

Title (en)

Method and apparatus for high-speed flame spraying

Title (de)

Verfahren und Vorrichtung zum Hochgeschwindigkeits-Flammspritzen

Title (fr)

Procédé et appareil de dépôt par pulvérisation thermique à grand vitesse

Publication

EP 1369498 B1 20041222 (DE)

Application

EP 03011231 A 20030516

Priority

DE 10222660 A 20020522

Abstract (en)

[origin: DE10222660A1] For high speed flame spraying, the spray particles are accelerated in a flame spray of combustion gases. The powder tube (2) and the outer jet body (1) together form a Laval jet (5) to accelerate the flame spray to a speed up to 800 m/second, where the injection of the spray particles is axial and centrally in diverging sections of the jet structure. The Laval jet has a high pressure combustion chamber (3), with feed tubes (4) for the delivery of oxygen and a combustion gas e.g. propane, propylene, hydrogen, ethene and acetylene, or a kerosene.

IPC 1-7

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

IPC 8 full level

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

CPC (source: EP US)

B05B 7/205 (2013.01 - EP US); **C23C 4/129** (2016.01 - EP US)

Cited by

EP1700638A1; EP1888803A4; EP1638698A4; EP2052788A1; WO2008025815A1; WO2010037548A1; DE102012000816A1; EP2617868A1; EP2014794A1; DE102007032021A1; US7836843B2; US7989023B2; EP2014795A1; DE102007032022A1

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EP 1369498 A1 20031210; **EP 1369498 B1 20041222**; AT E285483 T1 20050115; DE 10222660 A1 20031204; DE 50300212 D1 20050127; US 2004018317 A1 20040129; US 6972138 B2 20051206

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