

# 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
- 1/011 . . {Open support bases}
- 1/012 . . {Details of mechanical connections}
- 1/013 . . {Profiles for cabinet frames}
- 1/014 . . {Corner connections for frameworks}
- 1/015 . Boards, panels, desks; Parts thereof or accessories therefor
- 2001/0155 . . {Removable shutters for non-used openings}
- 1/03 . . for energy meters
- 1/04 . . Mounting thereon of switches or of other devices in general, the switch or device having, or being without, casing
- 1/041 . . . {Mechanical coupling for side-by-side mounted apparatus}
- 1/042 . . . {Mounting on perforated supports by means of screws or locking members}
- 1/043 . . . . {the perforated support having openings distributed according to a pattern}
- 1/044 . . . Mounting through openings
- 1/048 . . . . Snap mounting
- 1/052 . . . Mounting on rails
- 1/0523 . . . . {locked into position by a sliding member}
- 1/0526 . . . . {locking or releasing devices actuated from the front face of the apparatus}
- 1/056 . . . Mounting on plugboards
- 1/0565 . . . . {by means of an adapter carrying one or more apparatuses (holders with sockets [H01R 33/00](#))}

- 1/06 . . having associated enclosures, e.g. for preventing access to live parts (shutters or guards for contacts [H02B 1/14](#))
- 1/063 . . . {with tamper resistant sealing device}
- 1/066 . . . {with hinged covers (covers for distribution boxes [H02G 3/14](#))}
- 1/14 . Shutters or guards for preventing access to contacts (shielding of isolating-contacts in withdrawable switchgear [H02B 11/24](#))
- 1/16 . Earthing arrangements (earthing arrangements for substations [H02B 5/01](#), for switchgear [H02B 11/28](#), [H02B 13/075](#); earth plates, pins, or other contacts [H01R 4/66](#))
- 1/18 . Disposition or arrangement of fuses (for switchgear having a withdrawable carriage [H02B 11/26](#))
- 1/20 . Bus-bar or other wiring layouts, e.g. in cubicles, in switchyards (installations of bus-bars [H02G 5/00](#))
- 1/202 . . {Cable lay-outs}
- 1/205 . . {for connecting electrical apparatus mounted side by side on a rail}
- 1/207 . . {Cross-bar layouts}
- 1/21 . . Bus-bar arrangements for rack-mounted devices with withdrawable units
- 1/22 . . Layouts for duplicate bus-bar selection
- 1/24 . Circuit arrangements for boards or switchyards (devices for displaying diagrams [H02B 15/00](#); service supply [H02J 11/00](#))
- 1/26 . Casings; Parts thereof or accessories therefor (adapted for a single switch [H01H](#); enclosures for cables, lines or bus-bars [H02G](#); distribution, connection or junction boxes [H02G 3/08](#); casings in general [H05K](#))
- 1/28 . . dustproof, splashproof, drip-proof, waterproof or flameproof
- 1/30 . . Cabinet-type casings; Parts thereof or accessories therefor
- 1/301 . . . {mainly consisting of a frame onto which plates are mounted}

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