

Title (en)

Device and method for inductive heating of an electrically conductive workpiece

Title (de)

Vorrichtung und Verfahren zum induktiven Erwärmen eines elektrisch leitenden Werkstücks

Title (fr)

Dispositif et procédé destinés au réchauffement inductif d'une pièce à usiner conductrice électriquement

Publication

EP 2040512 A3 20091104 (DE)

Application

EP 08010441 A 20080609

Priority

CH 14722007 A 20070921

Abstract (en)

[origin: EP2040512A2] The device has a U-shaped magnet core (3) with two thighs (4). An electrically conducting coil (5) is arranged on one of the thigh of the U-shaped magnet core and is connected to an alternate current source. A magnet yoke (6) is arranged at distance of free standing end thigh of the U-shaped magnet core, so that a closed magnetic circuit with an air gap (7) is formed. The size of the air gap is selected in such a manner that the electrically conducting workpiece (2) is feasible contact less by the air gap. An independent claim is included for a method for inductive heating of an electrically conducting workpiece.

IPC 8 full level

H05B 6/14 (2006.01); **H05B 6/36** (2006.01)

CPC (source: EP US)

H05B 6/101 (2013.01 - EP US); **H05B 6/365** (2013.01 - EP US)

Citation (search report)

- [A] US 2005247704 A1 20051110 - LOVELESS DON L [US], et al
- [A] JP H11219778 A 19990810 - SUMITOMO RUBBER IND
- [A] DE 3040763 A1 19810514 - YUGEN KAISHA PARUSU GIKEN KISH [JP]
- [A] WO 9117644 A1 19911114 - TECHMETAL PROMOTION [FR]
- [A] US 2006254709 A1 20061116 - BONE MARVIN J JR [US], et al
- [A] JP H1092561 A 19980410 - KITASHIBA ELECTRIC, et al

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)

EP 2040512 A2 20090325; EP 2040512 A3 20091104; EP 2040512 B1 20100811; AT E477701 T1 20100815; DE 502008001112 D1 20100923; ES 2347723 T3 20101103; PT 2040512 E 20101027; TW 200926903 A 20090616; TW I454184 B 20140921; US 2009078697 A1 20090326; US 9055616 B2 20150609

DOCDB simple family (application)

EP 08010441 A 20080609; AT 08010441 T 20080609; DE 502008001112 T 20080609; ES 08010441 T 20080609; PT 08010441 T 20080609; TW 97124459 A 20080630; US 20250908 A 20080902