

TITLE OF INVENTION:

THIN FILM TRANSISTOR, PIXEL STRUCTURE AND MANUFACTURING METHOD OF THIN FILM TRANSISTOR

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ABSTRACT

A thin film transistor includes a substrate, a gate, a semiconductor layer and a gate insulating layer. The gate is disposed on the substrate and has a top surface and side surface. The semiconductor layer is disposed on the substrate and includes a drain region, a channel region and a source region, and the gate overlaps the channel region. The contour of an upper surface of the gate insulating layer has a first surface, a second surface, a third surface and a fourth surface disposed in sequence to form a groove. The first surface overlaps the top surface, the second surface and third surface overlap the side surface, and the fourth surface overlaps the substrate. Also disclosed are a pixel structure including the thin film transistor and a manufacturing method of the thin film transistor.

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FIG. 1B