Title (en)

HIGH-STRENGTH SOFT-MAGNETIC COMPOSITE MATERIAL OBTAINED BY COMPACTION/BURNING AND PROCESS FOR PRODUCING THE SAME

Title (de)

HOCHBELASTBARES WEICHMAGNETISCHES VERBUNDMATERIAL, DAS DURCH KOMPAKTIERUNG/BRENNUNG ERHALTEN WIRD, UND PROZESS ZU SEINER HERSTELLUNG

Title (fr)

MATÉRIAU COMPOSITE MAGNÉTIQUE DOUX À HAUTE RÉSISTANCE OBTENU PAR COMPACTION/COMBUSTION ET SON PROCÉDÉ DE FABRICATION

Publication

EP 2219195 A4 20160803 (EN)

Application

EP 08847585 A 20081106

Priority

- JP 2008070201 W 20081106
- JP 2007289774 A 20071107

Abstract (en)

[origin: EP2219195A1] The present invention relates to a soft-magnetic composite material obtained by compaction and heat treatment. This material is produced by mixing and compacting Mg-containing oxide-coated soft-magnetic particles with at least one type of silicone resin, low melting glass and metal oxide, and heat treatment in a non-oxidizing atmosphere to obtain a precursor of a soft-magnetic composite compaction-heat treated material, followed by heat-treating in an oxidizing atmosphere to obtain a heat treated body.

IPC 8 full level

H01F 1/33 (2006.01); **B22F 1/16** (2022.01); **H01F 1/24** (2006.01); **H01F 41/02** (2006.01)

CPC (source: EP US)

B22F 1/16 (2022.01 - EP US); **C22C 33/0228** (2013.01 - EP); **H01F 1/33** (2013.01 - EP); **H01F 41/0246** (2013.01 - EP US)

Citation (search report)

- [XI] WO 2007004727 A1 20070111 - MITSUBISHI STEEL MFG [JP], et al
- [A] JP 2006332524 A 20061207 - MITSUBISHI MATERIALS PMG CORP
- [A] JP 2000232014 A 20000822 - MATSUSHITA ELECTRIC IND CO LTD
- See references of WO 2009060895A1

Cited by

EP3693101A4; EP2680281A4; EP3441989A4; US9318244B2; US9805855B2; US11183321B2

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

DOCDB simple family (publication)

EP 2219195 A1 20100818; **EP 2219195 A4 20160803**; CN 101849268 A 20100929; CN 101849268 B 20121010; JP 2009117651 A 20090528; WO 2009060895 A1 20090514

DOCDB simple family (application)

EP 08847585 A 20081106; CN 200880114838 A 20081106; JP 2007289774 A 20071107; JP 2008070201 W 20081106