

Title (en)
HIGH STRENGTH, HIGH IMPACT TOUGHNESS STEEL ALLOY, AN ARTICLE OF MANUFACTURE MADE THEREFROM, AND A METHOD FOR MAKING THE SAME

Title (de)
HOCHFESTE STAHLLEGIERUNG MIT HOHER SCHLAGZÄHIGKEIT, DARAUS HERGESTELLTER GEGENSTAND UND VERFAHREN ZU DESSEN HERSTELLUNG

Title (fr)
ALLIAGE D'ACIER À HAUTE RÉSISTANCE ET AYANT UNE FORTE TÉNACITÉ À L'IMPACT, ARTICLE FABRIQUÉ À PARTIR DE CET ALLIAGE ET PROCÉDÉ DE FABRICATION ASSOCIÉ

Publication
EP 4008801 A1 20220608 (EN)

Application
EP 21211845 A 20211201

Priority
US 202063119924 P 20201201

Abstract (en)
A steel alloy is disclosed. The alloy contains in weight percent: C about 0.21-about 0.27, Mn about 0.1 max, Si about 0.1 max, P about 0.005 max, S about 0.002 max, Cr about 1.2-about 1.8, Mo about 1.1-about 1.9, V about 0.2-about 0.4, Ni about 3.0-about 3.8, Nb about 0.005-about 0.03, Cu about 0.10 max, Al about 0.02 max. The balance of the alloy is iron, impurities, and incidental amounts of residual elements that do not adversely affect the basic and novel properties provided by the alloy. An article of manufacture and method of making same are also disclosed.

IPC 8 full level
C22C 38/44 (2006.01); **C21D 1/18** (2006.01); **C21D 6/00** (2006.01); **C21D 8/00** (2006.01); **C21D 9/10** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/42** (2006.01); **C22C 38/46** (2006.01); **C22C 38/48** (2006.01)

CPC (source: EP US)
C21D 1/18 (2013.01 - EP); **C21D 6/004** (2013.01 - EP); **C21D 8/005** (2013.01 - EP); **C21D 8/0226** (2013.01 - US); **C21D 8/0273** (2013.01 - US); **C21D 9/10** (2013.01 - EP US); **C22C 38/002** (2013.01 - US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - US); **C22C 38/42** (2013.01 - EP US); **C22C 38/44** (2013.01 - EP US); **C22C 38/46** (2013.01 - EP US); **C22C 38/48** (2013.01 - EP US)

Citation (search report)
• [I] GB 1009924 A 19651117 - REPUBLIC STEEL CORP
• [A] EP 0225425 A2 19870616 - KOBE STEEL LTD [JP]
• [A] JP H02145750 A 19900605 - TOSHIBA CORP
• [A] CN 111500928 A 20200807 - UNIV BEIJING SCIENCE & TECH
• [A] US 4985201 A 19910115 - CHANG KEH-MINN [US], et al

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 4008801 A1 20220608; US 2022170141 A1 20220602

DOCDB simple family (application)
EP 21211845 A 20211201; US 202117539394 A 20211201