

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

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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(NO₃)₂, and a doping agent, for example HNO₃ or NH₄NO₃. 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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Cited by

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