

Title (en)

Producing a layer of transparent conductive zinc oxide.

Title (de)

Herstellung einer durchsichtigen leitenden Zinkoxidschicht.

Title (fr)

Préparation d'une couche conductrice transparente d'oxyde de zinc.

Publication

EP 0336574 A1 19891011 (EN)

Application

EP 89302495 A 19890314

Priority

GB 8808036 A 19880406

Abstract (en)

A process for providing a layer (15) of an optionally doped transparent electrically conductive zinc oxide on a heated substrate (8) in which a solution of a thermally decomposable precursor for the zinc oxide is sprayed towards the substrate and the spray is subjected to sufficient radiant heating firstly to evaporate the solvent and create a particulate residue and secondly to cause the residue to sublime. The residue is adsorbed onto the substrate or growing layer and undergoes surface diffusion and pyrolysis leading to growth of the layer of zinc oxide. The layer is probably nucleated and has a high degree of ordering between adjacent crystallites. Also a layer of zinc oxide having planes in its crystalline structure which are predominantly orientated parallel with the surface of the substrate.

IPC 1-7

C23C 18/12

IPC 8 full level

C01G 9/02 (2006.01); **C03C 17/245** (2006.01); **C23C 18/12** (2006.01)

CPC (source: EP KR US)

C23C 18/1216 (2013.01 - EP KR US); **C23C 18/1291** (2013.01 - EP KR); **C23C 18/143** (2019.04 - EP KR US)

Citation (search report)

- [A] US 2791521 A 19570507 - JAFFE MARY S
- [A] GB 704793 A 19540303 - PITTSBURGH PLATE GLASS CO

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