

Title (en)

Operating mechanism for a circuit breaker with a latch disengageable by a short circuit

Title (de)

Betätigungsmechanismus für einen Lastschalter mit durch einen kurzschlussentkuppelbare Verriegelung

Title (fr)

Mécanisme de commande d'un disjoncteur à verrou débrayable sur un court-circuit

Publication

EP 0789380 B1 20020410 (FR)

Application

EP 97410012 A 19970129

Priority

FR 9601661 A 19960206

Abstract (en)

[origin: EP0789380A1] The mechanism for a multi-polar circuit breaker comprises a pivoting lever system (14) associated with a release hook (44) and a switching bar (22). An opening pawl (50) co-operates with the hook to ensure the arming and release of the mechanism (10) in the locked and released positions of the pawl respectively. The opening pawl (50) comprises a releasable operating device, provoking the automatic unlocking of the bolt (60) in the presence of a short-circuit current exceeding a calibrated threshold. The threshold is defines by a spring mechanism (74,76). The automatic unlocking is controlled by the mechanical reaction generated by the electrodynamic compensation effect. This provokes an ultra-rapid rotation of the bolt to release the opening pawl (50) before the intervention of the release device (70).

IPC 1-7

H01H 77/10

IPC 8 full level

H01H 71/12 (2006.01); **H01H 3/34** (2006.01); **H01H 33/42** (2006.01); **H01H 71/10** (2006.01); **H01H 71/64** (2006.01); **H01H 77/10** (2006.01)

CPC (source: EP KR US)

H01H 71/10 (2013.01 - KR); **H01H 77/101** (2013.01 - EP US); **H01H 2071/507** (2013.01 - EP US)

Cited by

EP2597428A1; EP2597427A1; EP2254136A1; FR2983294A1; EP1347479A1; FR2837619A1; US6018284A; EP0977233A1; FR2781921A1; FR2983293A1; RU2621902C2; US6777635B2; EP1014415A1; FR2945661A1; CN101894692A; EP3799095A1; FR3101191A1; US11177090B2; DE102013217678A1; US9324513B2; DE102013217678B4; US8264232B2

Designated contracting state (EPC)

BE DE ES GB IT

DOCDB simple family (publication)

EP 0789380 A1 19970813; **EP 0789380 B1 20020410**; BR 9700886 A 19981124; CA 2196916 A1 19970807; CA 2196916 C 20051101; CN 1082711 C 20020410; CN 1162186 A 19971015; DE 69711742 D1 20020516; DE 69711742 T2 20021017; ES 2175312 T3 20021116; FR 2744563 A1 19970808; FR 2744563 B1 19980403; JP 4237832 B2 20090311; JP H09288960 A 19971104; KR 100425355 B1 20040618; KR 970063313 A 19970912; RU 2154322 C2 20000810; SG 77129 A1 20001219; TR 199700086 A2 19980721; TR 199700086 A3 19980721; TW 364139 B 19990711; UA 42780 C2 20011115; US 5731560 A 19980324; ZA 97857 B 19970806

DOCDB simple family (application)

EP 97410012 A 19970129; BR 9700886 A 19970205; CA 2196916 A 19970205; CN 97101079 A 19970205; DE 69711742 T 19970129; ES 97410012 T 19970129; FR 9601661 A 19960206; JP 1038197 A 19970123; KR 19970003354 A 19970204; RU 97101880 A 19970205; SG 1997000095 A 19970116; TR 9700086 A 19970205; TW 86100313 A 19970114; UA 97020474 A 19970205; US 78726897 A 19970124; ZA 97857 A 19970203