

## SECTION H — ELECTRICITY

### H04 ELECTRIC COMMUNICATION TECHNIQUE

#### H04Q SELECTING (switches, relays, selectors H01H; wireless communication networks H04W) [1, 2009.01]

##### Note(s) [1, 2009.01]

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.
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.

##### Subclass index

##### SELECTING ARRANGEMENTS

General; by line; multiplex.....3/00, 5/00, 11/00

DISPOSITIONS FOR TELECONTROL OR TELEMETRY .....9/00

DETAILS.....1/00

<b>1/00</b>	<b>Details of selecting apparatus or arrangements [1, 2006.01]</b>	1/32	• • •	using trains of dc pulses (H04Q 1/39 takes precedence) [1, 3, 2006.01]
1/02	• Constructional details [1, 2006.01]	1/34	• • •	• Impulse regenerators with mechanical or other non-electrical marking arrangements [1, 2006.01]
1/04	• • Frames or mounting racks for selector switches; Accessories therefor, e.g. frame cover [1, 2006.01]	1/36	• • •	• Pulse-correcting arrangements, e.g. for reducing effects due to interference [1, 2006.01]
1/06	• • Cable ducts or mountings specially adapted for exchange installations [1, 2006.01]	1/38	• • •	• using combinations of direct currents of different amplitudes or polarities over line conductors or combination of line conductors [1, 2006.01]
1/08	• • Frames or mounting racks for relays; Accessories therefor [1, 2006.01]	1/39	• • •	• using coded pulse groups [3, 2006.01]
1/10	• • Exchange station construction [1, 2006.01]	1/40	• • •	• whereby duration of pulse or interval between two pulses is variable [1, 2006.01]
1/12	• • Arrangements of multiple bars with or without pivotable frames [1, 2006.01]	1/42	• • •	• involving the position of a pulse in a cycle [1, 2006.01]
1/14	• • Distribution frames [1, 2006.01]	1/44	• • •	• using ac (H04Q 1/50 takes precedence) [1, 3, 2006.01]
1/16	• • Wiring arrangements for selector switches or relays in frames [1, 2006.01]	1/442	• • •	• with out-of-voice band signalling frequencies [3, 2006.01]
1/18	• Electrical details [1, 2006.01]	1/444	• • •	• with voice-band signalling frequencies [3, 2006.01]
1/20	• • Testing circuits or apparatus; Circuits or apparatus for detecting, indicating, or signalling faults or troubles [1, 2006.01]	1/446	• • •	• using one signalling frequency (H04Q 1/46 takes precedence) [3, 2006.01]
1/22	• • • Automatic arrangements [1, 2006.01]	1/448	• • •	• with conversion of a single frequency signal into a digital signal [3, 2006.01]
1/24	• • • • for connection devices [1, 2006.01]	1/45	• • •	• using multi-frequency signalling (H04Q 1/46 takes precedence) [1, 3, 2006.01]
1/26	• • • • for signalling trouble in unoccupied sub-exchanges [1, 2006.01]			
1/28	• • Current-supply circuits or arrangements for selection equipment at exchanges [1, 2006.01]			
1/30	• • Signalling arrangements; Manipulation of signalling currents (multiplex systems providing for calling or supervisory signals H04J 1/14, H04J 3/12) [1, 2006.01]			

- 1/453 • • • • • in which m-out-of-n signalling frequencies are transmitted [3, 2006.01]
- 1/457 • • • • • with conversion of multi-frequency signals into digital signals [3, 2006.01]
- 1/46 • • • • • comprising means for distinguishing between a signalling current of predetermined frequency and a complex current containing that frequency, e.g. speech current [1, 3, 2006.01]
- 1/48 • • • Induced-current signalling arrangements [1, 2006.01]
- 1/50 • • • Conversion between different kinds of signals [1, 2006.01]
- 1/54 • • Amplifier switched-on automatically in dependence on automatically selected lines [1, 2006.01]
- 1/56 • • Balancing circuitry switched-on automatically in dependence on automatically selected lines [1, 2006.01]
- 3/00 Selecting arrangements (H04Q 5/00-H04Q 11/00 take precedence) [1, 2006.01]**
- 3/02 • Circuit arrangements for selectors responsive to a permutation code [1, 2006.01]
- 3/04 • Circuit arrangements for receivers of routing digits [1, 2006.01]
- 3/06 • • for group or trunk group selectors [1, 2006.01]
- 3/08 • • for local or long-distance selectors [1, 2006.01]
- 3/10 • • for PBX selectors, i.e. private branch exchange selectors [1, 2006.01]
- 3/12 • • for line selectors providing transfer of routing digits [1, 2006.01]
- 3/14 • • for two-way operation selectors [1, 2006.01]
- 3/16 • • for marking-switches [1, 2006.01]
- 3/18 • Circuit arrangements for first stage of hunting switching [1, 2006.01]
- 3/20 • • for preselectors [1, 2006.01]
- 3/22 • • • comprising common calling and disconnecting circuit [1, 2006.01]
- 3/24 • • for line finders [1, 2006.01]
- 3/26 • • • comprising common calling and disconnecting circuit [1, 2006.01]
- 3/28 • • • comprising main groups and subgroups [1, 2006.01]
- 3/30 • • Selector finders, i.e. alloters [1, 2006.01]
- 3/32 • Circuit arrangements for second or subsequent stages of hunting switching [1, 2, 2006.01]
- 3/34 • • for the second preselection stage [1, 2006.01]
- 3/36 • • for the second line-finder stage [1, 2006.01]
- 3/38 • • for stages after the group-selector stage [1, 2006.01]
- 3/40 • • for stages after the line selector, e.g. for extension selector [1, 2006.01]
- 3/42 • Circuit arrangements for indirect selecting controlled by common circuits, e.g. register controller, marker [1, 2006.01]
- 3/44 • • using revertive control [1, 2006.01]
- 3/46 • • using signals other than revertive impulses [1, 2006.01]
- 3/47 • • using translators [1, 2006.01]
- 3/48 • • using markers [1, 2006.01]
- 3/49 • • • for end-to-end marking [1, 2006.01]
- 3/495 • • • for routing connecting paths [1, 2006.01]
- 3/52 • • using static devices in switching stages, e.g. electronic switching arrangements [2, 2006.01]
- 3/54 • • in which the logic circuitry controlling the exchange is centralised [1, 2006.01]
- 3/545 • • • using a stored programme [4, 2006.01]
- 3/55 • • • using wired logic circuitry [4, 2006.01]
- 3/555 • • • • being comprised by electro-magnetic devices [4, 2006.01]
- 3/56 • • in which the control signals are multiplexed [2, 2006.01]
- 3/58 • Arrangements providing connection between main exchange and sub-exchange or satellite [1, 2006.01]
- 3/60 • • for connecting to satellites or concentrators which connect one or more exchange lines with a group of local lines [1, 2006.01]
- 3/62 • • for connecting to private branch exchanges [1, 2006.01]
- 3/64 • Distributing or queuing [1, 2006.01]
- 3/66 • • Traffic distributors [1, 2006.01]
- 3/68 • • Grouping or interlacing selector groups or stages [1, 2006.01]
- 3/70 • Identification of class of calling subscriber [1, 2006.01]
- 3/72 • Finding out and indicating number of calling subscriber [1, 2006.01]
- 3/74 • • Identification of subscriber calling from a party-line [1, 2006.01]
- 3/76 • Translation from the called subscriber's number to the outgoing or incoming control information [4, 2006.01]
- 3/78 • Temporary storage of information of calling or called subscriber (intermediate storage means for telegraphic communication H04L 13/08) [4, 2006.01]
- 5/00 Selecting arrangements wherein two or more subscriber stations are connected by the same line to the exchange [1, 2006.01]**
- 5/02 • with direct connection for all subscribers, i.e. party-line system (H04Q 5/24 takes precedence) [1, 2006.01]
- 5/04 • • Signalling by currents in one or other or both line wires or additional wires [1, 2006.01]
- 5/06 • • Signalling by amplitude or polarity of dc [1, 2006.01]
- 5/08 • • Signalling by continuous ac [1, 2006.01]
- 5/10 • • • using single frequencies for different subscribers [1, 2006.01]
- 5/12 • • • using combinations of frequencies [1, 2006.01]
- 5/14 • • Signalling by pulses [1, 2006.01]
- 5/16 • • • by predetermined number of pulses [1, 2006.01]
- 5/18 • with indirect connection, i.e. through subordinate switching centre [1, 2006.01]
- 5/20 • • the subordinate centre permitting interconnection of subscribers connected thereto [1, 2006.01]
- 5/22 • • the subordinate centre not permitting interconnection of subscribers connected thereto [1, 2006.01]
- 5/24 • for two-party-line systems [1, 2006.01]
- 9/00 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 [1, 2006.01]**
- 9/02 • Automatically-operated arrangements [1, 2006.01]
- 9/04 • Arrangements for synchronous operation [1, 2006.01]
- 9/06 • Calling by using amplitude or polarity of dc [1, 2006.01]

- 9/08 • Calling by using continuous ac [1, 2006.01]
- 9/10 • • using single different frequencies [1, 2006.01]
- 9/12 • • using combinations of frequencies [1, 2006.01]
- 9/14 • Calling by using pulses [1, 2006.01]
- 9/16 • • by predetermined number of pulses [1, 2006.01]

- 11/00 Selecting arrangements for multiplex systems**  
(multiplex systems H04J) [1, 2006.01]
- 11/02 • for frequency-division multiplexing [1, 2006.01]
- 11/04 • for time-division multiplexing [1, 2006.01]
- 11/06 • • Time-space-time switching [5, 2006.01]
- 11/08 • • Time only switching [5, 2006.01]