

Title (en)
RARE EARTH MAGNET

Title (de)
SELTENERDMAGNET

Title (fr)
AIMANT DE TERRES RARES

Publication
EP 3462465 B1 20220216 (EN)

Application
EP 18194093 A 20180912

Priority
• JP 2017191466 A 20170929
• JP 2018027405 A 20180219

Abstract (en)
[origin: EP3462465A1] [PROBLEM TO BE SOLVED] To provide a rare earth magnet in which 1-5 phase is stabilized even when Ce is used for at least part of the rare earth element and part of Co is replaced with Fe, and a production method thereof. [MEANS TO SOLVE THE PROBLEM] A rare earth magnet having a composition represented by the formula: $(\text{Ce}_x \text{La}_{1-x-w} \text{R}'_w)_v (\text{Co}_y \text{Fe}_{1-y})_{100-v-z} \text{M}_z$, wherein R' is one or more rare earth elements other than Ce and La, M represents one or more members selected from the group consisting of a transition metal element other than Co and Fe, Ga, Al, Zn, and In, and an unavoidable impurity element, $0 < x < 1.0$, $0 < y < 1.0$, $0 \leq w \leq 0.1$, $7.1 \leq v \leq 20.9$, and $0 \leq z \leq 8.0$, and satisfying, in the formula, the relationship of $y \geq -3x + 1.7$, and a production method thereof.

IPC 8 full level
H01F 1/055 (2006.01); **H01F 41/02** (2006.01)

CPC (source: CN EP KR)
C22C 1/02 (2013.01 - CN); **C22C 19/07** (2013.01 - CN); **C22C 33/04** (2013.01 - CN); **C22C 38/005** (2013.01 - CN KR); **C22C 38/10** (2013.01 - CN); **H01F 1/0551** (2013.01 - EP); **H01F 1/0557** (2013.01 - CN); **H01F 1/0558** (2013.01 - CN); **H01F 1/0575** (2013.01 - KR); **H01F 41/0253** (2013.01 - EP); **H01F 1/0555** (2013.01 - EP)

Designated contracting state (EPC)
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