

## Title (en)

ZINC ALLOY PLATED STEEL SHEET HAVING EXCELLENT BENDING WORKABILITY AND MANUFACTURING METHOD THEREFOR

## Title (de)

ZINKLEGIERTES STAHLBLECH MIT EXZELLENTER BIEGEBEARBEITBARKEIT UND HERSTELLUNGSVERFAHREN DAFÜR

## Title (fr)

TÔLE D'ACIER PLAQUÉE D'ALLIAGE DE ZINC PRÉSENTANT UNE EXCELLENTE APTITUDE AU CINTRAGE, ET SON PROCÉDÉ DE FABRICATION

## Publication

**EP 3369838 A4 20180905 (EN)**

## Application

**EP 16860213 A 20161026**

## Priority

- KR 20150148793 A 20151026
- KR 2016012098 W 20161026

## Abstract (en)

[origin: EP3369838A1] Disclosed are: a zinc alloy plated steel sheet comprising a base steel sheet and a zinc alloy plated layer; and a method for manufacturing the same, the zinc alloy plated layer comprising a Zn single phase structure as a microstructure, and a Zn-Al-Mg-based intermetallic compound, wherein (0001) preferred orientation degree (f) of the Zn single phase structure, represented by the following relation formula 1, is 50% or higher. [Relation formula 1]  $f(\%) = (I_{\text{basal}} / I_{\text{total}}) \times 100$  (wherein,  $I_{\text{total}}$  is defined as a value obtained by integrating diffraction peaks of all Zn single phases when an X-ray diffraction pattern is measured to  $2\theta$   $10^\circ$ - $100^\circ$  by using a Cu-K $\alpha$  source, and  $I_{\text{basal}}$  is defined as a value obtained by integrating diffraction peaks of Zn single phases related to a basal plane.)

## IPC 8 full level

**C23C 2/06** (2006.01); **C23C 2/14** (2006.01); **C23C 2/16** (2006.01); **C23C 2/18** (2006.01); **C23C 2/20** (2006.01); **C23C 2/26** (2006.01); **C23C 2/40** (2006.01)

## CPC (source: EP KR US)

**C23C 2/06** (2013.01 - EP KR US); **C23C 2/14** (2013.01 - EP KR US); **C23C 2/16** (2013.01 - KR); **C23C 2/18** (2013.01 - KR); **C23C 2/20** (2013.01 - EP KR US); **C23C 2/26** (2013.01 - EP KR US); **C23C 2/261** (2022.08 - KR); **C23C 2/40** (2013.01 - KR US); **C22C 18/04** (2013.01 - EP US); **Y10T 428/12799** (2015.01 - US)

## Citation (search report)

- [X1] WO 2012091385 A2 20120705 - POSCO [KR], et al
- [XAI] EP 2876182 A1 20150527 - POSCO [KR]
- [XAI] KR 20150052376 A 20150514 - POSCO [KR]
- See references of WO 2017074030A1

## Cited by

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## 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)

**EP 3369838 A1 20180905**; **EP 3369838 A4 20180905**; **EP 3369838 B1 20190821**; CN 108350555 A 20180731; JP 2018532889 A 20181108; JP 6983153 B2 20211217; KR 101819381 B1 20180118; KR 20170049422 A 20170510; US 2018320260 A1 20181108

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