

Title (en)

H-STEEL AND METHOD FOR MANUFACTURING SAME

Title (de)

H-STAHL UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)

PROFILÉ ACIER EN H ET PROCÉDÉ POUR LE FABRIQUER

Publication

[EP 3533893 A1 20190904 \(EN\)](#)

Application

[EP 17885325 A 20171221](#)

Priority

- JP 2016248181 A 20161221
- JP 2017045965 W 20171221

Abstract (en)

This H section includes, as a chemical composition, C, Si, Mn, Nb, V, Ti, and N; in which the H section includes, as a metallographic structure, ferrite of 60 area% to less than 100 area%, an average grain size of this ferrite is 1 µm to 30 µm, a thickness of a flange is 20 mm to 140 mm, tensile yield stress is 385 MPa to 530 MPa, and Charpy absorbed energy at -20°C is 100 J or more.

IPC 8 full level

[C21D 8/00](#) (2006.01); [C22C 38/00](#) (2006.01); [C22C 38/14](#) (2006.01); [C22C 38/58](#) (2006.01)

CPC (source: EP KR US)

[B21B 1/088](#) (2013.01 - US); [C21D 8/005](#) (2013.01 - EP KR US); [C21D 8/0226](#) (2013.01 - EP US); [C22C 38/00](#) (2013.01 - EP US);  
[C22C 38/001](#) (2013.01 - EP US); [C22C 38/002](#) (2013.01 - EP US); [C22C 38/02](#) (2013.01 - EP KR US); [C22C 38/04](#) (2013.01 - EP US);  
[C22C 38/06](#) (2013.01 - EP KR US); [C22C 38/08](#) (2013.01 - EP US); [C22C 38/12](#) (2013.01 - EP US); [C22C 38/14](#) (2013.01 - EP KR US);  
[C22C 38/16](#) (2013.01 - EP US); [C22C 38/24](#) (2013.01 - EP US); [C22C 38/26](#) (2013.01 - EP US); [C22C 38/28](#) (2013.01 - EP US);  
[C22C 38/42](#) (2013.01 - EP US); [C22C 38/44](#) (2013.01 - EP US); [C22C 38/46](#) (2013.01 - EP US); [C22C 38/48](#) (2013.01 - EP US);  
[C22C 38/50](#) (2013.01 - EP US); [C22C 38/58](#) (2013.01 - EP KR US); [C21D 2211/001](#) (2013.01 - EP US); [C21D 2211/005](#) (2013.01 - EP US);  
[C21D 2211/008](#) (2013.01 - EP US)

Cited by

CN112746221A

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

[US 2019203309 A1 20190704](#); CN 109715842 A 20190503; CN 109715842 B 20200306; EP 3533893 A1 20190904; EP 3533893 A4 20200624;  
JP 6468408 B2 20190213; JP WO2018117228 A1 20190404; KR 102021726 B1 20190916; KR 20190032625 A 20190327;  
PH 12019500350 A1 20191111; WO 2018117228 A1 20180628

DOCDB simple family (application)

[US 201716329163 A 20171221](#); CN 201780057895 A 20171221; EP 17885325 A 20171221; JP 2017045965 W 20171221;  
JP 2018558074 A 20171221; KR 20197007720 A 20171221; PH 12019500350 A 20190219