

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



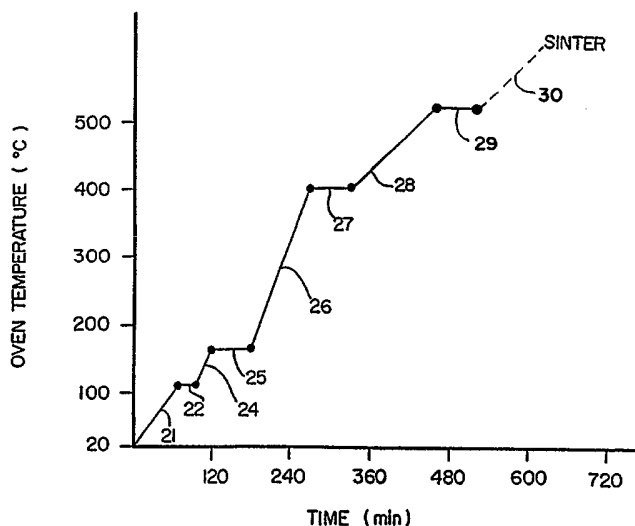
(43) International Publication Date
3 January 2002 (03.01.2002)

PCT

(10) International Publication Number
WO 02/000569 A3

- (51) International Patent Classification⁷: C04B 35/634, 35/638, B22F 1/00, 3/10, C04B 35/632, C08K 5/20, 5/31, 5/14, C08L 67/04, 23/10, 33/10, 67/00
- (21) International Application Number: PCT/US01/20141
- (22) International Filing Date: 22 June 2001 (22.06.2001)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
09/603,678 26 June 2000 (26.06.2000) US
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- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
- (88) Date of publication of the international search report:
30 October 2003
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: BINDER SYSTEM AND METHOD FOR FORMING SINTERED PARTS BY POWDER INJECTION MOLDING



(57) Abstract: The present invention relates to a binder composition comprising an aliphatic polyester polymer; an ethylenebisamide wax; and a guanidine wetting agent. The composition may also contain an additive which accelerates or extends debinding of the binder composition, and to a method for forming a sintered part by powder injection molding, including the steps of forming a green composition comprising a binder and an inorganic powder, wherein the binder is a composition comprising an aliphatic polyester polymer, an ethylenebisamide wax, and a guanidine wetting agent, and may further include an additive which accelerates or delays completion of debinding of the binder; melting the composition; injecting the composition into a mold for a part; heating the part to a temperature at which the binder decomposes; heating the part to a temperature at which the inorganic powder is sintered.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER					
IPC 7	C04B35/634	C04B35/638	B22F1/00	B22F3/10	C04B35/632
	C08K5/20	C08K5/31	C08K5/14	C08L67/04	C08L23/10
	C08L33/10	C08L67/00			
According to International Patent Classification (IPC) or to both national classification and IPC					
B. FIELDS SEARCHED					
Minimum documentation searched (classification system followed by classification symbols)					
IPC 7	C04B	B22F	C08K	C08L	
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched					
Electronic data base consulted during the international search (name of data base and, where practical, search terms used)					
EPO-Internal, WPI Data, PAJ, CHEM ABS Data					
C. DOCUMENTS CONSIDERED TO BE RELEVANT					
Category °	Citation of document, with indication, where appropriate, of the relevant passages				Relevant to claim No.
P, X	US 6 093 761 A (SCHOFALVI KARL-HEINZ) 25 July 2000 (2000-07-25) column 18, line 32-59; figures 2-4; examples 1,2				1, 2, 8-10, 20-25, 33-35, 37-41, 43
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A document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) *O* document referring to an oral disclosure, use, exhibition or other means *P* document published prior to the international filing date but later than the priority date claimed			*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. *&* document member of the same patent family		
Date of the actual completion of the international search			Date of mailing of the international search report		
22 January 2002			01/02/2002		
Name and mailing address of the ISA			Authorized officer		
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016			Raming, T		

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PCT/US 01/20141

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 01/20141

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