

CPC**COOPERATIVE PATENT CLASSIFICATION****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.

H02B 1/00**Frameworks, boards, panels, desks, casings; Details of substations or switching arrangements**

- H02B 1/01
 - Frameworks
- H02B 1/011
 - • {Open support bases}
- H02B 1/012
 - • {Details of mechanical connections}
- H02B 1/013
 - • {Profiles for cabinet frames}
- H02B 1/014
 - • {Corner connections for frameworks}
- H02B 1/015
 - Boards, panels, desks; Parts thereof or accessories therefor
- H02B 2001/0155
 - • {Removable shutters for non-used openings}
- H02B 1/03
 - • for energy meters
- H02B 1/04
 - • Mounting thereon of switches or of other devices in general, the switch or device having, or being without, casing
- H02B 1/041
 - • • {Mechanical coupling for side-by-side mounted apparatus}
- H02B 1/042
 - • • {Mounting on perforated supports by means of screws or locking members}
- H02B 1/043
 - • • • {the perforated support having openings distributed according to a pattern}
- H02B 1/044
 - • • Mounting through openings
- H02B 1/048
 - • • • Snap mounting
- H02B 1/052
 - • • Mounting on rails
- H02B 1/0523
 - • • • {locked into position by a sliding member}
- H02B 1/0526
 - • • • {locking or releasing devices actuated from the front face of the apparatus}
- H02B 1/056
 - • • Mounting on plugboards
- H02B 1/0565
 - • • • {by means of an adapter carrying one or more apparatuses (holders with sockets [H01R 33/00](#))}
- H02B 1/06
 - • having associated enclosures, e.g. for preventing access to live parts (shutters or guards for contacts [H02B 1/14](#))
- H02B 1/063
 - • • {with tamper resistant sealing device}

- H02B 1/066 . . . {with hinged covers (covers for distribution boxes [H02G 3/14](#))}
- H02B 1/14 . Shutters or guards for preventing access to contacts (shielding of isolating-contacts in withdrawable switchgear [H02B 11/24](#))
- H02B 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](#))
- H02B 1/18 . Disposition or arrangement of fuses (for switchgear having a withdrawable carriage [H02B 11/26](#))
- H02B 1/20 . Bus-bar or other wiring lay-outs, e.g. in cubicles, in switchyards (installations of bus-bars [H02G 5/00](#))
- H02B 1/202 . . {Cable lay-outs}
- H02B 1/205 . . {for connecting electrical apparatus mounted side by side on a rail}
- H02B 1/207 . . {Cross-bar layouts}
- H02B 1/21 . . Bus-bar arrangements for rack-mounted devices with withdrawable units
- H02B 1/22 . . Layouts for duplicate bus-bar selection
- H02B 1/24 . Circuit arrangements for boards or switchyards (devices for displaying diagrams [H02B 15/00](#); service supply [H02J 11/00](#))

NOTE

In groups [H02B 1/26](#) to [H02B 1/56](#), in the absence of an indication to the contrary, an invention is classified in the last appropriate place.

- H02B 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](#))
- H02B 1/28 . . dustproof, splashproof, drip-proof, waterproof or flameproof
- H02B 1/30 . . Cabinet-type casings; Parts thereof or accessories therefor
- H02B 1/301 . . . {mainly consisting of a frame onto which plates are mounted}
- H02B 1/303 . . . {Bases or feet}
- H02B 1/305 . . . {Cable entries}
- H02B 1/306 . . . {Accessories, e.g. windows}
- H02B 1/308 . . . {Mounting of cabinets together}
- H02B 1/32 . . . Mounting of devices therein
- H02B 1/34 Racks
- H02B 1/36 with withdrawable units
- H02B 1/38 . . . Hinged covers or doors
- H02B 1/40 . . Wall-mounted casings; Parts thereof or accessories therefor
- H02B 1/42 . . . Mounting of devices therein
- H02B 1/44 . . . Hinged covers or doors
- H02B 1/46 . . Boxes; Parts thereof or accessories therefor
- H02B 1/48 . . . Mounting of devices therein
- H02B 1/50 . . Pedestal- or pad-mounted casings; Parts thereof or accessories therefor
- H02B 1/505 . . . {retractable installations}
- H02B 1/52 . . Mobile units, e.g. for work sites

H02B 1/54	<ul style="list-style-type: none"> • Anti-seismic devices or installations (for buildings in general E04B 1/98; {shock absorbers F16F})
H02B 1/56	<ul style="list-style-type: none"> • Cooling; Ventilation
H02B 1/565	<ul style="list-style-type: none"> • • {for cabinets}
H02B 3/00	Apparatus specially adapted for the manufacture, assembly, or maintenance of boards or switchgear
H02B 5/00	Non-enclosed substations; Substations with enclosed and non-enclosed equipment
H02B 5/01	<ul style="list-style-type: none"> • Earthing arrangements, e.g. earthing rods
H02B 5/02	<ul style="list-style-type: none"> • mounted on pole, e.g. pole transformer substation
H02B 5/06	<ul style="list-style-type: none"> • gas-insulated
H02B 7/00	Enclosed substations, e.g. compact substations
H02B 7/01	<ul style="list-style-type: none"> • gas-insulated
H02B 7/06	<ul style="list-style-type: none"> • Distribution substations, e.g. for urban network (H02B 7/01 takes precedence)
H02B 7/08	<ul style="list-style-type: none"> • • Underground substations
H02B 11/00	Switchgear having carriage withdrawable for isolation
H02B 11/02	<ul style="list-style-type: none"> • Details
H02B 11/04	<ul style="list-style-type: none"> • • 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)
H02B 11/06	<ul style="list-style-type: none"> • • Means for duplicate bus-bar selection (layouts for duplicate bus-bar selection H02B 1/22)
H02B 11/08	<ul style="list-style-type: none"> • • Oil-tank lowering means associated with withdrawal mechanism
H02B 11/10	<ul style="list-style-type: none"> • • Indicating electrical condition of gear; Arrangement of test sockets
H02B 11/12	<ul style="list-style-type: none"> • with isolation by horizontal withdrawal
H02B 11/127	<ul style="list-style-type: none"> • • Withdrawal mechanism
H02B 11/133	<ul style="list-style-type: none"> • • • with interlock (interlock for switches in general H01H)
H02B 11/167	<ul style="list-style-type: none"> • • truck type (H02B 11/127 takes precedence)
H02B 11/173	<ul style="list-style-type: none"> • • drawer type (H02B 11/127 takes precedence)
H02B 11/18	<ul style="list-style-type: none"> • with isolation by vertical withdrawal
H02B 11/20	<ul style="list-style-type: none"> • • having an enclosure
H02B 11/22	<ul style="list-style-type: none"> • • • wherein front of enclosure moves with carriage upon horizontal withdrawal subsequent to isolation
H02B 11/24	<ul style="list-style-type: none"> • Shutters or guards
H02B 11/26	<ul style="list-style-type: none"> • Arrangements of fuses, resistors, voltage arresters or the like
H02B 11/28	<ul style="list-style-type: none"> • Earthing arrangements
H02B 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)

- H02B 13/005 . {Electrical connection between switchgear cells}
- H02B 13/01 . with resin casing
- H02B 13/02 . with metal casing
- H02B 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](#))
- H02B 13/035 . . Gas-insulated switchgear
- H02B 13/0352 . . . {for three phase switchgear}
- H02B 13/0354 . . . {comprising a vacuum switch ([H02B 13/0352](#) takes precedence)}
- H02B 13/0356 . . . {Mounting of monitoring devices, e.g. current transformers}
- H02B 13/0358 . . . {Connections to in or out conductors (connectors in general [H01R](#))}
- H02B 13/045 . . . Details of casing, e.g. gas tightness (gas reservoirs for switches [H01H 33/56](#))
- H02B 13/055 . . . Features relating to the gas (selection of fluids for switches [H01H 33/22](#))
- H02B 13/065 . . . Means for detecting or reacting to mechanical or electrical defects (for switches [H01H 9/50](#), [H01H 33/26](#), [H01H 33/53](#))
- H02B 13/0655 {through monitoring changes of gas properties}
- H02B 13/075 . . . Earthing arrangements
- H02B 13/08 . with stone, brick or concrete casing
- H02B 15/00** **Supervisory desks or panels for centralised control or display** (desks in general [A47B](#))
- H02B 15/02 . with mimic diagrams
- H02B 15/04 . . consisting of building blocks