

Title (en)
STEEL PLATE

Title (de)
STAHLPLATTE

Title (fr)
PLAQUE D'ACIER

Publication
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Application
EP 19220022 A 20150515

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Abstract (en)
Disclosed is a steel plate. The steel plate has a chemical composition meeting predetermined conditions. A microstructure in the surface layer of the steel plate includes at least one of ferrite and upper bainite in a total fraction of 80 area percent or more, and grains of the at least one of ferrite and upper bainite have an effective grain size of 10.0 μm or less. Of the microstructure of the surface layer, grains of the remainder microstructure excluding the ferrite and the upper bainite have an average equivalent circle diameter of 3.0 μm or less. The steel plate has a dislocation density ρ of $5.0 \times 10^{13} \text{ m}^{-2}$ to $2.5 \times 10^{15} \text{ m}^{-2}$ as determined by X-ray diffractometry. The steel plate having the configuration has excellent fatigue properties.

IPC 8 full level
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CPC (source: EP KR)
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Citation (search report)
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• [A] JP S6415319 A 19890119 - KAWASAKI STEEL CO
• [A] JP 2008297575 A 20081211 - KOBE STEEL LTD
• [A] JP 2007197823 A 20070809 - JFE STEEL KK
• [A] EP 2157203 A1 20100224 - KOBE STEEL LTD [JP]
• [A] EP 2006407 A1 20081224 - NIPPON STEEL CORP [JP]

Designated contracting state (EPC)
AL 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 RS SE SI SK SM TR

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