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**Sakurai et al.**

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(54) **PROTECTIVE FILM FOR FPD, VAPOR DEPOSITION MATERIAL FOR PROTECTIVE FILM AND ITS PRODUCTION METHOD, FPD, AND MANUFACTURING DEVICE FOR FPD PROTECTIVE FILM**

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(\* ) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(58) **Field of Search** ..... **257/79; 428/696, 428/701, 332; 501/134-137**

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(57) **ABSTRACT**

A vapor deposited material for FPD protective film comprises a polycrystalline body, sintered body, or single crystal having a surface covered with a fluoride layer. A manufacturing device for FPD protective film comprises: a film formation section for forming a film body on one side of a substrate, and a layer formation section for forming a fluoride layer on a surface of said film body; wherein said layer formation section comprises: a layer formation chamber for housing a substrate on which said film body is formed, a gas supply mechanism for forming a fluoride layer on the surface of said film body by supplying a fluoridation agent towards said substrate in said layer formation chamber, and a substrate heating section provided in said layer formation chamber for heating said substrate.

**15 Claims, 8 Drawing Sheets**

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