

Title (en)

DIE-CASTING ALUMINUM ALLOY, ALUMINUM ALLOY DIE-CAST MATERIAL, AND METHOD FOR MANUFACTURING SAME

Title (de)

DRUCKGUSSALUMINIUMLEGIERUNG, DRUCKGUSSMATERIAL AUS ALUMINIUMLEGIERUNG UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)

ALLIAGE D'ALUMINIUM POUR MOULAGE SOUS PRESSION, MATÉRIAUX EN ALLIAGE D'ALUMINIUM MOULÉ SOUS PRESSION ET LEUR PROCÉDÉ DE FABRICATION

Publication

EP 4130314 A4 20231206 (EN)

Application

EP 20929406 A 20200403

Priority

JP 2020015329 W 20200403

Abstract (en)

[origin: EP4130314A1] The present invention relates to a die-cast aluminum alloy, an aluminum alloy die-cast material, and a method for manufacturing the same for a large heat sink with excellent thermal conductivity and castability and a tool/container in which heat dissipation properties are required. The die-cast aluminum alloy comprises Si: 9.5 % by mass or more and 12 % by mass or less, Fe: 0.3 % by mass or more and 1.0 % by mass or less, and Mg: 0.15 % by mass or more and 0.35 % by mass or less, the remainder being Al and unavoidable impurities.

IPC 8 full level

C22C 21/02 (2006.01); **B22D 21/04** (2006.01); **C22F 1/043** (2006.01)

CPC (source: EP KR)

B22D 21/007 (2013.01 - KR); **B22D 21/04** (2013.01 - EP); **C22C 21/02** (2013.01 - EP KR); **C22F 1/043** (2013.01 - EP KR)

Citation (search report)

- [XYI] JP 2011100672 A 20110519 - NIPPON LIGHT METAL CO
- [Y] JP 2004269937 A 20040930 - SUMITOMO LIGHT METAL IND
- [Y] JP H08134578 A 19960528 - NIPPON LIGHT METAL CO
- [A] CN 108866396 A 20181123 - GUANGZHOU ZHIYUAN NEW MATERIAL TECH CO LTD, et al
- [A] JP 2006063420 A 20060309 - RYOKA MACS CORP
- See also references of WO 2021199428A1

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 4130314 A1 20230208; EP 4130314 A4 20231206; JP 7449367 B2 20240313; JP WO2021199428 A1 20211007;
KR 20220156589 A 20221125; WO 2021199428 A1 20211007

DOCDB simple family (application)

EP 20929406 A 20200403; JP 2020015329 W 20200403; JP 2022511481 A 20200403; KR 20227036309 A 20200403