

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 A1 20180704 (EN)**

Application  
**EP 16841210 A 20160601**

Priority

- JP 2015168605 A 20150828
- JP 2016066277 W 20160601

Abstract (en)  
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  
**C22C 38/00** (2006.01); **C21D 8/10** (2006.01); **C21D 9/08** (2006.01); **C22C 38/54** (2006.01)

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)

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