

Title (en)

THICK STEEL SHEET AND METHOD FOR PRODUCING SAME

Title (de)

DICKES STAHLBLECH UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)

TÔLE D'ACIER ÉPAISSE ET SON PROCÉDÉ DE PRODUCTION

Publication

EP 3128032 A4 20170208 (EN)

Application

EP 15774087 A 20150319

Priority

- JP 2014071529 A 20140331
- JP 2015001559 W 20150319

Abstract (en)

[origin: EP3128032A1] Provided is a thick steel plate which can preferably be used for members of, for example, industrial machines and transporting and conveying devices which are required to have abrasion resistance against, for example, rock, sand, ore, and slurry materials and a method for manufacturing the steel plate. A thick steel plate having a chemical composition containing, by mass%, C: 0.200% or more and 0.350% or less, Si: 0.05% or more and 0.45% or less, Mn: 0.50% or more and 2.00% or less, P: 0.020% or less, S: 0.005% or less, Al: 0.005% or more and 0.100% or less, one, two, or more of Cu, Ni, Cr, Mo, V, Nb, Ti, B, REM, Ca, and Mg, and the balance being Fe and inevitable impurities, in which Cl, which is defined by a particular equation, is 40 or more, and a steel microstructure in which the area fraction of a bainite phase is 60% or more, the area fraction of Martensite-Austenite constituent is 5% or more and less than 20%, and the remaining constituent phases are one, two, or all of a ferrite phase, a pearlite phase, and a martensite phase. After hot-rolling the steel having the chemical composition described above, accelerated cooling is performed to a temperature range of 400°C or higher and 650°C or lower.

IPC 8 full level

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CPC (source: EP KR US)

C21D 8/0226 (2013.01 - EP US); **C21D 8/0263** (2013.01 - EP KR US); **C21D 9/46** (2013.01 - EP KR US); **C22C 38/00** (2013.01 - EP US); **C22C 38/002** (2013.01 - EP US); **C22C 38/005** (2013.01 - EP US); **C22C 38/02** (2013.01 - EP KR US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP KR US); **C22C 38/08** (2013.01 - EP US); **C22C 38/12** (2013.01 - EP US); **C22C 38/14** (2013.01 - EP US); **C22C 38/16** (2013.01 - EP US); **C22C 38/18** (2013.01 - EP US); **C22C 38/20** (2013.01 - EP US); **C22C 38/22** (2013.01 - EP US); **C22C 38/24** (2013.01 - EP US); **C22C 38/26** (2013.01 - EP US); **C22C 38/28** (2013.01 - EP US); **C22C 38/32** (2013.01 - EP US); **C22C 38/42** (2013.01 - EP US); **C22C 38/44** (2013.01 - EP US); **C22C 38/46** (2013.01 - EP KR US); **C22C 38/48** (2013.01 - EP US); **C22C 38/50** (2013.01 - EP KR US); **C22C 38/54** (2013.01 - EP KR US); **C22C 38/58** (2013.01 - EP KR US); **C21D 2211/001** (2013.01 - EP US); **C21D 2211/002** (2013.01 - EP KR US); **C21D 2211/008** (2013.01 - EP KR US)

Citation (search report)

- [XA] WO 2014020891 A1 20140206 - JFE STEEL CORP [JP]
- [Y] JP 3578435 B2 20041020
- [Y] JP H08269615 A 19961015 - KOBE STEEL LTD
- [Y] JP 2010222682 A 20101007 - JFE STEEL CORP
- See references of WO 2015151443A1

Designated contracting state (EPC)

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