

ABSTRACT

A LIQUID CRYSTAL DISPLAY ELEMENT, METHOD OF MANUFACTURING AND STORING THE SAME AND ELECTRONIC EQUIPMENT ON WHICH THE SAME IS MOUNTED

The liquid crystal display element is disclosed having flexible substrates including a gas barrier film. Hitherto such elements have suffered from poor display performance caused by bubble formation. The element of the present invention is characterised by subjecting the end portions of the substrates to a gas barrier means (13, 17). A reduced amount of gas or water vapour can permeate into the liquid crystal and therefore bubbles are less likely to form. Further measures are disclosed such as maintaining the oxygen and nitrogen saturation solubility to not less than 10 μ l/ml and the water vapour saturation solubility to not less than 100 ppm. The element can also be manufactured or stored at a reduced pressure.

The element when mounted in a piece of electronic equipment is protected by a guard plate of not less than 0.5 mm and the space therefrom is not less than 0.5 mm.

Fig. 1