

Title (en)  
Circuit breaker

Title (de)  
Schutzschalter

Title (fr)  
Disjoncteur

Publication  
**EP 1014415 B1 20020327 (EN)**

Application  
**EP 99124033 A 19991209**

Priority  

- JP 36684898 A 19981224
- JP 29797899 A 19991020

Abstract (en)  
[origin: EP1014415A1] A circuit breaker rapidly breaking the short-circuit current prior to the operation of an overcurrent tripping device when a short-circuit current flows is obtained. An operation setting spring (63) is provided between engagement means B (53) of latch means holding a supporting member (32) of a toggle link (44, 46) linked to opening/closing contacts (8, 18) and engagement means A (52) held by a latch receiver (39) displaced by an operation of an overcurrent tripping device (64). When electromagnetic repulsion force generated by the short-circuit current strains the operation setting spring, engagement means B is disengaged and the toggle link supporting member instantaneously is displaced to rapidly break the short-circuit current. As engagement means B is displaced through this operation, latch receiver driving means (57) moves the latch receiver via a relay lever (55) to release the strain of the operation setting spring. <IMAGE>

IPC 1-7  
**H01H 71/43; H01H 77/10**

IPC 8 full level  
**H01H 71/12** (2006.01); **H01H 71/24** (2006.01); **H01H 73/36** (2006.01); **H01H 77/10** (2006.01); **H01H 71/50** (2006.01); **H01H 73/04** (2006.01)

CPC (source: EP)  
**H01H 71/2418** (2013.01); **H01H 77/10** (2013.01); **H01H 71/505** (2013.01); **H01H 73/045** (2013.01); **H01H 2071/507** (2013.01)

Cited by  
CN112753088A; CN117577491A; US11527377B2; WO2020064273A1

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**EP 1014415 A1 20000628; EP 1014415 B1 20020327**; DE 69901091 D1 20020502; DE 69901091 T2 20021002; JP 2000243204 A 20000908;  
JP 3368238 B2 20030120

DOCDB simple family (application)  
**EP 99124033 A 19991209**; DE 69901091 T 19991209; JP 29797899 A 19991020