

Title (en)
MOLTEN ALUMINUM ALLOY-PLATED STEEL SHEET HAVING EXCELLENT CORROSION RESISTANCE AND WELDABILITY, AND METHOD FOR PRODUCING SAME

Title (de)
MIT ALUMINIUMLEGIERUNGSSCHMELZE PLATTIERTES STAHLBLECH MIT AUSGEZEICHNETER KORROSIONSBESTÄNDIGKEIT UND SCHWEISSBARKEIT SOWIE VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)
TÔLE D'ACIER PLAQUÉE D'ALLIAGE D'ALUMINIUM FONDU AYANT UNE EXCELLENTE RÉSISTANCE À LA CORROSION ET SOUDABILITÉ ET SON PROCÉDÉ DE FABRICATION

Publication
EP 3730664 A4 20201202 (EN)

Application
EP 18892672 A 20181217

Priority
• KR 20170177677 A 20171222
• KR 2018015998 W 20181217

Abstract (en)
[origin: EP3730664A1] The present invention relates to a molten aluminum alloy-plated steel sheet having excellent corrosion resistance and weldability, and a method for producing same. A plated steel sheet according to one aspect of the present invention may be a molten aluminum alloy-plated steel sheet having excellent corrosion resistance and weldability and comprising a molten aluminum alloy plating film including: an interface alloy layer present at the interface with the steel sheet; and a plating upper layer disposed on the interface alloy layer, wherein a phase having an atomic ratio between Fe and Al of between 1:2.8-1:3.3 constitutes at least 70% by area of the phases present within 1 μm in the interface alloy layer direction from the boundary between the interface alloy layer and a base steel sheet.

IPC 8 full level
C23C 2/12 (2006.01); **C22C 21/02** (2006.01); **C22C 21/10** (2006.01); **C23C 2/26** (2006.01); **C23C 2/28** (2006.01); **C23C 2/40** (2006.01); **C23C 28/02** (2006.01); **C23C 30/00** (2006.01)

CPC (source: EP KR US)
C22C 21/02 (2013.01 - EP KR); **C22C 21/10** (2013.01 - EP KR); **C23C 2/12** (2013.01 - EP KR); **C23C 2/26** (2013.01 - EP KR US); **C23C 2/29** (2022.08 - EP KR US); **C23C 2/40** (2013.01 - EP KR); **C23C 2/526** (2022.08 - KR); **C23C 28/023** (2013.01 - EP); **C23C 28/028** (2013.01 - EP); **C23C 30/00** (2013.01 - EP)

Citation (search report)
• [IA] WO 2017195269 A1 20171116 - NIPPON STEEL & SUMITOMO METAL CORP [JP]
• [IA] EP 3239336 A1 20171101 - POSCO [KR]
• [A] EP 3124642 A1 20170201 - NIPPON STEEL & SUMITOMO METAL CORP [JP]
• [XAI] EP 2377965 A2 20111019 - POSCO [KR]
• See references of WO 2019124901A1

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 3730664 A1 20201028; **EP 3730664 A4 20201202**; CN 111511955 A 20200807; CN 111511955 B 20230414; KR 102043519 B1 20191112; KR 20190076129 A 20190702; WO 2019124901 A1 20190627

DOCDB simple family (application)
EP 18892672 A 20181217; CN 201880083264 A 20181217; KR 20170177677 A 20171222; KR 2018015998 W 20181217