

Title (en)

Thermal spray application of polymeric material

Title (de)

Verfahren zum thermischen Besprühen von polymeren Materialien

Title (fr)

Pulvérisation thermique de matériaux polymériques

Publication

EP 0988898 A3 20010502 (EN)

Application

EP 99307426 A 19990920

Priority

US 15906098 A 19980923

Abstract (en)

[origin: EP0988898A2] 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 propelled 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. <IMAGE>

IPC 1-7

B05D 1/08; B05D 1/10

IPC 8 full level

B05D 1/10 (2006.01); **C23C 4/02** (2006.01); **C23C 4/04** (2006.01); **C23C 4/18** (2006.01)

CPC (source: EP)

B05D 1/10 (2013.01); **C23C 4/02** (2013.01); **C23C 4/04** (2013.01); **C23C 4/18** (2013.01)

Citation (search report)

- [A] EP 0546802 A2 19930616 - SMITH & NEPHEW RICHARDS INC [US]
- [A] US 5021259 A 19910604 - SINGELYN JAMES D [US]
- [A] PATENT ABSTRACTS OF JAPAN vol. 017, no. 126 (M - 1381) 17 March 1993 (1993-03-17)

Cited by

FR2808461A1; EP3006590A1; EP3603825A3; US11591103B2; US9486832B2; US9981284B2; WO2010135721A3; WO0142525A3; US10113588B2; US10563696B2; US8496018B2; US8807152B2; US9803690B2; US9885100B2; US10458011B2; US11136480B2; US11459481B2; US11767436B2; US9782956B2; US11390773B2; WO2013101928A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

EP 0988898 A2 20000329; EP 0988898 A3 20010502; AR 021821 A1 20020807; CA 2283022 A1 20000323; CN 1256175 A 20000614; ID 24547 A 20000727; JP 2000096203 A 20000404; SG 108212 A1 20050128

DOCDB simple family (application)

EP 99307426 A 19990920; AR P990104805 A 19990923; CA 2283022 A 19990922; CN 99123914 A 19990923; ID 990888 D 19990923; JP 27121899 A 19990924; SG 1999004617 A 19990921