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(54) **SEMICONDUCTOR DEVICE AND METHOD FOR FORMING THE SAME**

(30) **Foreign Application Priority Data**

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Publication Classification

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(51) **Int. Cl.⁷** **H01L 27/01; H01L 27/148**

(52) **U.S. Cl.** **257/350; 257/365; 257/245**

(21) Appl. No.: **09/983,366**

(57) **ABSTRACT**

(22) Filed: **Oct. 24, 2001**

Related U.S. Application Data

(60) Division of application No. **09/237,854**, filed on Jan. 27, 1999, which is a division of application No. **08/351,135**, filed on Nov. 30, 1994, now Pat. No. 5,917,221, which is a continuation of application No. **08/072,127**, filed on Jun. 7, 1993, now abandoned.

In a field effect type device having a thin film like active layer, there is provided a thin film like semiconductor device including a top side gate electrode on the active layer and a bottom side gate electrode connected to a static potential, the bottom side gate electrode being provided between the active layer and a substrate. The bottom side gate electrode may be electrically connected to only one of a source and a drain of the field effect type device. Also, the production methods therefor are disclosed.

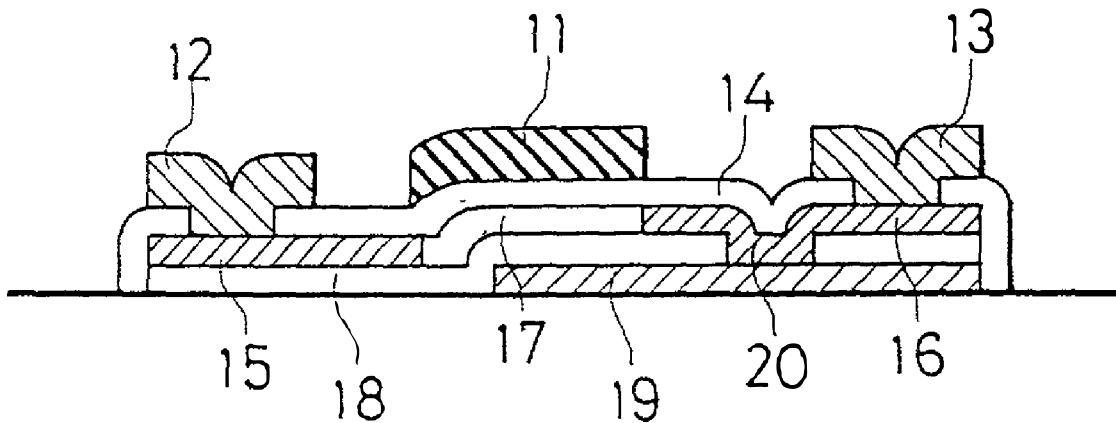


FIG. 1(A)

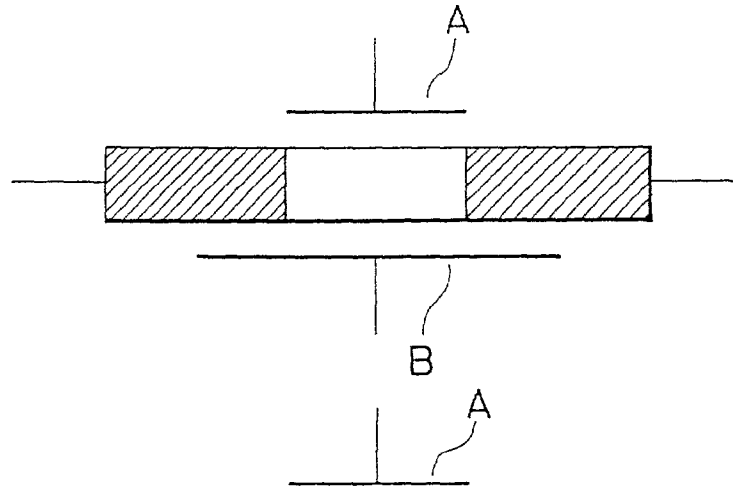


FIG. 1(B)

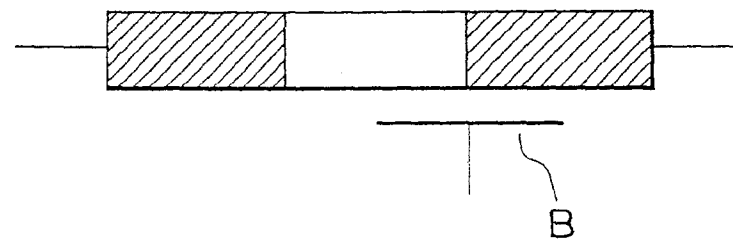


FIG. 2(A)

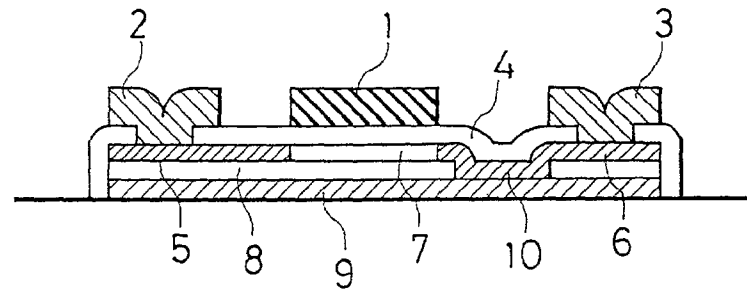


FIG. 2(B)

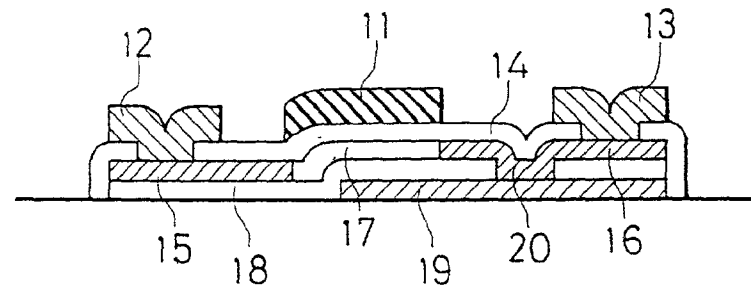


FIG. 3(A)

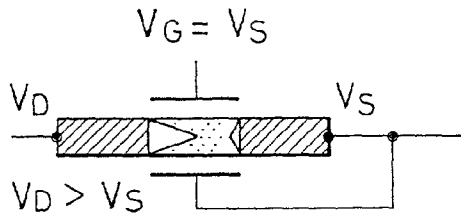


FIG. 3(B)

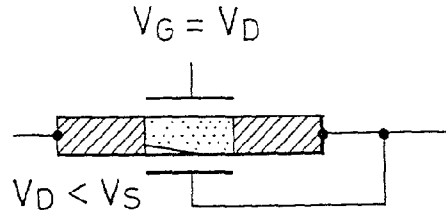


FIG. 3(C)

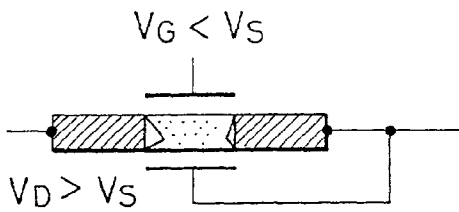


FIG. 3(D)

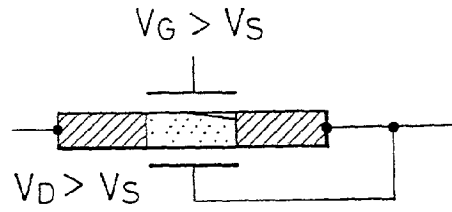


FIG. 3(E)

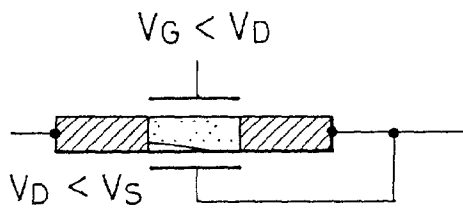


FIG. 3(F)

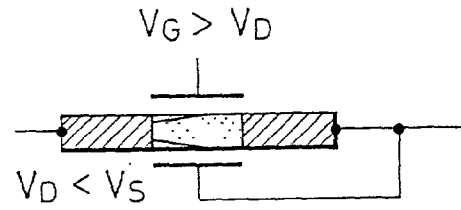


FIG. 3(G)

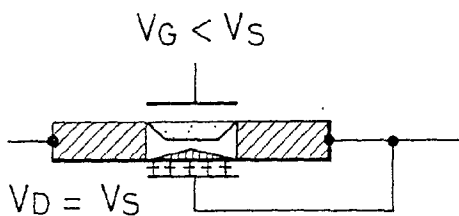


FIG. 3(H)

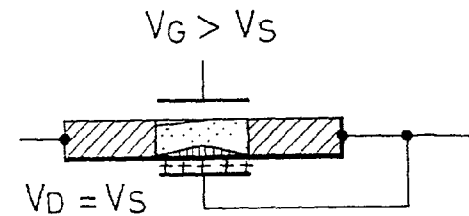


FIG. 4

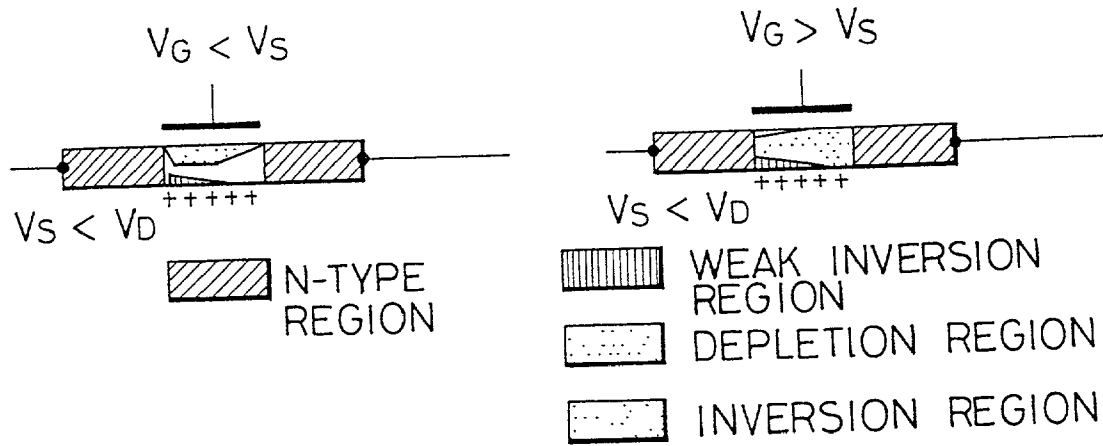


FIG. 5(A)

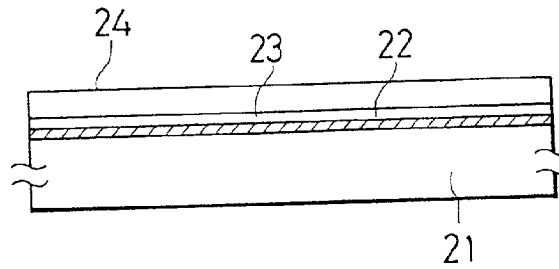


FIG. 5(B)

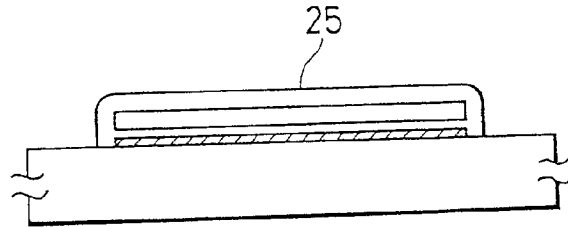


FIG. 5(C)

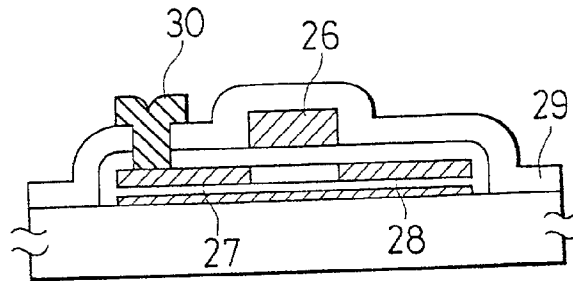


FIG. 5(D)

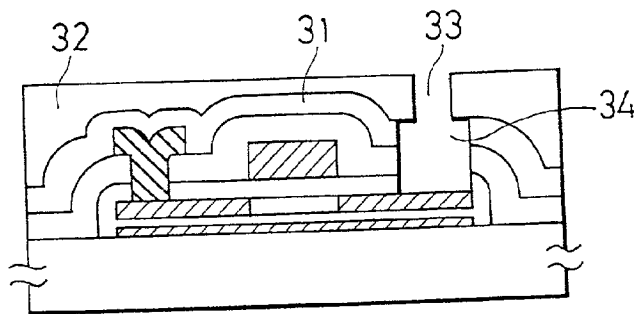


FIG. 5(E)

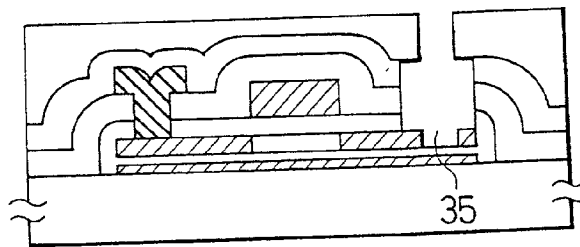
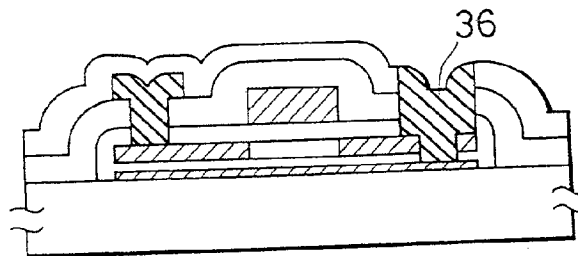


FIG. 5(F)



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