

Title (en)

COLD SPRAY APPARATUS WITH LARGE AREA CONFORMAL DEPOSITION ABILITY

Title (de)

KALTSPRÜHVERFAHREN MIT GROSSFLÄCHIGER KONFORMER ABSCHEIDUNGSFÄHIGKEIT

Title (fr)

APPAREIL DE PULVÉRISATION À FROID AYANT UNE CAPACITÉ DE DÉPÔT CONFORME À UNE GRANDE SURFACE

Publication

**EP 3526369 B1 20240918 (EN)**

Application

**EP 17862179 A 20171016**

Priority

- US 201615295050 A 20161017
- US 2017056766 W 20171016

Abstract (en)

[origin: WO2018075395A1] A cold spray apparatus for applying a coating of particles to a substrate includes a nozzle assembly having a plurality of inner passages terminating at a common exit. The nozzle assembly includes a particle supply members in communication with the inner passages. The particle supply members supply the particles to flow and accelerate through the inner passages and out of the nozzle assembly via the common exit toward the substrate to be coated thereon. Furthermore, each inner passage includes a laser that emits a laser beam that is transmitted through the inner passage. The laser heats at least one of the particles and the substrate to promote coating of the substrate with the particles.

IPC 8 full level

**C23C 24/08** (2006.01); **B05B 7/22** (2006.01); **C23C 24/04** (2006.01)

CPC (source: EP KR)

**B05B 7/1404** (2013.01 - KR); **B05B 7/1481** (2013.01 - KR); **B05B 7/228** (2013.01 - EP KR); **C23C 24/04** (2013.01 - EP);  
**C23C 24/08** (2013.01 - EP); **C23C 24/082** (2013.01 - KR)

Citation (examination)

KR 20160080599 A 20160708 - GLOBAL DISPLAY CO LTD [KR]

Cited by

US11662300B2; US11898986B2; US11935662B2

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

DOCDB simple family (publication)

**WO 2018075395 A1 20180426**; AU 2017345219 A1 20190502; CA 3040863 A1 20180426; CN 110073033 A 20190730;  
CN 110073033 B 20220201; EP 3526369 A1 20190821; EP 3526369 A4 20200429; EP 3526369 B1 20240918; JP 2019537663 A 20191226;  
JP 7194439 B2 20221222; KR 102361006 B1 20220209; KR 20190057398 A 20190528; MX 2019004515 A 20190926

DOCDB simple family (application)

**US 2017056766 W 20171016**; AU 2017345219 A 20171016; CA 3040863 A 20171016; CN 201780076908 A 20171016;  
EP 17862179 A 20171016; JP 2019520610 A 20171016; KR 20197013317 A 20171016; MX 2019004515 A 20171016