

Title (en)
Cryocooler interface sleeve for a superconducting magnet and method of use

Title (de)
Kryokühler Schnittstellenhülse für superleitend Magnet und anwendungsverfahren

Title (fr)
Douille d'interface cryogénique pour aimant superconducteur et méthode d'utilisation

Publication
EP 1279886 A3 20051214 (EN)

Application
EP 02076247 A 20020329

Priority
US 91591601 A 20010726

Abstract (en)
[origin: EP1279886A2] A method for cooling a superconducting device (16) by using a sleeve assembly (12) which thermally interconnects a two stage cryocooler (14) with the device. In operation, the cryocooler (14) is moveable relative to the sleeve assembly (12) between a first configuration wherein the cryocooler (14) is engaged with the sleeve assembly (12), and a second configuration wherein the cryocooler (14) is disengaged from the sleeve assembly (12). The cryocooler (14) is disposed in the sleeve assembly (12) with the cooling element (24) of the cryocooler (14) positioned at a distance from the cylinder (32) of the sleeve assembly (12) to establish thermal communication therebetween. Also, the cooling probe (26) of the cryocooler (14) is in contact with the receptacle (30) of the sleeve assembly (12) and is urged against the receptacle (30) to establish thermal communication therebetween. A bellows (28) joins the cryocooler (14) with the sleeve assembly (12) to create an enclosed chamber (50) therebetween and helium is pumped into the sleeve assembly (12) to maintain an operational pressure in the sleeve assembly (12).
<IMAGE>

IPC 1-7
F17C 13/00; H01F 6/04; F25D 19/00

IPC 8 full level
F17C 13/00 (2006.01); **F25B 9/00** (2006.01); **F25D 19/00** (2006.01); **H01F 6/04** (2006.01); **H01L 39/04** (2006.01)

CPC (source: EP)
F17C 13/006 (2013.01); **F25D 19/006** (2013.01); **F17C 2221/017** (2013.01); **F17C 2223/0161** (2013.01); **F17C 2227/0135** (2013.01); **F17C 2227/0353** (2013.01); **F17C 2270/0527** (2013.01); **F25B 9/10** (2013.01); **F25B 2309/1407** (2013.01); **H01F 6/04** (2013.01)

Citation (search report)
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Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
EP 1279886 A2 20030129; **EP 1279886 A3 20051214**; JP 2003056925 A 20030226; JP 3863050 B2 20061227

DOCDB simple family (application)
EP 02076247 A 20020329; JP 2002101977 A 20020404