

Title (en)

Circuit breaker with ventilation channels for efficient heat dissipation

Title (de)

Leistungsschalter mit Lüftungskanälen für einen effizienten Wärmeabtransport

Title (fr)

Commutateur de puissance doté de canaux d'aération pour une évacuation de chaleur efficace

Publication

EP 2573789 B1 20160824 (DE)

Application

EP 11182094 A 20110921

Priority

EP 11182094 A 20110921

Abstract (en)

[origin: EP2573789A1] The switch has a housing, and two switching device areas (1, 3) arranged in the housing. A quenching chamber device (5) and a sliding contact device (7) are arranged in one of the areas. A current release assembly consisting of a short-circuit trip (17) and an overload trip (26) is arranged in another area. A continuous ventilation channel (33) is formed within a housing wall along fixed contacts (10), where the channel acts as a convective air-flow through the power switch for dissipating heat. Movable contacts (9) are positioned opposite to the fixed contacts.

IPC 8 full level

H01H 9/34 (2006.01); **H01H 9/52** (2006.01); **H01H 71/02** (2006.01)

CPC (source: EP US)

H01H 9/342 (2013.01 - EP US); **H01H 9/52** (2013.01 - EP US); **H01H 33/53** (2013.01 - US); **H01H 71/025** (2013.01 - EP US);
H01H 9/047 (2013.01 - EP US); **H01H 2009/348** (2013.01 - EP US); **H01H 2223/002** (2013.01 - US)

Cited by

CN113903630A

Designated contracting state (EPC)

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DOCDB simple family (publication)

EP 2573789 A1 20130327; EP 2573789 B1 20160824; BR 112014006760 A2 20170328; BR 112014006760 B1 20200924;
CN 103733294 A 20140416; CN 103733294 B 20160120; ES 2600962 T3 20170213; KR 101608685 B1 20160404;
KR 20140063620 A 20140527; US 2014332502 A1 20141113; US 9147541 B2 20150929; WO 2013041358 A1 20130328

DOCDB simple family (application)

EP 11182094 A 20110921; BR 112014006760 A 20120903; CN 201280036666 A 20120903; EP 2012067125 W 20120903;
ES 11182094 T 20110921; KR 20147004600 A 20120903; US 201214117454 A 20120903