

Title (en)
ULTRA-RAPID CIRCUIT BREAKER ASSISTED WITH SEMI-CONDUCTORS

Publication
EP 0272349 B1 19930519 (FR)

Application
EP 86202360 A 19861222

Priority
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Abstract (en)
[origin: EP0275857A1] Ultra-rapid circuit-breaker comprising an ultra-rapid cut-out mechanism provided with a repulsion disk equipped with moving contacts (7,7'), the said mechanism further comprising stationary contacts (9,9'), across the input and output terminals (1,3) of which is connected an assisting circuit (10) comprising a capacitor (21) and a choke (23) as well as a set of semiconductors (13,15,17,19), the choke (23) constituting in whole or in part the repulsion coil of the said ultra-rapid mechanism, characterised in that it comprises at least two parallel branches (CD, EF), a first branch (CD) comprising two opposed diodes (13,15) or the like, in series, each oriented in the blocking direction for the current entering the circuit, a second branch (EF) comprising two opposed thyristors or the like (17,19) each oriented in the passing direction for the current entering the circuit, and an LC oscillating circuit (21,23) which connects the point common to the two diodes (13,15) or the like and the point common to the two thyristors (17,19) or the like, the two thyristors (17,19) or the like being controlled remotely or via an incorporated current sensor (20) detecting the exceeding of a previously fixed triggering threshold which can be adjusted in the control electronics. <IMAGE>

IPC 1-7
H01H 9/54; **H01H 33/59**

IPC 8 full level
H01H 3/22 (2006.01); **H01H 9/54** (2006.01); **H01H 77/10** (2006.01)

CPC (source: EP US)
H01H 3/222 (2013.01 - EP US); **H01H 9/542** (2013.01 - EP US); **H01H 77/10** (2013.01 - EP US); **H01H 2003/225** (2013.01 - EP US); **H01H 2009/543** (2013.01 - EP US)

Cited by
EP1022755A1; EP1022753A1; EP1014403A1; EP3091627A4; EP3407446A4; US10176939B2; WO9620489A1; WO9428567A1

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