

Title (en)
INDUCTION HEATING METHOD

Title (de)
INDUKTIONSHEIZVERFAHREN

Title (fr)
PROCÉDÉ DE CHAUFFAGE PAR INDUCTION

Publication
EP 2181563 A1 20100505 (DE)

Application
EP 08784690 A 20080710

Priority

- EP 2008005647 W 20080710
- DE 102007034970 A 20070726

Abstract (en)
[origin: WO2009012896A1] When a billet of an electrically conductive material is inductively heated by rotation of the billet (10) relative to a magnetic field, which is produced by means of at least one superconducting winding (60), through which direct-current flows, on an iron core (55.2, 55.3, 55.4), the back-induction voltage can be reduced by producing and maintaining a direct current in the winding (60), with a direct-current value which produces a magnetic flux density in the iron core, at least in the area of the winding, for which flux density the relative permeability of the material of the iron core is less than when no current is flowing through the winding.

IPC 8 full level
H05B 6/02 (2006.01); **H05B 6/14** (2006.01)

CPC (source: EP US)
H05B 6/145 (2013.01 - EP US)

Citation (search report)
See references of WO 2009012896A1

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

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
WO 2009012896 A1 20090129; AT E479314 T1 20100915; AU 2008280489 A1 20090129; BR PI0814393 A2 20180109;
CA 2688075 A1 20090129; CA 2688075 C 20101005; CN 101803453 A 20100811; DE 102007034970 A1 20090205;
DE 102007034970 B4 20100512; DE 502008001221 D1 20101007; EP 2181563 A1 20100505; EP 2181563 B1 20100825;
ES 2351182 T3 20110201; JP 2010534905 A 20101111; JP 5025797 B2 20120912; KR 20100039355 A 20100415; RU 2010106391 A 20110910;
RU 2462001 C2 20120920; TW 200922382 A 20090516; US 2009255923 A1 20091015

DOCDB simple family (application)
EP 2008005647 W 20080710; AT 08784690 T 20080710; AU 2008280489 A 20080710; BR PI0814393 A 20080710; CA 2688075 A 20080710;
CN 200880100216 A 20080710; DE 102007034970 A 20070726; DE 502008001221 T 20080710; EP 08784690 A 20080710;
ES 08784690 T 20080710; JP 2010517291 A 20080710; KR 20107001650 A 20080710; RU 2010106391 A 20080710;
TW 97128533 A 20080725; US 47803309 A 20090604