

Title (en)

HIGH-EFFICIENCY NANODIAMOND-BASED ULTRAVIOLET PHOTOCATHODES

Title (de)

HOCHEFFIZIENTE ULTRAVIOLETT-FOTOKATHODEN AUF NANODIAMANTBASIS

Title (fr)

PHOTOCATHODES À HAUT RENDEMENT À BASE DE NANODIAMANT POUR RAYONS ULTRAVIOLETS

Publication

EP 3353801 B1 20191113 (EN)

Application

EP 16795142 A 20160921

Priority

- IT UB20153768 A 20150921
- IB 2016055616 W 20160921

Abstract (en)

[origin: WO2017051318A1] Method for the production of high efficiency photocathodes for ultraviolet based on nanodiamonds, comprising providing a support (10; 20, 21) capable of conducting electrons, and producing a photosensitive layer of nanodiamonds (30) on the support (10; 20, 21). Production of the photosensitive layer includes providing nanodiamond particles in the form of powder, hydrogenating the nanoparticles in a H₂ plasma, preparing a dispersion of the hydrogenated particles in a solvent, and spraying the dispersion onto the support and waiting for the solvent to evaporate from the support, the spray and waiting cycle being repeated several times in order to obtain a continuous photosensitive layer.

IPC 8 full level

H01J 9/12 (2006.01)

CPC (source: EP)

H01J 9/12 (2013.01)

Designated contracting state (EPC)

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DOCDB simple family (publication)

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