

Title (en)

Power supply line with high-temperature superconductors for superconductive magnets in a cryostat

Title (de)

Stromzuführung mit Hochtemperatursupraleitern für supraleitende Magnete in einem Kryostaten

Title (fr)

Alimentation en courant à supraconducteurs haute température pour aimants supraconducteurs dans un cryostat

Publication

EP 1970921 B1 20170301 (DE)

Application

EP 08004323 A 20080308

Priority

DE 102007013350 A 20070316

Abstract (en)

[origin: EP1970921A2] The cryostat assembly (1) has a superconducting magnet (6) immersed in a helium tank (2) enclosed with a nitrogen tank (3). An access tube (4) provided with a current lead, transfers the room temperature to the superconducting magnet. The current lead comprises a normal conductor and a superconductor which are made of high temperature superconductor (HTS) material. A terminal of the current lead which electrically connects the normal conductor and the superconductor is thermally coupled to the wall of the nitrogen tank.

IPC 8 full level

H01F 6/06 (2006.01); **H01F 6/04** (2006.01)

CPC (source: EP US)

H01F 6/065 (2013.01 - EP US); **H01F 6/04** (2013.01 - EP US)

Cited by

CN103456455A; CN111724966A

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EP 1970921 A2 20080917; **EP 1970921 A3 20140101**; **EP 1970921 B1 20170301**; DE 102007013350 A1 20080918;
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