

Title (en)
Al-Mg-Si-Mn-Fe CASTING ALLOYS

Title (de)
AL-MG-SI-MN-FE-GUSSLEGIERUNGEN

Title (fr)
ALLIAGES DE MOULAGE D'AL-MG-SI-MN-FE

Publication
EP 3589766 A4 20200902 (EN)

Application
EP 19773328 A 20190506

Priority
• US 201862667930 P 20180507
• US 2019030924 W 20190506

Abstract (en)
[origin: WO2019217319A1] New aluminum casting (foundry) alloys are disclosed. The new aluminum casting alloys generally include from 2.5 to 5.0 wt. % Mg, from 0.70 to 2.5 wt. % Si, wherein the ratio of Mg/Si (in weight percent) is from 1.7 to 3.6, from 0.40 to 1.50 wt. % Mn, from 0.15 to 0.60 wt. % Fe, optionally up to 0.15 wt. % Ti, optionally up to 0.10 wt. % Sr, optionally up to 0.15 wt. % of any of Zr, Sc, Hf, V, and Cr, the balance being aluminum and unavoidable impurities. The new aluminum casting alloys may be high pressure die cast, such as into automotive components. The new aluminum alloys may be supplied in an F or a T5 temper, for instance.

IPC 8 full level
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B22D 21/007 (2013.01 - US); **B22D 21/04** (2013.01 - EP KR); **C22C 21/08** (2013.01 - EP KR US); **C22F 1/047** (2013.01 - US)

Citation (search report)
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• See also references of WO 2019217319A1

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WO 2019217319 A1 20191114; CA 3099043 A1 20191114; CN 110603341 A 20191220; DE 202019105466 U1 20200113;
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ES 2949017 T3 20230925; JP 2021523291 A 20210902; JP 7438134 B2 20240226; KR 20200140917 A 20201216; MX 2020011679 A 20201210;
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