US007923311B2

(12) **United States Patent**
Zhang et al.

(10) **Patent No.: US 7,923,311 B2**
(45) **Date of Patent: *Apr. 12, 2011**

(54) **ELECTRO-OPTICAL DEVICE AND THIN FILM TRANSISTOR AND METHOD FOR FORMING THE SAME**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 541 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **11/898,833**

(22) Filed: **Sep. 17, 2007**

(65) **Prior Publication Data**

US 2008/0044962 A1 Feb. 21, 2008

Related U.S. Application Data

(60) Division of application No. 10/925,984, filed on Aug. 26, 2004, now Pat. No. 7,507,991, which is a division of application No. 10/140,176, filed on May 8, 2002, now Pat. No. 6,847,064, which is a division of application No. 10/011,708, filed on Dec. 11, 2001, now Pat. No. 6,797,548, which is a division of application No. 09/291,279, filed on Apr. 14, 1999, now Pat. No. 6,335,213, which is a division of application No. 09/045,696, filed on Mar. 23, 1998, now Pat. No. 6,124,155, which is a division of application No. 08/455,067, filed on May 31, 1995, now Pat. No. 5,811,328, which is a division of application No. 08/260,751, filed on Jun. 15, 1994, now Pat. No. 5,648,662, which is a continuation of application No. 07/895,029, filed on Jun. 8, 1992, now abandoned.

(30) **Foreign Application Priority Data**

Jun. 19, 1991 (JP) 3-174541

(51) **Int. Cl.**
H01L 21/02 (2006.01)

(52) **U.S. Cl.** **438/151**; 438/152; 438/156; 438/166; 257/E21.133; 257/E21.413; 257/E21.414; 257/E29.151; 257/E29.294

(58) **Field of Classification Search** 438/150–166; 257/E21.133, 413, 414, E27.111, E29.151, 257/278, 294

See application file for complete search history.

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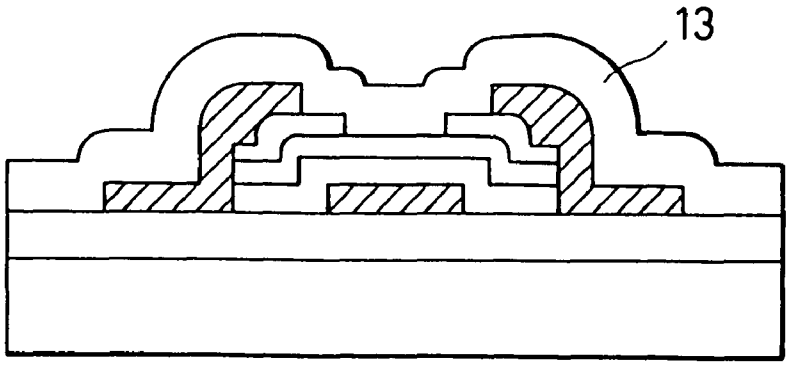
(57) **ABSTRACT**

A semiconductor device having a pair of impurity doped second semiconductor layers, formed on a first semiconductor layer having a channel formation region therein, an outer edge of the first semiconductor film being at least partly coextensive with an outer edge of the impurity doped second semiconductor layers. The semiconductor device further includes source and drain electrodes formed on the pair of impurity doped second semiconductor layers, wherein the pair of impurity doped second semiconductor layers extend beyond inner sides edges of the source and drain electrodes so that a stepped portion is formed from an upper surface of the source and drain electrodes to a surface of the first semiconductor film.

54 Claims, 8 Drawing Sheets



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