

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 A1 20201007 (EN)**

Application  
**EP 19167552 A 20190405**

Priority  
EP 19167552 A 20190405

Abstract (en)  
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 (applicant)  
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Citation (search report)  
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CA 3135141 A1 20201008; CA 3135144 A1 20201008; CN 113785078 A 20211210; CN 113785078 B 20231027; CN 113785079 A 20211210;  
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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