

Title (en)
DIE-CAST ALUMINUM ALLOY, PREPARATION METHOD THEREFOR, AND STRUCTURAL MEMBER FOR COMMUNICATION PRODUCT

Title (de)
ALUMINIUM-DRUCKGUSSLEGIERUNG, VERFAHREN ZU IHRER HERSTELLUNG UND STRUKTURELEMENT FÜR EIN KOMMUNIKATIONSPRODUKT

Title (fr)
ALLIAGE D'ALUMINIUM COULÉ SOUS PRESSION, SON PROCÉDÉ DE PRÉPARATION ET ÉLÉMENT STRUCTURAL POUR PRODUIT DE COMMUNICATION

Publication
EP 3954798 A4 20220608 (EN)

Application
EP 20802262 A 20200427

Priority
• CN 201910372923 A 20190506
• CN 2020087148 W 20200427

Abstract (en)
[origin: EP3954798A1] Disclosed are a die-cast aluminum alloy, a method for preparing the die-cast aluminum alloy, and a structural member for a communications product prepared by using the die-cast aluminum alloy. The die-cast aluminum alloy includes the following components in mass percentages: 0.1-7% of magnesium, 7-35% of zinc, 0.2-0.8% of manganese, 0.1-0.7% of iron, 0.07-0.2% of titanium and/or zirconium, with the inevitable impurities being ≤0.3%, and the balance being aluminum. The die-cast aluminum alloy features high strength, high toughness, and excellent fluidity, and is applicable to molding complex thin-walled products.

IPC 8 full level
C22C 21/10 (2006.01); **C22C 1/03** (2006.01)

CPC (source: CN EP)
B22D 21/04 (2013.01 - EP); **C22C 1/026** (2013.01 - CN EP); **C22C 1/03** (2013.01 - CN); **C22C 21/10** (2013.01 - CN EP);
C22F 1/047 (2013.01 - EP)

Citation (search report)
• [XI] WO 2017182101 A1 20171026 - RHEINFELDEN ALLOYS GMBH & CO KG [DE]
• [I] WO 2016034857 A1 20160310 - UNIV BRUNEL [GB]
• [A] US 2012087826 A1 20120412 - SENKOV OLEG N [US], et al
• [A] WO 2006127812 A2 20061130 - HOWMET CORP [US], et al
• [A] CN 109554560 A 20190402 - LIAONING ZHONGWANG GROUP CO
• See references of WO 2020224468A1

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3954798 A1 20220216; EP 3954798 A4 20220608; EP 3954798 B1 20230405; CN 110129637 A 20190816; WO 2020224468 A1 20201112

DOCDB simple family (application)
EP 20802262 A 20200427; CN 201910372923 A 20190506; CN 2020087148 W 20200427