

Title (en)

MAGNETICALLY ANISOTROPIC HOT-WORKED MAGNETS AND COMPOSITION AND METHOD FOR THEIR PRODUCTION

Publication

EP 0392077 A3 19910626 (EN)

Application

EP 89119269 A 19891017

Priority

JP 9449389 A 19890414

Abstract (en)

[origin: EP0392077A2] Anisotropic hot-worked permanent magnets are made from an R-T-B alloy powder to which is added a combined internal lubricant including a carbon-based material such as graphite and a glass material such as a B₂O₃-SiO₂-Bi₂O₃ type glass. The internal lubricant provides improved formability during the hot-working step, such as die-upsetting, and provides finished magnet products wherein the individual grains are more uniformly plastically deformed throughout the product.

IPC 1-7

H01F 1/053

IPC 8 full level

B22F 3/00 (2006.01); **B22F 3/14** (2006.01); **H01F 1/057** (2006.01); **H01F 1/08** (2006.01); **H01F 41/02** (2006.01)

CPC (source: EP)

B22F 3/14 (2013.01); **H01F 1/0576** (2013.01)

Citation (search report)

- [YD] EP 0302598 A1 19890208 - GEN MOTORS CORP [US]
- [YD] EP 0195219 A2 19860924 - ENERGY CONVERSION DEVICES INC [US]
- [Y] EP 0255816 A2 19880210 - TREIBACHER CHEMISCHE WERKE AG [AT]
- [A] EP 0249973 A1 19871223 - TOKIN CORP [JP]
- [A] EP 0248665 A2 19871209 - SEIKO INSTR INC [JP]
- [A] DE 2815897 A1 19781109 - NIPPON MUSICAL INSTRUMENTS MFG
- [AD] WPIL, FILE SUPPLIER, accession no. 88-266468 [38], Derwent Publications Ltd, London, GB; & JP 63098105 A (MITSUBISHI METAL K.K.)

Cited by

US2017010163A1; JP2018107446A; EP0608152A1; US5487893A; EP0571002B2; EP0414645B2

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JP 3047239 B2 20000529; JP H02272703 A 19901107

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