

# CPC COOPERATIVE PATENT CLASSIFICATION

## H ELECTRICITY

(NOTE omitted)

## H02 GENERATION; CONVERSION OR DISTRIBUTION OF ELECTRIC POWER

### H02B BOARDS, SUBSTATIONS, OR SWITCHING ARRANGEMENTS FOR THE SUPPLY OR DISTRIBUTION OF ELECTRIC POWER (basic electric elements, their assembly, including the mounting in enclosures or on bases, or the mounting of covers thereon, see the subclasses for such elements, e.g. transformers [H01F](#), switches, fuses [H01H](#), line connectors [H01R](#); installation of lines, cables, or other conductors for supply or distribution [H02G](#))

#### NOTE

This subclass [covers](#) boards, switchyards, switchgear or their installation, or the association of switching devices with each other or with other devices, e.g. transformers, fuses, meters or distribution boards; such associations constitute substations or distribution points.

#### WARNING

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.

#### 1/00 Frameworks, boards, panels, desks, casings; Details of substations or switching arrangements

#### NOTE

In groups [H02B 1/01](#) to [H02B 1/56](#), the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the last appropriate place.

- |           |  |       |  |
|-----------|--|-------|--|
| 1/01      | Frameworks   | 1/06  | . . having associated enclosures, e.g. for preventing access to live parts ( <a href="#">shutters or guards for contacts H02B 1/14</a> )   |
| 1/011     | . . {Open support bases}   | 1/063 | . . . {with tamper resistant sealing device}   |
| 1/012     | . . {Details of mechanical connections}  | 1/066 | . . . {with hinged covers ( <a href="#">covers for distribution boxes H02G 3/14</a> )}   |
| 1/013     | . . {Profiles for cabinet frames}  | 1/14  | . Shutters or guards for preventing access to contacts ( <a href="#">shielding of isolating-contacts in withdrawable switchgear H02B 11/24</a> )   |
| 1/014     | . . {Corner connections for frameworks}  | 1/16  | . Earthing arrangements ( <a href="#">earthing arrangements for substations H02B 5/01</a> , for switchgear <a href="#">H02B 11/28</a> , <a href="#">H02B 13/075</a> ; earth plates, pins, or other contacts <a href="#">H01R 4/66</a> )  |
| 1/015     | . Boards, panels, desks; Parts thereof or accessories therefor   | 1/18  | . Disposition or arrangement of fuses ( <a href="#">for switchgear having a withdrawable carriage H02B 11/26</a> )   |
| 2001/0155 | . . {Removable shutters for non-used openings}   | 1/20  | . Bus-bar or other wiring layouts, e.g. in cubicles, in switchyards ( <a href="#">installations of bus-bars H02G 5/00</a> )  |
| 1/03      | . . for energy meters  | 1/202 | . . {Cable lay-outs}   |
| 1/04      | . . Mounting thereon of switches or of other devices in general, the switch or device having, or being without, casing | 1/205 | . . {for connecting electrical apparatus mounted side by side on a rail}   |
| 1/041     | . . . {Mechanical coupling for side-by-side mounted apparatus}   | 1/207 | . . {Cross-bar layouts}  |
| 1/042     | . . . {Mounting on perforated supports by means of screws or locking members}  | 1/21  | . . Bus-bar arrangements for rack-mounted devices with withdrawable units  |
| 1/043     | . . . . {the perforated support having openings distributed according to a pattern}                                    | 1/22  | . . Layouts for duplicate bus-bar selection  |
| 1/044     | . . . Mounting through openings  | 1/24  | . Circuit arrangements for boards or switchyards ( <a href="#">devices for displaying diagrams H02B 15/00</a> ; <a href="#">service supply H02J 11/00</a> )  |
| 1/048     | . . . . Snap mounting  | 1/26  | . Casings; Parts thereof or accessories therefor ( <a href="#">adapted for a single switch H01H</a> ; <a href="#">enclosures for cables, lines or bus-bars H02G</a> ; <a href="#">distribution, connection or junction boxes H02G 3/08</a> ; <a href="#">casings in general H05K</a> ) |
| 1/052     | . . . Mounting on rails  | 1/28  | . . dustproof, splashproof, drip-proof, waterproof or flameproof   |
| 1/0523    | . . . . {locked into position by a sliding member}   | 1/30  | . . Cabinet-type casings; Parts thereof or accessories therefor  |
| 1/0526    | . . . . {locking or releasing devices actuated from the front face of the apparatus}                                   | 1/301 | . . . {mainly consisting of a frame onto which plates are mounted}   |
| 1/056     | . . . Mounting on plugboards   |       |  |
| 1/0565    | . . . . {by means of an adapter carrying one or more apparatuses ( <a href="#">holders with sockets H01R 33/00</a> )}  |       |  |

- 1/303 . . . {Bases or feet}
- 1/305 . . . {Cable entries}
- 1/306 . . . {Accessories, e.g. windows}
- 1/308 . . . {Mounting of cabinets together}
- 1/32 . . . Mounting of devices therein
- 1/34 . . . . Racks
- 1/36 . . . . with withdrawable units
- 1/38 . . . Hinged covers or doors
- 1/40 . . Wall-mounted casings; Parts thereof or accessories therefor
- 1/42 . . . Mounting of devices therein
- 1/44 . . . Hinged covers or doors
- 1/46 . . Boxes; Parts thereof or accessories therefor
- 1/48 . . . Mounting of devices therein
- 1/50 . . Pedestal- or pad-mounted casings; Parts thereof or accessories therefor
- 1/505 . . . {retractable installations}
- 1/52 . . Mobile units, e.g. for work sites
- 1/54 . Anti-seismic devices or installations (for buildings in general [E04B 1/98](#) ; shock absorbers [F16F](#))
- 1/56 . Cooling; Ventilation
- 1/565 . . {for cabinets}
- 3/00 Apparatus specially adapted for the manufacture, assembly, or maintenance of boards or switchgear**
- 5/00 Non-enclosed substations; Substations with enclosed and non-enclosed equipment**
- 5/01 . Earthing arrangements, e.g. earthing rods
- 5/02 . mounted on pole, e.g. pole transformer substation
- 5/06 . gas-insulated
- 7/00 Enclosed substations, e.g. compact substations**
- 7/01 . gas-insulated
- 7/06 . Distribution substations, e.g. for urban network ([H02B 7/01](#) takes precedence)
- 7/08 . . Underground substations
- 11/00 Switchgear having carriage withdrawable for isolation**
- 11/02 . Details
- 11/04 . . Isolating-contacts, e.g. mountings, shieldings (shutters or guards for isolating contacts [H02B 1/14](#), [H02B 11/24](#); switch contacts [H01H](#); line connectors in general [H01R](#))
- 11/06 . . Means for duplicate bus-bar selection (layouts for duplicate bus-bar selection [H02B 1/22](#))
- 11/08 . . Oil-tank lowering means associated with withdrawal mechanism
- 11/10 . . Indicating electrical condition of gear; Arrangement of test sockets
- 11/12 . with isolation by horizontal withdrawal
- 11/127 . . Withdrawal mechanism
- 11/133 . . . with interlock ([interlock for switches in general H01H](#))
- 11/167 . . truck type ([H02B 11/127](#) takes precedence)
- 11/173 . . drawer type ([H02B 11/127](#) takes precedence)
- 11/18 . with isolation by vertical withdrawal
- 11/20 . . having an enclosure
- 11/22 . . . wherein front of enclosure moves with carriage upon horizontal withdrawal subsequent to isolation
- 11/24 . Shutters or guards
- 11/26 . Arrangements of fuses, resistors, voltage arresters or the like
- 11/28 . Earthing arrangements
- 13/00 Arrangements of switchgear in which switches are enclosed in, or structurally associated with, a casing, e.g. cubicle (in association with main transformer [H02B 5/00](#), [H02B 7/00](#); switchgear having carriage withdrawable for isolation [H02B 11/00](#))**
- 13/005 . {Electrical connection between switchgear cells}
- 13/01 . with resin casing
- 13/02 . with metal casing
- 13/025 . . Safety arrangements, e.g. in case of excessive pressure or fire due to electrical defect (for buildings in general [E04B 1/94](#); devices for opening or closing safety wings [E05F 1/00](#); emergency protective circuit arrangements for distribution gear, e.g. bus-bar systems, or for switching devices [H02H 7/22](#))
- 13/035 . . Gas-insulated switchgear
- 13/0352 . . . {for three phase switchgear}
- 13/0354 . . . {comprising a vacuum switch ([H02B 13/0352](#) takes precedence)}
- 13/0356 . . . {Mounting of monitoring devices, e.g. current transformers}
- 13/0358 . . . {Connections to in or out conductors (connectors in general [H01R](#))}
- 13/045 . . . Details of casing, e.g. gas tightness (gas reservoirs for switches [H01H 33/56](#))
- 13/055 . . . Features relating to the gas (selection of fluids for switches [H01H 33/22](#))
- 13/065 . . . Means for detecting or reacting to mechanical or electrical defects (for switches [H01H 9/50](#), [H01H 33/26](#), [H01H 33/53](#))
- 13/0655 . . . . {through monitoring changes of gas properties}
- 13/075 . . . Earthing arrangements
- 13/08 . with stone, brick or concrete casing
- 15/00 Supervisory desks or panels for centralised control or display (desks in general [A47B](#))**
- 15/02 . with mimic diagrams
- 15/04 . . consisting of building blocks