COOPERATIVE PATENT CLASSIFICATION

ELECTRICITY

ELECTRIC COMMUNICATION TECHNIQUE

TELEPHONIC COMMUNICATION (circuits for controlling other apparatus via a telephone cable and not involving telephone switching apparatus G08)

NOTES

1. This subclass covers:
   • substation equipment;
   • telephonic communication systems combined with other electrical systems;
   • testing arrangements peculiar to telephonic communication systems.

2. In this subclass, the following terms or expressions are used with the meanings indicated:
   • “subscriber” is a general term for terminal equipment, e.g. fixed, wireless, mobile or cellular phones, or for a user of terminal equipment;
   • “substation” means a subscriber or monitoring equipment which may connect a single subscriber to a line without choice as to subscriber;
   • “satellite” is a type of exchange the operation of which depends upon control signals received from a supervisory exchange;
   • “switching centres” include exchanges and satellites.

WARNINGS

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:
   - H04M 7/02 covered by H04Q 3/00
   - H04M 7/04 covered by H04Q 3/00
   - H04M 7/10 covered by H04Q 3/00
   - H04M 15/02 covered by H04M 15/888

2. In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

Substation equipment, e.g. for use by subscribers;
Analogous equipment at exchanges (prepayment telephone coin boxes H04M 17/00; current supply arrangements H04M 19/00; telephone sets particularly adapted for data transmission H04M 11/066; network interface devices H04Q 1/028)

[Telephone sets using electrooptical means in the transmission path]
[Call diverting means]
[Constructional features of telephone sets]

Portable telephone sets, e.g. cordless phones, mobile phones or bar type handsets (constructional features of telephone transmitters or receivers, e.g. of speakers or microphones H04M 1/03; mounting of the dialing module H04M 1/73; with protection against RF exposure H04B 1/3838)

[Including a battery compartment]
[Portable telephones comprising a plurality of mechanically joined movable body parts, e.g. hinged housings]
[Characterized by the relative motions of the body parts]

[Using combined folding and rotation motions (combined with translation movement H04M 1/0235)]
[With a two degrees of freedom mechanism, i.e. folding around a first axis and rotating around a second axis perpendicular to the first]
[Foldable telephones, i.e. with body parts pivoting to an open position around an axis parallel to the plane they define in closed position (combined with translation movement H04M 1/0235)]
[Foldable in one direction, i.e. using a one degree of freedom hinge]
[The hinge comprising input and/or output user interface means]
[The hinge comprising two parallel pivoting axes]
[Foldable in two directions, i.e. using a two degree of freedom hinge]
[Rotatable telephones, i.e. the body parts pivoting to an open position around an axis perpendicular to the plane they define in closed position (combined with translation movement H04M 1/0235)]
{Rotatable in one plane, i.e. using a one degree of freedom hinge}

{The hinge comprising input and/or output user interface means}

{Including a rotatable keypad body part}

{Including a rotatable display body part}

{Slidable or telescopic telephones, i.e. with a relative translation movement of the body parts; Telephones using a combination of translation and other relative motions of the body parts}

{Sliding mechanism with one degree of freedom}

{Sliding mechanism with two degree of freedom, e.g. translation in two different directions}

{using relative motion of the body parts to change the operational status of the telephone set, e.g. switching on/off, answering incoming call}

{using the relative angle between housings}

{using open/close detection}

{comprising more than two body parts}

{Details of the mechanical connection between the housing parts or relating to the method of assembly}

{by means of a snap-on mechanism}

{comprising one or a plurality of mechanically detachable modules}

{wherein the modules are operable in the detached state, e.g. one module for the user interface and one module for the transceiver}

{for a headset device (constructional features of headsets \(H04M\) 1/05; headsets for handsfree use \(H04M\) 1/6058)}

{Details of the structure or mounting of specific components}

{for a battery compartment}

{for a camera module assembly (photo or video cameras per se \(G03B\); television cameras per se \(H04N\) 5/225)}

{for a display module assembly (for fixed telephones \(H04M\) 1/0295)}

{including a flexible display panel}

{including magnifying means}

{for a projector or beamer module assembly (constructional features of projectors per se \(G03B\) 21/00; constructional details of projectors using electronic spatial light modulators per se \(H04N\) 9/31)}

{for an electrical connector module}

{for a printed circuit board assembly}

{Improving the user comfort or ergonomics}

{for providing single handed use or left/right hand conversion}

{for providing a decorative aspect, e.g. customization of casings, exchangeable faceplate}

{Pen-type handsets}

{being disposable or recyclable}

{Telephone sets for operators}

{Door telephones}

{Terminal boxes for telephone sets}

{mechanical mounting details of display modules (for portable telephones \(H04M\) 1/0266)}

{Telephone sets adapted to be mounted on a desk or on a wall}

{Constructional features of telephone transmitters or receivers, e.g. telephone handsets, \{speakers or microphones\} (transducers in general \(H04R\) 1/00)}

{Improving the acoustic characteristics by means of constructional features of the housing, e.g. ribs, walls, resonating chambers or cavities}

{Supports for telephone transmitters or receivers (for transducers in general \(H04R\) 1/00)}

{adapted for use on head, throat, or breast (\{handsfree use of portable phones \(H04M\) 1/6041\})}

{Hooks; Cradles}

{associated with switches operated by weight of receiver or hand-set}

{associated with switches operated by magnetic effect due to proximity of receiver or hand-set}

{Supports for sets, e.g. incorporating armrests}

{Adjustable supports, e.g. extensible}

{pantographic}

{with resilient means to eliminate extraneous vibrations}

{Protection of telephone cords; Guiding telephone cords; Winding-up telephone cords (in general \(H02G\) 11/00)}

{Hygienic or sanitary devices on telephone equipment (for mouthpieces or earpieces per se \(H04R\) 1/12)}

{Telephone sets modified for use in ships, mines, or other places exposed to adverse environment (\(H04M\) 1/19 takes precedence; telephone cabinets per se \(E04H\) 1/14)}

{Improving the rigidity of the casing or resistance to shocks}

{Arrangements of transmitters, receivers, or complete sets to prevent eavesdropping, to attenuate local noise or to prevent undesired transmission; Special mouthpieces or receivers therefor (circuit arrangements for preventing eavesdropping \(H04M\) 1/68; telephone cabinets per se \(E04H\) 1/14)}

{Arrangements for preventing acoustic feed-back (\(H04M\) 1/62 takes precedence)}

{Combinations with auxiliary equipment, e.g. with clock, with memoranda pads}

{by non-intrusive coupling means, e.g. acoustic couplers}

{Acoustic coupling}

{Illuminating; Arrangements for improving visibility of characters on dials}

{Construction or mounting of dials or of equivalent devices; Means for facilitating the use thereof (by improving visibility \(H04M\) 1/22)}

{including a pointing device, e.g. roller key, track ball, rocker switch or joystick (constructional details of pointing devices per se \(G06F\) 3/033)}
Telephone sets including user guidance or features selection means facilitating their use; {Fixed telephone terminals for accessing a variety of communication services via the PSTN network}

{Configurable and interactive telephone terminals with subscriber controlled features modifications, e.g. with ADSI capability [Analog Display Services Interface] (systems providing special services or facilities to subscribers H04M 3/42; administration or customization of services H04M 3/42136; by downloading data to substation equipment H04M 3/42178)}

{Telephone terminals interfacing a personal computer, e.g. using an API (Application Programming Interface) (details of API H04M 7/0021)}

{Telephone terminals specially adapted for disabled people (H04M 1/72588 takes precedence; network based special services or facilities for hearing-impaired persons H04M 3/42391; devices for conversing with the deaf-blind G09B 21/04)}

{for a hearing impaired user (hearing-aid per se H04R 25/00)}

{for a visually impaired user (H04M 1/22 takes precedence)}

{for selecting a function from a menu display (H04M 1/2474 takes precedence)}

{Telephone terminals specially adapted for non-voice services, e.g. email, internet access (centralized arrangements where telephones services are combined H04M 7/0024; for recording text messages H04M 3/5322; for accessing Internet H04M 3/4938)}

{Telephones using digital voice transmission (simultaneous speech and data transmission H04M 11/06; [ISDN terminal access circuits H04Q 11/0471])}

{adapted for voice communication over an Internet Protocol [IP] network (Voice over Internet Protocol [VoIP] network equipment and services H04M 7/006; internet protocols H04L 29/06095)}

{Devices for signalling identity of wanted subscriber (constructional features H04M 1/23)}

{Devices whereby a plurality of signals may be stored simultaneously ([devices disposed in the exchange H04M 3/424, H04M 3/44])}

{controlled by voice recognition}

{with provision for storing only one subscriber number at a time, e.g. by keyboard or dial}

{using electronic memories}

{with provision for storing more than one subscriber number at a time, e.g. using toothed disc}

{using static electronic memories, e.g. chips}

**WARNING**

Group H04M 1/2745 is impacted by reclassification into groups H04M 1/2747 and H04M 1/2753.

Groups H04M 1/2745, H04M 1/2747, and H04M 1/2753 should be considered in order to perform a complete search.

Directories allowing storage of additional subscriber data, e.g. metadata

Management thereof, e.g. manual editing of data

Sorting, e.g. according to history or frequency of use

[Predictive input, predictive dialling by comparing the dialled sequence with the content of a telephone directory]

Methods of retrieving data

**WARNING**

Group H04M 1/2747 is incomplete pending reclassification of documents from group H04M 1/2745.

Groups H04M 1/2745 and H04M 1/2747 should be considered in order to perform a complete search.

Scrolling on a display

using interactive graphical means or pictorial representations

by matching character strings

Appending a prefix to or inserting a pause into a dialling sequence

Automatic dialling or redialling systems, e.g. on off-hook or redial on busy

implemented by means of discrete electronic components, i.e. neither programmable nor microprocessor-controlled (H04M 1/27457; H04M 1/2749 take precedence)

implemented by means of portable electronic directories

providing data content

**WARNING**

Group H04M 1/2753 is incomplete pending reclassification of documents from group H04M 1/2745. Groups H04M 1/2745 and H04M 1/2753 should be considered in order to perform a complete search.

by optical scanning

by data transmission, e.g. downloading

using magnetic recording, e.g. on tape

implemented by means of portable magnetic cards

using punched cards or tapes

Devices which can set up and transmit only one digit at a time

by interrupting current to generate trains of pulses; by periodically opening and closing contacts to generate trains of pulses

[pulses produced by electronic circuits]
1/315 . . . Clutches; Spring assemblies; Speed regulators, e.g. centrifugal brakes
(H04M 1/32 – H04M 1/40 take precedence)
1/32 . . . Locking setting devices during transmission to prevent interference by user
1/34 . . . Lost-motion or other arrangements for ensuring a pause between successive digit transmissions
1/38 . . . Pulses transmitted by a movement variably limited by the setting of a stop
1/40 . . . wherein the setting-operation short-circuits or open-circuits the transmitting mechanism during a variable part of a cycle
1/50 . . . by generating or selecting currents of predetermined frequencies or combinations of frequencies
1/505 . . . (signals generated in digital form)
1/515 . . . by generating or selecting other signals than trains of pulses of similar shape or other signals than currents of one or more different frequencies, e.g. generation of direct current signals of alternating polarity, coded pulses, impedance dialling
1/52 . . . Arrangements wherein a dial or equivalent is mechanically coupled to a line selector
1/53 . . . Generation of additional signals, e.g. additional pulses
1/54 . . . Arrangements wherein a dial or equivalent generates identifying signals, e.g. in party-line systems
1/56 . . . Arrangements for indicating or recording the called number at the calling subscriber's set
1/57 . . . Arrangements for indicating or recording the number of the calling subscriber at the called subscriber's set (at the operator set in a manual exchange H04M 5/20)
1/571 . . . {Blocking transmission of caller identification to called party}
1/573 . . . {Line monitoring circuits for detecting caller identification}
1/575 . . . {Means for retrieving and displaying personal data about calling party}
1/576 . . . [associated with a pictorial or graphical representation]
1/578 . . . [associated with a synthesized vocal announcement]
1/58 . . . Anti-side-tone circuits (hybrid circuits for carrier-frequency operation H04B 1/00)
1/585 . . . {implemented without inductive element}
1/60 . . . including speech amplifiers
1/6008 . . . {in the transmitter circuit}
1/6016 . . . {in the receiver circuit}
1/6025 . . . {implemented as integrated speech networks}
1/6033 . . . {for providing handsfree use or a loudspeaker mode in telephone sets (arrangements for preventing acoustic echo H04M 9/08)}
1/6041 . . . {Portable telephones adapted for handsfree use}
1/605 . . . {controlling the receiver volume to provide a dual operational mode at close or far distance from the user}
1/6058 . . . {involving the use of a headset accessory device connected to the portable telephone}
1/6066 . . . . . . {including a wireless connection}
1/6075 . . . . . . {adapted for handsfree use in a vehicle (H04M 1/605 takes precedence; arrangements for holding telephones in a vehicle B60R 11/0241)}
1/6083 . . . . . . {by interfacing with the vehicle audio system}
1/6091 . . . . . . {including a wireless interface}
1/62 . . . Constructional arrangements
1/64 . . . Automatic arrangements for answering calls; Automatic arrangements for recording messages for absent subscribers; Arrangements for recording conversations (centralised dictation systems H04M 11/10)
1/642 . . . . . . {storing speech in digital form}
1/645 . . . . . . {with speech synthesis}
1/647 . . . . . . {using magnetic tape (H04M 1/642 takes precedence)}
1/65 . . . Recording arrangements {for recording a message from the calling party (in the exchange H04M 3/501)}
1/6505 . . . . . . {storing speech in digital form}
1/651 . . . . . . {with speech synthesis}
1/6515 . . . . . . {using magnetic tape (H04M 1/6505 takes precedence)}
1/652 . . . . . . Means for playing back the recorded messages by remote control over a telephone line (H04M 1/658 takes precedence)
1/654 . . . . . . Telephone line monitoring circuits therefor, e.g. ring detectors
1/6545 . . . . . . {mechanically actuating hook switch, e.g. lifting handset}
1/656 . . . . . . for recording conversations
1/658 . . . . . . Means for redirecting recorded messages to other extensions or equipment
1/66 . . . with means for preventing unauthorised or fraudulent calling (verifying user identity or authority in secret or secure digital communications H04L 9/32)
1/663 . . . . . . Preventing unauthorised calls to a telephone set
1/665 . . . . . . by checking the validity of a code
1/667 . . . . . . Preventing unauthorised calls from a telephone set (H04M 1/677 takes precedence)
1/67 . . . . . . by electronic means
1/673 . . . . . . the user being required to key in a code
1/675 . . . . . . the user being required to insert a coded card, e.g. a smart card carrying an integrated circuit chip (for constructional features in portable telephones H04B 1/3816)
1/677 . . . Preventing the dialling or sending of predetermined telephone numbers or selected types of telephone numbers, e.g. long distance
1/6775 . . . . . {by providing access to preprogrammed keys}
1/68 . . . Circuit arrangements for preventing eavesdropping
1/70 . . . Lock-out or secrecy arrangements in party-line systems
1/72 . . . Substation extension arrangements; Cordless telephones, i.e. devices for establishing wireless links to base stations without route selecting (constructional features of cordless telephones H04M 1/0202)
1/723 . . . using two or more extensions per line (H04M 1/725 takes precedence)
1/725 . . . Cordless telephones [(for handsfree use H04M 1/6041)]
Communication status

improved user interface to control a main

{ Portable communication terminals with

line }

{ with one base station connected to a single

line]

1/72502 . . . . [according to a geographic location

(user location related services provided

by wireless communication networks

H04W 4/02; network applications adapted

for the location of the user terminal

H04L 29/08657)]

1/72572 . . . . . [by connection of an exchangeable

housing part]

1/72575 . . . . . [to restrict the functionality or the

communication capability of the terminal

(network access restriction H04W 48/02)]

1/72577 . . . . . [(by using keys with multiple functionality

defined by the current phone mode or status]

1/7258 . . . . . [for operating the terminal by selecting

telephonic functions from a plurality

of displayed items, e.g. menus, icons

(interaction techniques for Graphical User

Interfaces per se G06F 3/048)]

1/72586 . . . . . [wherein the items are sorted according to

a specific criteria, e.g. frequency of use]

1/72588 . . . . . [specially adapted for disabled people

(devices for conversing with the deaf-blind

G09B 21/04)]

1/72591 . . . . . [for a hearing impaired user (hearing-aids

per se H04R 25/00)]

1/72594 . . . . . [for a visually impaired user (H04M 1/22

takes precedence)]

1/72597 . . . . . [wherein handling of applications is

triggered by incoming communication events

(changing user alerting upon occurrence of

events H04M 19/04)]

1/727 . . . . . Identification code transfer arrangements

1/73 . . . . . Battery saving arrangements {(by switching on/

off the receiving circuit H04B 1/1615)}

1/733 . . . . . with a plurality of base stations connected to

a plurality of lines {(for selection in cordless

PBX H04W 84/16)}

1/737 . . . . . characterised by transmission of

electromagnetic waves other than radio waves,

e.g. infra-red

1/738 . . . . . Interface circuits for coupling substations to

external telephone lines (H04M 1/78 takes

precedence)

1/7385 . . . . . {Programmable or microprocessor-controlled}

1/74 . . . . . with means for reducing interference; with means

for reducing effects due to line faults

1/745 . . . . . [Protection devices or circuits for voltages

surges on the line]

1/76 . . . . . Compensating for differences in line impedance

(in general H04B)

1/78 . . . . . Circuit arrangements in which low-frequency

speech signals proceed in one direction on the

line, while speech signals proceeding in the

other direction on the line are modulated on a

high-frequency carrier signal (repeater circuits

H04B 3/38)

1/80 . . . . . Telephone line holding circuits

1/82 . . . . . Line monitoring circuits for call progress or status

discrimination {(for detecting caller identity

H04M 1/573)}

3/00 Automatic or semi-automatic exchanges

{constructional details of telephone exchanges

H04Q 1/02)
H04M

3/002  . . . (Applications of echo suppressors or cancellers in telephonic connections (in two-way loud-speaking telephone systems H04M 9/08; echo suppressors or cancellers
per se H04B 3/20))

3/005  . . . (Interface circuits for subscriber lines (current supply H04M 19/00) and subgroups; supervisory, monitoring or testing arrangements H04M 3/22 and
subgroups; in key telephone systems H04M 9/006 )

3/007  . . . (Access interface units for simultaneous transmission of speech and data, e.g. digital subscriber line (DSL) access interface units (DSL access multiplexers H04Q 11/0478, and
H04L 12/2856))

3/02  . . . Ringing or otherwise calling substations (selective calling H04Q)

3/04  . . . calling signal supplied from final selector

3/06  . . . calling signal supplied from subscriber's line circuit

3/08  . . . Indicating faults in circuits or apparatus

3/085  . . . (Fault locating arrangements)

3/10  . . . Providing fault or trouble signals

3/12  . . . Marking faulty circuits "busy"; Enabling equipment to disengage itself from faulty circuits (Using redundant circuits; Response of a circuit, apparatus or system to an error)

3/14  . . . Signalling existence of persistent "off-hook" condition

3/16  . . . with lock-out or secrecy provision in party-line systems

3/18  . . . with means for reducing interference (or noise); with means for reducing effects due to line faults (with means for protecting lines)

3/20  . . . with means for interrupting existing connections; with means for breaking-in on conversations

3/205  . . . (Eavesdropping prevention - indication of insecurity of line or network)

3/22  . . . Supervisory, monitoring, management, i.e. operation, administration, maintenance or testing arrangements

3/2209  . . . (for lines also used for data transmission)

3/2218  . . . (Call detail recording)

3/2227  . . . (Quality of service monitoring)

3/2236  . . . (Quality of speech transmission monitoring)

3/2245  . . . (Management of the local loop plant)

3/2254  . . . (in networks)

3/2263  . . . (Network management)

3/2272  . . . (Subscriber line supervision circuits, e.g. call detection circuits)

3/2281  . . . (Call monitoring, e.g. for law enforcement purposes; Call tracing; Detection or prevention of malicious calls)

3/229  . . . (Wire identification arrangements; Number assignment determination)

3/24  . . . with provision for checking the normal operation

3/241  . . . (for stored program controlled exchanges)

3/242  . . . (Software testing)

3/244  . . . (for multiplex systems)

3/245  . . . (for ISDN systems)

3/247  . . . (Knowledge-based maintenance systems)

3/248  . . . (for metering arrangements or prepayment telephone systems (metering arrangements per se H04M 15/00; prepayment telephone systems per se H04M 17/00))

3/26  . . . with means for applying test signals (or for measuring)

3/28  . . . Automatic routine testing (Fault testing; Installation testing; Test methods, test equipment or test arrangements therefor)

3/30  . . . for subscriber's lines (for the local loop)

3/301  . . . (Circuit arrangements at the subscriber's side of the line)

3/302  . . . (using modulation techniques for copper pairs (for ISDN systems H04M 3/245; ISDN selection or connection testing arrangements H04Q 11/0451))

3/303  . . . (and using PCM multiplexers, e.g. pair gain systems)

3/304  . . . (and using xDSL modems (xDSL line qualification H04Q 3/306))

3/305  . . . (testing of physical copper line parameters, e.g. capacitance or resistance (locating faults in cables G01R 31/08))

3/306  . . . (for frequencies above the voice frequency, e.g. xDSL line qualification (test methods, test equipment and test arrangements for subscriber lines using xDSL modems H04M 3/304; systems modifying transmission characteristics according to link quality H04L 1/0001; monitoring and/or testing of line transmission systems H04B 3/46))

3/307  . . . (using ringback)

3/308  . . . (Craftsman test terminals)

3/32  . . . for lines between exchanges

3/323  . . . (for the arrangements providing the connection (connection test, call call, call simulation))

3/326  . . . (for registers and translators)

3/34  . . . Testing for cross-talk (in lines generally H04B)

3/36  . . . Statistical metering, e.g. recording occasions when traffic exceeds capacity of trunks (digital computers for evaluating statistical data G06F 17/18)

3/362  . . . (Traffic simulation)

3/365  . . . (Load metering of control unit)

3/367  . . . (Traffic or load control)

3/38  . . . Graded-service arrangements, i.e. some subscribers prevented from establishing certain connections (queueing arrangements (H04M 3/523), H04Q 3/64)

3/382  . . . (using authorisation codes or passwords)

3/385  . . . (using speech signals)

3/387  . . . (using subscriber identification cards)

3/40  . . . Applications of speech amplifiers

3/42  . . . Systems providing special services or facilities to subscribers

3/42008  . . . (Systems for anonymous communication between parties, e.g. by use of disposal contact identifiers)

3/42017  . . . (Customized ring-back tones)

3/42025  . . . (Calling or Called party identification service)

3/42034  . . . (Calling party identification service)

3/42042  . . . (Notifying the called party of information on the calling party (details within substation equipment H04M 1/37, signalling details H04Q 3/72))

3/42051  . . . (where the notification is included in the ringing tone)
location information of a target

Location-based services which utilize the

in private branch exchanges

PBX's with CTI arrangements

Direct inward dialling

Remote access to features of PBX or home telephone systems-telesworking in a PBX

Location-based services which utilize the location information of a target

{ where the information is provided to a monitoring entity such as a potential calling party or a call processing server}

{Arrangements for automatic redialling (at the subscriber's set H04M 1/27)}

{Arrangements for placing incoming calls on hold}

{ when the called subscriber is connected to a data network using his telephone line, e.g. dial-up connection, Internet browsing}

{Call holding circuits}

{Notifying, informing or entertaining a held party while on hold, e.g. Music On Hold}

{Notifying a held subscriber when his held call is removed from hold}

{Notifying a called subscriber of an incoming call during an ongoing call, e.g. Call Waiting}

{Arrangements for calling a subscriber at a specific time, e.g. morning call service}

{Arrangements for screening incoming calls, i.e. evaluating the characteristics of a call before deciding whether to answer it (based on the calling party profile H04M 3/42059; based on location H04M 3/42348; based on presence H04M 3/42365; diversion H04M 3/54)}

{based on information specified by the calling party, e.g. priority or subject}

{Additional connecting arrangements for providing access to frequently-wanted subscribers, e.g. abbreviated dialling (at the subscriber's set H04M 1/27; automatic redialling H04M 3/4242)}

{Arrangements for calling a number of substations in a predetermined sequence until an answer is obtained}

{Arrangements for simultaneously calling a number of substations until an answer is obtained}

{Arrangements for recalling a called subscriber when the wanted subscriber ceases to be busy}

{Arrangements for providing information services, e.g. recorded voice services, time announcements}

{Non-interactive information services}

{Intercept announcements}

{Time announcements}

{Advertisement messages}

{Interactive information services, e.g. directory enquiries; Arrangements therefor, e.g. interactive voice response [IVR] systems or voice portals}

{Directory assistance systems}

{Connection assistance systems}

{with operator assistance}

{Connection initiated by DAS system}
Centralised arrangements for answering calls; Centralised arrangements for recording messages for absent or busy subscribers (H04M 3/487 takes precedence; centralised dictation systems H04M 11/10); Centralised arrangements for recording messages

Centralised call answering arrangements requiring operator intervention, e.g. call or contact centers for telemarketing

[Details of processing calls and other types of contacts in an unified manner (unified messaging in packet-switching networks H04L 51/361)]

[Operator terminal details]

[Interconnection arrangements between contact centers for telemarketing]

Arrangements for routing dead number calls to operators

[with call distribution or queuing]

[with call back arrangements]

[Operator skill based call distribution]

[Uniform load distribution]

[Dependent on call type or called number (DNIS)]

[Sequential or circular distribution]

[Interconnection arrangements between ACD systems]

[with waiting time or load prediction arrangements]

[Centralised call answering arrangements not requiring operator intervention]

[for recording incoming messages, i.e. mailbox systems]

[for recording messages comprising any combination of audio and non-audio components]

[where the non-audio components are still images or video (still image mailbox systems H04N 1/324, intermediate storage of video signals for videophones H04N 7/147)]

[for recording text messages]

[Voice mail systems]

[Message originator indirectly connected to the message centre, e.g. after detection of busy or absent state of a called party]

[Messaging centre selected by message originator]

[Interconnection arrangements between voice mail systems]

[Message receiving aspects]

[Message reply]

[Message type or category, e.g. priority, indication]

[Message preview]

[Message disposing or creating aspects]

[Message broadcasting]

[Message registering commands or announcements; Greetings]

[depend on calling party]

[Arrangements for indicating the presence of a recorded message, whereby the presence information might include a preview or summary of the message]

[Arrangements for diverting calls for one subscriber to another predetermined subscriber (based on the calling party profile H04M 3/42059; based on location H04M 3/42348; based on presence H04M 3/42365; to voice mail H04M 3/53308)]

[based on information specified by the calling party]

[Call deflection]

[loop avoiding arrangements]

[in private branch exchanges]

[with remote control]

[Arrangements for connecting several subscribers to a common circuit, i.e. affording conference facilities (computer conferences H04L 12/1813; video conference systems H04N 7/15)]

[by multiplexing]

[where the conference facilities are distributed]

[User guidance or feature selection]

[whereby the feature is a sub-conference]

[relating to time schedule aspects]

[relating to a participants right to speak (protocols for floor control H04L 29/06241, H04L 29/06428, H04L 29/06435)]

[Virtual meeting systems]

[audio processing specific to telephonic conferencing, e.g. spatial distribution, mixing of participants (echo suppression in two-way loud-speaking telephone systems H04M 9/02; sound field processing per se H04S 7/30)]

[using the instant speaker's algorithm (speech detection per se H01L 25/78)]

[Arrangements for transferring received calls from one subscriber to another; Arrangements affording interim conversations between either the calling or the called party and a third party (substation line holding circuits H04M 1/80)]

[Semi-automatic systems, i.e. in which the numerical selection of the outgoing line is under the control of an operator]

[Key telephone systems H04M 9/003]

[Arrangements for signalling the number or class of the calling line to the operator (between operators in inter-exchange working H04M 5/18)]
5/00 Manual exchanges (substation equipment in general H04M 1/00)
5/02 . Constructional details (jacks, jack-plugs
H01R 2201/16, H01R 2201/16)
5/04 . Arrangements for indicating calls or supervising
connections for calling or clearing
5/06 . affording automatic call distribution
5/08 . using connecting means other than cords
5/10 . using separate plug for each subscriber
5/12 . Ringing or otherwise calling substations
5/14 . Applications of speech amplifiers
5/16 . with means for reducing interference; with means
for reducing effects due to line faults
5/18 . Arrangements for signalling the class or number of
called or calling line from one exchange to another
5/20 . Number-indicating arrangements for incoming
lines

7/00 Interconnection arrangements between switching
centres (transmission arrangements in general H04B;
[interconnection arrangements between PSTN/ISDN
switching centres H04Q 3/00])
7/0003 . [Interconnection between telephone networks and
data networks]

WARNING
This group is no longer used for the classification of new
documents as of February 1, 2007. The backlog of this group is being continuously
reclassified to subgroups of H04M 7/0024 or H04M 7/1205

7/0006 . [where voice calls cross both networks]

WARNING
This group is no longer used for the classification of new
documents as of February 1, 2007. The backlog of this group is being continuously
reclassified to subgroups of H04M 7/0024 or H04M 7/1205

7/0009 . [where voice calls remain entirely in the
telephone network]

WARNING
This group is no longer used for the classification of new
documents as of February 1, 2007. The backlog of this group is being continuously
reclassified to subgroups of H04M 7/0024 or H04M 7/1205

7/0012 . [Details of application programming interfaces
(API) for telephone networks: Arrangements which
combine a telephonic communication equipment
and a computer, i.e. computer telephony integration
[CPI] arrangements]
7/0015 . [First party call control architectures]
7/0018 . [Computer Telephony Resource Boards]
7/0021 . [Details of Application Programming Interfaces]
7/0024 . [Services and arrangements where telephone
services are combined with data services
(arrangements which combine a telephonic
equipment and a computer H04M 7/0012)]
7/0027 . [Collaboration services where a computer is used
for data transfer and the telephone is used for
telephonic communication]
7/003 . [Click to dial services]
Interconnection arrangements not involving centralised switching

9/001 [Two-way communication systems between a limited number of parties]
9/002 [with subscriber controlled access to a line, i.e. key telephone systems]
9/003 [Transmission of control signals from or to the key telephone set; signalling equipment at key telephone set, e.g. keyboard or display equipment (keyboard equipment in semi-automatic systems H04M 3/62)]

9/005 [with subscriber controlled access to an exchange line]
9/006 [Exchange line circuits (subscriber line circuits H04M 3/005)]
9/007 [wherein the key telephone sets are star-connected to a central unit by a limited number of lines]
9/008 [Multiplex systems]
9/02 [involving a common line for all parties]
9/022 [Multiplex systems]
9/025 [Time division multiplex systems, e.g. loop systems]
9/027 [Frequency division multiplex systems]
9/04 [involving a separate line for each pair of parties]
9/06 [involving combinations of interconnecting lines]
9/08 [Two-way loud-speaking telephone systems with means for suppressing echoes or otherwise conditioning for one or other direction of traffic (for line transmission in general H04B 3/20)]
9/082 [using echo cancellers (echo cancellers per se H04B 3/23)]
9/085 [using digital techniques (H04M 9/082 takes precedence)]
9/087 [using different frequency bands for transmitting and receiving paths (for line transmission in general H04B 3/21); using phase shifting arrangements]
9/10 [with switching of direction of transmission by voice frequency]
11/085 . . [using a television receiver, e.g. viewdata system]
11/10 . . with dictation recording and playback systems (such systems in general G11B)
13/00 Party-line systems (substation equipment
H04M 1/00: exchange equipment H04M 3/00,
H04M 5/00: metering arrangements H04M 15/36)
15/00 Arrangements for metering, time-control or
time indication (; Metering, charging or billing
arrangements for voice wireline or wireless
communications, e.g. VoIP)
15/04 . . Recording calls [, or communications] in printed,
perforated or other permanent form
15/06 . . Recording class or number of calling [, i.e. A-
party] or called party [, i.e. B-party]
15/07 . . [Split billing, i.e. both A-party and B-party charged
for the communication]
15/08 . . Metering calls to called party [, i.e. B-party charged
for the communication]
15/09 . . [Third party charged communications]
15/10 . . Metering calls from calling party [, i.e. A-party
charged for the communication]
15/12 . . Discriminative metering [, charging or billing]
15/14 . . according to class of calling party
15/16 . . according to connection obtained
15/18 . . according to duration of the call [, or the
communication]
15/20 . . . . Operator's time recording or indicating
arrangements
15/22 . . . . according to time of day
15/24 . . . . preventing metering of tax-free calls to certain
lines, e.g. to fire or ambulance stations
15/26 . . . . with a meter [or performing charging or billing]
at the exchange controlled by an operator
15/28 . . with meter at substation [or with calculation of
charges at terminal]
15/30 . . the meter [or calculation of charges] not being
controlled from an exchange
15/31 . . [Distributed metering or calculation of charges]
15/32 . . [Charging, billing or] metering arrangements for
satellites or concentrators which connect one or
more exchange lines with a group of local lines
15/34 . . [Charging, billing or] metering arrangements for
private branch exchanges
15/36 . . [Charging, billing or] metering arrangements for
party-lines
15/38 . . [Charging, billing or] metering by apparatus other
than mechanical step-by-step counter type
15/39 . . [Arrangements for preventing metering, charging or
billing]
15/41 . . [Billing record details, i.e. parameters, identifiers,
structure of call data record [CDR]]
15/42 . . [Dynamic individual rates per user]
15/43 . . [Billing software details]
15/44 . . [Augmented, consolidated or itemized billing
statement or bill presentation]
15/46 . . [Real-time negotiation between users and providers
or operators]
15/47 . . [Fraud detection or prevention means]
15/48 . . [Secure or trusted billing, e.g. trusted elements or
encryption]
15/49 . . [Connection to several service providers]
15/50 . . [for cross-charging network operators]
{ Notification aspects }

{ Criteria or parameters used for performing billing }

{ Dynamic pricing, e.g. change of tariff during call }

{ Rating or billing plans; Tariff determination }

{ Types of notifications }

{ Based on the number of used services, e.g. call }

{ Pulse based }

{ Unit based }

{ Access based }

{ Session based }

{ Data or packet based }

{ Circuit arrangements }

{ Constructional features }

{ Account details or usage }

{ using SIMs (USIMs) or calling cards }

{ using commercial credit or debit cards }

{ Prepayment of wireline communication systems, }

{ Wireless communication systems or } telephone

systems (using a coded card to authorise calls from a }
telephone set H04M 1/675)

{ Coin-free or check-free systems, e.g. mobile- or }
card-operated phones, public telephones or booths)

{ Circuit arrangements }

{ Constructional features }

{ Account details or usage }

{ using SIMs (USIMs) or calling cards }

{ using commercial credit or debit cards }

{ using commercial credit/debit cards, e.g. VISA, }

AMEX)

{ with provision for recharging the prepaid account }
or card, or for credit establishment)

{ automatic recharging with predetermined }

amount at threshold)

{ selecting interactively a payment method }

{ cash-based recharging, i.e. physical input of }
coins or bank notes)

{ on-line recharging, e.g. cashless)

{ by calling a service number, e.g. interactive }

voice response [IVR] or menu)

{ by sending a message, e.g. SMS, MSS or }

EMS)

{ using signaling, e.g. USSD, SMS, or DTMF)

{ using WAP or Internet, i.e. including }
electronic payment, e.g. e-cash)
Current supply arrangements for telephone systems

Current supply source at the exchanger providing ringing current or supervisory tones, e.g. dialling tone, busy tone

[by reversing the polarity of the current at the exchange]

Arrangements for interrupting the ringing current

ringing-current generated at substation

[Encoding the ringing signal, i.e. providing distinctive or selective ringing capability]

[with variable loudness of the ringing tone, e.g. variable envelope or amplitude of ring signal]

[according to the level of ambient noise]

[Vibrating means for incoming calls]

Arrangements providing optical indication of the incoming call, e.g. flasher circuits

Current supply sources at subordinate switching centre charged from main exchange

Current supply sources at substation (generating ringing current H04M 19/04)

Subject matter not provided for in other groups of this subclass

Electronic components, circuits, software, systems or apparatus used in telephone systems

Diodes

Transistors

Integrated circuits

Magnetic elements

Logic circuits

Counting circuits

Delay circuits; Timers

Sequence circuits

Comparators

Scanners

Synchronisation circuits

A/D convertors

S/P convertors

PCM

Personal computers

Microprocessors

Memories

Displays

using speech synthesis

using speech recognition

involving speaker-dependent recognition

(adaptation to speaker for speech recognition)

using speaker recognition

Graphical user interfaces

Telephonic communication in combination with video communication

Telephonic communication in combination with fax communication

Object oriented software

Medium conversion

line protection circuits such as current or overvoltage protection circuits
2203/00 Aspects of automatic or semi-automatic exchanges
2203/05 . . related to OAM&P
2203/051 . . technician dispatch system
2203/052 . . software update
2203/053 . . remote terminal provisioning, e.g. of applets
2203/055 . . loopback testing
2203/056 . . non-invasive testing, i.e. in operation testing without service interruption
2203/057 . . distortion monitoring (QoS monitoring H04M 3/227; quality of speech transmission monitoring H04M 3/2236)
2203/058 . . signature devices
2203/10 . . related to the purpose or context of the telephonic communication
2203/1008 . . Calls without connection establishment for implicit information transfer or as a service trigger
2203/1016 . . Telecontrol
2203/1025 . . . of avatars
2203/1033 . . Remote administration, e.g. of web servers
2203/1041 . . Televoting
2203/105 . . Financial transactions and auctions, e.g. bidding (auctioneering devices in packet switching networks H04L 12/1804)
2203/1058 . . Shopping and product ordering
2203/1066 . . Game playing
2203/1075 . . Telemetering, e.g. transmission of ambient measurements
2203/1083 . . for hotels
2203/1091 . . Fixed mobile conversion
2203/15 . . related to dial plan and call routing
2203/152 . . . Temporary dial plan
2203/154 . . Functional or symbolic dial plan such as license plate numbers
2203/156 . . On-line status dependent routing
2203/158 . . Call-type dependent routing (route determination based on the nature of the carried application in packet switching networks H04L 45/306)
2203/20 . . related to features of supplementary services
2203/2005 . . Temporarily overriding a service configuration
2203/2011 . . Service processing based on information specified by a party before or during a call, e.g. information, tone or routing selection
2203/2016 . . Call initiation by network rather than by subscriber
2203/2022 . . Path replacement
2203/2027 . . Live party detection
2203/2033 . . Call handling or answering restrictions, e.g. specified by the calling party
2203/2038 . . Call context notifications
2203/2044 . . Group features, e.g. closed user group
2203/205 . . Broadcasting (broadcasting in packet switching networks H04L 12/18)
2203/2055 . . Line restrictions
2203/2061 . . Language aspects
2203/2066 . . Call type detection of indication, e.g. voice or fax, mobile of fixed, PSTN or IP
2203/2072 . . Schedules, e.g. personal calendars
2203/2077 . . Call queuing apart from automatic call distribution
2203/2083 . . Confirmation by serviced party
2203/2088 . . Call or conference reconnect, e.g. resulting from isdn terminal portability

2203/409 . . . Unified messaging with single point of access to voicemail and other mail or messaging systems (unified messaging in packet switching networks H04L 51/36)
2203/4518 . . . Attachments to voicemail (messages including annexed information, e.g. Attachments, in packet switching networks H04L 51/08)
2203/4527 . . . Voicemail attached to other kind of message
2203/4536 . . . Voicemail combined with text-based messaging
2203/4545 . . . Message forwarding (selective message forwarding in packet switching networks H04L 51/14)
2203/4554 . . . Sender-side editing
2203/4563 . . . Voicemail monitoring during recording
2203/4572 . . . Voicemail RSS

2203/2094 . . . Proximity
2203/251 . . . related to user interface aspects of the telephonic communication service
2203/252 . . . where a voice mode or a visual mode can be used interchangeably
2203/253 . . . where a visual mode is enhanced with visual information
2203/254 . . . . where the visual mode comprises menus
2203/255 . . . . comprising a personalized user interface
2203/256 . . . . comprising a service specific user interface
2203/257 . . . . remote control of subscription user interface for telephonic services, e.g. by ISDN stimulus, ADSL wireless telephony application WTA, MExE or BREW
2203/258 . . . Service state indications
2203/30 . . . related to audio recordings in general
2203/301 . . . Management of recordings
2203/303 . . . Marking
2203/305 . . . Recording playback features, e.g. increased speed
2203/306 . . . Prererecordings to be used during a voice call
2203/308 . . . Personal name recording
2203/35 . . . related to information services provided via a voice call
2203/351 . . . Pre or post-call/conference information service
2203/352 . . . In-call/conference information service
2203/353 . . . where the information comprises non-audio but is provided over voice channels (protocols for multimedia information services per se H04L 65/00)
2203/354 . . . Reverse directory service
2203/355 . . . Interactive dialogue design tools, features or methods
2203/356 . . . Phonecasting
2203/357 . . . Autocues for dialog assistance
2203/358 . . . Digital rights management
2203/359 . . . Augmented reality
2203/40 . . . related to call centers
2203/401 . . . Performance feedback
2203/402 . . . Agent or workforce management
2203/403 . . . Agent or workforce training
2203/404 . . . Collaboration among agents
2203/405 . . . Competitive bidding for work items
2203/406 . . . Rerouting calls between call centers
2203/407 . . . Call center operated for multiple customers
2203/408 . . . Customer-specific call routing plans
2203/45 . . . related to voicemail messaging
2203/4509 . . . Unified messaging with single point of access to voicemail and other mail or messaging systems (unified messaging in packet switching networks H04L 51/36)
2203/4518 . . . Attachments to voicemail (messages including annexed information, e.g. Attachments, in packet switching networks H04L 51/08)
2203/4527 . . . Voicemail attached to other kind of message
2203/4536 . . . Voicemail combined with text-based messaging
2203/4545 . . . Message forwarding (selective message forwarding in packet switching networks H04L 51/14)
2203/4554 . . . Sender-side editing
2203/4563 . . . Voicemail monitoring during recording
2203/4572 . . . Voicemail RSS
2203/4581 . . Sending message identifiers instead of whole messages (notification of incoming messages in packet-switching networks H04L 51/24)

2203/459 . . Calling party redirected to message centre on called party request

2203/50 . . related to audio conference

2203/5009 . . Adding a party to an existing conference (conducting a computer conference, e.g. admission detection H04L 12/1822)

2203/5018 . . Initiating a conference during a two-party conversation, i.e. three-party-service or three-way-call (computer conference organisation arrangements H04L 12/1818)

2203/5027 . . Dropping a party from a conference (conducting a computer conference, e.g. admission detection H04L 12/1822)

2203/5036 . . using conference for collection of feedback

2203/5045 . . Selection of bridge/multipoint control unit (network arrangements for computer conference optimisation H04L 12/1827)

2203/5054 . . Meet-me conference, i.e. participants dial-in

2203/5063 . . Centrally initiated conference, i.e. Conference server dials participants (computer conference organisation arrangements H04L 12/1818)

2203/5072 . . Multiple active speakers (conducting a computer conference, e.g. Admission detection H04L 12/1822)

2203/5081 . . Inform conference party of participants, e.g. of change of participants (conducting a computer conference, e.g. admission detection, H04L 12/1822)

2203/509 . . Microphone arrays

2203/55 . . related to network data storage and management

2203/551 . . Call history (recording a computer conference H04L 12/1831)

2203/552 . . Call annotations

2203/553 . . Data upload

2203/554 . . Data synchronization

2203/555 . . Statistics, e.g. about subscribers but not being call statistics

2203/556 . . Statistical analysis and interpretation

2203/557 . . Portable profiles

2203/558 . . Databases

2203/559 . . Sorting systems

2203/60 . . related to security aspects in telephonic communication systems (network architectures or network communication protocols for network security H04L 63/00)

2203/6009 . . Personal information, e.g. profiles or personal directories being only provided to authorised persons

2203/6018 . . Subscriber or terminal logon/logoff

2203/6027 . . Fraud preventions

2203/6036 . . Anti virus measures

2203/6045 . . Identity confirmation

2203/6054 . . Biometric subscriber identification

2203/6063 . . Authentication using cards

2203/6072 . . Authentication using challenger response

2203/6081 . . Service authorization mechanisms

2203/609 . . Secret communication

2203/65 . . related to applications where calls are combined with other types of communication

2203/651 . . Text message transmission triggered by call (automatic reactions in messaging within packet-switching networks H04L 51/02)

2203/652 . . Call initiation triggered by text message

2203/654 . . Pre, in or post-call message

2203/655 . . Combination of telephone service and social networking (messaging within social networks H04L 51/32)

2203/657 . . Combination of voice and fax calls

2203/658 . . Combination of voice calls and paging

2207/00 Type of exchange or network, i.e. telephonic medium, in which the telephonic communication takes place

2207/08 . . ISDN systems

2207/12 . . intelligent networks

2207/14 . . cable networks

2207/18 . . wireless networks

2207/182 . . wireless circuit-switched

2207/185 . . wireless packet-switched

2207/187 . . combining circuit and packet-switched, e.g. GPRS

2207/20 . . hybrid systems

2207/203 . . composed of PSTN and data network, e.g. the Internet

2207/206 . . composed of PSTN and wireless network

2207/30 . . third party service providers

2207/35 . . virtual private networks

2207/40 . . terminals with audio html browser

2207/45 . . public-private interworking, e.g. centrex

2215/00 Metering arrangements; Time controlling arrangements; Time indicating arrangements

2215/01 . . Details of billing arrangements

2215/0104 . . Augmented, consolidated or itemised billing statement, e.g. additional billing information, bill presentation, layout, format, e-mail, fax, printout, itemised bill per service or per account, cumulative billing, consolidated billing

2215/0108 . . Customization according to wishes of subscriber, e.g. customer preferences, friends and family, selecting services or billing options, Personal Communication Systems [PCS]

2215/0112 . . Dynamic pricing, e.g. change of tariff during call

2215/0116 . . Provision for limiting expenditure, e.g. limit on call expenses or account

2215/012 . . Continue allow grace, e.g. accept negative balance

2215/0124 . . Continue alternative, i.e. alternative account to continue use

2215/0128 . . Linked escalation limits, establish, first or second limit

2215/0132 . . Limit per application

2215/0136 . . Limit per terminal

2215/014 . . Limit per user or user related number

2215/0144 . . Release upon reaching limit

2215/0148 . . Fraud detection or prevention means

2215/0152 . . General billing plans, rate plans, e.g. charge rates, numbering plans, rate centers, customer accounts

2215/0156 . . Secure and trusted billing, e.g. trusted elements, encryption, digital signature, codes or double check mechanisms to secure billing calculation and information
Charging/billing arrangements for connection made to the lowest cost tariff

Least cost routing, i.e. provision for selecting the least cost tariff route

Involving wireless systems

Roaming

Least cost routing, i.e. provision for selecting the lowest cost tariff

Charging/billing arrangements for connection made over different networks, e.g. wireless and PSTN, ISDN, etc.
2215/7286 . . . Dynamically
2215/729 . . . by user request
2215/7295 . . . Reserve amount, e.g. according to estimated
costs for a typical communication duration
or according to the estimated volume to be
transferred
2215/74 . . . Rating aspects, e.g. rating parameters or tariff
determination aspects
2215/7407 . . . class of subscriber
2215/7414 . . . QoS
2215/7421 . . . Determine tariff or charge band
2215/7428 . . . Load situation, e.g. Current network load, traffic
load or available resources
2215/7435 . . . Location dependent, e.g. Bussiness or home
2215/7442 . . . Roaming
2215/745 . . . Least cost routing, e.g. Automatic or manual, call
by call or by preselection
2215/7457 . . . Biding
2215/7464 . . . Select transport technology for a given service,
e.g. use for data connection WLAN rather
than GSM/UMTS/GPRS or use company's
communication network rather than a public
network
2215/7471 . . . Select route depending on origin or type
of service, e.g. route TDMA voice calls
differently than VoIP calls
2215/7478 . . . According to the number of recipients
2215/7485 . . . Group call; Conference call; Multi Party Call
2215/7492 . . . Group MMS or SMS; Point-to-multi-point
services, broadcast services
2215/78 . . . Metric aspects
2215/7806 . . . Time based
2215/7813 . . . Time based data, e.g. VoIP or circuit switched
packet data
2215/782 . . . Data or packet based
2215/7826 . . . Message based
2215/7833 . . . Session based
2215/784 . . . Access based
2215/7846 . . . Transaction based
2215/785 . . . Based on the number of used channels, e.g.
bundling channels or frequencies or CDMA codes
2215/786 . . . Unit based
2215/7866 . . . Pulse based
2215/7873 . . . Based on the number of used services, e.g. call
forwarding or call barring
2215/788 . . . Event based
2215/7886 . . . Apply cheapest or best package, e.g. selection
among available tariffs or packages (least cost
routing H04M 2215/42)
2215/7893 . . . Money or currency based
2215/81 . . . Notifying aspects, e.g. notifications or displays to
the user
2215/8104 . . . Time or frequency of notification
2215/8108 . . . before establishing a communication
2215/8112 . . . during the communication
2215/8116 . . . after the end of the communication
2215/812 . . . in regular intervals
2215/8125 . . . Dynamic change of the length/frequency of
the length of the notification interval, e.g.
depending on the remaining available prepaid
credit
2215/8129 . . . Type of notification
Details of telephonic subscriber devices

- Including a Bluetooth interface
- Including near field communication means, e.g. RFID
- Including a wireless LAN interface
- Home cordless telephone systems using the DECT standard
- Including a GPS signal receiver
- Including a sensor for measuring a physical value, e.g. temperature or motion (telephones including GPS signal receivers H04M 2250/10)
- Including a card reading device
- Including more than one display unit
- Including more than one keyboard unit
- Including a rotatable camera
- Including a touch pad, a touch sensor or a touch detector (digitizers for touch screens G06F 3/041)
- Including functional features of a camera (constructional features concerning the integration of cameras in portable phones H04M 1/0264)
- Including functional features of a projector or beamer module assembly (constructional features concerning the integration of projectors in portable phones H04M 1/0272)
- Including a user help function
- Including a multilanguage function
- Logging of communication history, e.g. outgoing or incoming calls, missed calls, messages or URLs (logging of telephone numbers H04M 1/56, H04M 1/57)
- User interface aspects of conference calls
- File transfer between terminals (download of applications H04M 1/72525; transfer of messages, e.g. SMS, e-mail or MMS H04M 1/72547)
- User interface aspects for indicating selection options for a communication line
- With means for recording information, e.g. telephone number during a conversation (recording of telephone conversations H04M 1/656)
- Methods for entering alphabetical characters, e.g. multi-tap or dictionary disambiguation (methods for entering alphabetical characters per se G06F 3/0237)
- User manuals of subscriber equipments, e.g. of mobile phones
- With voice recognition means (voice activated dialling H04M 1/271; voice recognition algorithms G10L 15/00)