

Title (en)
ZIRCONIUM ALLOYS WITH IMPROVED CORROSION/CREEP RESISTANCE DUE TO FINAL HEAT TREATMENTS

Title (de)
ZIRKONIUMLEGIERUNGEN MIT VERBESSERTER KORROSIONS-/KRIECHBESTÄNDIGKEIT AUFGRUND ABSCHLIESSENDER WÄRMEBEHANDLUNG

Title (fr)
ALLIAGES DE ZIRCONIUM PRÉSENTANT UNE MEILLEURE RÉSISTANCE À LA CORROSION/AU FLUAGE GRÂCE À DES TRAITEMENTS THERMIQUES FINAUX

Publication
EP 2721188 A4 20150429 (EN)

Application
EP 12800643 A 20120518

Priority

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- US 2012038471 W 20120518

Abstract (en)
[origin: WO2012173738A1] Articles, such as tubing or strips, which have excellent corrosion resistance to water or steam at elevated temperatures, are produced from alloys having 0.2 to 1.5 weight percent niobium, 0.01 to 0.6 weight percent iron, and optionally additional alloy elements selected from the group consisting of tin, chromium, copper, vanadium, and nickel with the balance at least 97 weight percent zirconium, including impurities, where a necessary final heat treatment includes one of i) a SRA or PRXA (15-20% RXA) final heat treatment, or ii) a PRXA (80-95% RXA) or RXA final heat treatment.

IPC 8 full level
C22C 16/00 (2006.01); **C22F 1/18** (2006.01)

CPC (source: EP)
C22C 16/00 (2013.01); **C22F 1/18** (2013.01); **C22F 1/186** (2013.01); **G21C 3/07** (2013.01); **Y02E 30/30** (2013.01)

Citation (search report)

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US 2012038471 W 20120518; CN 201280029053 A 20120518; CN 201810867175 A 20120518; EP 12800643 A 20120518; EP 16000804 A 20120518; ES 16000804 T 20120518; JP 2014515830 A 20120518; KR 20147000611 A 20120518; TW 101121397 A 20120614