

Title (en)

MANUFACTURING METHOD OF MAGNESIUM BASED ALLOY FOR HIGH TEMPERATURE

Title (de)

HERSTELLUNGSVERFAHREN EINER MAGNESIUMBASIERTE LEGIERUNG FÜR HOHE TEMPERATUREN

Title (fr)

PROCÉDÉ DE FABRICATION D'UN ALLIAGE À BASE DE MAGNESIUM POUR HAUTE TEMPERATURE

Publication

EP 2374905 B1 20190123 (EN)

Application

EP 11159526 A 20110324

Priority

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- KR 20100135979 A 20101227

Abstract (en)

[origin: EP2374905A2] Provided is a manufacturing method of a magnesium-based alloy for high temperature. The manufacturing method includes melting a magnesium (Mg) or magnesium alloy into a liquid phase, adding calcium oxide (CaO) 1.4 times the weight of a final calcium (Ca) target composition onto a surface of a melt in which the magnesium or the magnesium alloy is melted, forming a targeted amount of Ca in the magnesium or magnesium alloy through a reduction reaction between the melt and the added CaO. Specifically, the amount of Ca formed is in the range of 0.8 wt% to 2.4 wt%, and a final composition of the Mg alloy includes 6.0 to 8.0 wt% of aluminum (Al), 0.1 to 0.3 wt% of manganese (Mn), 0.2 to 0.3 wt% of strontium (Sr), less than 0.04 wt of zinc (Zn), less than 0.9 wt of tin (Sn), and a balance being Mg.

IPC 8 full level

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CPC (source: EP)

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