

Title (en)
NICKEL-CHROMIUM ALLOY

Title (de)
NICKEL-CHROM-LEGIERUNG

Title (fr)
ALLIAGE NICKEL-CHROME

Publication
EP 2350329 A1 20110803 (DE)

Application
EP 09744619 A 20091013

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Abstract (en)
[origin: CA2740160A1] The invention relates to a nickel-chromium alloy, comprising 0.4 to 0.6% carbon, 28 to 33% chromium, 15 to 25% iron, 2 to 6% aluminum, up to 2% silicon, up to 2% manganese, up to 1.5% niobium, up to 1.5% tantalum, up to 1.0% tungsten, up to 1.0% titanium, up to 1.0% zirconium, up to 0.5% yttrium, up to 0.5% cerium, up to 0.5% molybdenum, up to 0.1% nitrogen and the remainder nickel, having high oxidation and carburization resistance, long-time rupture strength and creep resistance. Said alloy is particularly suited as a material for components of petrochemical plants and parts, such as for pipe coils in cracking and reforming furnaces, preheaters and reformer tubes and for use for parts of iron ore direct reduction systems.

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C22C 19/05 (2006.01)

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Citation (search report)
See references of WO 2010043375A1

Citation (third parties)
Third party :
• FR 929727 A 19480106 - WILLIAM JESSOP ANS SONS LTD
• US 3306736 A 19670228 - RUNDELL GENE R
• FR 2429843 A2 19800125 - POMPEY ACIERIES [FR]

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Designated contracting state (EPC)
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 SE SI SK SM TR

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DE 102008051014 A1 20100422; BR 122016030244 A2 20170829; BR PI0920279 B1 20200915; CA 2740160 A1 20100422; CA 2740160 C 20160712; CN 102187003 A 20110914; CN 102187003 B 20131106; EA 020052 B1 20140829; EA 201170560 A1 20111230; EP 2350329 A1 20110803; EP 2350329 B1 20171220; EP 3330390 A1 20180606; EP 3330390 B1 20190828; EP 3550045 A1 20191009; ES 2661333 T3 20180328; ES 2747898 T3 20200312; HU E037289 T2 20180828; HU E046718 T2 20200330; IL 212098 A0 20110630; IL 212098 A 20171031; JP 2012505314 A 20120301; JP 2014185397 A 20141002; JP 2017128815 A 20170727; JP 2018131690 A 20180823; JP 6320590 B2 20180509; JP 6486532 B2 20190320; KR 101738390 B1 20170522; KR 102029019 B1 20191007; KR 102064375 B1 20200109; KR 102080674 B1 20200224; KR 20110079881 A 20110711; KR 20170058442 A 20170526; KR 20190112208 A 20191002; KR 20190137965 A 20191211; MX 2011003923 A 20110503; MY 160131 A 20170228; PL 2350329 T3 20180530; PL 3330390 T3 20200518; PT 2350329 T 20180308; PT 3330390 T 20191024; TR 201802979 T4 20180321; UA 109631 C2 20150925; US 10053756 B2 20180821; US 2011272070 A1 20111110; US 2016108501 A1 20160421; US 9249482 B2 20160202; WO 2010043375 A1 20100422; ZA 201102259 B 20111130

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