

Title (en)

Thermal barrier coatings and methods of producing same

Title (de)

Wärmesperbeschichtungen und Herstellungsverfahren dafür

Title (fr)

Revêtements de barrière thermique et leurs procédés de production

Publication

**EP 2149623 A2 20100203 (EN)**

Application

**EP 09161428 A 20090528**

Priority

US 18142208 A 20080729

Abstract (en)

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 4/10** (2006.01); **C23C 4/18** (2006.01); **C23C 28/00** (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 (applicant)

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Citation (examination)

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