

Title (en)

ELECTRODEPOSITION METHOD FOR THE PRODUCTION OF NANOSTRUCTURED ZNO

Title (de)

ELEKTRODEPOSITIONSVERFAHREN ZUR HERSTELLUNG VON NANOSTRUKTURIERTEM ZNO

Title (fr)

PROCÉDÉ D'ÉLECTRODÉPOSITION POUR LA PRODUCTION DE ZNO NANOSTRUCTURÉ

Publication

**EP 2252728 B1 20121212 (DE)**

Application

**EP 09711885 A 20090220**

Priority

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- DE 102008029234 A 20080619

Abstract (en)

[origin: WO2009103286A2] The problem addressed by the invention is that of improving on an electrodeposition method for the production of nanostructured ZnO in such a manner that this method enables the production of nanostructured ZnO with a high internal quantum efficiency (IQE) without additional tempering steps. According to the invention, the electrodeposition method uses an aqueous solution of a Zn salt, for example Zn(NO<sub>3</sub>)<sub>2</sub>, and a doping agent, for example HNO<sub>3</sub> or NH<sub>4</sub>NO<sub>3</sub>. ZnO nanotubes produced in this way show an intense emission band edge in the UV range and only a weak emission in the range from 450 to 700 nm in the photoluminescence spectrum.

IPC 8 full level

**C25D 9/08** (2006.01)

CPC (source: EP US)

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