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(54) **THIN-FILM TRANSISTOR SUBSTRATE AND
METHOD OF MANUFACTURING
THIN-FILM TRANSISTOR**

(52) **U.S. CL.**
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(57) **ABSTRACT**

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A thin-film transistor includes a gate electrode and a layered oxide region between a substrate and the gate electrode. The layered oxide region includes a first oxide layer and a second oxide layer. A channel region includes a first region of the first oxide layer, and a source/drain region includes a second region of the first oxide layer and a first region of the second oxide layer laid one above the other. The mobility of the first oxide layer is greater than the mobility of the second oxide layer. The distance between a peak position in a concentration profile of a first impurity atoms in a layering direction and a top face of the first region of the second oxide layer is shorter than the distance between the peak position and a top face of the second region of the first oxide layer.

