

Title (en)

LOW PRESSURE GAS DISCHARGE SWITCH

Title (de)

NIEDERDRUCK-GASENTLADUNGSSCHALTER

Title (fr)

COMMUTATEUR A DECHARGE GAZEUSE BASSE PRESSION

Publication

**EP 0944914 B1 20031015 (DE)**

Application

**EP 97951838 A 19971209**

Priority

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- DE 19651744 A 19961212

Abstract (en)

[origin: WO9826442A1] To enable gas discharge at a low pressure, at least two main electrodes separated by a distance d are provided, defining in a circuit-breaking case the cathode and the anode with the spacing required for said gas discharge at a low pressure. The gas discharge is triggered by increasing the electron density in the hollow cathode space. It is also necessary for the cathode to have at least one opening and preferably that both the cathode and the anode have aligned openings facing each other. According to the invention, elements are mounted on the main electrodes to create a magnetic field above the discharge between said main electrodes (1, 1a, 2, 2a). These elements are used to generate a magnetic field oriented either substantially parallel to the current flow during the discharge or transversal to the latter. Said elements are advantageously realized in the form of stretch punctures (11, 11', 21, 21') either in hollow cylinders forming part of the anode (1) and the cathode (2) designed as hollow electrodes or in the supply conductors associated therewith.

IPC 1-7

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IPC 8 full level

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