

Title (en)  
SPRAY NOZZLE DEVICE FOR DELIVERING A RESTORATIVE COATING THROUGH A HOLE IN A CASE OF A TURBINE ENGINE

Title (de)  
SPRÜHDÜSENVORRICHTUNG ZUR ABGABE EINER RESTAURATIVEN BESCHICHTUNG DURCH EIN LOCH IN EINEM GEHÄUSE EINES TURBINENMOTORS

Title (fr)  
DISPOSITIF DE BUSE DE PULVÉRISATION POUR FOURNIR UN REVÊTEMENT DE RESTAURATION PAR L'INTERMÉDIAIRE D'UN TROU DANS UN CARTER D'UN MOTEUR À TURBINE

Publication  
**EP 3789120 A1 20210310 (EN)**

Application  
**EP 20193132 A 20200827**

Priority  
US 201916557317 A 20190830

Abstract (en)  
An atomizing spray nozzle device includes an atomizing zone housing that receives different phases of materials used to form a coating. The atomizing zone housing mixes the different phases of the materials into a two-phase mixture of ceramic-liquid droplets in a carrier gas. The device also includes a plenum housing fluidly coupled with the atomizing housing and extending from the atomizing housing to a delivery end. The plenum housing includes an interior plenum that receives the two-phase mixture of ceramic-liquid droplets in the carrier gas from the atomizing zone housing. The device also includes one or more delivery nozzles fluidly coupled with the plenum chamber. The delivery nozzles provide outlets from which the two-phase mixture of ceramic-liquid droplets in the carrier gas is delivered onto one or more surfaces of a target object as the coating on the target object.

IPC 8 full level  
**B05B 1/04** (2006.01); **B05B 7/00** (2006.01); **B05B 7/04** (2006.01); **B05B 7/08** (2006.01); **B05B 7/12** (2006.01); **B05B 7/14** (2006.01); **B05B 7/16** (2006.01); **B05B 12/12** (2006.01); **B23P 6/00** (2006.01); **F01D 5/00** (2006.01)

CPC (source: CN EP)  
**B05B 1/046** (2013.01 - EP); **B05B 7/0012** (2013.01 - EP); **B05B 7/0416** (2013.01 - CN); **B05B 7/045** (2013.01 - EP); **B05B 7/0884** (2013.01 - EP); **B05B 7/1481** (2013.01 - EP); **B05B 12/126** (2013.01 - EP); **B05B 13/0278** (2013.01 - CN); **B05B 13/0627** (2013.01 - CN); **C23C 4/00** (2013.01 - EP); **F01D 5/005** (2013.01 - EP); **F01D 5/288** (2013.01 - EP); **B05B 7/12** (2013.01 - EP); **B05B 7/1673** (2013.01 - EP); **B05B 7/1686** (2013.01 - EP); **F05D 2230/80** (2013.01 - EP); **F05D 2230/90** (2013.01 - EP); **F05D 2300/20** (2013.01 - EP)

Citation (search report)  
• [X] EP 3495047 A1 20190612 - GEN ELECTRIC [US]  
• [X] US 2018154381 A1 20180607 - BEWLAY BERNARD PATRICK [US], et al  
• [X] US 2015209915 A1 20150730 - RAUTENBERG JOACHIM [DE], et al

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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DOCDB simple family (application)  
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