

Title (en)

PEARLITE RAIL HAVING SUPERIOR ABRASION RESISTANCE AND EXCELLENT TOUGHNESS

Title (de)

PERLITSCHIENE MIT HOHER ABRIEBFESTIGKEIT UND HERVORRAGENDER FESTIGKEIT

Title (fr)

RAIL DE PERLITE PRÉSENTANT UNE RÉSISTANCE À L'ABRASION SUPÉRIEURE ET UNE EXCELLENTE TÉNACITÉ

Publication

EP 2343390 B1 20150819 (EN)

Application

EP 09823351 A 20091030

Priority

- JP 2009005800 W 20091030
- JP 2008281847 A 20081031

Abstract (en)

[origin: EP2343390A1] This pearlite rail consists of a steel including: in terms of percent by mass, C: 0.65 to 1.20%; Si: 0.05 to 2.00%; Mn: 0.05 to 2.00%; P# 0.0150%; S# 0.0100%; Ca: 0.0005 to 0.0200%, and Fe and inevitable impurities as the balance, wherein a head surface portion which ranges from surfaces of head corner portions and a head top portion to a depth of 10 mm has a pearlite structure, a hardness Hv of the pearlite structure is in a range of 320 to 500, and Mn sulfide-based inclusions having major lengths in a range of 10 to 100 µm are present at an amount per unit area in a range of 10 to 200/mm² in a cross-section taken along a lengthwise direction in the pearlite structure.

IPC 8 full level

C22C 38/04 (2006.01); **C21C 7/00** (2006.01); **C21C 7/04** (2006.01); **C22C 38/58** (2006.01)

CPC (source: EP KR US)

C21C 7/0025 (2013.01 - EP US); **C21C 7/04** (2013.01 - KR); **C21C 7/064** (2013.01 - EP US); **C22C 38/002** (2013.01 - EP US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP KR US); **C22C 38/58** (2013.01 - KR)

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