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(54) Title: SUBSTRATE WITH CONDUCTOR FORMED OF LOW–RESISTANCE ALUMINUM ALLOY

(57) Abstract

A wiring substrate is disclosed, which has optimal characteristics for, for example, an active matrix type liquid crystal display device with a thin film transistor. Wiring formed of an Al–Nd–Ti alloy thin film is formed on a glass substrate, and if necessary, a semiconductor element which is electrically connected to the wiring is formed. In this case, the specific resistance of the Al–Nd–Ti alloy thin film is about 8 $\mu\Omega$ cm if the Nd concentration is 0.75 at % and the Ti concentration is 0.5 at %. Further, even if the resultant substrate is heated at 240 – 270 °C after the formation of the wiring, occurrence of a hillock and a pinhole is substantially completely suppressed.

