

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
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CPC (source: EP US)
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Cited by
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