

Title (en)

Thermal barrier coatings and methods of producing same

Title (de)

Wärmesperrbeschichtungen und Herstellungsverfahren dafür

Title (fr)

Revêtements de barrière thermique et leurs procédés de production

Publication

**EP 2149623 A3 20101215 (EN)**

Application

**EP 09161428 A 20090528**

Priority

US 18142208 A 20080729

Abstract (en)

[origin: EP2149623A2] A thermal insulating ceramic layer for use on metal alloy components exposed to hostile thermal and chemical environment, such as a gas turbine. The thermal barrier coating may include cracks made by a series of steps, including subjecting at least a portion of the thermal barrier coating to a shockwave such that microcracks are formed in the thermal barrier coating without also substantially deforming the substrate.

IPC 8 full level

**C23C 28/00** (2006.01); **C23C 4/10** (2006.01); **C23C 4/18** (2006.01); **C23C 28/04** (2006.01); **F01D 5/28** (2006.01)

CPC (source: EP US)

**C23C 4/11** (2016.01 - EP US); **C23C 4/18** (2013.01 - EP US); **C23C 28/3215** (2013.01 - EP US); **C23C 28/325** (2013.01 - EP US); **C23C 28/345** (2013.01 - EP US); **C23C 28/3455** (2013.01 - EP US); **F01D 5/288** (2013.01 - EP US); **F05C 2201/0463** (2013.01 - EP US); **F05C 2201/0466** (2013.01 - EP US); **F05D 2300/11** (2013.01 - EP US); **F05D 2300/134** (2013.01 - EP US); **Y10T 428/12549** (2015.01 - EP US)

Citation (search report)

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Designated contracting state (EPC)

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 SE SI SK TR

DOCDB simple family (publication)

**EP 2149623 A2 20100203**; **EP 2149623 A3 20101215**; JP 2010043351 A 20100225; US 2010028711 A1 20100204

DOCDB simple family (application)

**EP 09161428 A 20090528**; JP 2009129739 A 20090529; US 18142208 A 20080729