

Title (en)
HIGH-STRENGTH THICK STEEL PLATE FOR CONSTRUCTION HAVING EXCELLENT CHARACTERISTICS FOR PREVENTING DIFFUSION OF BRITTLE CRACKS, AND PRODUCTION METHOD THEREFOR

Title (de)
HOCHFESTE DICKE STAHLPLATTE ZUR KONSTRUKTION MIT HERVORRAGENDEN MAGNETISCHEN EIGENSCHAFTEN ZUR VERHINDERUNG DER DIFFUSION VON SPRÖDEN RISSEN UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)
PLAQUE D'ACIER ÉPAISSE DE HAUTE RÉSISTANCE MÉCANIQUE POUR STRUCTURE DOTÉE D'EXCELLENTE PROPRIÉTÉS D'ARRÊT DE PROPAGATION DE FISSURES CASSANTES, ET PROCÉDÉ DE FABRICATION DE CELLE-CI

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Application
EP 12863931 A 20120518

Priority
• JP 2011285569 A 20111227
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• JP 2012063410 W 20120518

Abstract (en)
Provided is a high-strength thick steel plate for structural use having a thickness of 50 mm or more and excellent brittle crack arrestability which can be preferably used for ships and a method for manufacturing the steel plate. The thick steel plate having excellent brittle crack arrestability has a specified chemical composition and a metallographic structure mainly including a ferrite phase and including a texture, in which the integration degree I of the RD//{(110) plane in the surface portion is 1.3 or more and the integration degree I of the RD//{(110) plane in the central portion in the thickness direction is 1.8 or more, a Charpy fracture appearance transition temperature vTrs in the surface portion of -60°C or lower and a Charpy fracture appearance transition temperature vTrs in the central portion in the thickness direction of -50°C or lower.

IPC 8 full level
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CPC (source: EP)
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