

Title (en)

STEEL FOR RAILS AND A METHOD OF MANUFACTURING OF A RAIL THEREOF

Title (de)

STAHL FÜR SCHIENEN UND VERFAHREN ZUR HERSTELLUNG EINER SCHIENE DAFÜR

Title (fr)

ACIER POUR RAILS ET PROCÉDÉ DE FABRICATION D'UN RAIL ASSOCIÉ

Publication

EP 4247987 A1 20230927 (EN)

Application

EP 20815939 A 20201117

Priority

IB 2020060815 W 20201117

Abstract (en)

[origin: WO2022106864A1] A steel for rail comprising of the following elements, 0.25% # C # 0.8 %; 1.0% # Mn #2.0 %; 1.40% # Si # 2 %; 0.01% # Al # 1 %; 0.8% # Cr # 2%; 0 # P # 0.09%; 0 # S # 0.09%; 0% # N # 0.09%; 0% # Ni # 1%; 0% # Mo # 0.5%; 0% # V# 0.2%; 0% # Nb # 0.1%; 0% # Ti # 0.1%; 0% # Cu# 0.5%; 0% # B # 0.008%; 0% # Sn# 0.1%; 0% # Ce # 0.1%; 0% # Mg # 0.10%; 0% # Zr # 0.10%; the remainder composition being composed of iron and unavoidable impurities caused by processing, the microstructure of said steel comprising, by area percentage, 2% to 10% of Proeutectoid Ferrite, the balance being made of Pearlite wherein the pearlite having interlamellar spacing from 100nm to 250nm.

IPC 8 full level

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CPC (source: EP KR US)

C21D 1/02 (2013.01 - EP KR); **C21D 1/28** (2013.01 - EP KR); **C21D 1/84** (2013.01 - US); **C21D 6/004** (2013.01 - US); **C21D 6/005** (2013.01 - US); **C21D 6/008** (2013.01 - US); **C21D 8/005** (2013.01 - EP KR US); **C21D 8/0226** (2013.01 - KR); **C21D 9/04** (2013.01 - EP KR US); **C22C 38/001** (2013.01 - EP KR US); **C22C 38/002** (2013.01 - US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP KR US); **C22C 38/20** (2013.01 - EP); **C22C 38/22** (2013.01 - EP); **C22C 38/24** (2013.01 - EP); **C22C 38/28** (2013.01 - EP); **C22C 38/34** (2013.01 - EP KR US); **C22C 38/38** (2013.01 - EP); **C22C 38/42** (2013.01 - EP US); **C22C 38/44** (2013.01 - EP KR US); **C22C 38/46** (2013.01 - EP KR US); **C22C 38/48** (2013.01 - KR); **C22C 38/50** (2013.01 - EP KR US); **C22C 38/58** (2013.01 - EP KR); **C22C 38/60** (2013.01 - KR); **C21D 2211/005** (2013.01 - KR US); **C21D 2211/009** (2013.01 - EP KR US)

Designated contracting state (EPC)

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BA ME

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