

Title (en)
HIGH-TEMPERATURE SUPERCONDUCTOR (HTS) COIL

Title (de)
HOCHTEMPERATUR-SUPRALEITER (HTS)-SPULE

Title (fr)
BOBINE SUPRACONDUCTRICE À HAUTE TEMPÉRATURE

Publication
EP 2601660 A1 20130612 (DE)

Application
EP 11725000 A 20110520

Priority
• DE 102010040272 A 20100906
• EP 2011058233 W 20110520

Abstract (en)
[origin: WO2012031790A1] The present invention provides a high-temperature superconductor (HTS) coil (1) with at least one coil winding (2), which has a superconducting material; and with a coil former (3) for the coil winding (2), wherein the coil winding (2) or the coil former (3) are designed in such a way that, when the high-temperature superconductor (HTS) coil (1) cools down from a room temperature to the operating temperature of the high-temperature superconductor (HTS) coil (1), said coil winding or said coil former counteracts the thermal shrinkage of the coil winding (2) so as to avoid or reduce the longitudinal compression (circumferential direction) of the superconducting material contained in the coil winding (2).

IPC 8 full level
H01F 6/06 (2006.01); **H01F 41/04** (2006.01); **H02K 55/04** (2006.01)

CPC (source: EP KR US)
H01F 6/06 (2013.01 - EP KR US); **H01F 41/04** (2013.01 - KR); **H01F 41/048** (2013.01 - EP US); **H02K 3/02** (2013.01 - US); **H02K 55/04** (2013.01 - EP KR US); **Y02E 40/60** (2013.01 - EP US)

Citation (search report)
See references of WO 2012031790A1

Citation (examination)
• JP H0432207 A 19920204 - FUJI ELECTRIC CO LTD
• JP S62108507 A 19870519 - TOSHIBA CORP

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
DE 102010040272 A1 20120308; **DE 102010040272 B4 20180419**; CN 103189937 A 20130703; EP 2601660 A1 20130612; JP 2013539338 A 20131017; JP 6270479 B2 20180131; KR 101887714 B1 20180810; KR 20130138231 A 20131218; US 2013172196 A1 20130704; US 9048015 B2 20150602; WO 2012031790 A1 20120315

DOCDB simple family (application)
DE 102010040272 A 20100906; CN 201180053365 A 20110520; EP 11725000 A 20110520; EP 2011058233 W 20110520; JP 2013526372 A 20110520; KR 20137008796 A 20110520; US 201113820822 A 20110520