

Title (en)

METHOD FOR PRODUCING SOFT MAGNETIC MATERIAL AND METHOD FOR PRODUCING DUST CORE

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES WEICHMAGNETISCHEN MATERIALS UND VERFAHREN ZUR HERSTELLUNG EINES PULVERKERNNS

Title (fr)

PROCÉDÉ DE FABRICATION D'UN MATÉRIAUX MAGNÉTIQUE DOUX, ET PROCÉDÉ DE FABRICATION D'UN NOYAU AGGLOMÉRÉ

Publication

EP 2359963 A4 20160831 (EN)

Application

EP 09828775 A 20091026

Priority

- JP 2009005635 W 20091026
- JP 2008301637 A 20081126

Abstract (en)

[origin: WO2010061525A1] Disclosed is a method for efficiently producing a soft magnetic material which comprises a plurality of insulating layers on the surface of a soft magnetic metal particle. Specifically, a soft magnetic material serving as a material for a dust core is produced by: a step of preparing a material powder which is composed of composite magnetic particles, each obtained by forming an insulating coating film having hydrated water on the surface of a soft magnetic metal particle; a step of preparing a resin material containing a silicone which is cured by a hydrolysis-polycondensation reaction; and a step of forming a silicone coating film on the surface of the insulating coating film by mixing the material powder and the resin material in a heating atmosphere of 80-150°C.

IPC 8 full level

B22F 1/102 (2022.01); **B22F 1/16** (2022.01); **H01F 1/24** (2006.01); **H01F 1/26** (2006.01); **H01F 3/08** (2006.01); **H01F 41/02** (2006.01)

CPC (source: EP US)

B22F 1/102 (2022.01 - EP US); **B22F 1/108** (2022.01 - EP US); **B22F 1/16** (2022.01 - EP US); **H01F 1/24** (2013.01 - EP);
H01F 1/26 (2013.01 - EP); **H01F 41/0246** (2013.01 - EP US); **C22C 2202/02** (2013.01 - EP)

Citation (search report)

- [AD] EP 1840907 A1 20071003 - SUMITOMO ELECTRIC INDUSTRIES [JP]
- [E] JP 2009283774 A 20091203 - SUMITOMO ELECTRIC INDUSTRIES
- [A] EP 0913220 A1 19990506 - KAWASAKI STEEL CO [JP]
- See references of WO 2010061525A1

Cited by

US9159489B2

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 MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

WO 2010061525 A1 20100603; CN 102046310 A 20110504; CN 102046310 B 20130925; EP 2359963 A1 20110824; EP 2359963 A4 20160831;
EP 2359963 B1 20170906; KR 20110089237 A 20110805

DOCDB simple family (application)

JP 2009005635 W 20091026; CN 200980119137 A 20091026; EP 09828775 A 20091026; KR 20107024119 A 20091026