

Title (en)  
SEAMLESS STEEL PIPE AND MANUFACTURING METHOD OF SAME

Title (de)  
NAHTLOSES STAHLROHR UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)  
TUYAU EN ACIER SANS SOUDURE ET SON PROCÉDÉ DE FABRICATION

Publication  
**EP 3418410 A4 20190109 (EN)**

Application  
**EP 16890483 A 20160216**

Priority  
JP 2016054381 W 20160216

Abstract (en)  
[origin: EP3418410A1] A seamless steel pipe is provided that provides a yield strength of 555 MPa or higher and good SSC resistance in a reliable manner. A seamless steel pipe contains, in mass %, C: 0.02 to 0.15 %; Si: 0.05 to 0.5 %; Mn: 0.30 to 2.5 %; Al: 0.01 to 0.10 %; Ti: 0.001 to 0.010 %; N: up to 0.007 %; Cr: 0.05 to 1.0 %; Mo: not less than 0.02 % and less than 0.5 %; Ni: 0.03 to 1.0 %; Cu: 0.02 to 1.0 %; V: 0.020 to 0.20 %; Ca: 0.0005 to 0.005 %; and Nb: 0 to 0.05 %, among others, where the carbon equivalent Ceq is not less than 0.430 % and less than 0.500 %, the main phase of the microstructure from the surface layer to an in-the-wall portion is tempered martensite or tempered bainite, the size of prior austenite grains is lower than 6.0 in crystal grain size number according to ASTM E112-10, a portion between a position at 1 mm from the inner surface and a position at 1 mm from the outer surface has a Vickers hardness of 250 Hv or lower, and the yield strength is 555 MPa or higher.

IPC 8 full level  
**C22C 38/00** (2006.01); **C21D 8/10** (2006.01); **C21D 9/08** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/42** (2006.01); **C22C 38/44** (2006.01); **C22C 38/48** (2006.01); **C22C 38/50** (2006.01); **C22C 38/58** (2006.01)

CPC (source: EP RU US)  
**C21D 6/004** (2013.01 - EP US); **C21D 6/005** (2013.01 - EP US); **C21D 6/008** (2013.01 - EP US); **C21D 8/10** (2013.01 - EP RU); **C21D 8/105** (2013.01 - EP US); **C21D 9/08** (2013.01 - EP RU); **C21D 9/085** (2013.01 - EP US); **C22C 38/00** (2013.01 - EP US); **C22C 38/001** (2013.01 - EP US); **C22C 38/002** (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 38/42** (2013.01 - EP US); **C22C 38/44** (2013.01 - EP US); **C22C 38/46** (2013.01 - EP US); **C22C 38/48** (2013.01 - EP US); **C22C 38/50** (2013.01 - EP RU US); **C22C 38/58** (2013.01 - EP RU US); **C21D 8/10** (2013.01 - US); **C21D 9/08** (2013.01 - US); **C21D 2211/001** (2013.01 - EP US); **C21D 2211/002** (2013.01 - EP US); **C21D 2211/005** (2013.01 - EP US)

Citation (search report)

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Designated contracting state (EPC)  
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