

Title (en)

Martensitic stainless steels for seamless steel pipe.

Title (de)

Rostfreie martensitische Stähle für nahtlose Rohre.

Title (fr)

Aciers inoxydables martensiques pour tubes d'acier sans soudure.

Publication

EP 0178334 A1 19860423 (EN)

Application

EP 84112233 A 19841011

Priority

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Abstract (en)

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 a 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, molybdenum, 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

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CPC (source: EP)

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

Citation (search report)

- [Y] GB 2027745 A 19800227 - KAWASAKI STEEL CO
- [Y] GB 1336698 A 19731107 - SONY CORP
- [A] GB 1221584 A 19710203 - UDDEHOLMS AB [SE]
- [A] AT 345322 B 19780911 - SUEDEWESTFALEN AG STAHLWERKE [DE]
- [A] SU 498357 A1 19760105
- [A] EP 0081592 A1 19830622 - KAWASAKI STEEL CO [JP]
- [AD] C.W.WEGST: "STAHLSCHLÜSSEL", 1983, Edition 13, page 324, Verlag Stahlschlüssel Wegst GmbH, Marbach, DE;

Cited by

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

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