

Title (en)
STEEL PIPE AND STEEL PLATE

Title (de)
STAHLROHR UND STAHLPLATTE

Title (fr)
TUBE EN ACIER ET PLAQUE D'ACIER

Publication
EP 3686305 A4 20210127 (EN)

Application
EP 17926174 A 20170919

Priority
JP 2017033706 W 20170919

Abstract (en)
[origin: EP3686305A1] A steel pipe includes: a base metal that includes a cylindrical steel plate having a predetermined chemical composition; and a weld that is provided in a seam portion of the steel plate and extends in a longitudinal direction of the steel plate, in which a surface layer microstructure that is a microstructure in a range up to 1.0 mm from a surface of the base metal in a depth direction includes polygonal ferrite and granular bainite, an area fraction of the polygonal ferrite in the surface layer microstructure is 0 to 70%, a total area fraction of the polygonal ferrite and the granular bainite in the surface layer microstructure is 50% or more, a maximum hardness in the surface layer microstructure is 270 Hv or lower, an area fraction of polygonal ferrite in an internal microstructure that is a microstructure in a range up to a thickness center from an area positioned at a distance of more than 1.0 mm from the surface of the base metal in the depth direction is 40% or less, a maximum hardness in the internal microstructure is 248 Hv or lower, and an average hardness in the internal microstructure is 150 to 220 Hv.

IPC 8 full level
C22C 38/00 (2006.01); **C21D 1/19** (2006.01); **C21D 8/02** (2006.01); **C21D 8/10** (2006.01); **C21D 9/08** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/08** (2006.01); **C22C 38/12** (2006.01); **C22C 38/14** (2006.01); **C22C 38/16** (2006.01); **C22C 38/18** (2006.01); **C22C 38/22** (2006.01); **C22C 38/24** (2006.01); **C22C 38/26** (2006.01); **C22C 38/28** (2006.01); **C22C 38/40** (2006.01)

CPC (source: EP KR)
C21D 8/0205 (2013.01 - KR); **C21D 8/105** (2013.01 - EP KR); **C21D 9/085** (2013.01 - EP); **C22C 38/001** (2013.01 - EP); **C22C 38/002** (2013.01 - EP); **C22C 38/005** (2013.01 - EP); **C22C 38/02** (2013.01 - EP); **C22C 38/04** (2013.01 - EP); **C22C 38/06** (2013.01 - EP); **C22C 38/08** (2013.01 - EP); **C22C 38/12** (2013.01 - EP); **C22C 38/14** (2013.01 - EP); **C22C 38/16** (2013.01 - EP); **C22C 38/18** (2013.01 - EP); **C22C 38/22** (2013.01 - EP); **C22C 38/24** (2013.01 - EP); **C22C 38/26** (2013.01 - EP); **C22C 38/28** (2013.01 - EP); **C22C 38/40** (2013.01 - EP); **C22C 38/58** (2013.01 - KR); **C21D 1/19** (2013.01 - EP); **C21D 8/0205** (2013.01 - EP); **C21D 8/0263** (2013.01 - EP); **C21D 2211/002** (2013.01 - EP); **C21D 2211/005** (2013.01 - EP); **C21D 2211/008** (2013.01 - EP)

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[X] WO 2013114519 A1 20130808 - NIPPON STEEL & SUMITOMO METAL CORP [JP]

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