

Title (en)
STEEL MATERIAL COMPOSITE WITH INHOMOGENEOUS PROPERTY DISTRIBUTION

Title (de)
STAHLWERKSTOFFVERBUND MIT INHOMOGENER EIGENSCHAFTSVERTEILUNG

Title (fr)
COMPOSITE À BASE D'ACIER PRÉSENTANT UNE RÉPARTITION INHOMOGÈNE DES PROPRIÉTÉS

Publication
EP 3573826 A1 20191204 (DE)

Application
EP 17706161 A 20170130

Priority
EP 2017051925 W 20170130

Abstract (en)
[origin: WO2018137781A1] The present invention relates to a steel material composite, comprising a core layer of a higher-strength or high-strength steel and, integrally bonded to the core layer on one or both sides, an outer layer of ferritic, chemically resistant steel. Corresponding flat steel products are distinguished by favourable properties with respect to their strength, ductility, low sensitivity to hydrogen-induced crack formation and favourable corrosion resistance. The present invention also relates to a method for producing a corresponding steel material composite and to the use of such steel material composites in vehicle structures and in particular in bodywork structures.

IPC 8 full level
B23K 20/04 (2006.01); **B23K 20/227** (2006.01); **B32B 15/01** (2006.01); **C21D 8/02** (2006.01); **C22C 38/00** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/18** (2006.01); **C22C 38/22** (2006.01); **C22C 38/24** (2006.01); **C22C 38/26** (2006.01); **C22C 38/28** (2006.01); **C23C 2/06** (2006.01); **C23C 2/12** (2006.01); **C23C 28/02** (2006.01)

CPC (source: EP KR US)
B23K 20/04 (2013.01 - EP KR US); **B23K 20/227** (2013.01 - EP KR US); **B23K 20/24** (2013.01 - EP KR); **B32B 15/01** (2013.01 - EP); **B32B 15/011** (2013.01 - EP KR US); **B32B 15/012** (2013.01 - EP); **B32B 15/013** (2013.01 - EP); **C21D 8/0226** (2013.01 - KR); **C22C 38/002** (2013.01 - EP KR US); **C22C 38/004** (2013.01 - EP KR); **C22C 38/02** (2013.01 - EP KR US); **C22C 38/04** (2013.01 - EP KR US); **C22C 38/06** (2013.01 - EP KR US); **C22C 38/18** (2013.01 - EP KR); **C22C 38/22** (2013.01 - EP KR US); **C22C 38/24** (2013.01 - EP KR US); **C22C 38/26** (2013.01 - EP KR US); **C22C 38/28** (2013.01 - EP KR US); **C23C 2/06** (2013.01 - EP KR); **C23C 2/12** (2013.01 - EP KR); **C23C 28/02** (2013.01 - EP KR); **C23C 28/021** (2013.01 - EP); **C23C 28/023** (2013.01 - EP); **C23C 28/025** (2013.01 - EP); **B23K 2101/006** (2018.07 - EP KR US); **B23K 2101/04** (2018.07 - KR); **B23K 2101/185** (2018.07 - EP KR US); **B23K 2103/04** (2018.07 - EP US); **B23K 2103/166** (2018.07 - EP KR US); **B23K 2103/18** (2018.07 - EP KR US); **B32B 2255/06** (2013.01 - KR); **B32B 2307/714** (2013.01 - KR); **B32B 2605/08** (2013.01 - KR); **C21D 8/0226** (2013.01 - EP); **C21D 2211/005** (2013.01 - EP KR)

Citation (search report)
See references of WO 2018137781A1

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)
WO 2018137781 A1 20180802; CN 110214081 A 20190906; EP 3573826 A1 20191204; JP 2020509223 A 20200326; KR 20190113776 A 20191008; US 2019389178 A1 20191226

DOCDB simple family (application)
EP 2017051925 W 20170130; CN 201780084585 A 20170130; EP 17706161 A 20170130; JP 2019541146 A 20170130; KR 20197020589 A 20170130; US 201716481733 A 20170130