

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 A1 20110713 (EN)

Application
EP 09823351 A 20091030

Priority
• JP 2009005800 W 20091030
• JP 2008281847 A 20081031

Abstract (en)
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)

Cited by
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AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
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