

Title (en)  
HIGH STRENGTH HOT DIP GALVANISED STEEL STRIP

Title (de)  
HOCHFESTER FEUERVERZINKTER BANDSTAHL

Title (fr)  
ACIER EN BANDES GALVANISÉ À CHAUD À HAUTE RÉSISTANCE

Publication  
**EP 2768989 A1 20140827 (EN)**

Application  
**EP 12759372 A 20120912**

Priority  
• EP 11007431 A 20110913  
• EP 2012003823 W 20120912  
• EP 12759372 A 20120912

Abstract (en)  
[origin: WO2013037485A1] The invention relates to a high strength hot dip galvanised steel strip consisting, in mass percent, of the following elements: 0.13 - 0.19 % C 1.70 - 2.50 % Mn max 0.15 % Si 0.40 - 1.00 % Al 0.05 - 0.25 % Cr 0.01 - 0.05 % Nb max 0.10 % P max 0.004 % Ca max 0.05 % S max 0.007 % N and optionally at least one of the following elements: max 0.50 % Ti max 0.40 % V max 0.50 % Mo max 0.50 % Ni max 0.50 % Cu max 0.005 % B the balance being Fe and inevitable impurities, wherein 0.40 % < Al + Si < 1.05 % and Mn + Cr > 1.90 %. This steel offers improved formability at a high strength, has a good weldability and surface quality together with a good producability and coatability.

IPC 8 full level  
**C21D 1/20** (2006.01); **C21D 8/02** (2006.01); **C21D 9/46** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/26** (2006.01); **C23C 2/02** (2006.01)

CPC (source: EP US)  
**C21D 1/20** (2013.01 - EP US); **C21D 8/0263** (2013.01 - EP US); **C21D 9/46** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP US); **C22C 38/26** (2013.01 - EP US); **C23C 2/02** (2013.01 - EP US); **C23C 2/0224** (2022.08 - EP US); **C21D 2211/001** (2013.01 - EP US); **C21D 2211/002** (2013.01 - EP US); **C21D 2211/005** (2013.01 - EP US); **C21D 2211/008** (2013.01 - EP US); **Y10T 428/12799** (2015.01 - EP US)

Citation (search report)  
See references of WO 2013037485A1

Citation (third parties)  
Third party :  
• JP H01127623 A 19890519 - SUMITOMO METAL IND  
• US 2009211668 A1 20090827 - ISHIZUKA KIYOKAZU [JP], et al  
• JP 2010255100 A 20101111 - JFE STEEL CORP  
• FI 20090387 A 20110424 - RAUTARUUKKI OYJ [FI]  
• JP 2010132975 A 20100617 - JFE STEEL CORP

Cited by  
WO2021123880A1; WO2020245678A1; WO2020245627A1; WO2020245626A1; WO2020245668A1; WO2023281035A1

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)  
**WO 2013037485 A1 20130321**; BR 112014005641 A2 20170328; CA 2848161 A1 20130321; CN 103857808 A 20140611; CN 103857808 B 20161123; EP 2768989 A1 20140827; EP 2768989 B1 20151118; ES 2562478 T3 20160304; IN 2734CHN2014 A 20150703; JP 2014531511 A 20141127; KR 20140068186 A 20140605; MX 2014002922 A 20140521; PT 2768989 E 20160318; US 2014205858 A1 20140724; ZA 201402590 B 20150729

DOCDB simple family (application)  
**EP 2012003823 W 20120912**; BR 112014005641 A 20120912; CA 2848161 A 20120912; CN 201280050757 A 20120912; EP 12759372 A 20120912; ES 12759372 T 20120912; IN 2734CHN2014 A 20140410; JP 2014530115 A 20120912; KR 20147009711 A 20120912; MX 2014002922 A 20120912; PT 12759372 T 20120912; US 201214343622 A 20120912; ZA 201402590 A 20140409