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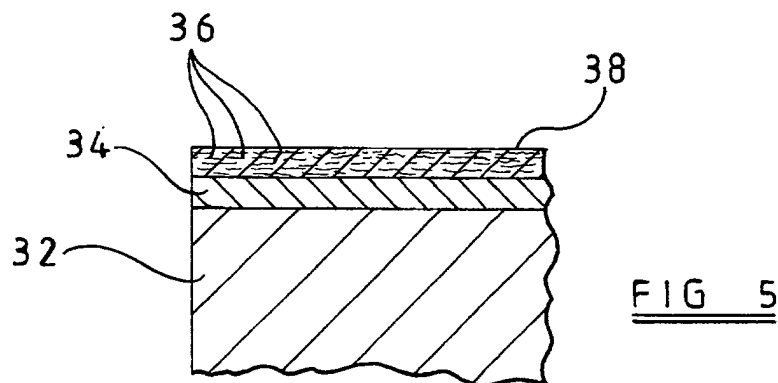
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(54) **Thermal spray application of polymeric material**

(57) A PEEK composite may be applied to a metallic substrate (32) through an HVOF process. The metallic substrate (32) is prepared with a metallic bonding layer (34) that is arc sprayed onto its surface. A powdered PEEK composite material (36) is then heated and pro-

pelled against the substrate (32) and bonding layer (34) by a high velocity oxy fuel technique to uniformly coat the substrate (32). Following the HVOF process, the PEEK coating is annealed to provide a durable, PEEK-coated substrate.



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EUROPEAN SEARCH REPORT

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EP 99 30 7426

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	EP 0 546 802 A (SMITH & NEPHEW RICHARDS INC) 16 June 1993 (1993-06-16) * example 1 *	16, 18	B05D1/08 B05D1/10
A	US 5 021 259 A (SINGELYN JAMES D) 4 June 1991 (1991-06-04) * column 2, line 42 - line 66 *	1	
A	PATENT ABSTRACTS OF JAPAN vol. 017, no. 126 (M-1381), 17 March 1993 (1993-03-17) & JP 04 308746 A (NIPPON STEEL CORP), 30 October 1992 (1992-10-30) * abstract *	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			B05D
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 7 March 2001	Examiner Brothier, J-A
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p>			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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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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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0546802 A	16-06-1993	AU 664579 B	23-11-1995
		AU 3004992 A	10-06-1993
		CA 2084933 A	10-06-1993
		JP 5269194 A	19-10-1993
		US 5370696 A	06-12-1994
US 5021259 A	04-06-1991	NONE	
JP 04308746 A	30-10-1992	NONE	