

Title (en)

MARTENSITIC STAINLESS STEELS FOR SEAMLESS STEEL PIPE

Publication

EP 0178334 B1 19900718 (EN)

Application

EP 84112233 A 19841011

Priority

EP 84112233 A 19841011

Abstract (en)

[origin: EP0178334A1] Martensitic stainless steels that enable the fabrication of high-strength seamless steel pipe suited for use in oil-well pipe and pipeline tubing by means of a Mannesmann plug mill or Mannesmann mandrel mill process, without the formation of defects during production. The heat workability of these steels, which contain no more than 0.30% by weight of carbon and from 11 to 14% by weight of chromium, and have a ferrite content of at least 40% at 1200 DEG C, has been vastly improved by holding the phosphorus and sulfur levels therein to no more than 0.020% and 0.003% by weight, respectively. Optional elements are nickel, copper, molydenum, columbium, vanadium, calcium and rare elements. Boron may be present from 0.001 to 0.008 % by weight, aluminium from 0.005 to 0.10 % by weight.

IPC 1-7

C22C 38/18; C22C 38/38

IPC 8 full level

C22C 38/18 (2006.01); **C22C 38/38** (2006.01)

CPC (source: EP)

C22C 38/18 (2013.01); **C22C 38/38** (2013.01)

Cited by

US5714114A; EP0273973A4; FR2920784A1; EP1288316A1; EP0606885A1; US5433798A; CN100355914C; EP0237170A3; US8231947B2; EP1306458A3; FR2643648A1; EP0298127A4; US8220554B2; US8211248B2; US7361236B2; US9982505B2; US7686897B2; US9789544B2; WO9621747A1; WO2016057776A1; WO2009034282A1; WO2004007780A1; WO9311270A1; US6846371B2; US9512677B2; US8211247B2; US8663401B2; US10316616B2

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