Title (en)

SWITCH POLE FOR A POWER CIRCUIT BREAKER

Publication

EP 0222073 A3 19881005 (DE)

Application

EP 86111125 A 19860812

Priority

DD 28176385 A 19851016

Abstract (en)

[origin: EP0222073A2] The invention relates to a switch pole for a power circuit breaker which is fitted with a vacuum switching chamber. It is based on an arrangement where the vacuum switching chamber is arranged in an insulating housing. At least two control electrodes are provided in the latter, which surround the vacuum switching chamber and at the same time are pivoted at the potential of the respective adjacent connection of the vacuum switching chamber. The important factor is to make use of potential distribution on the one hand reliably to avoid partial discharges and to maintain the dielectric stress in the dielectric material of the insulating housing within limits, without, on the other hand, adversely affecting the switching capacity of the switching chamber. The invention teaches that the metal screen of the vacuum switching chamber and/or a third control electrode are to be influenced by the design of the two control electrodes such that when the switch is closed they are at full potential and when the switch is open they are at half potential. The arrangement is also suitable for cases where the outer surface of the insulating housing has no earth coating or where a plurality of switch poles are housed in a container which is filled with an insulating gas, e.g. SF6. <IMAGE>

IPC 1-7

H01H 33/66; H01H 33/24

IPC 8 full level

H01H 33/662 (2006.01); H01H 33/24 (2006.01); H01H 33/66 (2006.01)

CPC (source: EP)

H01H 33/66207 (2013.01); H01H 33/24 (2013.01); H01H 33/66261 (2013.01); H01H 2033/6623 (2013.01)

Citation (search report)

- [XPD] EP 0176665 A2 19860409 - BUCHWITZ OTTO STARKSTROM [DD]
- [Y] DE 603883 C 19341010 - BBC BROWN BOVERI & CIE
- [Y] FR 2204873 A1 19740524 - MEIDENSHA ELECTRIC MFG CO LTD [JP]
- [AD] DE 2322372 A1 19741107 - SIEMENS AG
- [AD] DE 2240106 A1 19730301 - GEN ELECTRIC
- [AD] JP S555651 B2 19800208
- [AD] ELEKTRIE, Band 28, Nr. 10, 1974, Seiten 533-538; K. BÖHME: "Die optimierten feststoffisolierten 36-kV-Schaltzellen vom Typ ASIF 36"

Cited by

CN111837213A; EP1858044A3; EP4177924A1; EP1056109A1; FR2794280A1; DE102007022875A1; DE102007022875B4; WO9209997A1; WO0229839A1; US7679023B2; US7683286B2

Designated contracting state (EPC)

AT CH DE FR LI NL SE

DOCDB simple family (publication)

EP 0222073 A2 19870520; **EP 0222073 A3 19881005**; DD 241810 A1 19861224

DOCDB simple family (application)

EP 86111125 A 19860812; DD 28176385 A 19851016