

Title (en)
HIGH-HARDNESS STEEL PRODUCT AND METHOD OF MANUFACTURING THE SAME

Title (de)
HOCHHARTES STAHLPRODUKT UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)
PRODUIT D'ACIER À DURETÉ ÉLEVÉE ET SON PROCÉDÉ DE FABRICATION

Publication
EP 3719148 B1 20230125 (EN)

Application
EP 19167552 A 20190405

Priority
EP 19167552 A 20190405

Abstract (en)
[origin: EP3719148A1] A hot-rolled steel strip product comprising a composition consisting of, in terms of weight percentages, 0.17 % to 0.38 % C, 0 % to 0.5 % Si, 0.1 % to 0.4 % Mn, 0.015 % to 0.15 % Al, 0.1 % to 0.6 % Cu, 0.2 % to 0.8 % Ni, 0.1 % to 1 % Cr, 0.01 % to 0.3 % Mo, 0 % to 0.005 % Nb, 0 % to 0.05 % Ti, 0 % to 0.2 % V, 0.0008 % to 0.005 % B, 0 % to 0.025 % P, 0.008 % or less S, 0.01 % or less N, 0 % to 0.01 % Ca, and the remainder being Fe and inevitable impurities, wherein the steel product has a Brinell hardness in the range of 420 - 580 HBW, and a corrosion index (ASTM G101-04) of at least 5.

IPC 8 full level
C21D 8/02 (2006.01); **C22C 38/04** (2006.01); **C22C 38/42** (2006.01); **C22C 38/44** (2006.01); **C22C 38/54** (2006.01)

CPC (source: EP KR US)
C21D 1/00 (2013.01 - EP); **C21D 6/004** (2013.01 - US); **C21D 6/005** (2013.01 - US); **C21D 6/008** (2013.01 - US); **C21D 8/0205** (2013.01 - US); **C21D 8/0226** (2013.01 - EP KR US); **C21D 8/0263** (2013.01 - EP US); **C21D 8/0273** (2013.01 - KR); **C21D 9/52** (2013.01 - US); **C22C 38/001** (2013.01 - KR US); **C22C 38/002** (2013.01 - US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - US); **C22C 38/08** (2013.01 - EP); **C22C 38/105** (2013.01 - EP); **C22C 38/12** (2013.01 - EP); **C22C 38/14** (2013.01 - EP); **C22C 38/16** (2013.01 - EP); **C22C 38/20** (2013.01 - US); **C22C 38/22** (2013.01 - US); **C22C 38/24** (2013.01 - US); **C22C 38/26** (2013.01 - US); **C22C 38/28** (2013.01 - US); **C22C 38/42** (2013.01 - EP KR US); **C22C 38/44** (2013.01 - EP KR US); **C22C 38/46** (2013.01 - KR US); **C22C 38/48** (2013.01 - KR US); **C22C 38/50** (2013.01 - KR US); **C22C 38/54** (2013.01 - EP KR US); **C21D 2211/008** (2013.01 - EP KR)

Citation (examination)
AU 2013204206 A1 20140508 - BLUESCOPE STEEL LTD

Cited by
WO2023083898A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 3719148 A1 20201007; **EP 3719148 B1 20230125**; BR 112021019860 A2 20211207; BR 112021019865 A2 20211207; CA 3135141 A1 20201008; CA 3135144 A1 20201008; CN 113785078 A 20211210; CN 113785078 B 20231027; CN 113785079 A 20211210; CN 113785079 B 20240405; EP 3719149 A1 20201007; EP 3719149 B1 20230322; JP 2022528420 A 20220610; KR 20210149123 A 20211208; PL 3719148 T3 20230508; SI 3719148 T1 20230630; US 2022177996 A1 20220609; US 2022177997 A1 20220609; WO 2020201437 A1 20201008; WO 2020201438 A1 20201008

DOCDB simple family (application)
EP 19167552 A 20190405; BR 112021019860 A 20200402; BR 112021019865 A 20200402; CA 3135141 A 20200402; CA 3135144 A 20200402; CN 202080026935 A 20200402; CN 202080026939 A 20200402; EP 19185759 A 20190711; EP 2020059423 W 20200402; EP 2020059424 W 20200402; JP 2021559152 A 20200402; KR 20217035749 A 20200402; PL 19167552 T 20190405; SI 201930516 T 20190405; US 202017601227 A 20200402; US 202017601234 A 20200402