

Title (en)

Grain-oriented electrical steel sheet and material having very high magnetic flux density and method of manufacturing same.

Title (de)

Kornorientierte Elektrobleche und Material mit sehr hoher magnetischer Flussdichte und Verfahren zur Herstellung dieser.

Title (fr)

Tôle d'acier électrique à grains orientés et matériau à haute densité de flux magnétique et procédé pour leur fabrication.

Publication

**EP 0588342 A1 19940323 (EN)**

Application

**EP 93114924 A 19930916**

Priority

- JP 24819492 A 19920917
- JP 28648692 A 19921023

Abstract (en)

Very high magnetic flux density grain-oriented electrical steel sheet containing 2.5 to 4.0 weight percent silicon as an essential component and having a very high magnetic flux density B<sub>8</sub> of not less than 1.92 tesla, in which by area not less than 80 percent is accounted for by matrix secondary recrystallization grains having a diameter not larger than 100 mm and not smaller than 10 mm in a direction of cold rolling and not larger than 50 mm and not smaller than 5 mm in a direction perpendicular to the cold rolling direction, and in which, moreover, of the grains in said matrix, not fewer than 50 percent are fine secondary recrystallization grains having an average diameter not larger than 5 mm. <IMAGE>

IPC 1-7

**C21D 8/12**; **C22C 38/02**

IPC 8 full level

**C21D 8/12** (2006.01); **C22C 38/02** (2006.01); **H01F 1/147** (2006.01)

CPC (source: EP KR)

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Citation (search report)

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- [A] EP 0339475 A2 19891102 - NIPPON STEEL CORP [JP]
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- [A] CHEMICAL ABSTRACTS, vol. 105, no. 2, July 14, 1986, Columbus, Ohio, USA IGUCHI, MASAO et al. "Directional silicon steel strip with excellent magnetic properties" page 237, column 2, abstract- no. 10 195t
- [A] CHEMICAL ABSTRACTS, vol. 117, no. 6, August 10, 1992, Columbus, Ohio, USA YOSHITOMI, YASUNARI et al. "Manufacture of anisotropic electromagnetic steel sheets having improved magnetic properties" page 297, column 1, abstract- no. 53 362k
- [A] CHEMICAL ABSTRACTS, vol. 105, no. 2, July 14, 1986, Columbus, Ohio, USA IGUCHI, MASAO et al. "Directional silicon steel strip with excellent magnetic properties" page 2377, column 2, abstract-no. 10 194s

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