

Title (en)
SINGLE-STAGE CIRCUIT BREAKER

Title (de)
EINSTUFIGER SCHUTZSCHALTER

Title (fr)
DISJONCTEUR MONO-ÉTAGE

Publication
EP 3577675 B1 20220817 (EN)

Application
EP 18702694 A 20180201

Priority
• CN 201710064294 A 20170204
• EP 2018052557 W 20180201

Abstract (en)
[origin: WO2018141866A1] The present invention provides a single-stage circuit breaker. The single-stage circuit breaker comprises a shell; a first contact assembly and a first execution assembly used for cooperating with an electromagnetic trip device; an arc extinguishing device accommodated between an electromagnetic protection device and the first contact assembly; a thermal protection and arc fault detection device located near the arc extinguishing device and in a first accommodation chamber; an arc fault and leakage trip device arranged in a second accommodation chamber; a second contact assembly and a second execution assembly used for cooperating with the arc fault and leakage trip device and located at one side of the second accommodation chamber; and a circuit board assembly for arc fault handling and leakage protection. The single-stage circuit breaker of the present invention can not only meet the requirements for arc fault detection, leakage protection and overload over-current protection at the same time, but also can ensure the compactness of the internal structural layout of the circuit breaker.

IPC 8 full level
H01H 83/02 (2006.01); **H01H 71/02** (2006.01); **H01H 71/10** (2006.01); **H01H 83/20** (2006.01)

CPC (source: CN EP)
H01H 9/50 (2013.01 - CN); **H01H 71/0207** (2013.01 - CN EP); **H01H 71/1045** (2013.01 - EP); **H01H 83/02** (2013.01 - EP); **H01H 83/04** (2013.01 - CN); **H01H 83/14** (2013.01 - CN); **H01H 71/1027** (2013.01 - EP); **H01H 2083/201** (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

DOCDB simple family (publication)
WO 2018141866 A1 20180809; CN 108400066 A 20180814; CN 108400066 B 20200421; EP 3577675 A1 20191211; EP 3577675 B1 20220817

DOCDB simple family (application)
EP 2018052557 W 20180201; CN 201710064294 A 20170204; EP 18702694 A 20180201