

Title (en)

WIRE ROD AND METHOD FOR MANUFACTURING SAME

Title (de)

WALZDRAHT UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)

FIL MACHINE ET SON PROCÉDÉ DE FABRICATION

Publication

**EP 2990499 A4 20170104 (EN)**

Application

**EP 14788178 A 20140423**

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Abstract (en)

[origin: EP2990499A1] A wire rod according to the present invention includes a predetermined chemical composition and the remainder thereof includes Fe and impurity, wherein the average value of a grain size of a pearlite block in a cross section perpendicular to a wire rod axial direction is 23µm or less, and wherein a number density of the pearlite blocks having a grain size of 40µm or more in the cross section perpendicular to the wire rod axial direction is 0 to 20 pieces/mm<sup>2</sup>.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [X] KR 20130034029 A 20130404 - NIPPON STEEL & SUMITOMO METAL CORP [JP]
- [I] EP 2175043 A1 20100414 - NIPPON STEEL CORP [JP]
- [A] US 2009223610 A1 20090910 - KOCHI TAKUYA [JP], et al
- [A] NAOYA KAMIKAWA ET AL: "Effect of Deformation Temperature on Microstructure Evolution in ARB Processed Ultralow Carbon IF Steel", MATERIALS TRANSACTIONS, vol. 53, no. 1, 25 December 2011 (2011-12-25), Sendai, pages 30 - 37, XP055320678, Retrieved from the Internet <URL:https://www.jim.or.jp/journal/e/pdf3/53/01/30.pdf> [retrieved on 20161117], DOI: 10.2320/matertrans.MD201115
- See references of WO 2014175345A1

Cited by

CN112176258A; EP3165623A4

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