

Title (en)
NiFe binder with universal application

Title (de)
NiFe-Binder mit universeller Einsetzbarkeit

Title (fr)
Liant NiFe ayant une application universelle

Publication
EP 2527480 A1 20121128 (DE)

Application
EP 11167901 A 20110527

Priority
EP 11167901 A 20110527

Abstract (en)
The process comprises providing a dispersion comprising a composition, which comprises a hardness carrier and a base binder alloy comprising nickel (70-90 wt.%), iron (7-34 wt.%), cobalt (less than 5 wt.%) and molybdenum (less than 0.02 wt.%), in a solvent, grinding the dispersion, producing a powder by drying the dispersion, preparing powder compacts by pressing or by extrusion of the powder using plasticizing agents, and sintering the powder compacts. The base binder alloy has a weight ratio of iron:nickel of 1:4-1:7, and is present as an alloy powder. An independent claim is included for a sintered composite material.

Abstract (de)
Die vorliegende Erfindung betrifft ein Verfahren zur Herstellung eines Verbundwerkstoffs umfassend das Sintern einer Zusammensetzung enthaltend a) mindestens einen Hrtetrger und b) einer Basisbindelegierung, umfassend \pm) 66 bis 93 Gew.-% Nickel, ²) 7 bis 34 Gew.-% Eisen und ³) 0 bis 9 Gew.-% Kobalt, wobei sich die Gewichtsanteile der Basisbindelegierung zu 100 Gew.-% ergnzen.

IPC 8 full level
B22F 1/105 (2022.01); **C22C 29/00** (2006.01); **C22C 29/06** (2006.01)

CPC (source: EP KR US)
B22F 1/105 (2022.01 - EP KR US); **C22C 19/00** (2013.01 - EP US); **C22C 29/00** (2013.01 - EP KR US); **C22C 29/005** (2013.01 - EP US); **C22C 29/06** (2013.01 - EP KR US); **C22C 29/067** (2013.01 - EP US); **C22C 38/08** (2013.01 - EP US)

Citation (applicant)

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EP 2527480 A1 20121128; **EP 2527480 B1 20170503**; CN 103562422 A 20140205; CN 103562422 B 20160210; ES 2628422 T3 20170802; IL 229654 A0 20140130; IL 229654 B 20181231; JP 2014519553 A 20140814; JP 6124877 B2 20170510; KR 102079325 B1 20200219; KR 20140032414 A 20140314; PL 2527480 T3 20171229; RU 2013158048 A 20150710; RU 2623545 C2 20170627; US 11207730 B2 20211228; US 2014086782 A1 20140327; US 2018029118 A1 20180201; US 9821372 B2 20171121; WO 2012163804 A1 20121206

DOCDB simple family (application)
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