

Title (en)

Puffer-type gas-blast circuit interrupter with magnetic and pneumatic arc extinguishing.

Title (de)

Druckgasschalter mit magnetischer und pneumatischer Selbstbeblasung.

Title (fr)

Interrupteur à auto-soufflage magnétique et pneumatique de l'arc.

Publication

EP 0008546 A1 19800305 (FR)

Application

EP 79400532 A 19790726

Priority

FR 7824089 A 19780817

Abstract (en)

1. Auto-blowing switch having a tight enclosure (10) filled with a high dielectric strength gas, like sulfur hexafluoride, inside which are located a pair of separable contacts (16, 24, 54), a coil (28) for generating a magnetic field blasting in rotation an arc (52) drawn between the separated contacts and a device of gas compression and blasting comprising a movable wall (24, 56) and a fixed wall (18) delimiting a chamber (26) of variable volume to puff the gas filling the chamber (26) by the movable wall (24, 56) displacement, characterized in that said movable wall (24, 56) shaped as a conducting disk independent of the movable contact assembly of the switch, is biased when the switch is closed, in inactive position of maximum spacing of the fixed wall (18) and of joining to the coil (28) front side, located outside said chamber (26), the coil (28) generating, when the switch is opened, on the one hand an electrodynamic repulsion force of the conducting disk (24, 56) by Thomson effect to compress the gas contained in the chamber (26) and on the other hand said magnetic field blasting in rotation the arc (52) extending inside the chamber (26).

Abstract (fr)

L'invention est relative à un dispositif de soufflage magnétique et électromagnétique d'un arc électrique. Une bobine (28) est excitée lors de la formation de l'arc électrique et le champ magnétique engendré provoque d'une part le déplacement d'un piston (24) de soufflage pneumatique et d'autre part la rotation de l'arc par soufflage magnétique. Le dispositif de soufflage peut être appliqué à un interrupteur électrique.

IPC 1-7

H01H 33/88; **H01H 33/18**

IPC 8 full level

H01H 33/70 (2006.01); **H01H 33/18** (2006.01); **H01H 33/28** (2006.01); **H01H 33/91** (2006.01); **H01H 33/915** (2006.01)

CPC (source: EP)

H01H 33/18 (2013.01); **H01H 33/285** (2013.01); **H01H 33/91** (2013.01)

Citation (search report)

- FR 804144 A 19361016 - FORGES ATELIERS CONST ELECTR
- US 3665134 A 19720523 - FISCHER WILLIAM H
- US 2381244 A 19450807 - ARNOLD EDWIN E
- DE 1142201 B 19630110 - FUJII ELECTRIC CO LTD
- GB 378471 A 19320809 - ELECTR & ALLIED IND RES ASS, et al

Cited by

CN112362723A

Designated contracting state (EPC)

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DOCDB simple family (publication)

EP 0008546 A1 19800305; **EP 0008546 B1 19821117**; DE 2964051 D1 19821223; FR 2433824 A1 19800314; FR 2433824 B1 19801212; JP S5543789 A 19800327

DOCDB simple family (application)

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