

Title (en)

HIGH-VOLTAGE CIRCUIT BREAKER WITH A DISCHARGE CHANNEL

Title (de)

HOCHSPANNUNGSLEISTUNGSSCHALTER MIT EINEM ABSTRÖMKANAL

Title (fr)

DISJONCTEUR D'ALIMENTATION HAUTE TENSION DOTE D'UN CANAL D'ECOULEMENT

Publication

EP 1185996 B1 20030910 (DE)

Application

EP 00949083 A 20000609

Priority

- DE 0001918 W 20000609
- DE 19928080 A 19990611

Abstract (en)

[origin: WO0077809A1] The invention relates to a high-voltage circuit breaker, comprising two arcing contacts (4,5) which separate in the event of breaking and between which an electric arc (12) may be produced in an electric arc chamber (9) filled with arc-extinguishing gas. The extinguishing gas that is heated by the electric arc exits through a discharge channel (see claim no. 1), starting from the narrow point (6) of an insulating nozzle (7) that surrounds the electric arc chamber. Said discharge channel has several areas (12,13,14,15) through which the arc-extinguishing gas successively passes. According to the invention, the first area (12), which faces towards the narrow point of the nozzle, has a reduced specific flow resistance in relation to the narrow point (6) and at least a second area (13), a third area (14) and a fourth area are provided downstream of the first area (12) in the discharge direction, the specific flow resistance of the second and third areas being greater than the specific flow resistance of the area directly preceding them in the discharge direction of the arc-extinguishing gas and the specific flow resistance of the third area (14) being less than that of the second area (13).

IPC 1-7

H01H 33/98; **H01H 33/70**

IPC 8 full level

H01H 33/70 (2006.01); **H01H 33/915** (2006.01); **H01H 33/98** (2006.01)

CPC (source: EP US)

H01H 33/7015 (2013.01 - EP US); **H01H 33/98** (2013.01 - EP US); **H01H 2033/888** (2013.01 - EP US)

Cited by

US8530774B2; EP2063445A1

Designated contracting state (EPC)

CH DE FR GB LI SE

DOCDB simple family (publication)

WO 0077809 A1 20001221; AU 6259600 A 20010102; CN 1186795 C 20050126; CN 1355925 A 20020626; DE 19928080 C1 20010208; DE 19928080 C5 20061116; DE 50003658 D1 20031016; EP 1185996 A1 20020313; EP 1185996 B1 20030910; US 6646850 B1 20031111

DOCDB simple family (application)

DE 0001918 W 20000609; AU 6259600 A 20000609; CN 00808812 A 20000609; DE 19928080 A 19990611; DE 50003658 T 20000609; EP 00949083 A 20000609; US 960401 A 20011211