

Title (en)
Electrically conductive shield for a vacuum switching device

Title (de)
Elektrisch leitender Schirm für einen Vakumschalter

Title (fr)
Ecran électro-conducteur pour un interrupteur à vide

Publication
EP 0780868 A3 19990428 (EN)

Application
EP 96308893 A 19961206

Priority
GB 9526232 A 19951221

Abstract (en)
[origin: EP0780868A2] An electrically conductive shield for a vacuum switching device, e.g. a vacuum interrupter, has a self-centering means for centering the shield within a ceramic insulator surrounding the shield. The self-centering means may comprise three outwardly facing domes (33) formed as "dimples" in the wall of the shield (19; 20). These domes make a clearance fit with the ceramic insulator (8) when cold, however when heated in order to effect brazing of the component parts of the interrupter, the domes (33) make first an interference fit with the ceramic while the shield "floats" relative to the ceramic, then are distorted by a further increase in temperature, the shield being then self-centred within the interrupter. The shield may consist of two shield members (19, 20), the first being as described above, the second having an outwardly turned lip (40) which is a clearance fit when cold, but causes distortion of an end-portion of the second shield member (20) at elevated temperature and acts to centre the second shield member (20). <IMAGE>

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H01H 33/66; B23K 1/00

IPC 8 full level
H01H 33/662 (2006.01)

CPC (source: EP)
H01H 33/66261 (2013.01); **H01H 2033/66276** (2013.01)

- Citation (search report)
- [A] US 4937405 A 19900626 - PILSINGER GUENTER [DE], et al
 - [X] EP 0409047 A2 19910123 - CALOR EMAG ELEKTRIZITAETS AG [DE]
 - [X] EP 0419940 A2 19910403 - CALOR EMAG ELEKTRIZITAETS AG [DE], et al
 - [X] FR 2450794 A1 19801003 - HAZEMEIJER BV [NL]
 - [A] US 4665287 A 19870512 - SOFIANEK JOSEPH C [US], et al
 - [A] US 4002867 A 19770111 - CHERRY SIDNEY J
 - [A] EP 0087881 A1 19830907 - MEIDENSHA ELECTRIC MFG CO LTD [JP]
 - [A] EP 0043258 A2 19820106 - MEIDENSHA ELECTRIC MFG CO LTD [JP]
 - [XYA] US 5137202 A 19920811 - PURDY III ROBERT J [US]
 - [Y] US 5377900 A 19950103 - BERGMANN ERNEST E [US]
 - [A] DE 3202429 A1 19830728 - DIETZEL KLAUS

Cited by
DE19946570B4

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DE FR GB NL

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