

Title (en)
ALUMINUM ALLOY MEMBER AND METHOD FOR MANUFACTURING SAME

Title (de)
ALUMINIUMLEGIERUNGSELEMENT UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)
ÉLÉMENT EN ALLIAGE D'ALUMINIUM ET SON PROCÉDÉ DE FABRICATION

Publication
EP 4130315 A4 20230823 (EN)

Application
EP 21774412 A 20210310

Priority
• JP 2020057188 A 20200327
• JP 2021009517 W 20210310

Abstract (en)
[origin: EP4130315A1] The present invention provides: an aluminum alloy member which can be manufactured at a relatively low cost and has a light weight, and which can have high dimensional accuracy under a high-temperature environment and is less likely to undergo the color-fading of a blackened surface even under a high-temperature environment, and has excellent heat resistance; and a method for manufacturing the aluminum alloy member with high efficiency. The aluminum alloy member according to the present invention comprises: a substrate which comprises an extruded material of an aluminum powder alloy having an Si content of 20 to 40% by mass and has an anodic oxide coating film formed on the surface thereof; and an electrolytically colored layer which is formed by precipitating a metal or a metal salt on voids in the anodic oxide coating film.

IPC 8 full level
B22F 3/20 (2006.01); **C22C 1/04** (2023.01); **C22C 21/02** (2006.01); **C22C 32/00** (2006.01); **C22F 1/00** (2006.01); **C22F 1/043** (2006.01); **C25D 11/04** (2006.01); **C25D 11/22** (2006.01); **B22F 3/24** (2006.01); **C25D 11/08** (2006.01)

CPC (source: EP KR US)
B22F 3/16 (2013.01 - US); **B22F 3/20** (2013.01 - EP US); **C22C 1/04** (2013.01 - KR); **C22C 1/0416** (2013.01 - EP); **C22C 21/02** (2013.01 - EP KR US); **C22C 32/0036** (2013.01 - EP); **C22C 32/0078** (2013.01 - EP); **C22F 1/043** (2013.01 - EP KR US); **C25D 11/04** (2013.01 - EP); **C25D 11/22** (2013.01 - EP KR US); **B22F 2003/242** (2013.01 - EP US); **B22F 2301/052** (2013.01 - US); **B22F 2998/10** (2013.01 - EP US); **B22F 2999/00** (2013.01 - US); **C25D 11/08** (2013.01 - EP)

Citation (search report)
• [Y] WO 2019116755 A1 20190620 - NIPPON LIGHT METAL CO [JP], et al & EP 3726292 A1 20201021 - NIPPON LIGHT METAL CO [JP]
• [Y] EP 3062149 A1 20160831 - NIPPON LIGHT METAL CO [JP]
• [Y] JP H09236908 A 19970909 - SKY ALUMINIUM
• See references of WO 2021193064A1

Designated contracting state (EPC)
AL 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 RS SE SI SK SM TR

DOCDB simple family (publication)
EP 4130315 A1 20230208; EP 4130315 A4 20230823; CN 115315544 A 20221108; JP WO2021193064 A1 20210930;
KR 20220158055 A 20221129; TW 202140862 A 20211101; US 2023175159 A1 20230608; WO 2021193064 A1 20210930

DOCDB simple family (application)
EP 21774412 A 20210310; CN 202180024400 A 20210310; JP 2021009517 W 20210310; JP 2022509562 A 20210310;
KR 20227036968 A 20210310; TW 110110807 A 20210325; US 202117913035 A 20210310