

Title (en)
DC ELECTRICAL CIRCUIT BREAKER

Title (de)
ELEKTRISCHER TRENNSCHALTER FÜR GLEICHSTROM

Title (fr)
DISJONCTEUR ELECTRIQUE À COURANT CONTINU

Publication
EP 3232457 B1 20210106 (FR)

Application
EP 17166705 A 20170414

Priority
FR 1653346 A 20160415

Abstract (en)
[origin: US2017301490A1] A DC electrical circuit breaker includes first and second movable electrical contacts. The circuit breaker includes a magnetic circuit including a magnet and generating a magnetic field able to guide an electrical arc in the direction of a quenching chamber, and having for this purpose curved field lines extending perpendicularly to opposite lateral walls of an electrical arc formation chamber, these field lines converging, in a central region of the arc formation chamber containing the contact zones, toward the quenching chamber while extending parallel to the longitudinal plane.

IPC 8 full level
H01H 9/44 (2006.01); **H01H 9/36** (2006.01); **H01H 77/10** (2006.01); **H01H 1/20** (2006.01); **H01H 9/34** (2006.01); **H01H 9/46** (2006.01)

CPC (source: CN EP US)
H01F 1/055 (2013.01 - US); **H01H 9/346** (2013.01 - EP); **H01H 9/36** (2013.01 - EP); **H01H 9/443** (2013.01 - EP US);
H01H 9/446 (2013.01 - EP US); **H01H 33/08** (2013.01 - US); **H01H 33/182** (2013.01 - US); **H01H 73/04** (2013.01 - CN);
H01H 73/18 (2013.01 - CN); **H01H 73/20** (2013.01 - CN); **H01H 77/108** (2013.01 - EP US); **H01H 1/2041** (2013.01 - EP US);
H01H 9/46 (2013.01 - EP)

Cited by
EP3736844A1; FR3095890A1; CN107808790A; CN107799368A; US11133138B2

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 3232457 A1 20171018; EP 3232457 B1 20210106; CN 107301937 A 20171027; CN 114220718 A 20220322; CN 114220718 B 20240405;
ES 2864005 T3 20211013; FR 3050311 A1 20171020; FR 3050311 B1 20201204; US 10176945 B2 20190108; US 2017301490 A1 20171019

DOCDB simple family (application)
EP 17166705 A 20170414; CN 201710235614 A 20170412; CN 202111374165 A 20170412; ES 17166705 T 20170414;
FR 1653346 A 20160415; US 201715471237 A 20170328