Title (en)

HIGH STRENG PRECIPTATION HARDENABLE STAINLESS STEEL

Title (de)

HÄRTBARER GEFÄLLTER EDELSTAHL VON HOHER FESTIGKEIT

Title (fr)

ACIER INOXYDABLE DURCISSABLE PAR PRÉCIPITATION À HAUTE RÉSISTANCE

Publication

EP 2929062 A1 20151014 (EN)

Application

EP 13814314 A 20131206

Priority

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- US 2013073542 W 20131206

Abstract (en)

[origin: US2014161658A1] A precipitation hardenable, martensitic stainless steel alloy is disclosed. The alloy has the following composition in weight percent, about C 0.03 max Mn 1.0 max Si 0.75 max P 0.040 max S 0.020 max Cr 10-13 Ni 10.5-11.6 Mo 0.25-1.5 Co 0.5-1.5 Cu 0.75 max Ti 1.5-1.8 Al 0.3-0.8 Nb 0.3-0.8 B 0.010 max N 0.030 max The balance is iron and usual impurities. The disclosed alloy provides a unique combination of corrosion resistance, strength, and toughness.

IPC 8 full level

C22C 38/00 (2006.01); **C21D 6/00** (2006.01); **C21D 6/02** (2006.01); **C21D 6/04** (2006.01); **C21D 9/00** (2006.01); **C22C 38/06** (2006.01); **C22C 38/44** (2006.01); **C22C 38/48** (2006.01); **C22C 38/50** (2006.01); **C22C 38/52** (2006.01); **C22C 38/54** (2006.01)

CPC (source: EP US)

C21D 1/06 (2013.01 - EP US); **C21D 6/004** (2013.01 - EP US); **C22C 38/001** (2013.01 - EP US); **C22C 38/002** (2013.01 - EP US); **C22C 38/004** (2013.01 - EP US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP US); **C22C 38/44** (2013.01 - EP US); **C22C 38/48** (2013.01 - EP US); **C22C 38/50** (2013.01 - EP US); **C22C 38/52** (2013.01 - EP US); **C22C 38/54** (2013.01 - EP US); C21D 6/02 (2013.01 - EP US); C21D 6/04 (2013.01 - EP US); C21D 9/0068 (2013.01 - EP US); C21D 2211/008 (2013.01 - EP US)

Citation (search report)

See references of WO 2014089418A1

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US 2014161658 A1 20140612; AU 2013355066 A1 20140612; AU 2013355066 B2 20161103; BR 112015013006 A2 20170711; CA 2893272 A1 20140612; CA 2893272 C 20190423; CN 105102649 A 20151125; EP 2929062 A1 20151014; JP 2016504498 A 20160212; JP 6117372 B2 20170419; KR 101780875 B1 20170921; KR 20150082614 A 20150715; US 2016319406 A1 20161103; US 2018320256 A1 20181108; WO 2014089418 A1 20140612

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