

Title (en)  
GAS-INSULATED HIGH-VOLTAGE CIRCUIT-BREAKER

Title (de)  
GASISOLIERTER HOCHSPANNUNGSSCHALTER

Title (fr)  
DISJONCTEUR HAUTE TENSION À ISOLATION GAZEUSE

Publication  
**EP 3039703 B1 20180502 (DE)**

Application  
**EP 14747655 A 20140805**

Priority

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- EP 2014066797 W 20140805

Abstract (en)  
[origin: WO2015028264A2] The gas-insulated high-voltage switchgear includes a contact arrangement that is enclosed in a housing (10) and has two arc contacts in a coaxial arrangement, namely a tulip contact (20) with a constriction and a contact pin (30), said contacts being movable relative to each other along an axis (A). The switchgear also includes two insulating nozzles (40, 50) which are held at a distance to each other in the axial direction. The first (40) of the two insulating nozzles has a first flow channel (41), which is led along the axis and which comprises a first constriction (42), and the second (50) has a second flow channel (51), which is led along the axis and which has a second constriction (52). In the switchgear, the tulip contact (20) is arranged in a first flow channel (41) outflow section (43) which is arranged downstream of the first constriction (42). The sum of the flow cross-sections ( $A_k$ ,  $A_\Sigma$ ) of the constriction of the tulip contact (20) and of a third constriction arranged in the outflow section (43) is greater than the flow cross-section ( $A_n$ ) of the first constriction (42), wherein a first sub-flow (L11) of a quenching gas flow (L1) can be conducted through the constriction of the tulip contact (20), and a second sub-flow (L12) which is oriented parallel to the first sub-flow (L11) can be conducted through the third constriction. In this manner, the dielectric restoration of an isolating gap which can be found in the arc zone (L) is improved upstream of the tulip contact (20), and the breaking capacity and the operating reliability of the switchgear are thus increased.

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