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54 **Sintered bodies of composite materials and their manufacture.**

57 A body comprising a mixture of particulate materials is formed by mixing together aluminium and/or an aluminium alloy powder with a proportion of alumina powder, compacting and sintering the resultant mass, and reshaping the resultant mass under pressure after sintering. A body so formed possesses a high hot strength and, by the choice of appropriate proportions of the powdered materials is particularly suitable for forming the crown of an internal combustion engine piston. The invention also relates to the manufacture of such bodies and pistons.

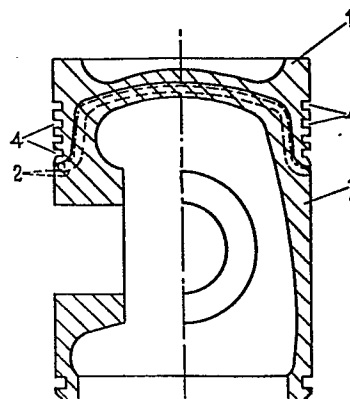


FIG. 1.



European Patent  
Office

# EUROPEAN SEARCH REPORT

0035348

Application number

EP 81 30 0719

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int. Cl. <sup>3</sup> )
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	DE - A - 837 467 (ALUMINIUM INDUSTRIE A.G.) * Claims 1,3,5; page 4, lines 121-126 *	1-16	C 22 C 32/00 B 32 B 5/14 15/20 F 02 F 3/12 B 22 F 7/06
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X	US - A - 3 065 073 (H. HUG) * Claims 1,3,7; column 2, lines 15-21 *	1,4,5, 8,9, 11,12, 16	
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X	WO - A - 79/01103 (THE BRITISH INTERNAL COMBUSTION ENGINE RESEARCH INSTITUTE LTD.) * Claims 1-17 *	2-16	TECHNICAL FIELDS SEARCHED (Int. Cl. <sup>3</sup> )  C 22 C B 22 F F 02 F 3/02 3/10 3/12 3/14 3/28 F 16 J 1/02 11/04
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	GB - A - 671 606 (MASCHINENFABRIK AUGSBURG-NÜRNBERG A.G.) * Claims 1-7 *	2-8	
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			CATEGORY OF CITED DOCUMENTS
			X: particularly relevant A: technological background O: non-written disclosure P: intermediate document T: theory or principle underlying the invention E: conflicting application D: document cited in the application L: citation for other reasons
			&: member of the same patent family. corresponding document
X The present search report has been drawn up for all claims			
Place of search	Date of completion of the search	Examiner	
The Hague	01-10-1981	SCHRUEERS	