

Title (en)

Thermal spraying device and thermal spraying method

Title (de)

Vorrichtung und Verfahren zum thermischen Verspritzen

Title (fr)

Dispositif et procédé de pulvérisation thermique

Publication

EP 1714704 A1 20061025 (EN)

Application

EP 05008499 A 20050419

Priority

EP 05008499 A 20050419

Abstract (en)

A thermal spraying device is provided with a first blowing mechanism for lengthening droplet formed near the tips of the thermal spraying materials by arc, and a second blowing mechanism for blowing tip portion of the lengthened droplet to atomize the droplet and to scatter atomized droplets towards a face to be thermally sprayed. The first blowing mechanism lengthens the droplet so that the second blowing mechanism propels air to the tip portion of the lengthened droplet that is separated from a location where the tips of thermal spraying materials are adjacent and the arc is generated, therefore arcing between the tips of the thermal spraying materials continues stably. Satisfactory thermal spraying is possible.

IPC 8 full level

B05B 7/22 (2006.01); **C23C 4/12** (2006.01)

CPC (source: EP)

B05B 7/0075 (2013.01); **B05B 7/224** (2013.01); **B05B 13/0636** (2013.01)

Citation (applicant)

- US 6091042 A 20000718 - BENARY RAPHAEL [US]
- US 5714205 A 19980203 - MARANTZ DANIEL R [US], et al

Citation (search report)

- [X] WO 9112183 A1 19910822 - TAFE INC [US]
- [X] WO 03090936 A1 20031106 - EBARA CORP [JP], et al
- [X] US 3901441 A 19750826 - KASAGI RYOICHI
- [XD] US 5714205 A 19980203 - MARANTZ DANIEL R [US], et al
- [A] DE 10204251 A1 20030814 - DAIMLER CHRYSLER AG [DE]

Cited by

EP2052785A1; CN111334741A; DE102011103487A1; DE102015104492A1; US8252372B2; DE102015104492B4; US10421088B2; WO2008104252A1; WO2015028116A1

Designated contracting state (EPC)

DE FR GB

Designated extension state (EPC)

AL BA HR LV MK YU

DOCDB simple family (publication)

EP 1714704 A1 20061025; **EP 1714704 B1 20100908**; DE 602005023409 D1 20101021

DOCDB simple family (application)

EP 05008499 A 20050419; DE 602005023409 T 20050419