

Title (en)  
MINIATURE CIRCUIT BREAKER

Title (de)  
MINI-SCHUTZSCHALTER

Title (fr)  
DISJONCTEUR MINIATURE

Publication  
**EP 3439015 A1 20190206 (EN)**

Application  
**EP 16896567 A 20161024**

Priority  
• CN 201620257040 U 20160330  
• CN 2016103065 W 20161024

Abstract (en)  
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)

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)

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

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3439015 A1 20190206**; **EP 3439015 A4 20191204**; BR 212018069918 U2 20190319; CN 205621690 U 20161005; IL 261897 A 20181031; RU 2018137591 A 20200430; RU 2018137591 A3 20200430; RU 2722093 C2 20200526; WO 2017166797 A1 20171005

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