

Title (en)  
CONTACT ASSEMBLY CONFIGURED FOR A LOAD BREAK SWITCH, LOAD BREAK SWITCH AND METHOD OF QUENCHING AN ELECTRIC ARC WITHIN A LOAD BREAK SWITCH

Title (de)  
KONTAKTANORDNUNG MIT KONFIGURATION FÜR EINEN LASTTRENNSCHALTER, LASTTRENNSCHALTER UND VERFAHREN ZUM LÖSCHEN EINES ELEKTRISCHEN LICHTBOGENS INNERHALB EINES LASTTRENNSCHALTERS

Title (fr)  
ENSEMBLE CONTACT CONÇU POUR INTERRUPTEUR COUPE-CHARGE, INTERRUPTEUR COUPE-CHARGE ET PROCÉDÉ D'EXTINCTION D'UN ARC ÉLECTRIQUE DANS UN INTERRUPTEUR COUPE-CHARGE

Publication  
**EP 3901975 A1 20211027 (EN)**

Application  
**EP 20171370 A 20200424**

Priority  
EP 20171370 A 20200424

Abstract (en)  
A contact assembly (105) for a load break switch (100) including: a stationary contact unit (110); and a movable contact unit (120) configured to move between a closed position and an open position, wherein: i) an electric current flowing along a current path (140) through the stationary contact unit (110) and the movable contact unit (120) and ii) including an electric arc (142) between the stationary contact unit (110) and the movable contact unit (120) is adapted to generate a magnetic field enabling a Lorentz force (144) to act on the electric arc (142), wherein: iii) a structure (122) of the movable contact unit (120) is adapted to form the current path (140) or iv) a structure (112) of the stationary contact unit (110) and a structure (122) of the movable contact unit (120) are adapted to form the current path (140), such that in both cases iii), iv) the Lorentz force (144) enlarges a path of the electric arc (142), to facilitate quenching or extinguishing the electric arc (142), and in the closed position, the structure (122, 112) is configured to allow the current flowing through the movable contact unit (120) and the stationary contact unit (110) to flow along a current path (140) that is unaffected by the structure (122, 112).

IPC 8 full level  
**H01H 1/42** (2006.01); **H01H 1/54** (2006.01); **H01H 9/34** (2006.01); **H01H 77/10** (2006.01)

CPC (source: EP)  
**H01H 1/42** (2013.01); **H01H 1/54** (2013.01); **H01H 9/34** (2013.01); **H01H 77/102** (2013.01)

Citation (search report)  
• [XAY] US 2013328458 A1 20131212 - CRANE ALLAN DAVID [GB]  
• [Y] US 2017103858 A1 20170413 - ABROY HAMID S [US]  
• [XI] GB 2576338 A 20200219 - EATON INTELLIGENT POWER LTD [IE]

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 3901975 A1 20211027; EP 3901975 B1 20240529**

DOCDB simple family (application)  
**EP 20171370 A 20200424**