

Title (en)

A superconductive quench protected coil.

Title (de)

Eine supraleitende abschreckgesicherte Spule.

Title (fr)

Bobine supra-conductrice à sécurité d'extinction.

Publication

EP 0350264 A1 19900110 (EN)

Application

EP 89306784 A 19890704

Priority

US 21547988 A 19880705

Abstract (en)

A quench protected superconductive coil is provided having a plurality of layers of superconductive wire (35). A strip of electrically conductive foil (43) is located between adjacent layers of wire. The ends of the foil (43) are joined together to form an electrically conductive loop. A quench protected coil is also provided having a length of superconductive wire (35) which has a copper matrix and a length of insulated current conductive stabilizer wire (37). The superconductive and stabilizer wire are co-wound to form a winding plurality of layers. The co-wound wires are joined together with electrically conductive joints at the beginning and at the end of the winding and preferably at a plurality of intervals in between. The loops of foil may be used together with the stabilizer wire.

IPC 1-7

H01F 7/22

IPC 8 full level

G01R 33/20 (2006.01); **A61B 5/055** (2006.01); **G01R 33/381** (2006.01); **H01F 6/02** (2006.01)

CPC (source: EP)

H01F 6/02 (2013.01)

Citation (search report)

- [A] EP 0014915 A1 19800903 - SIEMENS AG [DE]
- [A] US 3869686 A 19750304 - BENZ HANS
- [A] US 4218668 A 19800819 - AIHARA KATSUZO [JP], et al
- [A] US 4437080 A 19840313 - EKIN JOHN W [US], et al
- [A] US 4499443 A 19850212 - MATERNA PETER A [US]
- [A] US 4727346 A 19880223 - WESTPHAL MICHAEL [DE], et al

Cited by

EP0826977A3; GB2540623A; EP3920196A1; EP0468415A3; US5210512A; GB2510410A; GB2510410B; CN108447644A; JP2021534924A; US11776721B2; WO2008114184A3; WO2020079238A1; US8072301B2; WO2008114184A2; JP2013031658A

Designated contracting state (EPC)

DE FR GB NL

DOCDB simple family (publication)

EP 0350264 A1 19900110; IL 90667 A0 19900118; JP H0272605 A 19900312; JP H0335818 B2 19910529

DOCDB simple family (application)

EP 89306784 A 19890704; IL 9066789 A 19890620; JP 17206189 A 19890705