

Title (en)
ROTATING SWITCH WITH CURVED ARC-RUNNER PATH

Publication
EP 0296915 B1 19930310 (FR)

Application
EP 88401386 A 19880608

Priority
FR 8709009 A 19870625

Abstract (en)
[origin: JPS6419639A] PURPOSE: To increase breaking capacity by fixing a permanent magnet to a contact containing a moving track, without mutually corresponding two hot spout with respect to two arc roots, and blowing the arc roots toward hidden positions to ensure easy arc extinguishment and current shutoff. CONSTITUTION: When a rotary switch is open with the rotation of a shaft 22, arc roots 48, 50 locked onto fixed contacts 14, 16 are blown with the action of the magnetic field of a permanent magnet 34 and moved on a cylindrical outer periphery 42 to form arc root moving tracks. Hot spots, corresponding to the arc roots 48, 50, are moved to hidden positions 52, 54 and, when arcs 44, 46 are extinguished naturally and transferred into a zero current, optimum reignition preventing conditions are obtained, so that no thermoelectric discharge occurs at the hot spots 52, 54 on the side opposite to a knife blade 28. In this way, the possibility for reigniting the arcs 44, 46 is prevented or restricted, when recovery voltage develops and breaking capacity is increased.

IPC 1-7
H01H 33/12

IPC 8 full level
H01H 9/44 (2006.01); **H01H 19/00** (2006.01); **H01H 33/12** (2006.01); **H01H 33/18** (2006.01); **H01H 33/65** (2009.01)

CPC (source: EP US)
H01H 1/2041 (2013.01 - EP US); **H01H 9/443** (2013.01 - EP US); **H01H 33/182** (2013.01 - EP US)

Cited by
WO2007068693A1; FR2944911A1; FR2668851A1; DE102008015463B3; EP0874380A1; FR2762710A1

Designated contracting state (EPC)
AT BE CH DE ES GB GR IT LI NL SE

DOCDB simple family (publication)
EP 0296915 A1 19881228; EP 0296915 B1 19930310; AT E86787 T1 19930315; AU 1836388 A 19890105; AU 596061 B2 19900412; BR 8803129 A 19890208; CA 1314918 C 19930323; CN 1016656 B 19920513; CN 1034633 A 19890809; DE 3879002 D1 19930415; DE 3879002 T2 19930916; DK 171506 B1 19961202; DK 351188 A 19881226; DK 351188 D0 19880624; ES 2040364 T3 19931016; FR 2618251 A1 19890120; FR 2618251 B1 19891117; IN 171165 B 19920808; JP 2633305 B2 19970723; JP S6419639 A 19890123; NO 173907 B 19931108; NO 173907 C 19940216; NO 882747 D0 19880621; NO 882747 L 19881227; PT 87840 A 19890531; PT 87840 B 19930930; TR 23247 A 19890721; US 4803319 A 19890207; YU 119688 A 19910228; YU 47469 B 19951003; ZA 884375 B 19890222

DOCDB simple family (application)
EP 88401386 A 19880608; AT 88401386 T 19880608; AU 1836388 A 19880624; BR 8803129 A 19880624; CA 569544 A 19880615; CN 88103893 A 19880624; DE 3879002 T 19880608; DK 351188 A 19880624; ES 88401386 T 19880608; FR 8709009 A 19870625; IN 418MA1988 A 19880620; JP 15599688 A 19880623; NO 882747 A 19880621; PT 8784088 A 19880624; TR 42888 A 19880615; US 20631088 A 19880614; YU 119688 A 19880622; ZA 884375 A 19880620