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(54) **Manufacturing process of composite plates made of magnesium alloys and ceramic foam and composite plates**

(57) Process bases on the infiltration of metal melt (matrix) in the pores of ceramic foam (hardening phase). Method of casting, sizing of mould, preheating of ceramic foam or mould, pouring temperature, use of insulating cover and vibrating enable complete filling the pores with metal. For manufacturing of composite plates the gravity casting and vibrating of total system during casting and solidification is used. Such composite plates are used in automotive, aircraft and military industry because composite plates have good mechanical properties, high break-through strength at low density and resistance to cutting.

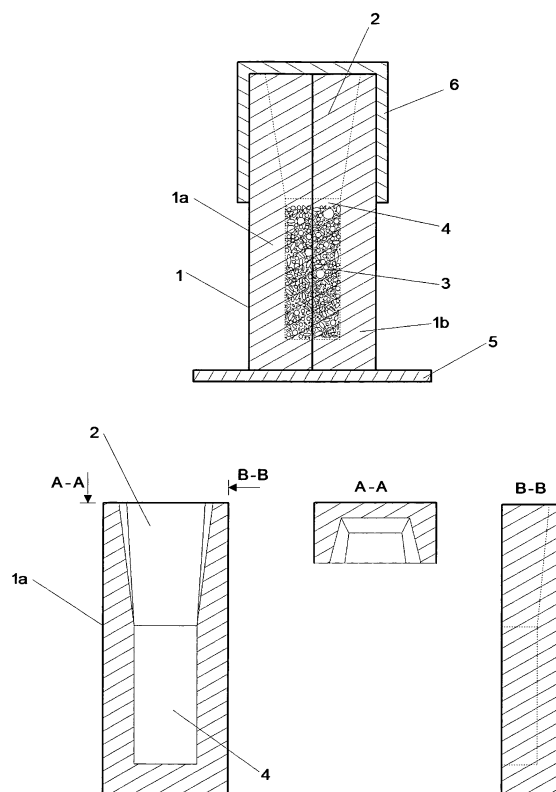


Figure 1



EUROPEAN SEARCH REPORT

Application Number
EP 12 46 8001

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A,D	ZESCHKY J ET AL: "Mg alloy infiltrated Si-O-C ceramic foams", MATERIALS SCIENCE AND ENGINEERING A: STRUCTURAL MATERIALS:PROPERTIES, MICROSTRUCTURE & PROCESSING, LAUSANNE, CH, vol. 403, no. 1-2, 25 August 2005 (2005-08-25), pages 215-221, XP027791870, ISSN: 0921-5093 [retrieved on 2005-08-25] * the whole document *	1	INV. B22D19/02 B22D27/08
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			TECHNICAL FIELDS SEARCHED (IPC)
			B22D
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 21 April 2015	Examiner Scheid, Michael
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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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 12 46 8001

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on

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21-04-2015

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