

Title (en)
Disconnecter-fitted vacuum breaker

Title (de)
Vakuumschalter mit Trennschalter

Title (fr)
Interrupteur à vide avec sectionneur

Publication
EP 0843330 A3 19990303 (EN)

Application
EP 97304550 A 19970626

Priority
JP 30452296 A 19961115

Abstract (en)
[origin: EP0843330A2] To obtain a disconnecter-fitted vacuum breaker which can be housed in multiple stages vertically in a box. Method of Solution Secure fixed rods 21 vertically on the front face of mounting plate 3 and provide sliding rods 20A and 20B vertically through its central part. Secure the rear end of mechanism frame 4 to the front ends of sliding rods 20A and 20B, and secure insulating frame 13 to the rear ends of sliding rods 20A and 20B. House multiple vacuum bulbs 1 horizontally in grooves formed on the back of insulating frame 13, and secure their fixed side conductive shafts to the rear end of insulating frame 13 with fixed side conductors 6B. Secure movable side contact bases 8 to the rear faces of fixed side conductors 6B. Provide supporting frames 11 on the rear surface sides of the upper and lower ends of mechanism frame 4, and provide driving shaft 7 vertically between these supporting frames 11. Secure supporting frame 10 in the central part of mechanism frame 4, support the central part of driving shaft 7 with bearings and, at the same time, insert screw gear 23B. Mount a motor on the left side face of supporting frame 10, and cause driving screw gear 23A which is press-fitted to its shaft to engage with screw gear 23B. Insert screw gears 23C on the upper and lower ends of driving shaft 7, and, by causing them to engage with screw gears 23D inserted on fixed rods 21, drive insulating frame 13 by driving mechanism frame 4 forwards and backwards. Close and open the disconnectors with contact pieces 8a mounted on the movable contact bases by driving insulating frame 13 forwards and backwards. <IMAGE>

IPC 1-7
H01H 33/66; H01H 3/40

IPC 8 full level
H01H 3/40 (2006.01); **H01H 33/66** (2006.01); **H01H 33/666** (2006.01); **H02B 13/02** (2006.01)

CPC (source: EP)
H01H 3/40 (2013.01); **H01H 33/6661** (2013.01); **H01H 31/003** (2013.01); **H01H 2033/6665** (2013.01)

Citation (search report)
• [A] EP 0070794 A2 19830126 - FUJI ELECTRIC CO LTD [JP]
• [A] EP 0145994 A2 19850626 - WICKMANN WERKE GMBH [DE]
• [A] EP 0092205 A2 19831026 - HITACHI LTD [JP]

Cited by
CN112490757A; CN104134555A; CN112382526A; CN106783353A; CN107785189A; EP4100981A4; CN114400164A; EP3032666A1; CN107005034A; CN114974983A; US11972914B2; US8710388B2; WO2016091382A1

Designated contracting state (EPC)
AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
EP 0843330 A2 19980520; EP 0843330 A3 19990303; EP 0843330 B1 20041006; DE 69731058 D1 20041111; DE 69731058 T2 20050217; JP H10144188 A 19980529; MY 123118 A 20060531

DOCDB simple family (application)
EP 97304550 A 19970626; DE 69731058 T 19970626; JP 30452296 A 19961115; MY PI9703506 A 19970731