

Title (en)

High-strength air cooled steel alloy and hot worked product

Title (de)

Hochfester luftgekühlter Stahl und daraus resultiertes warmverformte Produkt.

Title (fr)

Acier à haute résistance mécanique refroidi par air et son produit à chaud.

Publication

EP 1700925 B1 20090909 (EN)

Application

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Priority

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Abstract (en)

[origin: EP1700925A1] The invention relates to a steel alloy, which in hot-worked condition has a ferritic-pearlitic microstructure and austenite grain size coarser than ASTM 10 (coarser than 10 µm), and which has a chemical composition of: C 0,15...0,6 percent by weight Si 1,25...2,0 percent by weight Mn 0,5...1,6 percent by weight S 0...0,2 percent by weight Cr 0 ...1,5 percent by weight Mo 0,02...0,1 percent by weight Al 0 ...0,1 1 percent by weight V 0 ...0,2 percent by weight N 0 ...0,04 percent by weight Nb 0 ...0,1 percent by weight Ti 0 ...0,05 percent by weight. The invention relates additionally to methods for manufacturing ferritic-pearlitic hot forged products and hot-rolled steel bars having a high yield strength, high fatigue strength and good machinability.

IPC 8 full level

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CPC (source: EP)

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Cited by

CN110343962A; CN102560248A; CN111663076A; CN110819892A; JP2020147786A; JPWO2020090816A1; JP6597945B1; CN111836910A; FR3119445A1; US9574255B2; ITTO20090451A1; EP2784169A4; JP6525115B1; WO2019177034A1; WO2020090816A1; WO2020003425A1

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