

Title (en)

BISMUTH CONTAINING FREE-MACHINING STEEL

Title (de)

BISMUTHALTIGER AUTOMATENSTAHL

Title (fr)

ACIER DE DÉCOLLETAGE CONTENANT DU BISMUTH

Publication

**EP 2789710 B1 20190821 (DE)**

Application

**EP 13827542 A 20130212**

Priority

- RU 2012133578 A 20120806
- RU 2013000105 W 20130212

Abstract (en)

[origin: RU2503737C1] FIELD: metallurgy.SUBSTANCE: proposed steel contains components in the following ratio in wt %: carbon - not over 0.16; silicon - not over 0.15; manganese - 1.2-1.68; sulfur - 0.2-0.4; phosphorus - 0.06-0.15; aluminium - not over 0.01; bismuth - 0.03-0.05 or 0.06-0.12, oxygen - 0.003-0.015, iron and admixtures making the rest. It features uniformly distributed sulphide inclusions approximating to globular and slightly deformed form and oxygen activity at transfer to casting of 20-70 ppm.EFFECT: calibrated products feature higher machinability by cutting at required level of mechanical properties.6 dwg, 2 tbl

IPC 8 full level

**C22C 38/60** (2006.01); **C22C 38/00** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01)

CPC (source: EP)

**C22C 38/00** (2013.01); **C22C 38/002** (2013.01); **C22C 38/02** (2013.01); **C22C 38/04** (2013.01); **C22C 38/60** (2013.01); **C21D 2211/004** (2013.01)

Designated contracting state (EPC)

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DOCDB simple family (publication)

**EP 2789710 A1 20141015**; **EP 2789710 A4 20150520**; **EP 2789710 B1 20190821**; CN 104245992 A 20141224; CN 104245992 B 20161214; ES 2757277 T3 20200428; RU 2503737 C1 20140110; WO 2014025287 A1 20140213

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