

Title (en)

DIE CAST COMPONENT AND METHOD FOR PRODUCING A DIE CAST COMPONENT

Title (de)

DRUCKGUSSBAUTEIL UND VERFAHREN ZUR HERSTELLUNG EINES DRUCKGUSSBAUTEILS

Title (fr)

COMPOSANT MOULÉ SOUS PRESSION ET PROCÉDÉ DE FABRICATION D'UN COMPOSANT MOULÉ SOUS PRESSION

Publication

EP 3825428 B1 20221116 (DE)

Application

EP 19211356 A 20191125

Priority

EP 19211356 A 20191125

Abstract (en)

[origin: WO2021105229A1] The invention relates to a method for producing a die casting part and a die casting part produced with said method. According to the invention, an excellent punch-riveting suitability is achieved when the die casting part has a curable aluminium alloy with the following alloy constituents: 5.0 to 9.0 wt.-% silicon (Si), 0.25 to 0.5 wt.-% magnesium (Mg) and as the remainder aluminium and unavoidable impurities caused by production each with max. 0.05 wt.-% and in total at most 0.15 wt.-%, wherein the die casting part has a yield point (Rp0.2) of greater than 190 MPa and an elongation at break (A5) of greater than or equal to 7 %, and uniform strain (Ag) and necking strain (Az) meet the condition $Az \geq Ag/2$.

IPC 8 full level

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

CPC (source: EP US)

C22C 21/02 (2013.01 - EP US); **C22C 21/04** (2013.01 - EP); **C22F 1/002** (2013.01 - US); **C22F 1/043** (2013.01 - EP US)

Cited by

EP4186988A1; WO2023099520A1

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 3825428 A1 20210526; **EP 3825428 B1 20221116**; CN 115279931 A 20221101; HU E061156 T2 20230528; HU E061156 T4 20230828; MX 2022006232 A 20221027; PL 3825428 T3 20230320; US 2023008295 A1 20230112; WO 2021105229 A1 20210603

DOCDB simple family (application)

EP 19211356 A 20191125; CN 202080079803 A 20201125; EP 2020083393 W 20201125; HU E19211356 A 20191125; MX 2022006232 A 20201125; PL 19211356 T 20191125; US 202017779777 A 20201125