

Title (en)

OPERATION MECHANISM FOR MINIATURE CIRCUIT BREAKER

Title (de)

BETÄTIGUNGSMECHANISMUS FÜR MINIATUR-LEISTUNGSSCHALTER

Title (fr)

MÉCANISME DE MANOEUVRE POUR DISJONCTEUR MINIATURE

Publication

EP 3404691 B1 20210127 (EN)

Application

EP 16884716 A 20161024

Priority

- CN 201610012560 A 20160111
- CN 2016103018 W 20161024

Abstract (en)

[origin: EP3404691A1] An operating mechanism of a miniature circuit breaker comprises a handle, a driving connecting rod, a stationary contact and a moving contact, and further comprises a tension spring and a trip lever, one end of the driving connecting rod is hinged with the handle, the other end of the driving connecting rod is matched with the moving contact, one end of the tension spring is fixed on a housing, and the other end of the tension spring is connected to the moving contact; the moving contact is driven by the tension spring and the driving connecting rod together to provide a contact pressure and an overstretching elastic force required for ensuring the reliability of electrical contact for closing the moving contact and the stationary contact, and the tension spring provides an energy storage elastic force required for resetting the mechanism for breaking the moving contact from the stationary contact; and the trip lever is arranged on the moving contact, and is used to control the locking and unlocking cooperation between the driving connecting rod and the moving contact, when a failure automatically occurs, the trip lever separates the driving connecting rod from the moving contact to automatically release the operation mechanism. The mechanism can effectively simplify the structure, reduce the manufacturing cost, improve the production efficiency, and optimize the mechanical performance.

IPC 8 full level

H01H 71/10 (2006.01); **H01H 71/52** (2006.01)

CPC (source: CN EP RU)

H01H 71/10 (2013.01 - CN EP RU); **H01H 71/526** (2013.01 - EP RU)

Citation (examination)

- CN 205487987 U 20160817 - ZHEJIANG CHINT ELECTRIC APPLIANCE CO LTD
- CN 203434106 U 20140212 - YUEQING SHENGYU ELECTRIC CO LTD

Cited by

CN109509647A; WO2022135044A1; EP4131314A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

EP 3404691 A1 20181121; **EP 3404691 A4 20190828**; **EP 3404691 B1 20210127**; BR 112018014124 A2 20181211; CN 106960768 A 20170718; CN 106960768 B 20191011; MY 191683 A 20220707; PH 12018501494 A1 20190325; RU 2018129468 A 20200213; RU 2018129468 A3 20200213; RU 2716012 C2 20200305; WO 2017121164 A1 20170720

DOCDB simple family (application)

EP 16884716 A 20161024; BR 112018014124 A 20161024; CN 201610012560 A 20160111; CN 2016103018 W 20161024; MY PI2018702826 A 20161024; PH 12018501494 A 20180711; RU 2018129468 A 20161024