

Title (en)

PERMANENT CURRENT SWITCH FOR SHORT-CIRCUITING AT LEAST ONE SUPERCONDUCTING MAGNET WINDING

Publication

EP 0107830 B1 19870128 (DE)

Application

EP 83110191 A 19831012

Priority

DE 3240019 A 19821028

Abstract (en)

[origin: US4623769A] A continuous-current switch for shorting at least one superconducting magnet winding is provided with at least two contacts, each of which comprises several superconducting conductor sections which are arranged parallel to one another. The superconducting conductor sections are connected to support elements and are cooled by a cryogenic coolant. An actuating device is provided for joining the superconducting conductor sections together with a predetermined contact pressure. In order to ensure contact resistances are as low as possible for large superconducting magnets, the invention provides that the superconducting sections are arranged at the surfaces of the contacts facing each other in at least substantially parallel planes whereby the superconducting conductor sections of the first contact cross the superconducting conductor sections of the other contact. Moreover, the conductor sections of the second contact are provided with a resilient support arrangement which may be in the form of springs or a pneumatic or hydraulic spring bellows.

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IPC 8 full level

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