

Title (en)
STAINLESS STEEL PIPE AND METHOD FOR PRODUCING SAME

Title (de)
EDELSTAHLROHR UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)
TUYAU EN ACIER INOXYDABLE ET PROCÉDÉ DE PRODUCTION ASSOCIÉ

Publication
EP 3342894 A4 20190306 (EN)

Application
EP 16841210 A 20160601

Priority

- JP 2015168605 A 20150828
- JP 2016066277 W 20160601

Abstract (en)
[origin: EP3342894A1] A stainless steel pipe having a strength in a predetermined range and a low yield ratio is to be provided. A stainless steel pipe has a chemical composition of, in mass%: C: up to 0.02 %; Si: 0.05 to 1.00 %; Mn: 0.1 to 1.0 %; P: up to 0.030 %; S: up to 0.002 %; Ni: 5.5 to 8 %; Cr: 10 to 14 %; Mo: 2 to 4 %; V: 0.01 to 0.10 %; Ti: 0.05 to 0.3 %; Nb: up to 0.1 %; Al: 0.001 to 0.1 %; N: up to 0.05 %; Cu: up to 0.5 %; Ca: 0 to 0.008 %; Mg: 0 to 0.05 %; B: 0 to 0.005 %; and balance Fe and impurities, the stainless steel pipe having a microstructure including martensite and, by volume fraction, 12 to 18 % retained austenite. The martensite has prior austenite grains of a crystal grain size number lower than 8.0 in accordance with ASTM E112. The stainless steel pipe has a yield strength of 550 to 700 MPa.

IPC 8 full level
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CPC (source: EP US)
C21D 1/18 (2013.01 - EP 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 US); **C21D 8/105** (2013.01 - EP US); **C21D 9/08** (2013.01 - EP US); **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 US); **C22C 38/54** (2013.01 - EP US); **C21D 2211/001** (2013.01 - EP US); **C21D 2211/008** (2013.01 - EP US)

Citation (search report)

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- [I] JP 5640777 B2 20141217
- [A] EP 1717328 A1 20061102 - JFE STEEL CORP [JP]
- [A] EP 1498501 A1 20050119 - SUMITOMO METAL IND [JP]
- See also references of WO 2017038178A1

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