

Title (en)
Circuit breaker mechanism

Title (de)
Schalt Schloss für einen Leistungsschalter

Title (fr)
Serrure pour disjoncteur

Publication
EP 0584503 B1 19960501 (DE)

Application
EP 93110996 A 19930709

Priority
DE 4227213 A 19920817

Abstract (en)
[origin: EP0584503A1] The latching mechanism for power circuit breakers is the force-storing binding element between the handle and a contact apparatus. The production cost of previous latching mechanisms is excessively high. Furthermore, in the event of contact welding, there is a risk of the contact apparatus not opening despite the latching mechanism being released. The new latching mechanism (10) reliably opens the contact apparatus and consists of a smaller number of individual parts (components) which are of technologically simpler design. It is inserted between two symmetrical latching plates (14) which are held in the moulded housing and in which a switching link (18) is supported. Two toggle levers (22) are connected such that they are spaced apart, via a connecting shaft (12) which engages in cam slots in lateral rails. A toggle-lever spring (24) engages between the switching link (18) and the connecting shaft (12). A supporting lever (20) which can be driven by the switching link (18) is supported in a force-fitting manner in the latching plates (14), and the toggle levers (22) are supported in a force-fitting manner in the supporting lever (20). A catch lever (28) and a catch (26) which holds said lever in the locked position are held in a force-fitting manner, by means of a catch spring (30), in recesses (70; 74) in the latching plates (14). <IMAGE>

IPC 1-7
H01H 71/52; **H01H 71/02**; **H01H 71/50**

IPC 8 full level
H01H 71/02 (2006.01); **H01H 71/50** (2006.01); **H01H 71/52** (2006.01)

CPC (source: EP US)
H01H 71/0221 (2013.01 - EP US); **H01H 71/501** (2013.01 - EP US); **H01H 71/505** (2013.01 - EP US); **H01H 71/522** (2013.01 - EP US)

Cited by
FR2939238A1; EP0923102A3; CN104040668A; CN109817494A; FR2826174A1; WO2014044735A1; US5918732A; EP3557604A1; WO2010061141A1; WO2013072398A1; WO9617368A1; WO0116986A1; EP2629315A1; DE102013101430A1; US11817276B2; WO0016358A1; WO2019201992A1

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EP 93110996 A 19930709; AT 93110996 T 19930709; CN 93118337 A 19930816; DE 4227213 A 19920817; DE 59302424 T 19930709; ES 93110996 T 19930709; US 10724993 A 19930816