

Title (en)

CIRCUIT BREAKER WITH LEAKAGE CURRENT RELEASE

Publication

**EP 0103167 B1 19871111 (DE)**

Application

**EP 83107884 A 19830810**

Priority

- AT 64083 A 19830224
- AT 314382 A 19820819

Abstract (en)

[origin: EP0103167A1] 1. circuit breaker with fault-current tripping, consisting of adjacently arranged components constructed as switching rows (1, 2) in which the terminal paths for interrupting the phase conductors (L1) and the neutral conductor (N) are accommodated and which contain the latching mechanisms (26), which are coupled to each other, with the thermal (4) and magnetic (3a, 3b) tripping devices, in which arrangement no thermal tripping device (4) is arranged in the switching row (2) of the neutral conductor (N) but only the magnetic tripping device (3b) and components for the latching mechanism which are similar to the corresponding components in the switching rows (1) of the phase conductors (L1), in which arrangement the current path of the neutral conductor (N) is conducted between the connecting terminals (13b, 14b) of the switching row (2) of the neutral conductor (N) via the summation current transformer which also covers the phase conductors (L1), characterized in that a power-system-dependent electronic amplifying device (17) is arranged in the switching row (2) of the neutral conductor (N) and that the tripping coil of the magnetic tripping device (3b), which tripping coil is arranged in the switching row (2) of the neutral conductor (N), is connected to the power system via the amplifying device (17) when a fault current flows in the summation current transformer, as a result of which the magnetic tripping device (3b) is operated by the power system energy, that the neutral conductor (N) is conducted free of interruption through the summation current transformer (16) between the connecting terminals (13b, 14b) and that the amplifying device (17) and the checking device (15) are connected to one of the phase conductors (L1) by means of a connecting line (20a) via an interrupter contact (8a, 9a) the construction of which corresponds to the interrupt contacts (8, 9) of the phase conductors (L1).

IPC 1-7

**H01H 83/22**

IPC 8 full level

**H01H 71/00** (2006.01); **H01H 83/22** (2006.01)

CPC (source: EP)

**H01H 71/002** (2013.01); **H01H 83/226** (2013.01); **H01H 2071/004** (2013.01); **H01H 2083/045** (2013.01)

Cited by

DE4413418A1; CN114156702A; CN105655207A; EP3035359A3; EP1164615A1; CN104183434A; FR2715517A1; EP0665569A1; FR2596916A1; EP2175468A3; DE3642471A1; EP0196241A1; FR2578093A1; EP0456585A1; FR2662017A1; DE3412273A1

Designated contracting state (EPC)

CH DE FR GB IT LI NL

DOCDB simple family (publication)

**EP 0103167 A1 19840321**; **EP 0103167 B1 19871111**; DE 3374487 D1 19871217

DOCDB simple family (application)

**EP 83107884 A 19830810**; DE 3374487 T 19830810