

Title (en)

WEAR-RESISTANT STEEL PLATE HAVING EXCELLENT LOW-TEMPERATURE TOUGHNESS AND CORROSION WEAR RESISTANCE

Title (de)

VERSCHLEISSFESTE STAHLPLATTE MIT HERVORRAGENDER KÄLTEZÄHIGKEIT UND KORROSIONSVerschleissfestigkeit

Title (fr)

TÔLE D'ACIER RÉSISTANT À L'USURE QUI PRÉSENTE UNE EXCELLENTE TÉNACITÉ À BASSE TEMPÉRATURE ET UNE EXCELLENTE RÉSISTANCE À L'USURE DUE À LA CORROSION

Publication

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Application

EP 13839513 A 20130913

Priority

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Abstract (en)

[origin: EP2873748A1] Provided is an abrasion resistant steel plate which possesses excellent abrasion resistance, excellent low-temperature toughness and excellent corrosive wear resistance. An abrasion resistant steel plate includes the composition containing by mass%: 0.23% to 0.35% C, 0.05% to 1.00% Si, 0.1% to 2.0% Mn, 0.020% or less P, 0.005% or less S, 0.005% to 0.100% Al, 0.03% to 2.0% Cr, and 0.03% to 1.0% Mo in a state where DI* defined by the following formula (1) is satisfied 45 or more, and further containing remaining Fe and unavoidable impurities as a balance. The steel plate has a structure where an as-quenched martensitic phase forms a main phase and a grain size of prior austenite grains is 30 μm or less, and surface hardness of the steel plate is 450 or more at Brinell hardness HBW10/3000.

IPC 8 full level

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CPC (source: CN EP KR US)

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Citation (search report)

- [XA] JP 2009030092 A 20090212 - JFE STEEL KK
- [XA] JP 2009030093 A 20090212 - JFE STEEL KK
- [XA] JP 2009030094 A 20090212 - JFE STEEL KK
- [XA] JP 2011214120 A 20111027 - JFE STEEL CORP
- [E] EP 2695960 A1 20140212 - JFE STEEL CORP [JP]
- [E] EP 2692890 A1 20140205 - JFE STEEL CORP [JP]
- See references of WO 2014045552A1

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CN104988413A; EP3098331A4; CN109504903A; US10662493B2; US10253385B2

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