

Title (en)

Dense oxide coatings by thermal spraying.

Title (de)

Dichte Oxidbeschichtungen beim thermischen Spritzen.

Title (fr)

Revêtement d'oxyde dense par pulvérisation thermique.

Publication

EP 0621079 A1 19941026 (EN)

Application

EP 94106071 A 19940419

Priority

US 4971893 A 19930420

Abstract (en)

A thermal spray gun (10) includes a nozzle member with an axial conduit (34) that conveys a powder stream of heat fusible oxide ceramic in a carrier gas. The conduit (34) terminates at the nozzle face in a plurality of radially divergent orifices (65). A gas cap (14) extends from the nozzle member and defines a combustion chamber (82). An annular flow of a combustible mixture is injected from the nozzle member coaxially into the combustion chamber (82). Air is injected adjacently to the gas cap wall so that a spray stream containing the ceramic is propelled through the open end, preferably supersonic. An aluminum oxide coating sprayed thereby should comprise substantial alpha phase and have good dielectric breakdown strength. <IMAGE>

IPC 1-7

B05B 7/20; **C23C 4/12**

IPC 8 full level

B05B 7/20 (2006.01); **C23C 4/10** (2006.01); **C23C 4/12** (2006.01)

CPC (source: EP)

B05B 7/205 (2013.01); **C23C 4/11** (2016.01); **C23C 4/129** (2016.01)

Citation (search report)

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- [A] PATENT ABSTRACTS OF JAPAN vol. 12, no. 115 (E - 599) 12 April 1988 (1988-04-12)

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