

Title (en)
WROUGHT PRODUCTS MADE OF 2XXX ALLOY HAVING AN OPTIMIZED CORROSION RESISTANCE, AND METHOD FOR OBTAINING SAME

Title (de)
KNETPRODUKTE AUS 2XXX-LEGIERUNG MIT OPTIMIERTER KORROSIONSBESTÄNDIGKEIT UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)
PRODUITS CORROYES EN ALLIAGE 2XXX PRESENTANT UNE RESISTANCE A LA CORROSION OPTIMISEE ET PROCEDE D'OBTENTION

Publication
EP 4263892 A1 20231025 (FR)

Application
EP 21854746 A 20211216

Priority
• FR 2013653 A 20201218
• FR 2021052370 W 20211216

Abstract (en)
[origin: WO2022129806A1] Method for thermomechanical treatment of wrought products made of 2000 series aluminum alloy comprising, in % by weight, Cu 3.5 - 5.8; Mg 0.2 - 1.5; Mn \leq 0.9; Fe \leq 0.15; Si \leq 0.15; Zr \leq 0.25; Ag \leq 0.8; Zn \leq 0.8; Ti 0.02-0.15; unavoidable impurities \leq 0.05 each and \leq 0.15 in total; remainder aluminum, enabling an improvement in the stress corrosion resistance. It comprises a tempering consisting of two sequences. The first sequence is defined by a maximum temperature T1max between 130°C and 180°C and by a hold time at a temperature between 130°C and 180°C which equates to an equivalent time (formula i) calculated at 160°C between 10 h and 80 h. The second sequence is defined by a temperature T2°c (t) below T1max and a hold time t2 at a temperature between 100°C and 130°C, which equates to an equivalent time (formula ii) calculated at 160°C such that (formula iii) is between 0.3% and 15% of the equivalent time (formula iv) calculated for the first sequence.

IPC 8 full level
C22C 21/16 (2006.01); **C22C 1/02** (2006.01); **C22F 1/057** (2006.01)

CPC (source: EP US)
C22C 21/14 (2013.01 - US); **C22C 21/16** (2013.01 - EP US); **C22C 21/18** (2013.01 - US); **C22F 1/002** (2013.01 - US); **C22F 1/057** (2013.01 - EP US); **C22C 1/026** (2013.01 - EP)

Citation (search report)
See references of WO 2022129806A1

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BA ME

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KH MA MD TN

DOCDB simple family (publication)
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DOCDB simple family (application)
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