

Title (en)
MINIATURE CIRCUIT BREAKER

Title (de)
MINI-SCHUTZSCHALTER

Title (fr)
DISJONCTEUR MINIATURE

Publication
EP 3439015 A4 20191204 (EN)

Application
EP 16896567 A 20161024

Priority
• CN 201620257040 U 20160330
• CN 2016103065 W 20161024

Abstract (en)
[origin: EP3439015A1] A miniature circuit breaker comprises a housing having an air outlet. A plurality of arc extinguishing grid-plates is mounted in an arc extinguishing chamber. The arc extinguishing chamber is fixedly connected to the housing. An air discharge opening is formed in a rear plate of the arc extinguishing chamber. A rear arc extinguishing structure is disposed between the air discharge opening of the arc extinguishing chamber and the air outlet of the housing. The rear arc extinguishing structure comprises a plurality of air flow passages disposed between the air discharge opening of the arc extinguishing chamber and the air outlet of the housing, such that high-temperature air flows in the arc extinguishing chamber pass through the air discharge opening and the plurality of air flow passages and are then discharged from the air outlet. Thus, the air flows flowing out from the grid-plates of the arc extinguishing chamber can be prevented from interfering with each other, hot air flows can be prevented from interfering with each other at the air outlet, and heat energy can be quickly dissipated, thereby quickly extinguishing electric arcs, enhancing an arc extinguishing effect of an arc extinguishing system and a breaking capability of the circuit breaker, and reducing the volume of the arc extinguishing chamber.

IPC 8 full level
H01H 73/18 (2006.01); **H01H 9/34** (2006.01); **H01H 9/36** (2006.01); **H01H 71/02** (2006.01)

CPC (source: EP RU)
H01H 9/342 (2013.01 - EP); **H01H 9/362** (2013.01 - EP); **H01H 73/18** (2013.01 - EP RU); **H01H 9/346** (2013.01 - EP); **H01H 71/025** (2013.01 - EP)

Citation (search report)
• [XAY] WO 02075760 A1 20020926 - MOELLER GEBAEUDEAUTOMATION KG [AT], et al
• [XA] CN 204792658 U 20151118 - XIAMEN HONGFA ELECTRICAL SAFETY & CONTROLS CO LTD
• [YA] EP 1017073 A2 20000705 - BTICINO SPA [IT]
• [YA] DE 102011118968 B3 20130131 - ABB AG [DE]
• See references of WO 2017166797A1

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)
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EP 16896567 A 20161024; BR 212018069918 U 20161024; CN 2016103065 W 20161024; CN 201620257040 U 20160330; IL 26189718 A 20180920; RU 2018137591 A 20161024