

Title (en)
Gas blast switch

Title (de)
Druckgasschalter

Title (fr)
Interrupteur à gaz sous pression

Publication
EP 0554686 B1 19960703 (DE)

Application
EP 93100516 A 19930115

Priority
CH 34892 A 19920206

Abstract (en)
[origin: CA2088546A1] The gas-blast circuit breaker (12) has passages (120) in the pump piston (62) which connect the pump space (92) to the arcing space (72) and to the surrounding space (86). These passages (120) are held closed during switching-off and open during switching-on by valve means (122). For this purpose, the pump piston (62) is used as a valve seat and the annular disk (132) is used as a valve body which is common to the first valve (124) and to the second valve (126), the first valve (124) controlling the passage between the pump space (92) and the surrounding space (86), and the second valve (126) controlling the passage between the pump space (92) and the arcing space (72). When switching-off large currents, the piston (74) is subjected to an overpressure in the switching-off direction (A), which overpressure is produced by switching gas flowing into the arcing space (72), in order to support the drive. The valves (124, 126) are prevented from opening, by means of the pressure in the pump space (92). During switching-on, the annular disk (132) is raised off the pump piston (62) against the spring prestressing, by means of the reduced pressure in the pump space (92) and the overpressure in the arcing space (72), in order to connect these two spaces to the surrounding space (86) and to ensure pressure equalization without the drive having to apply more energy during switching-on than in the case of a circuit breaker without an arcing space (72). (Fig. 2)

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H01H 33/91; **H01H 33/90**

IPC 8 full level
H01H 33/90 (2006.01); **H01H 33/91** (2006.01); **H01H 33/915** (2006.01)

CPC (source: EP US)
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EP 0554686 A1 19930811; **EP 0554686 B1 19960703**; AT E140100 T1 19960715; CA 2088546 A1 19930807; CA 2088546 C 20041012; DE 59303093 D1 19960808; ES 2089590 T3 19961001; JP 3342075 B2 20021105; JP H0652762 A 19940225; US 5304762 A 19940419

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