

Title (en)

Fe-Ni BASED ALLOY FOR SHADOW MASK HAVING EXCELLENT CORROSION RESISTANCE AND SHADOW MASK MATERIAL

Title (de)

LEGIERUNG AUF Fe-Ni-BASIS FÜR SCHATTENMASKE MIT HERVORRAGENDER KORROSIONSBESTÄNDIGKEIT UND SCHATTENMASKENMATERIAL

Title (fr)

ALLIAGE A BASE DE FE-NI DESTINE A UN MATERIAU BRUT DE MASQUE PERFORE POSSEDANT UNE EXCELLENTE RESISTANCE A LA CORROSION ET MATERIAU DE MASQUE PERFORE

Publication

**EP 1445341 A4 20041215 (EN)**

Application

**EP 02777848 A 20021016**

Priority

- JP 0210718 W 20021016
- JP 2001323145 A 20011022

Abstract (en)

[origin: EP1445341A1] There is provided a Fe-Ni based alloy for shadow mask having high corrosion resistance, high rigidity and low thermal expansion and hardly generating rust even if being exposed in air in the course of circulation and transportation after the bright annealing as a middle step of the starting material production and a shadow mask material. A Fe-Ni based alloy for a shadow mask having an excellent corrosion resistance comprises C≤0.01 wt%, Si: 0.01-0.1 wt%, Mn: 0.01-0.1 wt%, Ni: 35-37 wt%, Cr≤0.1 wt%, Nb: 0.01-1.0 wt%, S≤0.0020 wt%, Al≤0.005 wt % and the balance being Fe and inevitable impurity, and a shadow mask material is comprised of the alloy having a proof strength at 0.2% of not less than 300 N/mm<sup>2</sup> and a thermal expansion coefficient of not more than 1.0×10<sup>-6</sup>/ DEG C.

IPC 1-7

**C22C 38/00**; **C22C 38/48**; **C22C 38/50**; **H01J 29/07**

IPC 8 full level

**C22C 38/00** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/08** (2006.01); **C22C 38/12** (2006.01); **C22C 38/40** (2006.01); **C22C 38/48** (2006.01); **C22C 38/50** (2006.01); **H01J 29/07** (2006.01)

CPC (source: EP KR US)

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Citation (search report)

- [E] EP 1403393 A1 20040331 - JFE STEEL CORP [JP]
- [A] PATENT ABSTRACTS OF JAPAN vol. 1995, no. 11 26 December 1995 (1995-12-26)
- [A] PATENT ABSTRACTS OF JAPAN vol. 2000, no. 07 29 September 2000 (2000-09-29)
- [A] PATENT ABSTRACTS OF JAPAN vol. 2000, no. 04 31 August 2000 (2000-08-31)
- See references of WO 03035920A1

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