

Title (en)
HIGH TENSION CIRCUIT BREAKER

Publication
EP 0039523 B1 19830608 (DE)

Application
EP 81200287 A 19810313

Priority
CH 354580 A 19800507

Abstract (en)
[origin: US4414450A] A high voltage power switch for alternating current has a stationary, hollow contact, an axially displaceable contact, a nozzle through which compressed gas is directed into an expansion chamber, and a cylindrical coil. The coil is connected at one of its ends with a first part of the hollow contact, and at its other end with a second part of the stationary contact. In a switch of this type, the disconnect capacity is improved by an increased exchange of gas between the arc and the surrounding compressed gas, while the dimensions of the coil connected with the hollow contact and the magnitude of the flow of compressed gas are relatively small. These features are obtained by configuring the first part of the stationary contact as a nozzle, and providing a compression device, actuated by the contacts, to produce a flow of compressed gas of a magnitude so that the arc is commutated from the first part to the second part of the contact within a period of time that is short compared with the duration of the half-wave of the current, prior to the time the current changes polarity.

IPC 1-7
H01H 33/18

IPC 8 full level
H01H 33/18 (2006.01); **H01H 33/91** (2006.01); **H01H 33/915** (2006.01)

CPC (source: EP US)
H01H 33/18 (2013.01 - EP US); **H01H 33/91** (2013.01 - EP US)

Cited by
EP0627751A1; FR2706073A1

Designated contracting state (EPC)
CH DE FR IT LI SE

DOCDB simple family (publication)
EP 0039523 A1 19811111; **EP 0039523 B1 19830608**; DE 3160402 D1 19830714; FI 68925 B 19850731; FI 68925 C 19851111; FI 811379 L 19811108; JP S573328 A 19820108; PL 135042 B1 19850930; PL 230990 A1 19820104; US 4414450 A 19831108; YU 39698 B 19850320; YU 71981 A 19830630

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EP 81200287 A 19810313; DE 3160402 T 19810313; FI 811379 A 19810505; JP 6433081 A 19810430; PL 23099081 A 19810505; US 26020381 A 19810504; YU 71981 A 19810319