

Title (en)
CIRCUIT BREAKER CONTACT SYSTEM

Title (de)
KONTAKTSYSTEM EINES LEISTUNGSSCHUTZSCHALTERS

Title (fr)
SYSTÈME DE CONTACT D'UN DISJONCTEUR DE PUISSANCE

Publication
EP 2898525 B1 20170426 (DE)

Application
EP 13771417 A 20130919

Priority
• DE 102012108849 A 20120920
• EP 2013069433 W 20130919

Abstract (en)
[origin: WO2014044739A1] The contact systems of circuit breakers for at least one pole are equipped with a movable contact in the form of a contact arm. The contact arm is biased by a contact force spring in order to generate a contact pressure in the closed position. The contact arm 10 is mounted in a circuit breaker housing in a rotatable manner about a contact arm rotational point, the low-voltage switch being actuated in said housing. An essential aspect of the contact system according to the invention is that the contact force spring 18, 19 is arranged between the contact arm 10 and a lever 21 which can be rotated about a lever rotational point 23. The contact force spring 19 biases the contact arm 10 and the lever at both ends of the spring. The position of the contact arm rotational point 12, the position of the lever rotational point 23, and the lengths of the lever and the contact arm 10 are dimensioned relative to one another such that a resulting torque which generates the contact force is applied to the contact arm 10, and the rotatable lever 21 and the contact arm 10 latch to each other in any position of the contact system between ON and OFF and back when the switch is manually actuated by a handle 7. The lever 21 and the contact arm 10 unlatch when an opening movement is electrodyamically triggered (in the event of a short-circuit or an overcurrent) and relatch while the contact system is converted into the normal position in order to reset after the opening movement has been electrodyamically triggered.

IPC 8 full level
H01H 3/30 (2006.01); **H01H 71/50** (2006.01); **H01H 73/26** (2006.01); **H01H 77/10** (2006.01)

CPC (source: EP)
H01H 71/505 (2013.01); **H01H 77/105** (2013.01); **H01H 3/3031** (2013.01); **H01H 73/26** (2013.01)

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 2014044739 A1 20140327; EP 2898525 A1 20150729; EP 2898525 B1 20170426

DOCDB simple family (application)
EP 2013069433 W 20130919; EP 13771417 A 20130919