

[54] CURRENT-CONTROLLED LUMINOUS ELEMENT ARRAY AND METHOD FOR PRODUCING THE SAME

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[21] Appl. No.: 321,608

[22] Filed: Oct. 12, 1994

[30] Foreign Application Priority Data

Oct. 12, 1993 [JP] Japan 5-253866

[51] Int. Cl.⁶ G09G 3/30

[52] U.S. Cl. 257/59; 257/40; 313/504; 313/505; 340/825.81; 345/76; 345/80; 345/206

[58] Field of Search 257/40, 59, 72; 313/504, 505; 345/206, 76, 91, 58, 80; 340/825.81

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[57] ABSTRACT

In a current-controlled luminous element array, combinations of a luminous element of a current-controlled type, a current-controlling transistor for controlling the current of the luminous element, and a switching transistor are arranged in a matrix form between signal electrode lines and scan electrode lines such that the luminous element is connected at one terminal thereof to a power source electrode line and at the other terminal thereof to a drain electrode of the current-controlling transistor, a gate electrode of the current-controlling transistor and one signal electrode line have the switching transistor connected therebetween, and the current-controlling transistor in an arbitrary column of matrix has a source electrode thereof connected to one scan electrode line in another column.

14 Claims, 6 Drawing Sheets

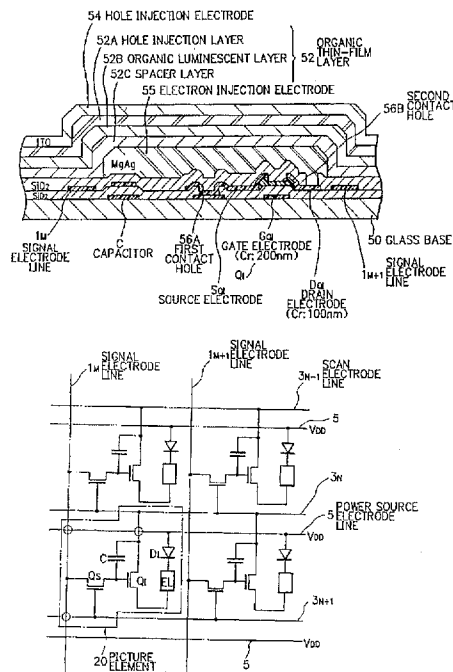


FIG. 1
PRIOR ART

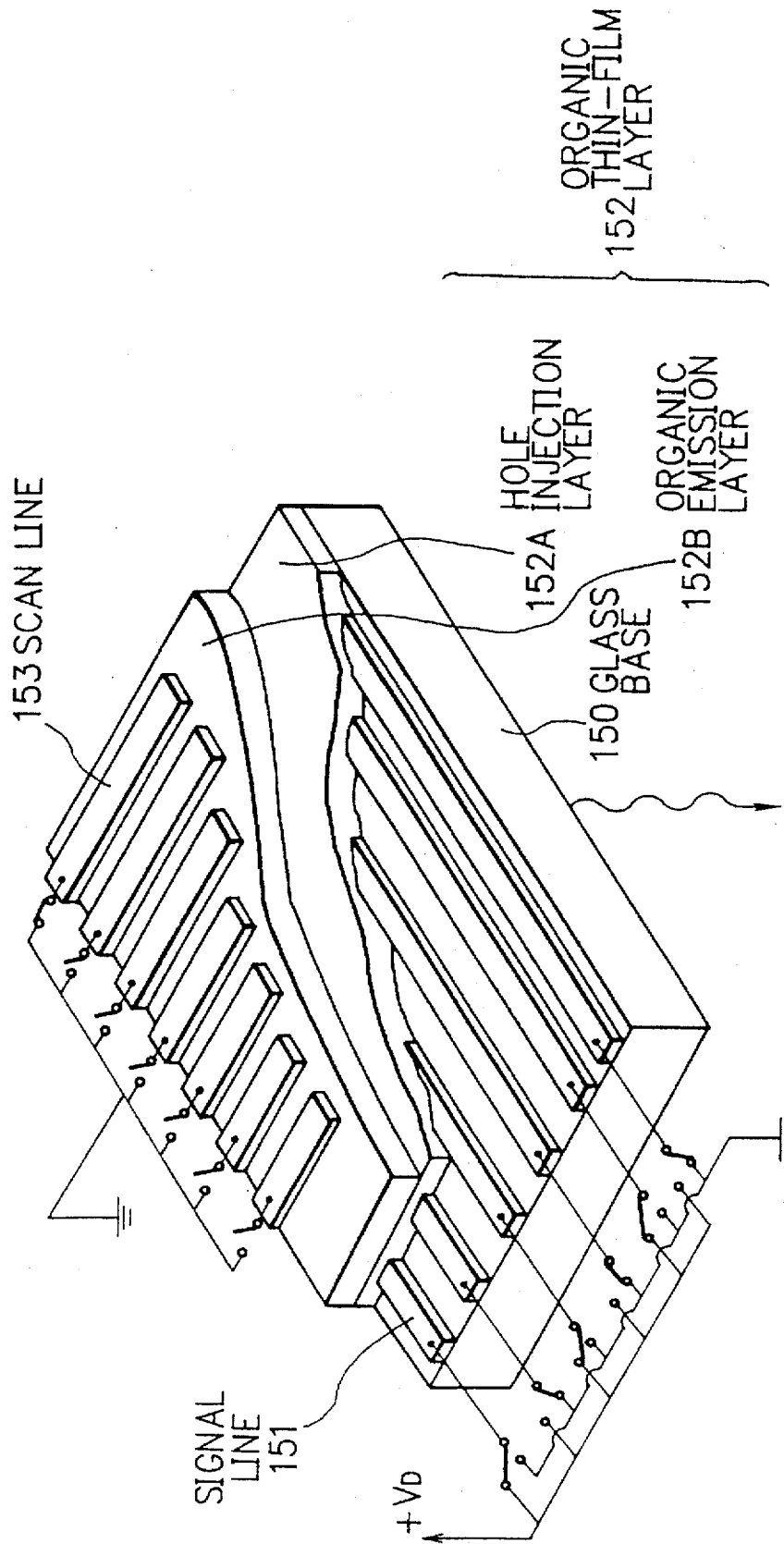


FIG. 2
PRIOR ART

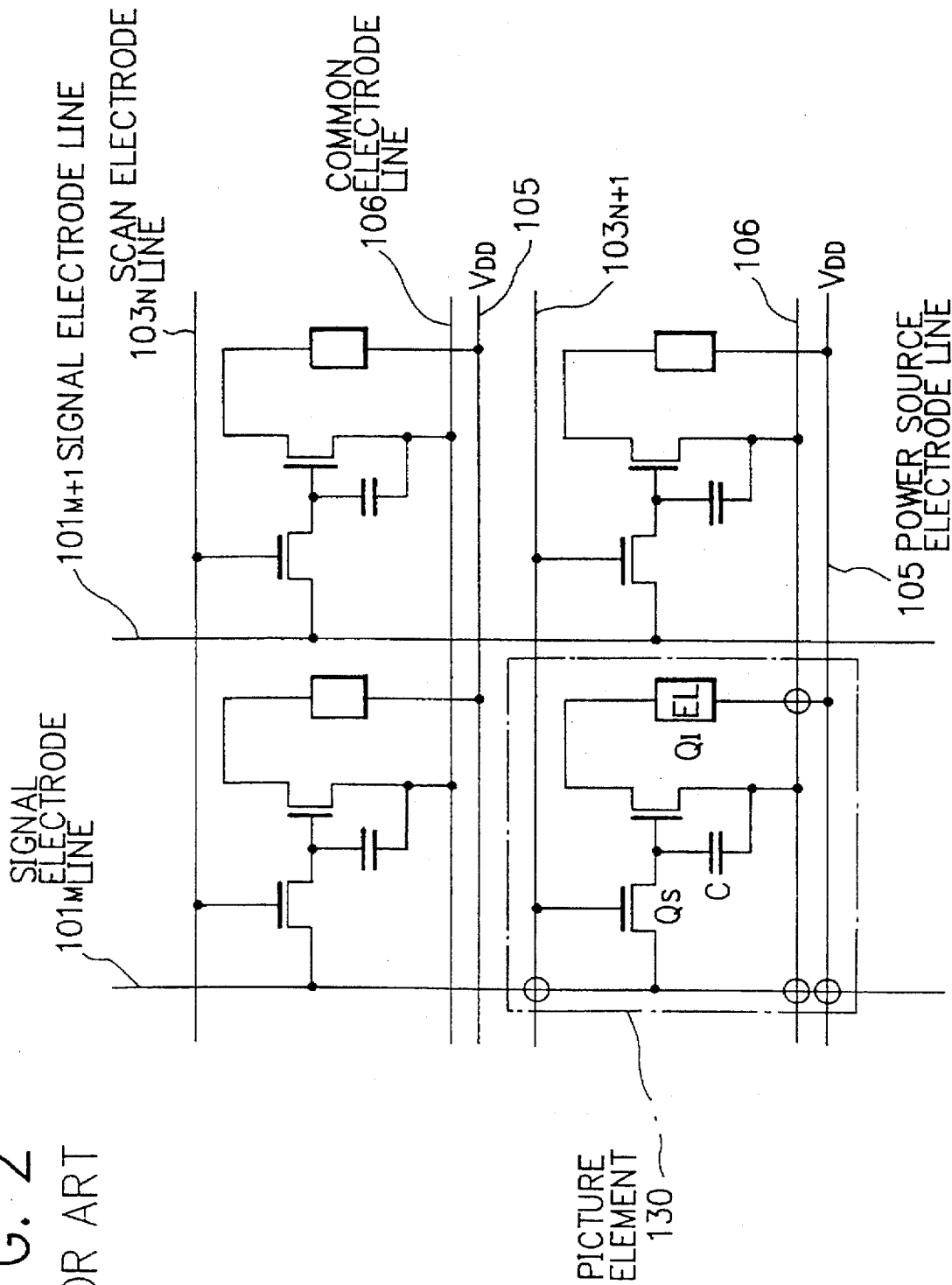


FIG. 3

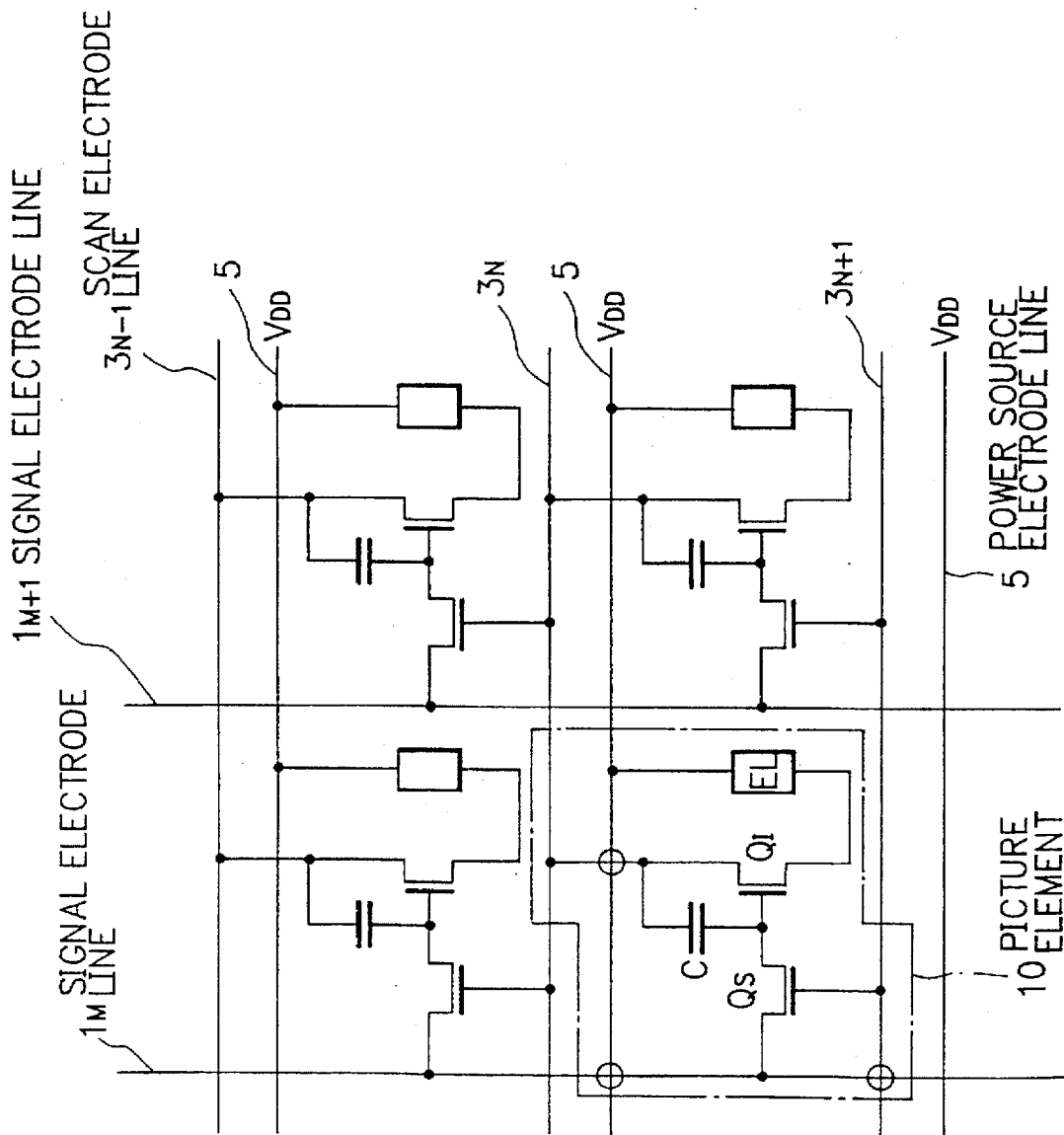
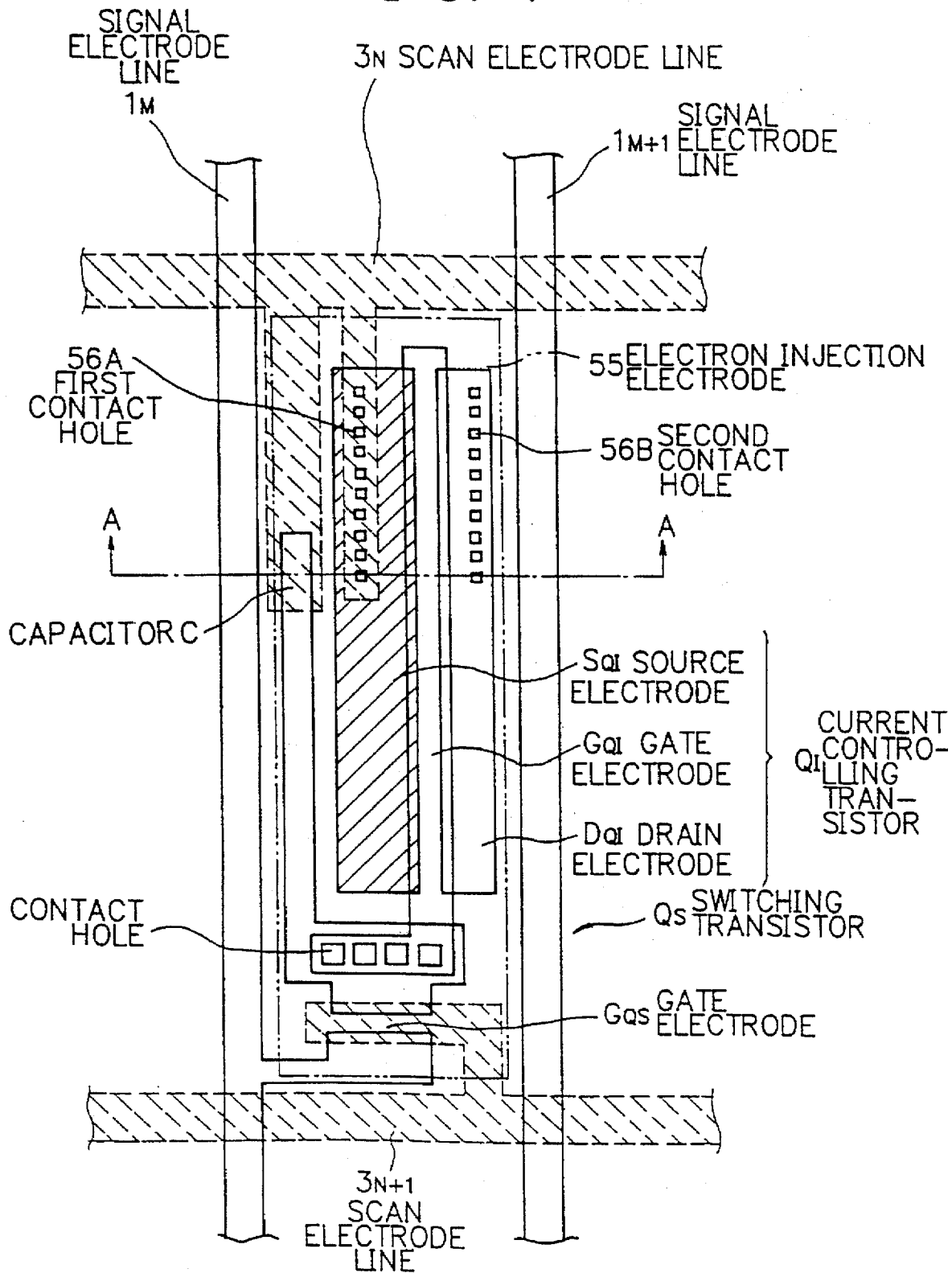


FIG. 4



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