

Title (en)
STEEL FOR WELDED STRUCTURES EXCELLENT IN HIGH TEMPERATURE STRENGTH AND LOW TEMPERATURE TOUGHNESS AND METHOD OF PRODUCTION OF SAME

Title (de)
STAHL FÜR GESCHWEIßTE KONSTRUKTIONEN MIT EXZELLENTER HOCHTEMPERATURFESTIGKEIT UND TIEFTEMPÉRATURZÄHIGKEIT UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)
ACIER POUR CONSTRUCTION SOUDÉE AYANT UNE EXCELLENTE RÉSISTANCE À TEMPÉRATURE ÉLEVÉE ET UNE EXCELLENTE RÉSILIENCE AUX BASSES TEMPÉRATURES ET PROCÉDÉS DE PRODUCTION DE L'ACIER

Publication
EP 2380997 A1 20111026 (EN)

Application
EP 09707108 A 20090115

Priority
JP 2009050906 W 20090115

Abstract (en)
By heating a steel material comprising C: 0.003 to 0.05%, Si: 0.60% or less, Mn: 0.6 to 2.0%, P: 0.020% or less, S: 0.010% or less, Cr: 0.20 to 1.5%, Nb: 0.005 to 0.05%, Al: 0.060% or less, and N: 0.001 to 0.006%, further limiting, as an impurity, Mo to 0.03% or less, having a balance of iron and unavoidable impurities, and having a weld cracking parameter P CM value defined by $P_{CM} = C + Si/30 + Mn/20 + Cu/20 + Ni/60 + Cr/20 + Mo/15 + V/10 + 5B$ of 0.22% or less, to 1000 to 1300°C in temperature, finishing the hot rolling at 800°C or more in temperature, then cooling, steel for welded structures excellent in high temperature strength and low temperature toughness can be inexpensively provided.

IPC 8 full level
C21D 8/00 (2006.01); **C21D 8/02** (2006.01); **C22C 38/00** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/22** (2006.01); **C22C 38/24** (2006.01); **C22C 38/26** (2006.01); **C22C 38/28** (2006.01); **C22C 38/38** (2006.01); **C22C 38/42** (2006.01); **C22C 38/44** (2006.01); **C22C 38/46** (2006.01); **C22C 38/48** (2006.01); **C22C 38/58** (2006.01)

CPC (source: EP KR US)
C21D 8/02 (2013.01 - KR); **C21D 8/0226** (2013.01 - EP US); **C21D 8/0263** (2013.01 - EP US); **C22C 38/001** (2013.01 - EP US); **C22C 38/004** (2013.01 - EP US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP US); **C22C 38/22** (2013.01 - EP US); **C22C 38/24** (2013.01 - EP US); **C22C 38/26** (2013.01 - EP KR US); **C22C 38/28** (2013.01 - EP US); **C22C 38/38** (2013.01 - EP US); **C22C 38/42** (2013.01 - EP US); **C22C 38/44** (2013.01 - EP US); **C22C 38/46** (2013.01 - EP US); **C22C 38/48** (2013.01 - EP KR US); **C22C 38/58** (2013.01 - EP US); **C21D 2211/004** (2013.01 - EP US); **C21D 2211/005** (2013.01 - EP US)

Cited by
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