

Title (en)  
Gas-insulated high-voltage circuit breaker

Title (de)  
Gasisolierter Hochspannungsschutzschalter

Title (fr)  
Disjoncteur haute tension isolé au gaz

Publication  
**EP 2887367 A1 20150624 (EN)**

Application  
**EP 13198479 A 20131219**

Priority  
EP 13198479 A 20131219

Abstract (en)  
The gas-insulated high-voltage circuit breaker comprises in coaxial arrangement two arcing contact members (20, 30) which are movable relative to one another along an axis (A) and of which a first (30) is realized as an axially extended contact pin (31) and a second (20) as a first contact tulip (31) with an axially extended flow duct (25) which forms a flexible nozzle throat (24) and which receives the contact pin (31) during current making: During current breaking pressurized arc-extinguishing gas flows from an arcing zone (Z), which takes a switching arc (S), through the flexible nozzle throat (24) to an expansion room (11) and applies an axially aligned first force (F 1 ) to a root of the switching arc (S) when the root is located in the flow duct (25) of the contact tulip (31). In order to increase the current interrupting performance the contact tulip (31) comprises a swirl chamber (70) for creating a predominantly circumferentially aligned second force (F 2 ) and for applying the second force (F 2 ) to the root of the switching arc (S).

IPC 8 full level  
**H01H 1/38** (2006.01); **H01H 33/70** (2006.01)

CPC (source: EP)  
**H01H 33/7023** (2013.01); **H01H 33/703** (2013.01); **H01H 1/385** (2013.01)

Citation (applicant)  
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• EP 0836209 B1 20040804 - ABB SCHWEIZ AG [CH]  
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• US 5898149 A 19990427 - BERGER ERNST [CH], et al

Citation (search report)  
• [Y] WO 2013153110 A1 20131017 - ABB TECHNOLOGY AG [CH]  
• [Y] GB 1246175 A 19710915 - REYROLLE A & CO LTD  
• [Y] US 3417216 A 19681217 - SMITH JR SIDNEY R  
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