

Title (en)

Method and device for determining the proportion of at least one aggregate of a multi-component powder for thermal spraying

Title (de)

Verfahren und Vorrichtung zum Ermitteln des Anteils zumindest eines Zuschlagstoffes eines Multikomponentenpulvers zum thermischen Spritzen

Title (fr)

Procédé et dispositif de détermination de la partie d'au moins un additif d'une poudre à plusieurs composants destinée à la pulvérisation thermique

Publication

EP 2006409 A3 20110504 (DE)

Application

EP 08005536 A 20080325

Priority

DE 102007016243 A 20070404

Abstract (en)

[origin: EP2006409A2] The method involves illuminating a powder injection jet (6) before entering into a hot gas jet (7), and detecting the fluorescence of a polyester additive by detection optics, where the additive is provided with multiple fluorescence markers. The powder injection jet is illuminated by a coherent light source such as laser light source. The detection optics is formed as a fiber-optic cable. The detected fluorescence is evaluated by utilizing emission spectroscopy. Independent claims are also included for the following: (1) a method for online-process control during thermal spraying (2) a device for selective detection of an additive during thermal spraying.

IPC 8 full level

C23C 4/04 (2006.01); **B05B 7/20** (2006.01); **C23C 4/12** (2006.01); **G01N 21/64** (2006.01)

CPC (source: EP)

C23C 4/04 (2013.01); **C23C 4/12** (2013.01); **C23C 4/18** (2013.01)

Citation (search report)

- [XY] JP 2003270150 A 20030925 - MITSUBISHI HEAVY IND LTD
- [XY] JP 2004069251 A 20040304 - MITSUBISHI HEAVY IND LTD
- [XAY] WO 2006060991 A1 20060615 - MTU AERO ENGINES GMBH [DE], et al
- [XA] GB 2377998 A 20030129 - OXFORD LASERS LTD [GB]
- [XA] FR 2754062 A1 19980403 - NAUDI ALAIN [FR]
- [XA] GB 2264558 A 19930901 - BRITISH PETROLEUM CO PLC [GB]
- [XA] US 4327120 A 19820427 - SIEMERS PAUL A, et al
- [XA] US 2002113136 A1 20020822 - TALLEY DOUGLAS G [US], et al

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

DE 102007016243 A1 20081030; EP 2006409 A2 20081224; EP 2006409 A3 20110504; EP 2006409 B1 20120801

DOCDB simple family (application)

DE 102007016243 A 20070404; EP 08005536 A 20080325