

Title (en)
Over current circuit breaker, particularly motor circuit breaker

Title (de)
Überstromschutzschalter, insbesondere Motorschutzschalter

Title (fr)
Disjoncteur de surintensité, en particulier disjoncteur pour moteur

Publication
EP 0847070 A3 19981104 (DE)

Application
EP 96120845 A 19961223

Priority
CH 30796 A 19960206

Abstract (en)
[origin: US5757602A] The overcurrent protective switch contains a switch lock 8, which, in the switched on position, holds the movable contact pieces 3 in engagement with the fixed contact pieces 2 against the force exerted by at least one switch-off spring. The switch lock 8 comprises a switch splicing plate 10 connected to the movable contact pieces 3 in an articulated mechanism; a toggle lever splicing plate 12 connected to the switch splicing plate 10 at a toggle joint 13; and a pawl lever 15 mounted in a position inside the housing 1, which is supported by a trigger pawl 17 and connected with the toggle lever splicing plate 12 in an articulate mechanism. The joint axles 11, 13, 16 of the switch splicing plate 10 and the toggle lever splicing plate 12, as well as the pivot bearing axle 14 of the pawl lever 15 are in the on state arranged on a slightly curved line, so that a past dead center condition is created. Under this condition, the toggle joint 13 is supported against a latched stop slide 22, the latching of which is released when switched off manually. The pawl lever 15 is capable of swiveling in both directions, that is, in one direction when the trigger pawl 17 is actuated, and in the other direction when switched off manually. Thus, a quick switching off is achieved either manually or by a current surge, using only a few simple components.\!

IPC 1-7
H01H 71/56

IPC 8 full level
H01H 71/56 (2006.01)

CPC (source: EP US)
H01H 71/56 (2013.01 - EP US)

Citation (search report)
• [A] EP 0091040 A2 19831012 - ELLENBERGER & POENSGEN [DE]
• [A] EP 0500138 A1 19920826 - WEBER PROTECTION AG [CH]
• [A] EP 0519560 A1 19921223 - VYNCKIER NV [BE]
• [DA] DE 4304769 C1 19940331 - KLOECKNER MOELLER GMBH [DE]
• [DA] DE 2123765 B1 19720531 - ELLENBERGER & POENSGEN [DE]

Cited by
EP1093145A1; FR2799573A1; US6307455B1

Designated contracting state (EPC)
AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
EP 0847070 A2 19980610; EP 0847070 A3 19981104; EP 0847070 B1 20020612; AT E219286 T1 20020615; DE 59609343 D1 20020718; DK 0847070 T3 20020715; ES 2176394 T3 20021201; PT 847070 E 20021129; US 5757602 A 19980526

DOCDB simple family (application)
EP 96120845 A 19961223; AT 96120845 T 19961223; DE 59609343 T 19961223; DK 96120845 T 19961223; ES 96120845 T 19961223; PT 96120845 T 19961223; US 79049697 A 19970129