

Title (en)
CURRENT-LIMITING DEVICE HAVING A CHANGEABLE COIL IMPEDANCE

Title (de)
VORRICHTUNG ZUR STROMBEGRENZUNG MIT EINER VERÄNDERBAREN SPULENIMPEDANZ

Title (fr)
DISPOSITIF DE LIMITATION DE COURANT AYANT UNE IMPÉDANCE DE BOBINE VARIABLE

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Application
EP 10805601 A 20101221

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Abstract (en)
[origin: WO2011095199A1] The invention relates to a device for limiting current having variable coil impedance. A current limiter is proposed, wherein by using a superconducting coil (5) inside a choke coil (1), the inductance and thus the impedance of the choke coil are significantly reduced. This is accomplished by means of currents that are induced in the superconducting coil and that compensate the magnetic field of the choke coil during normal operation. If a certain current value is exceeded, the superconductor goes into the normally-conducting state and increases the inductance, by means of which the current is limited. After the excessively high current is switched off, the superconductor automatically returns to the superconducting state after a few seconds, and the normal operation can be resumed. A special advantage of the current limiter is the compact design thereof, so that the current limiter is suitable both for the original equipment of energy networks and for retrofitting existing networks.

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• JP H05145128 A 19930611 - AGENCY IND SCIENCE TECHN
• JP H05145273 A 19930611 - HITACHI CABLE

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