>

Reducing bandwidth of signals	H04B 1/66
Spread spectrum techniques in general	H04B 1/69
By using a sub-carrier	H04B 14/08
Multiplex communication	<u>H04J</u>
Secret communication	H04K 1/00
Arrangements for secret or secure communication	H04L 9/00
Secret or subscription television systems	H04N 7/16

G06Q 2220/10

Usage protection of distributed data files

Definition statement

This place covers:

Subject matter wherein the usage of distributed information representing a selection by an individual is controlled by encryption.

Examples of such distribution can be by way of a storage medium such as a CD or by downloading.

G06Q 2220/12

Usage or charge determination

Definition statement

This place covers:

Subject matter including determining the amount of use of the selected information or a cost associated therewith.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

General electronic commerce system which includes billing	G06Q 20/027, G06Q 20/085, G06Q 20/0855
Data protection via encryption	G06F 21/00
Video electric signal modification using cryptography via record or coin control	<u>H04N 7/167</u>

G06Q 2220/123

involving third party for collecting or distributing payments, e.g. clearinghouse

Definition statement

This place covers:

Subject matter wherein a third party not associated with the actual distribution of the selected data is utilised to gather or disperse payment therefor.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Secure transaction including a third party	G06Q 20/0855
Data protection via encryption	G06F 21/00

G06Q 2220/127

Adding plural layers of rights or limitations by other than the original producer

Definition statement

This place covers:

Subject matter wherein a party other than the originating source places further restriction or proprietary interest on the use of the selected data.

G06Q 2220/14

Requiring a supplemental attachment or input, e.g. a dongle, to open

Definition statement

This place covers:

Subject matter wherein an auxiliary device or signal interacts with the distributed data file to permit usage.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Licensing in general	G06Q 2220/18
Data protection via encryption	G06F 21/00

G06Q 2220/145

Specific computer ID, e.g. serial number, configuration

Definition statement

This place covers:

Subject matter wherein the interaction uses a signal that describes or is characteristic of a particular data processing system.

G06Q 2220/16

Copy protection or prevention

Definition statement

This place covers:

Subject matter which prevents rerecording of a distributed data file.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Data protection via encryption	G06F 21/00
Copy protection or prevention of a video signal	H04N 7/167

G06Q 2220/165

Having origin or program ID

Definition statement

This place covers:

Subject matter wherein a copy protected distributed data file is supplemented by a unique identifier of a source of the file or of the file itself.

G06Q 2220/18

Licensing

Definition statement

This place covers:

Subject matter wherein a determination is made that an outside entity has authorised the use of the selection.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Information security in computers or digital processing system	G06F 21/00
, , , , , , , , , , , , , , , , , , , ,	

G06Q 2230/00

Voting or election arrangements

Definition statement

This place covers:

Subject matter determining the result of an election by multiple participants.

References

Informative references

System which reads sheets bearing hand-coded indicia representative of various categories and provides a total for each category	G07F 13/00
Betting on an outcome of an event, e.g. a race, or an election; totalisators	G07F 17/32

G06Q 2240/00

Transportation facility access, e.g. fares, tolls or parking

Definition statement

This place covers:

Subject matter controlling access to a vehicle or vehicle related facility in response to payment or other precondition for such access.

The term "vehicle related facility" designates a location for which payment for vehicle admission is required.

The reference to "other precondition" is intended to include passenger or baggage inspection.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

System processing data for a vehicle seat reservation	G06Q 10/02
[Organising, forecasting, or planning] machines	G06Q 10/06
Fare registers	G07B 15/00
Parking meters	G07F 17/24

G06Q 2250/00

Postage metering systems

Definition statement

This place covers:

Subject matter wherein the data processing or calculating computer comprises means for determining and printing cost required for mailing an article.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Generic weight determining devices utilizing mathematical computing	G01G19/4143
Franking apparatus	G07B 17/00

G06Q 2250/05

using cryptography

Definition statement

This place covers:

Subject matter wherein a charge for mailing an article is determined, markings representing this charge are affixed to the article, and respective modifications to an account balance are made.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Postage meter system absent cryptography	G06Q 2250/00
Franking apparatus	G07B 17/00
Electric signal modification with printed copy production	G09C 3/08

G06Q 2250/053

Reloading or recharging

Definition statement

This place covers:

Subject matter wherein additional funds are provided to the account balance.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Postage meter recharging absent cryptography	G06Q 2250/20
Franking apparatus	G07B 17/00

G06Q 2250/057

comprising printing details, e.g. verification of marks

Definition statement

This place covers:

Subject matter wherein particulars of the marking of the article to be mailed are provided.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Postage meter printing absent cryptography	G06Q 2250/70
Static presentation processing, e.g. printing	G06F 3/12
Franking apparatus	G07B 17/00

G06Q 2250/10

Special services or fees, e.g. discounts, surcharges or adjustments

Definition statement

This place covers:

Subject matter wherein a basic postage fee is modified to accommodate a particular postage service or condition.

Definition statement

The particular postage service includes, e.g. express mail, certified mail, C.O.D., special delivery, insurance and return receipt.

The condition includes, e.g. discount, surcharge, adjustment, the least costly fee.

A mere recitation of functional inputting means representing special service or charge without a step or procedure to carry out the modification of the fee is excluded from this group.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Postage meter system comprising means for revising postage rate structure	G06Q 2250/80
Franking apparatus	<u>G07B 17/00</u>

G06Q 2250/20

Recharging

Definition statement

This place covers:

Subject matter wherein said data processing or calculating computer comprises means for resetting a stored value of credit representing a postage fund available within a postage meter system.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Reloading or recharging in a cryptographic postage metering system	G06Q 2250/053
Franking apparatus	G07B 17/00

G06Q 2250/30

Record keeping

Definition statement

This place covers:

Subject matter wherein said data processing or calculating computer comprises means for resetting a stored value of credit representing a postage fund available within a postage meter system.

G06Q 2250/40

Data protection

Definition statement

This place covers:

Subject matter comprising means for preventing postage information from being inadvertently modified or destroyed.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Information security in computers or digital processing system	G06F 21/00
Franking apparatus	G07B 17/00

G06Q 2250/50

with specific mail handling means

Definition statement

This place covers:

Subject matter including details of means for performing a mailing process associated with the article.

Means for performing a mailing process includes, e.g. feeder, conveyor, inserter, sorter, sealer, stacker.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Postal sorting	<u>B07C</u>
Forming and packing contents unit from plural or different supply sources	<u>B65B</u>
Particular type of conveying system	<u>B65G</u>

G06Q 2250/60

involving mailed item weight

Definition statement

This place covers:

Subject matter wherein postage of the article is determined from the weight of the article.

References

Informative references

Point of sale terminal or an electronic cash register having a weighing device	G06Q 20/208
Computing means including a weighing device for computing weight and cost of goods	G01G19/4143
Franking apparatus	G07B 17/00

G06Q 2250/70

Specific printing

Definition statement

This place covers:

Subject matter including details of a printing mechanism or of information to be printed.

The details of information to be printed include, e.g. messages, graphical data, coded data and encrypted information.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Printing detail in a cryptographic postage metering system	G06Q 2250/057
Software printing control module	G06Q 2250/90
Data processing for presentation on a fixed medium, such as paper	G06F 3/12

G06Q 2250/80

Rate updating

Definition statement

This place covers:

Subject matter comprising means for revising a postage rate structure.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Postage meter system comprising means for modifying a basic postage fee to accommodate a particular postage service or condition, e.g. discount, surcharge, adjustment	G06Q 2250/10
Franking apparatus	G07B 17/00

G06Q 2250/90

Specialized function performed

Definition statement

This place covers:

Subject matter wherein the data processing or calculating computer is programmed to carry out a sequence of instructions related to a predetermined task associated with the postage meter system.

Tasks include input and output distribution, interrupt processing, job scheduling, message transmitting.

G06Q 2250/905

Display controlling

Definition statement

This place covers:

Subject matter wherein the sequence of instructions is for visually presenting postage related information to an operator.

Operation for controlling devices solely for producing a "hard copy", e.g. printer, plotter, is excluded from this group.

References

Informative references

Postage meter system including details of printing mechanism or of information to be printed	G06Q 2250/70
Franking apparatus	G07B 17/00