

Title (en)
COMPRESSED GAS CIRCUIT BREAKER

Publication
EP 0175954 B1 19891115 (DE)

Application
EP 85110863 A 19850829

Priority
CH 461084 A 19840926

Abstract (en)
[origin: ES8702733A1] A gas-blast switch, preferably suitable for switching high voltages, has two arc contacts which can be moved relatively to each other along an axis. Also included are a heating volume and a compression volume concentrically formed around the axis. Quenching gas is compressed in the compression volume by means of a compression slider. As soon as the gas pressure is sufficiently high, a part of the quenching gas flows via a back-pressure valve into the heating volume and there assists in blasting an arc drawn between the arc contacts during a switching-off process. The assist is needed primarily when only small currents are involved in which case only comparatively low quenching gas pressure is developed in the heating volume. The switching-off capacity of the gas-blast switch is increased with simultaneous reduction in the needed actuating energy. This is achieved in that the arc contact of a moving contact member has a discharge duct which extends in axial direction from a free end facing a fixed contact member to another end which opens into the expansion volume. Between the compression volume and the expansion volume a device is provided for controlling the pressure and for refilling the quenching gas located in the compression volume.

IPC 1-7
H01H 33/98

IPC 8 full level
H01H 33/90 (2006.01); **H01H 33/915** (2006.01); **H01H 33/985** (2006.01)

CPC (source: EP US)
H01H 33/901 (2013.01 - EP US); **H01H 2033/906** (2013.01 - EP US); **H01H 2033/908** (2013.01 - EP US)

Cited by
EP0933795A3; EP2816581A1; EP3200214A4; EP0752714A1; DE4412249A1; DE19526805A1; EP0753873A1; EP0582906A1; US5514844A; EP0334008A3; EP0821382A1; FR2751782A1; US5808257A; EP0441292A1; FR2657998A1; US5126516A

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

DOCDB simple family (publication)
EP 0175954 A2 19860402; **EP 0175954 A3 19870408**; **EP 0175954 B1 19891115**; BR 8504579 A 19860715; CA 1266699 A 19900313; DE 3438635 A1 19860403; DE 3574308 D1 19891221; ES 547296 A0 19861216; ES 8702733 A1 19861216; HU 192364 B 19870528; HU T38463 A 19860528; IN 165782 B 19900113; JP H07109744 B2 19951122; JP S6182631 A 19860426; PL 151229 B1 19900831; PL 255504 A1 19860715; US 4658108 A 19870414

DOCDB simple family (application)
EP 85110863 A 19850829; BR 8504579 A 19850919; CA 490952 A 19850917; DE 3438635 A 19841022; DE 3574308 T 19850829; ES 547296 A 19850925; HU 364585 A 19850925; IN 702MA1985 A 19850909; JP 21121485 A 19850926; PL 25550485 A 19850924; US 77731485 A 19850918