

Title (en)

COLD SPRAY APPARATUS WITH LARGE AREA CONFORMAL DEPOSITION ABILITY

Title (de)

KALTSPRÜHVERFAHREN MIT GROSSFLÄCHIGER KONFORMER ABSCHIEDUNGSFÄHIGKEIT

Title (fr)

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

Publication

**EP 3526369 A4 20200429 (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 7/14** (2006.01); **B05B 7/22** (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 (search report)

- [I] WO 2011069101 A2 20110609 - UNIV MICHIGAN [US], et al
- [IA] CN 103920626 A 20140716 - UNIV ZHEJIANG TECHNOLOGY, et al
- [XA] US 2010098845 A1 20100422 - JENSEN JENS DAHL [DE], et al
- [I] GB 2439934 A 20080116 - HOPKINS WILLIAM GEOFFREY [GB]
- See also references of WO 2018075395A1

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US11662300B2; US11898986B2; US11935662B2

Designated contracting state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

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