

Title (en)

HOT-DIP GALVANIZED STEEL SHEET AND MANUFACTURING METHOD THEREFOR

Title (de)

FEUERVERZINKTES STAHLBLECH UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

TÔLE EN ACIER GALVANISÉE PAR IMMERSION À CHAUD, ET PROCÉDÉ DE FABRICATION DE CELLE-CI

Publication

**EP 4261306 A1 20231018 (EN)**

Application

**EP 21910543 A 20211215**

Priority

- JP 2020215782 A 20201224
- JP 2021046368 W 20211215

Abstract (en)

Provided is a hot-dip galvanized steel sheet having both high strength and good workability, as well as excellent coating quality. The chemical composition of the base steel sheet is set within a specified range, the steel microstructure of the base steel sheet is a complex structure of ferrite, martensite and bainite, oxygen is present as oxides in the surface layer of the base steel sheet in an amount of 0.05 g/m<sup>2</sup> or more and 0.50 g/m<sup>2</sup> or less per surface, and the hot-dip galvanized layer contains Fe in an amount of 0.40 mass% or more.

IPC 8 full level

**C22C 38/00** (2006.01); **C21D 9/46** (2006.01); **C22C 38/06** (2006.01); **C22C 38/60** (2006.01); **C23C 2/02** (2006.01)

CPC (source: EP KR US)

**C21D 1/185** (2013.01 - EP); **C21D 1/19** (2013.01 - EP); **C21D 1/76** (2013.01 - EP); **C21D 8/0205** (2013.01 - EP US);  
**C21D 8/0226** (2013.01 - KR US); **C21D 8/0236** (2013.01 - KR US); **C21D 8/0247** (2013.01 - US); **C21D 8/0273** (2013.01 - EP KR);  
**C21D 9/46** (2013.01 - EP KR); **C22C 38/001** (2013.01 - KR US); **C22C 38/002** (2013.01 - US); **C22C 38/02** (2013.01 - EP KR US);  
**C22C 38/04** (2013.01 - EP KR); **C22C 38/06** (2013.01 - EP KR US); **C22C 38/12** (2013.01 - EP); **C22C 38/14** (2013.01 - EP);  
**C22C 38/38** (2013.01 - EP US); **C22C 38/60** (2013.01 - KR); **C23C 2/02** (2013.01 - EP KR US); **C23C 2/0224** (2022.08 - EP US);  
**C23C 2/024** (2022.08 - EP US); **C23C 2/06** (2013.01 - EP KR US); **C23C 2/40** (2013.01 - EP US); **C21D 2211/002** (2013.01 - EP KR US);  
**C21D 2211/005** (2013.01 - EP KR US); **C21D 2211/008** (2013.01 - EP US)

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

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DOCDB simple family (application)

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KR 20237018233 A 20211215; MX 2023007615 A 20211215; US 202118257178 A 20211215