

Title (en)
SEPARATING LAYER FOR HOT FORMING

Title (de)
TRENNSCHICHT FÜR DIE WARMUMFORMUNG

Title (fr)
COUCHE DE SÉPARATION POUR FORMAGE À CHAUD

Publication
EP 3807435 A1 20210421 (DE)

Application
EP 19733973 A 20190613

Priority
• DE 102018209737 A 20180618
• EP 2019065424 W 20190613

Abstract (en)
[origin: WO2019243146A1] The present invention relates to a flat steel product, which is suitable for being formed into a component by hot press forming and which has a steel substrate, wherein: - an anti-corrosion coating based on aluminum and/or zinc is applied to at least one side of the steel substrate and there is a cover layer on the anti-corrosion coating; - the cover layer has a thickness of less than 100 nm. The present invention also relates to a method for producing said flat steel product, comprising at least the following steps: (A) providing a steel substrate, which is provided with an anti-corrosion coating based on aluminum and/or zinc at least on one side, (B) applying a cover layer to at least one side of the steel substrate provided with an anti-corrosion coating, by applying a solution of the components contained in the cover layer, and (C) setting the thickness of the cover layer. The present invention also relates to a method for producing a hot-press-formed component from said flat steel product.

IPC 8 full level
C23C 2/12 (2006.01); **C21D 1/673** (2006.01); **C23C 2/26** (2006.01); **C23C 22/03** (2006.01); **C23C 22/68** (2006.01); **C25D 3/56** (2006.01)

CPC (source: EP US)
C21D 1/673 (2013.01 - EP); **C23C 2/12** (2013.01 - EP); **C23C 2/26** (2013.01 - EP US); **C23C 22/03** (2013.01 - EP); **C23C 22/68** (2013.01 - EP); **C25D 3/565** (2013.01 - EP); **C23F 11/1676** (2013.01 - EP)

Citation (search report)
See references of WO 2019243146A1

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)
DE 102018209737 A1 20191219; CN 112334590 A 20210205; EP 3807435 A1 20210421; WO 2019243146 A1 20191226

DOCDB simple family (application)
DE 102018209737 A 20180618; CN 201980041220 A 20190613; EP 19733973 A 20190613; EP 2019065424 W 20190613