

Title (en)

METHOD OF THERMAL SPRAY COATING FIBER-REINFORCED COMPOSITE MATERIALS

Title (de)

VERFAHREN ZUR THERMISCHEN SPRITZBESCHICHTUNG VON FASERVERSTÄRKTEN VERBUNDSTOFFEN

Title (fr)

PROCÉDÉ DE REVÊTEMENT, PAR PULVÉRISATION THERMIQUE, DE MATÉRIAUX COMPOSITES RENFORCÉS PAR DES FIBRES

Publication

**EP 3612659 A1 20200226 (EN)**

Application

**EP 18708240 A 20180130**

Priority

- US 201762490416 P 20170426
- US 2018015946 W 20180130

Abstract (en)

[origin: WO2018200053A1] A method of coating a fiber-reinforced composite material includes providing a fiber- reinforced composite workpiece, treating a surface of the workpiece to remove at least a portion of a polymer matrix and to expose fibers to a treated surface of the workpiece, and coating the treated surface of the workpiece using a thermal spray coating process. The treatment can include laser ablating or applying a peel ply process. The method yields a coated fiber-reinforced composite workpiece with the coating being bonded directly to the fibers via diffusion of the coating into the fibers, the formation of an intermediate compound at an interface of the coating and the fibers, or both.

IPC 8 full level

**C23C 4/02** (2006.01); **B29C 65/00** (2006.01); **C22C 47/16** (2006.01); **C23C 4/10** (2016.01); **C23C 4/12** (2016.01)

CPC (source: EP US)

**B22F 3/115** (2013.01 - EP); **B22F 7/04** (2013.01 - EP); **C23C 4/02** (2013.01 - EP US); **C23C 4/08** (2013.01 - US); **C23C 4/10** (2013.01 - EP); **C23C 4/12** (2013.01 - EP)

Citation (search report)

See references of WO 2018200053A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**WO 2018200053 A1 20181101**; EP 3612659 A1 20200226; US 2020131615 A1 20200430

DOCDB simple family (application)

**US 2018015946 W 20180130**; EP 18708240 A 20180130; US 201816607650 A 20180130