

ABSTRACT

The present invention has for its object to overcome the above-mentioned disadvantages and provide a microparticle spraying apparatus with which the disposition of microparticles on a substrate carrying electrodes can be accurately controlled, particularly a microparticle spraying apparatus capable of selectively disposing spacer microparticles in electrode gaps where no pixels are present even on a substrate carrying an array of stripe electrodes in use for the STN liquid crystal display device, to a microparticle spraying method and a method of manufacturing a liquid crystal display device which utilize said apparatus.

This invention relates to a microparticle spraying apparatus for selective disposition of a charged microparticle on a substrate carrying a plurality of electrodes

which comprises a spraying chamber adapted to accommodate said substrate, a microparticle supply means for supplying said microparticle into said spraying chamber and spraying it on said substrate, and a voltage application means for applying voltages to the electrodes disposed on said substrate,

said voltage application means being capable of applying different levels of voltages to said electrodes respectively.