

Title (en)

High strength hot rolled steel with high yield strength for use in the car industry

Title (de)

Hochfester warmgewalzter Stahl mit hoher Streckgrenze zur Verwendung in Kraftfahrzeugen

Title (fr)

Acier laminé à chaud à très haute limite d'élasticité et résistance mécanique utilisable notamment pour la réalisation de pièce de véhicules automobiles

Publication

EP 1138796 A1 20011004 (FR)

Application

EP 01400777 A 20010327

Priority

FR 0003958 A 20000329

Abstract (en)

A hot rolled steel with a very high elastic limit and mechanical strength for the production of motor vehicle components has the following composition by weight:- 0.08 - 0.2% carbon, 1 - 2% manganese, 0.02 - 0.1% aluminium, less than 0.5% silicon, less than 0.03% phosphorus, less than 0.01% sulphur, less than 0.3% vanadium, less than 1% chromium, less than 0.015% nitrogen, less than 0.6% molybdenum, the remainder being iron and inherent production impurities. An Independent claim is included for a method for the production of a hot rolled steel strip with this composition.

Abstract (fr)

Acier laminé à chaud à très haute résistance mécanique utilisable notamment pour la réalisation de pièce de véhicules automobiles caractérisée en la composition pondérale suivante : 0,08% < carbone < 0,16%, 1% < manganèse < 2%, 0,02% < aluminium < 0,1%, silicium < 0,5%, phosphore < 0,03%, soufre < 0,01%, vanadium < 0,3%, chrome < 1%, azote < 0,015%, molybdène < 0,6% <IMAGE>

IPC 1-7

C22C 38/04; **C22C 38/38**; **C21D 8/02**

IPC 8 full level

C21D 8/0226 (2006.01); **C21D 8/02** (2006.01); **C22C 38/00** (2006.01); **C22C 38/22** (2006.01); **C22C 38/24** (2006.01); **C22C 38/38** (2006.01); **C21D 1/19** (2006.01)

CPC (source: EP US)

C21D 8/0226 (2013.01 - EP US); **C22C 38/002** (2013.01 - EP US); **C22C 38/22** (2013.01 - EP US); **C22C 38/24** (2013.01 - EP US); **C22C 38/38** (2013.01 - EP US); **C21D 1/19** (2013.01 - EP US); **C21D 2211/002** (2013.01 - EP US)

Citation (search report)

- [X] DE 19710125 A1 19980917 - KRUPP AG HOESCH KRUPP [DE]
- [X] DE 19719546 A1 19980115 - THYSSEN STAHL AG [DE]
- [X] US 5919415 A 19990706 - PICHARD CLAUDE [FR]
- [A] EP 0845544 A1 19980603 - ASCOMETAL SA [FR]
- [A] EP 0761824 A2 19970312 - KAWASAKI STEEL CO [JP]
- [A] WO 9905328 A1 19990204 - EXXON PRODUCTION RESEARCH CO [US], et al
- [A] WO 9902747 A1 19990121 - EXXON RESEARCH ENGINEERING CO [US]

Cited by

WO2020065381A1; WO2020065422A1; WO2020058747A1; WO2020058801A1

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