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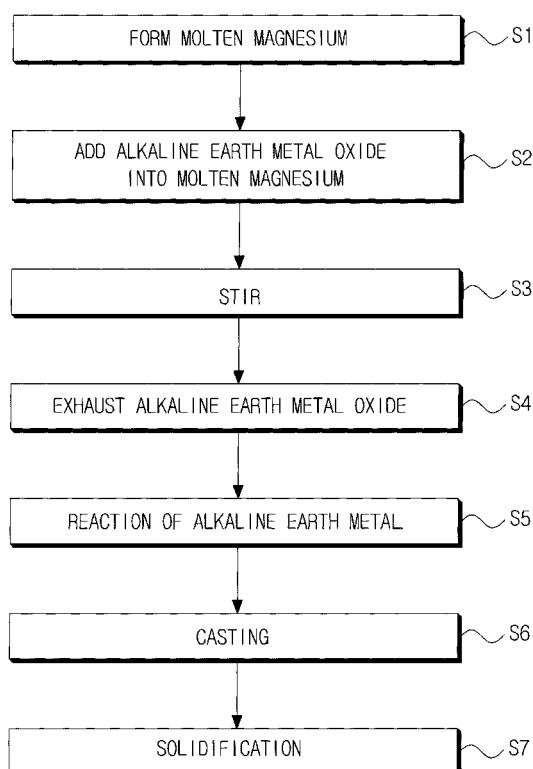
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(54) **Magnesium-based alloy for high temperature and a manufacturing method thereof**

(57) 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.

Figure 1





EUROPEAN SEARCH REPORT

Application Number
EP 11 15 9526

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	WO 2010/032893 A1 (KOREA IND TECH INST [KR]; KIM SHAE KWANG [KR]; LEE JIN KYU [KR]) 25 March 2010 (2010-03-25) * figure 1; example 1 * -----	1-14	INV. C22C1/06 C22C23/02 B22D21/00
			TECHNICAL FIELDS SEARCHED (IPC)
			C22C B22D
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 31 October 2011	Examiner González Junquera, J
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2010032893 A1	25-03-2010	KR 20100034773 A	02-04-2010

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82