

Title (en)  
THERMAL SPRAYING NOZZLE DEVICE AND THERMAL SPRAYING EQUIPMENT

Title (de)  
DÜSENVORRICHTUNG FÜR THERMISCHES SPRITZEN UND AUSRÜSTUNG FÜR THERMISCHES SPRITZEN

Title (fr)  
DISPOSITIF DE BUSE DE PULVERISATION THERMIQUE ET EQUIPEMENT DE PULVERISATION THERMIQUE

Publication  
**EP 1834699 A1 20070919 (EN)**

Application  
**EP 06702045 A 20060106**

Priority  
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• JP 2005002535 A 20050107

Abstract (en)  
[Subject] A thermal spraying nozzle device and a thermal spraying system are to be provided which can supply a thermal spraying material constantly and can control the state of a film or deposit. [Solution] In a thermal spraying nozzle device wherein carrier gas is introduced into an inlet side of a nozzle to form a supersonic gas flow and a thermal spraying material is atomized and ejected by the gas flow, a storage section (4) for the storage of molten metal as the thermal spraying material is connected an end portion on the inlet side of the nozzle (2) through a connecting pipe, the nozzle has a throat portion (2a) for accelerating the introduced carrier gas to supersonic velocity and a divergent region (2b) formed downstream of the throat portion toward an outlet, the metal particles atomized by the supersonic gas being cooled to a solidified or semi-solidified state in the divergent region.

IPC 8 full level  
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CPC (source: EP US)  
**B05B 7/1463** (2013.01 - EP US); **B05B 7/168** (2013.01 - EP US); **C23C 4/123** (2016.01 - EP US)

Cited by  
KR20130103773A; US11897782B2; WO2012068103A3; US8744251B2; US9976771B2; US10088195B2; KR101880320B1

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