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(54) Title (EN): A FLEXIBLE THIN-FILM TRANSISTOR AND MANUFACTURING METHOD THEREOF

(54) Title (FR): TRANSISTOR À COUCHE MINCE FLEXIBLE ET SON PROCÉDÉ DE FABRICATION

(54) Title (ZH): 一种柔性薄膜晶体管及其制备方法

(57) Abstract:

(EN): The present invention discloses a flexible thin-film transistor and a manufacturing method thereof. The thin-film transistor comprises a substrate; an active layer formed on top of the substrate; a gate layer formed on top of the active layer; and an organic insulating layer formed on top of the gate layer. The invention reduces the stress of an interlayer dielectric layer and reduces overall thickness of the interlayer dielectric layer, thereby increasing the degree to which a flexible display screen can bend.

(FR): La présente invention concerne un transistor à couche mince flexible et son procédé de fabrication. Le transistor à couche mince comprend un substrat; une couche active formée sur le dessus du substrat; une couche de grille formée sur le dessus de la couche active; et une couche isolante organique formée sur le dessus de la couche de grille. L'invention réduit la contrainte d'une couche diélectrique intercouche et réduit l'épaisseur globale de la couche diélectrique intercouche, ce qui permet d'augmenter le degré auquel un écran d'affichage flexible peut fléchir.

(ZH): 本发明公开了一种柔性薄膜晶体管及其制备方法。该柔性薄膜晶体管包括:基板;有源层,形成在基板上方;栅极,形成在有源层上方;以及有机绝缘层,形成在栅极上方。本发明减小了层间介电层的应力,降低了层间介电层的整体厚度,进而提升柔性显示屏的可弯折程度。

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