

Title (en)
HIGH NITROGEN, MULTI-PRINCIPAL ELEMENT, HIGH ENTROPY CORROSION RESISTANT ALLOY

Title (de)
STICKSTOFFREICHES, MEHRFACH-HAUPTELEMENT, KORROSIONSBESTÄNDIGE LEGIERUNG MIT HOHER ENTROPIE

Title (fr)
ALLIAGE DE MULTIPLES ÉLÉMENTS PRINCIPAUX, À HAUTE TENEUR EN AZOTE, RÉSISTANT À LA CORROSION ET À ENTROPIE ÉLEVÉE

Publication
EP 3592877 A1 20200115 (EN)

Application
EP 18713500 A 20180308

Priority
• US 201762468600 P 20170308
• US 2018021461 W 20180308

Abstract (en)
[origin: WO2018165369A1] A multi-principal element, corrosion resistant alloy is disclosed. The alloy has the following composition in weight percent: Co about 13 to about 28 Ni about 13 to about 28 Fe+Mn about 13 to about 28 Cr about 13 to about 37 Mo about 8 to about 28 N about 0.10 to about 1.00. The alloy also includes the usual impurities found in corrosion resistant alloys intended for the same or similar use. In addition, one or both of W and V may be substituted for some or all of the Mo. The alloy provides a solid solution that is substantially all FCC phase, but may include minor amounts of secondary phases that do not adversely affect the corrosion resistance and mechanical properties provided by the alloy.

IPC 8 full level
C22C 30/00 (2006.01)

CPC (source: EP KR RU US)
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Citation (search report)
See references of WO 2018165369A1

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