

Title (en)

Arc extinguishing device for circuit breaker

Title (de)

Lichtbogenlöscheinrichtung für Schutzschalter

Title (fr)

Dispositif d'extinction d'arc électrique pour disjoncteur de protection

Publication

EP 1615247 A1 20060111 (DE)

Application

EP 04405431 A 20040708

Priority

EP 04405431 A 20040708

Abstract (en)

The device has first and second fixed contacts for connection to the terminals of a circuit breaker, a contact path between the fixed contacts that carries current with the switch closed with a movable contact bridge with a first bridge contact forming a first contact point with the first bridge contact, a fore chamber with a first spark rail for accepting a spark formed when the first contact point opens and a quenching chamber connected to the fore chamber. A current path with no current with the switch closed contains the first spark rail and a current-limiting element. The quenching path is connected to the second fixed contact and the first spark rail is designed to receive a spark foot point from the first bridge contact. An independent claim is also included for a protection circuit with a circuit breaker.

IPC 8 full level

H01H 9/42 (2006.01)

CPC (source: EP US)

H01H 9/42 (2013.01 - EP US); **H01H 9/44** (2013.01 - EP US)

Citation (search report)

- [X] US 5777286 A 19980707 - ABOT JEAN [FR], et al
- [X] US 2001021090 A1 20010913 - BENARD DAVID J [US], et al
- [X] DE 10118746 A1 20021114 - SIEMENS AG [DE]
- [X] US 5495083 A 19960227 - AYMAMI-PALA JUAN [FR], et al
- [X] EP 0350825 A2 19900117 - ASEA BROWN BOVERI [DE]
- [A] US 5142111 A 19920825 - BLANCHARD CHRISTIAN [FR], et al
- [A] DE 912469 C 19540531 - SIEMENS AG

Cited by

DE102010019429B4; DE102010019429A1; CN107785197A

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

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DOCDB simple family (application)

EP 04405431 A 20040708; AT 04405431 T 20040708; CN 200510079879 A 20050629; DE 502004007984 T 20040708; ES 04405431 T 20040708; US 15225705 A 20050615