

Title (en)

AN AGE HARDENED THIN CAST STRIP PRODUCT WITH MICROALLOY ADDITIONS, AND METHOD FOR MAKING THE SAME

Title (de)

ALTERSHÄRTBARES, DÜNNES, GEGOSSENES STAHLBANDPRODUKT MIT MIKROLEGIERUNGSZUSÄTZEN UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

PRODUIT DURCI PAR VIEILLISSEMENT DE MINCE BANDE COULÉ AVEC AJOUTS DE MICRO-ALLIAGE, ET SON PROCÉDÉ DE FABRICATION

Publication

**EP 2162252 B1 20210707 (EN)**

Application

**EP 08747719 A 20080506**

Priority

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- US 74488107 A 20070506
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Abstract (en)

[origin: WO2008137898A1] A steel product or thin steel cast strip comprised of, by weight, less than 0.25% carbon, between 0.20 and 2.0% manganese, between 0.05 and 0.50% silicon, less than 0.01% aluminum, and at least one of niobium between 0.01% and 0.20% and vanadium between 0.01% and 0.20%, and having a microstructure of a majority bainite and acicular ferrite, and more than 70% niobium and/or vanadium in solid solution. The steel product may have an increase in elongation and an increase in yield strength after age hardening. The age hardened steel product may have niobium carbonitride particles with an average particle size of 10 nanometers and less, and may have substantially no niobium carbonitride particles greater than 50 nanometers. The steel product may have a yield strength of at least 380 MPa or a tensile strength of at least 410 MPa, or both. The steel product or thin cast steel strip may have a total elongation of at least 6% or 10%.

IPC 8 full level

**B22D 11/06** (2006.01); **B22D 11/124** (2006.01); **C21D 6/00** (2006.01); **C21D 6/02** (2006.01); **C21D 8/02** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/12** (2006.01)

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