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(54) **Powder metal mold**

(57) Described is a process of producing a component from a gamma prime or gamma double prime precipitation-strengthened nickel-base superalloy. The process includes forming a powder of the superalloy and filling a can (10) with the powder wherein the can includes nickel-chromium-molybdenum-niobium alloy. The can (10) is evacuated and sealed in a controlled environment. The can (10) and the powder are consolidated at a temperature, time, and pressure to produce a consolidation. The consolidated billet is forged at a temperature and strain rate to produce a forging with a uniform fine grain throughout. A further aspect described is a mold including a nickel-chromium-molybdenum-niobium alloy can.

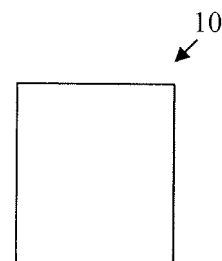


Figure 1

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## EUROPEAN SEARCH REPORT

Application Number  
EP 10 17 2220

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A	* page 10; claims 21-24 *	1-12	
			TECHNICAL FIELDS SEARCHED (IPC)
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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 4 February 2014	Examiner Helgadóttir, Inga
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  
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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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