

Title (en)  
Plasma spray apparatus

Title (de)  
Plasmasprühvorrichtung

Title (fr)  
Appareil de pulvérisation à plasma

Publication  
**EP 1657322 A3 20080227 (EN)**

Application  
**EP 05256848 A 20051104**

Priority  
• US 98204104 A 20041104  
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• US 25386805 A 20051019

Abstract (en)  
[origin: EP1657322A2] A method and apparatus for plasma spray coating a portion of a workpiece (24), such as a gas turbine compressor blade, without masking any portions thereof. The apparatus includes a plasma apparatus with an anode (16), cathode (18), and an arc generator for generating an electric arc (20) between the anode (16) and cathode (18). An arc gas emitter injects inert gas through the electric arc (20). The electric arc (20) is operable for ionizing the gas to create a plasma gas stream (21). A powder injector nozzle extends through the anode (16) and injects powdered material (34) into the plasma stream (21) for transfer to the workpiece (24).

IPC 8 full level  
**B05B 7/22** (2006.01); **C23C 4/00** (2006.01); **C23C 4/12** (2006.01)

CPC (source: EP)  
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Citation (search report)  
• [XY] RU 2039613 C1 19950720 - SIB AEROKOSMICHESKAYA AKADEMIY [SU]  
• [X] US 5770273 A 19980623 - OFFER HENRY PETER [US], et al  
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• [XY] EP 0342388 A2 19891123 - BROWNING JAMES A  
• [XY] US 2003185965 A1 20031002 - LIN SHYH-NUNG [US], et al  
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