

Title (en)

METHOD FOR MAKING SOFT MAGNETIC PARTS FROM PARTICULATE FERROUS MATERIAL, AND PARTS MADE THEREFROM

Title (de)

VERFAHREN ZUM PRODUZIERUNG VON WEICHMAGNETISCHEN TEILEN AUS KÖRNIGEN EISENWERKSTOFF, UND TEILE DARAUS

Title (fr)

PROCEDE DE FABRICATION DE BRIQUETTES MAGNETIQUES MOLLES A PARTIR D'UNE MATIERE PARTICULAIRE FERREUSE, ET ELEMENTS FABRIQUES A PARTIR DE CES BRIQUETTES

Publication

EP 0963591 A4 20001129 (EN)

Application

EP 98910087 A 19980227

Priority

- US 9803848 W 19980227
- US 3941097 P 19970228

Abstract (en)

[origin: WO9838655A1] A method is provided for making soft magnetic parts from particulates of ferrous material. The methods includes the following steps. Providing a plurality of ferrous particles and coating at least one substantially uniform layer of from about 0 wt.% to about 15 wt.% of a metal onto each of the particles. The coated particles are consolidated to form a part, and the part is heated at a temperature and for a time period sufficient to promote the formation of intermetallic phases between the metal layer and the ferrous particle at the boundary therebetween. The intermetallic phases have an electrical resistivity of greater than about 100 ohms/mil-ft.

IPC 1-7

H01F 1/22; **B22F 1/02**; **B22F 3/02**; **C22C 33/02**; **B32B 15/02**; **H02K 15/12**; **H01F 41/02**

IPC 8 full level

B22F 1/17 (2022.01); **B22F 3/23** (2006.01); **C22C 33/02** (2006.01); **H01F 1/22** (2006.01); **H01F 41/02** (2006.01)

CPC (source: EP US)

B22F 1/17 (2022.01 - EP US); **B22F 3/23** (2013.01 - EP); **C22C 33/02** (2013.01 - EP US); **H01F 1/22** (2013.01 - EP); **H01F 41/0246** (2013.01 - EP); **B22F 2998/10** (2013.01 - EP)

Citation (search report)

- [X] EP 0165872 A2 19851227 - KAWASAKI STEEL CO [JP]
- See references of WO 9838655A1

Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 9838655 A1 19980903; AU 6441798 A 19980918; CA 2282527 A1 19980903; EP 0963591 A1 19991215; EP 0963591 A4 20001129; JP 2001524262 A 20011127

DOCDB simple family (application)

US 9803848 W 19980227; AU 6441798 A 19980227; CA 2282527 A 19980227; EP 98910087 A 19980227; JP 53788298 A 19980227