

Title (en)  
METHOD AND INSTALLATION FOR THE PRODUCTION OF A STARTING MATERIAL FOR PRODUCING OF RARE EARTH MAGNET

Title (de)  
VERFAHREN UND ANLAGE ZUR HERSTELLUNG EINES AUSGANGSMATERIALS FÜR DIE HERSTELLUNG VON SELTENERDMAGNETEN

Title (fr)  
PROCÉDÉ ET INSTALLATION DE FABRICATION D'UN MATÉRIAU DE DÉPART POUR LA FABRICATION D'AIMANTS À TERRES RARES

Publication  
**EP 3431209 B1 20230920 (DE)**

Application  
**EP 18182618 A 20180710**

Priority  
DE 102017116272 A 20170719

Abstract (en)  
[origin: US2019027284A1] A method for producing a powdered starting material, which is provided for production of rare earth magnets, including the following steps: pulverizing an alloy, including at least one rare earth metal, wherein a powdered intermediate product is formed from the alloy including at least one rare earth metal, and carrying out at least one classification aimed at particle size and/or density for the powdered intermediate product, wherein a fraction of the powdered intermediate product, which is formed by means of the at least one classification, for fabrication of rare earth magnets. Furthermore, at least one dynamic classifier is provided, implementing at least one classification directed at particle size and/or density for the powdered intermediate product and thereby separates the fraction from the powdered intermediate product, which forms the starting material provided for manufacturing rare earth magnets.

IPC 8 full level  
**B02C 15/00** (2006.01); **B02C 13/00** (2006.01); **B02C 13/04** (2006.01); **B07B 13/00** (2006.01); **B07B 13/04** (2006.01); **B22F 1/052** (2022.01); **B22F 3/12** (2006.01); **B22F 3/24** (2006.01); **B22F 9/04** (2006.01); **C22C 28/00** (2006.01); **C22C 33/02** (2006.01); **H01F 1/057** (2006.01)

CPC (source: CN EP RU US)  
**B07B 13/003** (2013.01 - EP US); **B07B 13/04** (2013.01 - EP US); **B22F 1/052** (2022.01 - CN EP RU US); **B22F 3/12** (2013.01 - EP US); **B22F 3/24** (2013.01 - EP US); **B22F 9/04** (2013.01 - CN EP RU US); **C22C 1/051** (2013.01 - US); **C22C 1/058** (2023.01 - US); **C22C 28/00** (2013.01 - EP US); **H01F 1/053** (2013.01 - RU); **H01F 1/0536** (2013.01 - US); **H01F 1/0577** (2013.01 - CN EP US); **H01F 41/0246** (2013.01 - US); **H01F 41/0253** (2013.01 - CN US); **H01F 41/0266** (2013.01 - CN); **B02C 2015/002** (2013.01 - EP US); **B04C 5/00** (2013.01 - US); **B22F 2009/041** (2013.01 - CN); **B22F 2009/044** (2013.01 - EP US); **B22F 2999/00** (2013.01 - EP US); **C22C 33/025** (2013.01 - EP US); **C22C 2202/02** (2013.01 - EP US); **H01F 41/0266** (2013.01 - US)

C-Set (source: CN EP RU US)  
CN EP RU  
1. **B22F 2999/00 + B22F 1/052 + C22C 2202/02 + C22C 33/025**  
2. **B22F 2999/00 + C22C 33/025 + C22C 2202/02 + B22F 1/052**  
US  
1. **B22F 2999/00 + C22C 33/025 + C22C 2202/02 + B22F 1/052**  
2. **B22F 2999/00 + B22F 1/052 + C22C 2202/02 + C22C 33/025**

Designated contracting state (EPC)  
AL 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 RS SE SI SK SM TR

DOCDB simple family (publication)  
**EP 3431209 A1 20190123; EP 3431209 B1 20230920**; CN 109277577 A 20190129; DE 102017116272 A1 20190124; DK 3431209 T3 20240102; EP 4268995 A1 20231101; ES 2966804 T3 20240424; FI 3431209 T3 20231221; LT 3431209 T 20240110; PL 3431209 T3 20240304; RU 2706258 C1 20191115; SI 3431209 T1 20240229; US 11660639 B2 20230530; US 2019027284 A1 20190124; US 2023271224 A1 20230831

DOCDB simple family (application)  
**EP 18182618 A 20180710**; CN 201810735630 A 20180706; DE 102017116272 A 20170719; DK 18182618 T 20180710; EP 23190243 A 20180710; ES 18182618 T 20180710; FI 18182618 T 20180710; LT 18182618 T 20180710; PL 18182618 T 20180710; RU 2018125682 A 20180712; SI 201831039 T 20180710; US 201816035154 A 20180713; US 202318300948 A 20230414