

Title (en)

METHOD FOR PRODUCTION OF AN ELECTROCHEMICAL LAYER AND COATING UNIT SUITABLE FOR SAID METHOD

Title (de)

VERFAHREN UND BESCHICHTUNGSANLAGE ZUM HERSTELLEN EINER ELEKTROCHEMISCHEN SCHICHT "SHARK COAT" BEZEICHNET UNTER EINFLUSS EINES MAGNETFELDES

Title (fr)

PROCEDE POUR UNE COUCHE ELECTROCHIMIQUE ET DISPOSITIF D APPLICATION D UN REVETEMENT CONVENANT A LA MISE EN OEUVRE DUDIT PROCEDE

Publication

**EP 1774066 A1 20070418 (DE)**

Application

**EP 05771997 A 20050726**

Priority

- EP 2005053634 W 20050726
- DE 102004038724 A 20040806

Abstract (en)

[origin: WO2006032562A1] The invention relates to a method for electrochemical coating, whereby a substrate (14) is subjected to a magnetic field (23) during the layer building process and an electrochemical coating unit. According to the invention, the magnetic field (23) is generated on the surface (21) of the substrate (14) for coating with a locally changing field strength distribution  $H(x)$ , whereupon electrical field lines (24) in the electrolyte are concentrated in the regions of high magnetic field strength. The layer growth of a layer (22) is increased in these regions, which results, for example, in production of a corrugated profile (27) without subsequent machining steps. Said corrugated surfaces with suitable dimensions advantageously reduce flow resistance of the layer surfaces (27), as a result of which said surfaces are suitable, for example, for flow-optimised turbine blades.

IPC 8 full level

**C25D 5/00** (2006.01); **C25D 5/16** (2006.01); **F01D 5/28** (2006.01)

CPC (source: EP US)

**C25D 5/007** (2020.08 - EP US); **C25D 5/605** (2020.08 - EP US); **F01D 5/145** (2013.01 - EP US); **F05D 2230/30** (2013.01 - EP); **F05D 2230/90** (2013.01 - EP); **F05D 2250/28** (2013.01 - EP); **F05D 2250/60** (2013.01 - EP); **F05D 2250/61** (2013.01 - EP)

Citation (search report)

See references of WO 2006032562A1

Designated contracting state (EPC)

CH DE GB IT LI

DOCDB simple family (publication)

**WO 2006032562 A1 20060330**; DE 102004038724 B3 20060427; EP 1774066 A1 20070418

DOCDB simple family (application)

**EP 2005053634 W 20050726**; DE 102004038724 A 20040806; EP 05771997 A 20050726