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材料物理和化学

光反应型LCD间隙控制材料的研制

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摘要:

采用丙烯酸类单体以及各种功能性配合物制备了光反应型高分子树脂,该材料分子结构中具有可提高对ITO金属膜附着力的羟基基团,还具有能提高耐热性的苯环骨架结构。对其光敏性进行了测试,确定该材料具有快速固化的特点。通过对该材料的透光率、耐热性能的详细测试与比对,确定了该材料具有高透光率以及高耐热性能的特点,铅笔硬度测试结果在3H以上,表明该材料可作为LCD间隙控制材料使用。

关键词: 液晶盒厚 光反应型间隙控制材料 紫外光固化

Development of Photoreaction-LCD Gap Control Material

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Abstract:

With acrylic monomers and various functional complexes, the light reactive resin was prepared. This material has a molecular structure, which can improve the adhesion of metal film on the ITO with hydroxyl group, also is able to improve heat resistance of the benzene ring skeleton. Photosensitivity was tested for that the material has the characteristics of rapid solidification. Testing and comparison determined that the material has high transmittance and high heat resistance. 3H pencil hardness test results demonstrated that this material can be used as LCD gap control materials.

Keywords: cell gap photoreaction-LCD gap control material UV-curable

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