

Title (en)

ULTRA-HIGH STRENGTH MARTENSITIC ALLOY

Title (de)

ULTRAHOCHFESTE MARTENSITISCHE LEGIERUNG

Title (fr)

ALLIAGE MARTENSITIQUE DE RESISTANCE ULTRA ELEVEE

Publication

EP 1971700 A1 20080924 (EN)

Application

EP 06836627 A 20061030

Priority

- US 2006042205 W 20061030
- US 28308405 A 20051118

Abstract (en)

[origin: WO2007058759A1] An age hardenable martensitic steel alloy is disclosed. The alloy has the following composition in weight percent. C 0.30-0.36; Mn 0.05 max.; Si 0.05 max.; P 0.01 max.; S 0.0010 max.; Cr 1.30-3.2; Ni 10.0-13.0; Mo 1.0-2.70; Co 13.8-17.4; Ti 0.02 max.; Al 0.005 max.; Ce 0.030 max.; La 0.010 max. The balance is iron and the usual impurities. The composition of this alloy is balanced to provide a unique combination of very high strength, together with good toughness, ductility, and resistance to fatigue.

IPC 8 full level

C22C 38/10 (2006.01)

CPC (source: EP KR US)

C22C 38/005 (2013.01 - KR); **C22C 38/44** (2013.01 - EP KR US); **C22C 38/52** (2013.01 - EP KR US)

Citation (search report)

See references of WO 2007058759A1

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