

Title (en)

Gas heater, gas heater device and assembly for thermal spraying with accompanying method

Title (de)

Gasheizvorrichtung, Gasheizeinrichtung sowie Anordnung zum thermischen Spritzen mit zugehörigem Verfahren

Title (fr)

Dispositif de chauffage au gaz, installation de chauffage au gaz et dispositif de pulvérisation thermique avec procédé associé

Publication

**EP 2618070 A1 20130724 (DE)**

Application

**EP 12002883 A 20120424**

Priority

DE 102012000817 A 20120117

Abstract (en)

The apparatus has a heating unit (10) containing a graphite felt heatable by electric heater current, through which a gas stream (G) flows, where the heating unit is arranged separately and/or in a pressure tank (21) through which the gas stream flows. Two channels carry a gas stream and are filled with the graphite felt. Contacting devices i.e. perforated disks, selectively contact the graphite felt in the channels with the electric heater current. A compressing structure causes the graphite felt to compress when the compressing structure is exposed to the gas stream. The heater current is direct, 3-phase or alternating current. An independent claim is also included for a method for cold gas spraying.

Abstract (de)

Eine Heizvorrichtung (10) zur Erwärmung eines Gasstroms (G), insbesondere einer Kaltgasspritzeinrichtung (100), wird vorgeschlagen, die einen mit einem Heizstrom erwärmbaren und mit dem Gasstrom (G) durchströmbaren Graphitfilz (11) aufweist. Auch eine entsprechende Heizeinrichtung (20), eine Anordnung (100) zum thermischen Spritzen sowie ein Verfahren (1) sind Gegenstand der Erfindung.

IPC 8 full level

**F24H 3/04** (2006.01); **C23C 24/04** (2006.01); **H05B 3/14** (2006.01)

CPC (source: EP US)

**B05B 7/1613** (2013.01 - EP US); **C23C 4/12** (2013.01 - US); **C23C 24/04** (2013.01 - EP US); **F24H 3/0405** (2013.01 - EP US); **H05B 3/145** (2013.01 - EP US); **H05B 3/44** (2013.01 - EP US); **B05B 7/1486** (2013.01 - EP US); **H05B 2203/022** (2013.01 - EP US)

Citation (applicant)

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- WO 2007110134 A1 20071004 - LINDE AG [DE], et al
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- DE 102005004117 A1 20060406 - LINDE AG [DE]
- H. ASSADI ET AL.: "Partikelbeschleunigung, Aufprall und Schichtbildung beim Kaltgasspritzen / Particle acceleration, impact and coating formation in cold spraying", KOLL. HOCHGESCHWINDIGKEITS-FLAMMSPRITZEN, vol. 8, 2009, pages 27FF

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Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

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**EP 2618070 A1 20130724**; DE 102012000817 A1 20130718; US 2013177712 A1 20130711; US 9365918 B2 20160614

DOCDB simple family (application)

**EP 12002883 A 20120424**; DE 102012000817 A 20120117; US 201313741734 A 20130115