

Title (en)

PROCESS FOR MANUFACTURING SOURCES OF FIELD-EMISSION TYPE ELECTRONS, AND APPLICATION FOR PRODUCING EMITTER NETWORKS.

Title (de)

HERSTELLUNGSVERFAHREN VON FELDEMISSIONS-ELEKTRONENQUELLEN UND ANWENDUNG ZUR HERSTELLUNG VON EMITTER-MATRIZEN.

Title (fr)

PROCEDE DE FABRICATION DE SOURCES D'ELECTRONS DU TYPE A EMISSION DE CHAMP, ET SON APPLICATION A LA REALISATION DE RESEAUX D'EMETTEURS.

Publication

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Application

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Priority

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Abstract (en)

[origin: WO8909479A1] Process for manufacturing field-emission point emitters from a monocrystalline substrate (1) of suitable orientation covered with an insulating layer (2) from which square elemental zones, having a suitable orientation in relation to the substrate, have been removed. Silicon is deposited by selective epitaxy in these zones. The epitaxial growth of silicon at a high speed parallel to the substrate and at a slow speed on faces at 45 DEG in relation to the substrate enables the production of pyramide points which, after having been covered with tungsten, form emitter points. Application, production of bidimensional networks of point emitters, in particular for display screens.

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