

Title (en)

MICROALLOYED STEEL FOR HEAT-FORMING HIGH-RESISTANCE AND HIGH-YIELD-STRENGTH PARTS

Title (de)

MIKROLEGIERTER STAHL ZUM WARMFORMEN VON HOCHBESTÄNDIGEN TEILEN MIT HOHER STRECKGRENZE

Title (fr)

ACIER HAUTE RÉSISTANCE FAIBLEMENT ALLIÉ POUR FORMAGE À CHAUD DE PIÈCES DE HAUTE RÉSISTANCE ET DE LIMITE ÉLASTIQUE ÉLEVÉE

Publication

**EP 3168319 B1 20201216 (EN)**

Application

**EP 14897352 A 20140708**

Priority

ES 2014070558 W 20140708

Abstract (en)

[origin: EP3168319A1] The invention relates to a microalloyed steel for heat-forming high-strength and high-yield strength parts, and to a method for producing components made of said steel, having a specific composition of the following elements: 0.30% # C # 0.50%, 0.50% # Si # 1.50%, 0.50% # Mn # 1.50%, 0.005% # V < 0.50%, 0.001% # Ti < 0.050% which, using a method suitable for producing said steel, achieves low P content and good inclusion cleanliness. In addition, tensile strength values between 1050 and 1200 MPa are achieved using a controlled cooling process.

IPC 8 full level

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CPC (source: EP)

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Citation (examination)

- JP H10121200 A 19980512 - SUMITOMO METAL IND
- SEROSH ENGINEER ET AL: "A review of the development and application of microalloyed medium carbon steels", STEEL RESEARCH INTERNATIONAL, vol. 58, no. 8, 2 August 1987 (1987-08-02), pages 369 - 376, XP055600442

Cited by

US11319609B2; JP2020147810A; CN114667363A; JP2023502106A; WO2023014332A1; WO2021099815A1

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