

Title (en)
Low alloyed steel and components produced therefrom

Title (de)
Niedrig legierter Stahl und damit hergestellte Bauteile

Title (fr)
Acier faiblement allié et composant ainsi fabriqué

Publication
EP 2617855 B1 20160928 (DE)

Application
EP 12198668 A 20121220

Priority
• DE 102012100444 A 20120119
• DE 102012111679 A 20121130

Abstract (en)
[origin: MX2013000620A] A low-alloyed steel, comprising about 0.3 to about 0.50 wt. % carbon, about 2.0 to about 5.0 wt. % silicon, and a remainder of iron, optionally containing low amounts of molybdenum, titanium and/or boron, with up to about 0.5 wt. % impurities. The low-alloyed steel is useful for making structural components having a tensile strength of greater than about 1000 to about 2000 MPa, a yield strength of greater than about 700 to approximately 950 MPa; a break elongation of greater than about 17% and a scaling resistance of greater than about 650° C.

IPC 8 full level
C22C 38/22 (2006.01); **C22C 38/28** (2006.01); **C22C 38/32** (2006.01); **C22C 38/34** (2006.01)

CPC (source: EP US)
C21D 9/00 (2013.01 - EP US); **C22C 38/22** (2013.01 - EP US); **C22C 38/28** (2013.01 - EP US); **C22C 38/32** (2013.01 - EP US);
C22C 38/34 (2013.01 - EP US)

Citation (examination)
DE 19549094 A1 19970424 - HYUNDAI MOTOR CO LTD [KR]

Cited by
DE102014010600A1; WO2017021565A1; WO2016162023A1; WO2023198394A1; WO2016008555A1; DE102015105448A1

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

DOCDB simple family (publication)
DE 102012111679 A1 20130725; BR 102013001355 A2 20141202; BR 102013001355 B1 20190226; EP 2617855 A2 20130724;
EP 2617855 A3 20130911; EP 2617855 B1 20160928; LT 2617855 T 20170327; MX 2013000620 A 20130718; MX 356197 B 20180518;
US 10041157 B2 20180807; US 2013189146 A1 20130725

DOCDB simple family (application)
DE 102012111679 A 20121130; BR 102013001355 A 20130118; EP 12198668 A 20121220; LT 12198668 T 20121220;
MX 2013000620 A 20130116; US 201313744828 A 20130118