

Title (en)

Flat display.

Title (de)

Flache Anzeigeeinrichtung.

Title (fr)

Dispositif de visualisation plat.

Publication

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Application

EP 91109734 A 19910613

Priority

JP 15616890 A 19900614

Abstract (en)

A flat display comprises a flat tube (1) having a front panel (1F) and a back panel (1B) facing the front panel (1F), a fluorescent screen (2) formed on the inner surface of the front panel (1F) of the flat tube (1), an electron gun (10) disposed outside a region extending behind the fluorescent screen (2), a vertical deflecting electrode (3) disposed on the inner surface of the back panel (1B) and comprising a plurality of parallel electrode elements (3a) extending along the horizontal scanning direction, and an electrode structure (7) disposed between the vertical deflecting electrode (3) and the fluorescent screen (2), and comprising at least a counter electrode (4) constituting a vertical deflecting system together with the vertical deflecting electrode (3), a modulating electrode (5) and a horizontal deflecting electrode (6). The electron gun (10) has a back plate (41) and a cathode (1K) having a plurality of field emission cathode elements (K) arranged on a line on the inner surface of the back plate (41), and emits a flat electron beam (b) into the space between the vertical deflecting electrode (3) and the electrode structure (7). Since the flat electron beam (b) is produced by the plurality of field emission cathode elements (K) arranged on a line, the cathode (1K) of the electron gun (10) does not vibrate and hence the cathode (1K) can be formed in a large length suitable for a large display screen. <IMAGE>

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