

ECLA EUROPEAN CLASSIFICATION

H04Q SELECTING (switches, relays, selectors H01H; electronic switches [H03K17/00](#))

Notes

1. This subclass covers:

- methods, circuits, or apparatus for establishing selectively a connection between a desired number of stations (normally two), or between a main station and a desired number of substations (normally one) for the purpose of transferring information via this connection after it has been established;
- selective calling arrangements over connections already established.

In either case, the connection may be made by means of electric conductors or electromagnetic waves.

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. telephone for public use;
- "substation" means a subscriber or monitoring equipment which may connect a single subscriber to a line without choice as to subscriber;
- "satellite" is a kind of exchange the operation of which depends upon control signals received from a supervisory exchange;
- "switching centres" includes exchanges and satellites.

H04Q1/00 **Details of selecting apparatus or arrangements [N: for establishing connections among stations for the purpose of transferring information via these connections] [N1204]**

- H04Q1/02 . Constructional details
- H04Q1/02B . . [N: using pivoting mechanisms for accessing the interior of the apparatus] [N1204]
- H04Q1/02C . . [N: using sliding mechanisms for accessing the interior of the apparatus] [N1204]
- H04Q1/02D . . [N: Cabinets] [N1204]
- H04Q1/02D1 . . . [N: characterized by door details] [N1204]
- H04Q1/02N . . [N: Subscriber network interface devices (line interfacing in the subscriber set [H04M1/00L](#))]
- H04Q1/03 . . [N: Power distribution arrangements] [N1204]
- H04Q1/03B . . . [N: power failure protection] [N1204]
- H04Q1/035 . . [N: Cooling of active equipments, e.g. air ducts] [N1204]
- H04Q1/04 . . Frames or mounting racks for selector switches; Accessories therefor, e.g. frame cover
- H04Q1/06 . . Cable ducts or mountings specially adapted for exchange installations (in general [H02G](#))

H04Q1/06B	. . .	[N: vertical management arrangements] [N1204]
H04Q1/06C	. . .	[N: horizontal management arrangements] [N1204]
H04Q1/06D	. . .	[N: arranged on the front side] [N1204]
H04Q1/06E	. . .	[N: arranged on the rear side] [N1204]
H04Q1/08	. .	Frames or mounting racks for relays; Accessories therefor
H04Q1/09	. .	[N: Frames or mounting racks not otherwise provided for] [N1204]
H04Q1/10	. .	Exchange station construction
H04Q1/11	. .	[N: Protection against environment] [N1204]
H04Q1/11B	. . .	[N: mechanical protection, e.g. resistance to earthquakes] [N1204]
H04Q1/11C	. . .	[N: flooding protection, e.g. using water proof provision] [N1204]
H04Q1/11D	. . .	[N: lightning or EMI protection, e.g. shielding or grounding (suppression of noise or interference in transmission systems H04B15/00)] [N1204]
H04Q1/11E	. . .	[N: heat or sun protection] [N1204]
H04Q1/12	. .	Arrangements of multiple bars with or without pivotable frames
H04Q1/13	. .	[N: Patch panels for monitoring, interconnecting or testing circuits, e.g. patch bay, patch field or jack field; Patching modules] [N1204]
H04Q1/13B	. . .	[N: being pivotable] [N1204]
H04Q1/13C	. . .	[N: being slidable] [N1204]
H04Q1/13D	. . .	[N: characterized by patch cord details] [N1204]
H04Q1/13D2	. . . .	[N: having patch field management or physical layer management arrangements] [N1204]
H04Q1/13D2A	. . . . .	[N: using RFID] [N1204]
H04Q1/14	. .	Distribution frames
H04Q1/14B	. . .	[N: Details of connexions between cable and distribution frame]
H04Q1/14C	. . .	[N: Terminal blocks for distribution frames]
H04Q1/14K	. . .	[N: with contacts on circular surface] [N1204]
H04Q1/14L	. . .	[N: Plugs used in distribution frames]
H04Q1/14M	. . .	[N: with switches arranged in a matrix configuration]
H04Q1/14P	. . .	[N: with line protection means]
H04Q1/14R	. . .	[N: using robots for distributing]
H04Q1/14S	. . .	[N: Identification strips for distribution frames]
H04Q1/14W	. . .	[N: Wireguides in connector blocks] [N1204]
H04Q1/15	. .	[N: Backplane arrangements] [N1204]
H04Q1/15B	. . .	[N: characterised by connection features] [N1204]
H04Q1/16	. .	Wiring arrangements for selector switches or relays in frames
H04Q1/18	. .	Electrical details
H04Q1/20	. .	Testing circuits or apparatus; Circuits or apparatus for detecting, indicating, or signalling faults or troubles
H04Q1/22	. . .	Automatic arrangements
H04Q1/24	. . . .	for connection devices
H04Q1/24T	. . . . .	[N: in time-division multiplex systems]
H04Q1/26	. . . .	for signalling trouble in unoccupied sub-exchanges
H04Q1/28	. .	Current-supply circuits or arrangements for selection equipment at exchanges

- H04Q1/30 . . . Signalling arrangements; Manipulation of signalling currents ([multiplex systems providing for calling or supervisory signals H04J1/14, H04Q3/12](#); telephone substation equipment [H04M1/00](#))
- H04Q1/32 using trains of dc pulses ([H04Q1/39](#) takes precedence)
- H04Q1/34 Impulse regenerators with mechanical or other non-electrical marking arrangements
- H04Q1/36 Pulse-correcting arrangements, e.g. for reducing effects due to interference
- H04Q1/38 using combinations of direct currents of different amplitudes or polarities over line conductors or combination of line conductors
- H04Q1/39 using coded pulse groups
- H04Q1/40 whereby duration of pulse or interval between two pulses is variable
- H04Q1/42 involving the position of a pulse in a cycle
- H04Q1/44 using alternate current ([H04Q1/50](#) takes precedence)
- H04Q1/442 with out-of-voice band signalling frequencies
- H04Q1/442B [N: using one signalling frequency]
- H04Q1/442C [N: using two or more signalling frequencies, transmitted in succession or simultaneously]
- H04Q1/444 with voice-band signalling frequencies
- H04Q1/446 using one signalling frequency ([H04Q1/46](#) takes precedence)
- H04Q1/446B [N: the same frequency being used for all signalling information, e.g. A.C. nr.9 system]
- H04Q1/448 with conversion of a single frequency signal into a digital signal
- H04Q1/448B {7 dots} [N: which is transmitted in digital form]
- H04Q1/45 using multi-frequency signalling ([H04Q1/46](#) takes precedence)
- H04Q1/453 in which m-out-of-n signalling frequencies are transmitted
- H04Q1/453B {7 dots} [N: with an additional signal transmitted for voice protection]
- H04Q1/457 with conversion of multifrequency signals into digital signals
- H04Q1/457B {7 dots} [N: which are transmitted in digital form]
- H04Q1/46 comprising means for distinguishing between a signalling current of predetermined frequency and a complex current containing that frequency, e.g. speech current
- H04Q1/48 Induced-current signalling arrangements
- H04Q1/50 Conversion between different kinds of signals
- H04Q1/54 . . . Amplifier switched-on automatically in dependence on automatically-selected lines
- H04Q1/56 . . . Balancing circuitry switched-on automatically in dependence on automatically-selected lines

H04Q3/00 **Selecting arrangements** ([H04Q5/00](#) to [H04Q11/00](#) take precedence)

- H04Q3/00B . . [N: using crossbar selectors in the switching stages]
- H04Q3/00C . . [N: using relay selectors in the switching stages]
- H04Q3/00C4 . . . [N: in which the relays are arranged in a matrix configuration]
- H04Q3/00D . . [N: Arrangements providing connection between exchanges]

- H04Q3/00D1 . . [N: Details]
- H04Q3/00D2 . . [N: Provisions for signalling ([circuitry in H04Q1/30](#))]
- H04Q3/00D3 . . [N: Provisions for intelligent networking]
- H04Q3/00D3C . . . [N: customer-controlled]
- H04Q3/00D3D . . . [N: involving call modelling techniques, e.g. modifications to the basic call state model (BCSM)] [N9804]
- H04Q3/00D3F . . . [N: involving techniques for avoiding interaction of call service features] [N9804]
- H04Q3/00D3H . . . [N: involving hybrid, i.e. a mixture of public and private, or multi-vendor systems] [N9804]
- H04Q3/00D3P . . . [N: Personal communications services, e.g. provisions for portability of subscriber numbers ([subscriber services provided at exchanges H04M3/42](#))] [N9804]
- H04Q3/00D3S . . . [N: Service creation techniques][N9804]
- H04Q3/00D3S1 [N: using service-independent building blocks (SIBBs) or "primitives"] [N9804]
- H04Q3/00D4 . . [N: Provisions for network management]
- H04Q3/00D4B . . . [N: Bandwidth allocation or management] [N9811]
- H04Q3/00D4C . . . [N: customer-controlled]
- H04Q3/00D4F . . . [N: Fault management techniques] [N9811]
- H04Q3/00D4F1 [N: involving restoration of networks, e.g. disaster recovery, self-healing networks] [N9811]
- H04Q3/00D4P . . . [N: Network planning or design; Modelling of planned or existing networks] [N9811]
- H04Q3/00D4T . . . [N: Network testing or monitoring arrangements] [N9811]
- H04Q3/00D4V . . . [N: Congestion or overload control] [N9811]
- H04Q3/00D4W . . . [N: Specification, development or application of network management software, e.g. software re-use] [N9811]

- H04Q3/02 . . Circuit arrangements for selectors responsive to a permutation code

- H04Q3/04 . . Circuit arrangements for receivers of routing digits
- H04Q3/06 . . . for group or trunk group selectors
- H04Q3/08 . . . for local or long-distance selectors
- H04Q3/10 . . . for PBX selectors, i.e. private branch exchange selectors
- H04Q3/12 . . . for line selectors providing transfer of routing digits
- H04Q3/14 . . . for two-way operation selectors
- H04Q3/16 . . . for marking-switches

- H04Q3/18 . . Circuit arrangements for first stage of hunting switching
- H04Q3/20 . . . for preselectors
- H04Q3/22 comprising common calling and disconnecting circuit
- H04Q3/24 . . . for line finders
- H04Q3/26 comprising common calling and disconnecting circuit
- H04Q3/28 comprising main groups and subgroups
- H04Q3/30 . . . Selector finders, i.e. allotters

- H04Q3/32 . . Circuit arrangements for second or subsequent stages of hunting switching

- H04Q3/34 . . for the second preselection stage
- H04Q3/36 . . for the second line-finder stage
- H04Q3/38 . . for stages after the group selector stage
- H04Q3/40 . . for stages after the line selector, e.g. for extension selector

- H04Q3/42 . Circuit arrangements for indirect selecting controlled by common circuits, e.g. register controller, marker
- H04Q3/44 . . using revertive control
- H04Q3/46 . . using signals other than revertive impulses
- H04Q3/47 . . using translators
- H04Q3/48 . . using markers
- H04Q3/49 . . . for end-to-end marking
- H04Q3/49S . . . for routing connecting paths
- H04Q3/52 . . using static devices in switching stages, e.g. electronic switching arrangements
- H04Q3/52K . . . [N: using semiconductors in the switching stages]
- H04Q3/52K1 [N: Details]
- H04Q3/52L [N: using tubes in the switching stages]
- H04Q3/52P [N: Optical switching systems]
- H04Q3/52P1 [N: Details]
- H04Q3/54 . . in which the logic circuitry controlling the exchange is centralised
- H04Q3/54D . . . [N: Logic circuits or arrangements therefor (logic circuits in general [H03K19/00](#)) [C0910]]
- H04Q3/54S . . . [N: using a stored programme]
- H04Q3/54SC [N: Configuration, initialization] [N0209]
- H04Q3/54SC1 [N: Initialization, software or data downloading ([G06F9/445](#) takes precedence)] [N0209]
- H04Q3/54SC2 [N: Features introduction] [N0209]
- H04Q3/54SC3 [N: Configuration data, translation, passwords, databases] [N0209]
- H04Q3/54SM [N: using multi-processor systems] [N0209]
- H04Q3/54SM1 [N: Multi-processor, parallelism, distributed systems] [N0209]
- H04Q3/54SM2 [N: Redundancy, stand-by] [N0209]
- H04Q3/54SM3 [N: Intelligent peripherals, adjunct processors] [N0209]
- H04Q3/54ST [N: Software application] [N0209]
- H04Q3/54ST1 [N: Software development, e.g. procedural, object oriented, software generation, software testing] [N0209]
- H04Q3/54ST2 [N: Supervision, e.g. fault localisation, traffic measurements, avoiding errors, failure recovery, monitoring, statistical analysis] [N0209]
- H04Q3/55 . . . using wired logic circuitry
- H04Q3/55D [N: Wired circuits or arrangements therefor] [C0910]
- H04Q3/55S being comprised by electro-magnetic devices
- H04Q3/56 . . in which the control signals are multiplexed

- H04Q3/58 . Arrangements providing connection between main exchange and sub-exchange or satellite
- H04Q3/60 . . for connecting to satellites or concentrators which connect one or more exchange

- lines with a group of local lines
- H04Q3/60D . . . [N: Circuit arrangements therefor] [C0910]
- H04Q3/60F . . . [N: Arrangements in the satellite or concentrator]
- H04Q3/60F1 [N: Details]
- H04Q3/62 . . for connecting to private branch exchanges
- H04Q3/62D . . . [N: Circuit arrangements therefor] [C0910]
- H04Q3/62F . . . [N: Arrangements in the private branch exchange]
- H04Q3/62F1 [N: Details]

- H04Q3/64 . Distributing or queueing
- H04Q3/64D . . [N: Circuit arrangements therefor] [C0910]
- H04Q3/66 . . Traffic distributors
- H04Q3/66D . . . [N: Circuit arrangements therefor] [C0910]
- H04Q3/68 . . Grouping or interlacing selector groups or stages
- H04Q3/68D . . . [N: Circuit arrangements therefor] [C0910]

- H04Q3/70 . Identification of class of calling subscriber

- H04Q3/72 . Finding out and indicating number of calling subscriber
- H04Q3/74 . . Identification of subscriber calling from a party-line

- H04Q3/76 . Translation from the called subscriber`s number to the outgoing or incoming control information

- H04Q3/78 . Temporary storage of information of calling or called subscriber ([intermediate storage means for telegraphic communication H04L13/08](#))

- H04Q5/00** **Selecting arrangements wherein two or more subscriber stations are connected by the same line to the exchange**

- H04Q5/02 . with direct connection for all subscribers, i.e. party-line systems ([H04Q5/24 takes precedence](#))
- H04Q5/04 . . Signalling by currents in one or other or both line wires or additional wires
- H04Q5/06 . . Signalling by amplitude or polarity of dc
- H04Q5/08 . . Signalling by continuous ac
- H04Q5/10 . . . using single frequencies for different subscribers
- H04Q5/12 . . . using combinations of frequencies
- H04Q5/14 . . Signalling by pulses
- H04Q5/16 . . . by predetermined number of pulses

- H04Q5/18 . with indirect connection, i.e. through subordinate switching centre
- H04Q5/20 . . the subordinate centre permitting interconnection of subscribers connected thereto
- H04Q5/22 . . the subordinate centre not permitting interconnection of subscribers connected thereto

- H04Q5/24 . for two-party-line systems

- H04Q5/24A . . [N: Circuit arrangements in which for one subscriber low frequency speech and/or signalling signals proceed on the line, while for the other subscriber the low frequency speech and/or signalling signals are modulated upon a high frequency carrier signal]
- H04Q7/00** **Selecting arrangements to which subscribers are connected via radio links or inductive links**
- [N: **WARNING**
This group and its subgroups are no longer used for the classification of new documents as from February 01, 2008. The backlog of these groups is being continuously reclassified to the groups of H04W [C0802]
]
- H04Q7/06 . . in which the radio or inductive links are essentially one-way, e.g. selective calling systems
- H04Q7/08 . . . Selective calling networks, e.g. wide area paging
- H04Q7/10 . . . Selective call encoders, i.e. equipment at paging centre or base station
- H04Q7/10D [N: using digital or pulse address codes]
- H04Q7/10F [N: using frequency address codes]
- H04Q7/12 . . . with acknowledge back capability
- H04Q7/14 . . . Selective call receivers
- H04Q7/14M [N: with message or information receiving capability]
- H04Q7/16 Selective call decoders
- H04Q7/16D [N: using digital address codes]
- H04Q7/16F [N: using frequency address codes]
- H04Q7/16P [N: using pulse address codes]
- H04Q7/18 Functional features associated with selective call operation, e.g. battery saving circuits, address code programming
- H04Q7/18B [N: Battery saving circuits]
- H04Q7/18P [N: Means for monitoring or changing operational characteristics of paging receiver]
- H04Q7/20 . . in which the radio or inductive links are two-way links, e.g. mobile radio systems
- H04Q7/20R . . . [N: Selecting arrangements for remote fixed radio subscriber, e.g. rural telephony]
- H04Q7/20R4 [N: using a public radio mobile system, e.g. GSM, DECT] [N9904]
- H04Q7/22 . . . using dedicated mobile switching centres, e.g. cellular systems [N: ([H04Q7/20R4](#) takes precedence)] [C9904]
- H04Q7/22S [N: Supplementary selecting services provided by or via mobile switching centre]
- H04Q7/22S1 [N: Auxiliary data signalling, e.g. short message service (SMS), unstructured supplementary service data (USSD)] [N9904]
- H04Q7/22S1C [N: Message center equipment] [N9904]
- H04Q7/22S1D [N: Message delivery] [N9904]
- H04Q7/22S3 [N: Provisions for data transmission or connection to data network] [C9904]
- H04Q7/22S3C [N: using circuit-switched mode channels] [N9904]
- H04Q7/22S3N [N: Interfaces to backbone/core network] [N9904]

- H04Q7/22S3P [N: using packet-switched mode channels] [N9904]
- H04Q7/24 using public exchanges or networks with at least partially integrated mobile switching or mobile application [N: (H04Q7/22S3 takes precedence)] [C9904]
- H04Q7/24N [N: Networking arrangements, e.g. gateways] [N9904]
- H04Q7/24S [N: Signalling arrangements] [N9904]
- H04Q7/26 using a private branch exchange (PBX) as final selecting device, e.g. cordless PBX
- H04Q7/28 Trunked radio systems, i.e. sharing radio channel among active subscribers
- H04Q7/28D [N: Dispatch console arrangements] [N9903]
- H04Q7/28E [N: Channel access or release arrangements] [N9903]
- H04Q7/28M [N: Multi-site systems] [N9903]
- H04Q7/30 Base station equipment; [N: Base station subsystem] [C0005]
- H04Q7/30C [N: Rate adaptation, transcoder arrangements or by-pass] [N9904]
- H04Q7/30E [N: Remote base station arrangements] [9904]
- H04Q7/30N [N: Interfaces to backbone/core network] [N9904]
- H04Q7/32 Mobile subscriber equipment
- H04Q7/32A [N: Arrangements for storing subscriber or system parameters]
- H04Q7/32A2 [N: Updating, downloading or transfer of parameters] [N9904]
- H04Q7/32A4 [N: Storage or use of system related parameters] [N9904]
- H04Q7/32A6 [N: Storage or use of subscriber related parameters][N9904]
- H04Q7/32A8 [N: Storage or use of terminal related parameters] [N9904]
- H04Q7/32C [N: Channel access arrangements, e.g. scanning; access to request channel] [C0005]
- H04Q7/32D [N: with data transfer capability]
- H04Q7/32E [N: Arrangements for power control or power supply]
- H04Q7/32F [N: Arrangements for operating subscriber equipment] [C0008]
- H04Q7/32F2 [N: for multi-systems operation, e.g. dual-band] [N9904]
- H04Q7/32F4 [N: combined with other selective calling equipment, e.g. pager] [N9904]
- H04Q7/32F6 [N: with fixed public switched telephone network (PSTN) terminal interface, e.g. radio local loop (RLL) subscriber] [N9904]
- H04Q7/32R [N: Arrangements for relaying, repeating or indicating call at mobile equipment]
- H04Q7/32S [N: Security arrangements]
- H04Q7/34 Test or monitoring equipment, [N: e.g. operations, administration & maintenance (OA&M)] [C9904]
- H04Q7/34A [N: for radio subsystem] [N9904]
- H04Q7/34M [N: for subscriber equipment] [N9904]
- H04Q7/34N [N: for exchanges, network or system links] [N9904]
- H04Q7/34P [N: System reconfiguration or upgrading] [N9904]
- H04Q7/36 Arrangements for mobile service area coverage, e.g. cells layout
- H04Q7/36A [N: with adaptive channel assignment] [C9904]
- H04Q7/36B [N: with steered beams] [N9909]
- H04Q7/36C [N: with cluster frequency reuse] [N9904]
- H04Q7/36D [N: with dynamic channel assignment] [N9904]
- H04Q7/36H [N: with hybrid channel assignment, e.g. channel borrowing, load shedding] [N9904]

H04Q7/36M	. . .	[N: Small cells systems, e.g. microcells]
H04Q7/36P	. . .	[N: System planning tools] [N9904]
H04Q7/36S	. . .	[N: Spectrum sharing arrangements] [N9904]
H04Q7/36S2	. . . .	[N: for private radio base stations] [N9904]
H04Q7/38	. .	Arrangements for completing call to or from mobile subscriber
H04Q7/38A	. . .	[N: Subscriber authentication or fraud detection arrangements] [C0005]
H04Q7/38A2	. . . .	[N: Subscriber activation] [N9904]
H04Q7/38A4	. . . .	[N: Fraud detection arrangements] [N9904]
H04Q7/38C	. . .	[N: Selecting radio access] [C9904]
H04Q7/38C1	. . . .	[N: Selecting service provider] [N9904]
H04Q7/38C2	. . . .	[N: using a control channel]
H04Q7/38C2D	. . . . .	[N: Downlink control channel configuration] [N9904]
H04Q7/38C2U	. . . . .	[N: Uplink control channel configuration] [N9904]
H04Q7/38C4	. . . .	[N: using estimated or monitored link quality parameters, e.g. RSSI, BER]
H04Q7/38C6	. . . .	[N: using channel availability or priority information, e.g. idle/busy, call admission or blocking] [C0005]
H04Q7/38C8	. . . .	[N: Negotiating bandwidth, e.g. quality of service (QOS), call admission or blocking] [N9904] [C0005]
H04Q7/38H	. . .	[N: Hand-off arrangements]
H04Q7/38H6	. . . .	[N: Inter-network, inter-system handoff] [N9904]
H04Q7/38H8	. . . .	[N: Inter-exchange, inter-base-station-control (BSC) handoff] [N9904]
H04Q7/38H10	. . . .	[N: Intra-cell handoff] [N9904]
H04Q7/38H12	. . . .	[N: in multi-layered cells] [N9904]
H04Q7/38L	. . .	[N: Locating mobile subscriber]
H04Q7/38P	. . .	[N: Paging mobile subscriber]
H04Q7/38R	. . .	[N: Registration of mobile subscriber within system]
H04Q7/38R6	. . . .	[N: Roaming arrangements] [N9904]
H04Q7/38R8	. . . .	[N: using public switched telephone network (PSTN) mobility databases] [N9904]
H04Q7/38S	. . .	[N: Network security arrangements (H04Q7/38A takes precedence)]
H04Q7/38W	. . .	[N: Call management, subscriber management or control] [N9904]

H04Q9/00 Arrangements in telecontrol or telemetry systems for selectively calling a substation from a main station, in which substation desired apparatus is selected for applying a control signal thereto or for obtaining measured values therefrom

H04Q9/02	. .	Automatically-operated arrangements
H04Q9/04	. .	Arrangements for synchronous operation
H04Q9/06	. .	Calling by using amplitude or polarity of dc
H04Q9/08	. .	Calling by using continuous ac
H04Q9/10	. . .	using single different frequencies
H04Q9/12	. . .	using combinations of frequencies

- H04Q9/14 . Calling by using pulses
- H04Q9/16 . . by predetermined number of pulses

H04Q11/00 **Selecting arrangements for multiplex systems** (multiplex systems [H04J](#))

- H04Q11/00P . [N: using optical switching]
- H04Q11/00P1 . . [N: Details]
- H04Q11/00P2 . . [N: Switch and router aspects] [N0004]
- H04Q11/00P4 . . [N: Network aspects] [N0004]
- H04Q11/00P4B . . . [N: Provisions for optical burst or packet networks] [N0004] [C0406]
- H04Q11/00P4C . . . [N: Provisions for optical access or distribution networks, e.g. Gigabit Ethernet Passive Optical Network (GE-PON), ATM-based Passive Optical Network (A-PON), PON-Ring] [N0406]
- H04Q11/00P4E . . . [N: Provisions for the electrical-optical layer interface] [N0406]

- H04Q11/02 . for frequency-division multiplexing [N: ([H04Q11/00P](#) takes precedence)]
- H04Q11/02C . . [N: using a stored programme control]
- H04Q11/02C1 . . . [N: Details]

- H04Q11/04 . for time-division multiplexing [N: ([H04Q11/00P](#) takes precedence)]
- H04Q11/04C . . [N: using a stored programme control]
- H04Q11/04C1 . . . [N: Details]
- H04Q11/04D . . [N: Circuit arrangements therefor] [C0910]
- H04Q11/04S . . [N: Integrated services digital network, i.e. systems for transmission of different types of digitised signals, e.g. speech, data, telecentral, television signals]
- H04Q11/04S1 . . . [N: Details]
- H04Q11/04S1E [N: Exchange access circuits]
- H04Q11/04S1M [N: Selection or connection testing arrangements]
- H04Q11/04S1P [N: Connection protocols]
- H04Q11/04S1R [N: Primary rate access circuits]
- H04Q11/04S1T [N: Terminal access circuits]
- H04Q11/04S2 [N: Provisions for broadband connections]
- H04Q11/04S2D [N: Circuit arrangements therefor ([contains no documents, see provisionally \[H04Q11/04S2D1\]\(#\)](#))]
- H04Q11/04S2D1 [N: Details]
- H04Q11/06 . . Time-space-time switching
- H04Q11/08 . . Time only switching