EXHIBIT 8

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

(10) **Patent No.: US 8,558,959 B2**
(45) **Date of Patent: *Oct. 15, 2013**

(54) **LIQUID CRYSTAL DISPLAY DEVICE AND METHOD OF FABRICATING 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 0 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **13/609,486**

(22) Filed: **Sep. 11, 2012**

(65) **Prior Publication Data**

US 2013/0003001 A1 Jan. 3, 2013

Related U.S. Application Data

(60) Division of application No. 12/946,584, filed on Nov. 15, 2010, now Pat. No. 8,284,362, which is a continuation of application No. 12/191,017, filed on Aug. 13, 2008, now Pat. No. 7,956,969, which is a division of application No. 10/893,790, filed on Jul. 16, 2004, now Pat. No. 7,450,206, which is a division of application No. 10/263,257, filed on Oct. 2, 2002, now Pat. No. 6,778,229, which is a continuation-in-part of application No. 10/107,989, filed on Mar. 27, 2002, now abandoned.

(30) **Foreign Application Priority Data**

Oct. 2, 2001 (JP) 2001-306906
May 10, 2002 (JP) 2002-136128

(51) **Int. Cl.**
G02F 1/1343 (2006.01)
G02F 1/1337 (2006.01)

(52) **U.S. Cl.**
USPC **349/39**; 349/129; 349/130

(58) **Field of Classification Search**
USPC 349/39, 129–130
See application file for complete search history.

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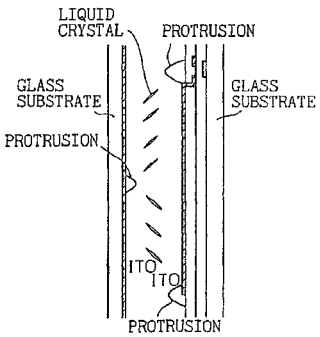
(74) *Attorney, Agent, or Firm* — Greer Burns & Crain, Ltd.

(57) **ABSTRACT**

A liquid crystal display device including a pair of substrates, defined as a first substrate and a second substrate and a liquid crystal layer sandwiched between the pair of substrates. The device also includes a pixel electrode and an additional electrode formed on the first substrate, and a contact hole that is configured and arranged to connect the pixel electrode and the additional electrode. In certain embodiments, the contact hole is formed at a liquid crystal domain boundary. In other embodiments, an additional contact hole is also provided between the pixel electrode and a second additional electrode, and in such embodiments the contact hole and the additional contact hole are formed within different liquid crystal domains. Further, in certain embodiments, the pixel electrode includes a plurality of pixel electrode slits arranged in a pattern to form a plurality of liquid crystal domains within each pixel.

18 Claims, 43 Drawing Sheets



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Amendment E, filed with the United States Patent and Trademark Office on Mar. 25, 2008, in response to an Office Action issued for U.S. Appl. No. 10/893,790.

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Fig.1

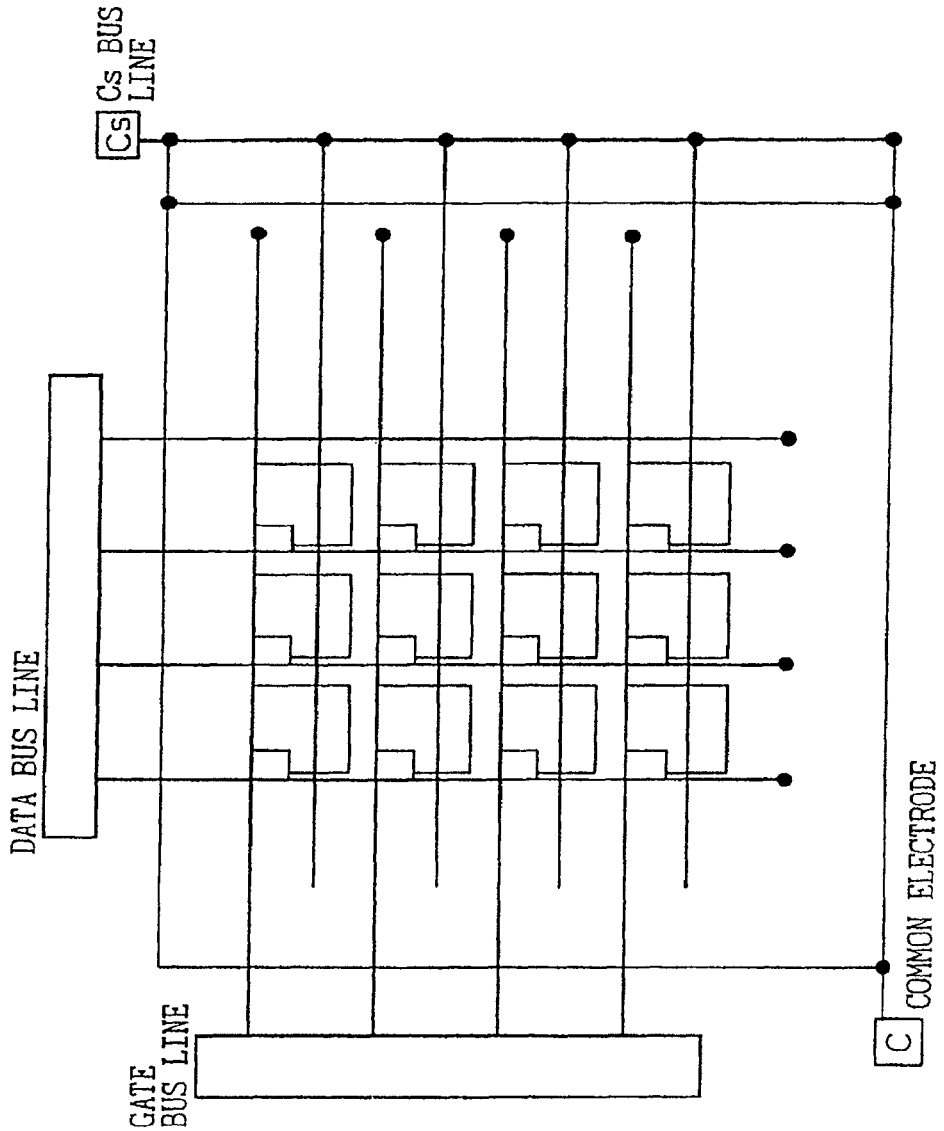
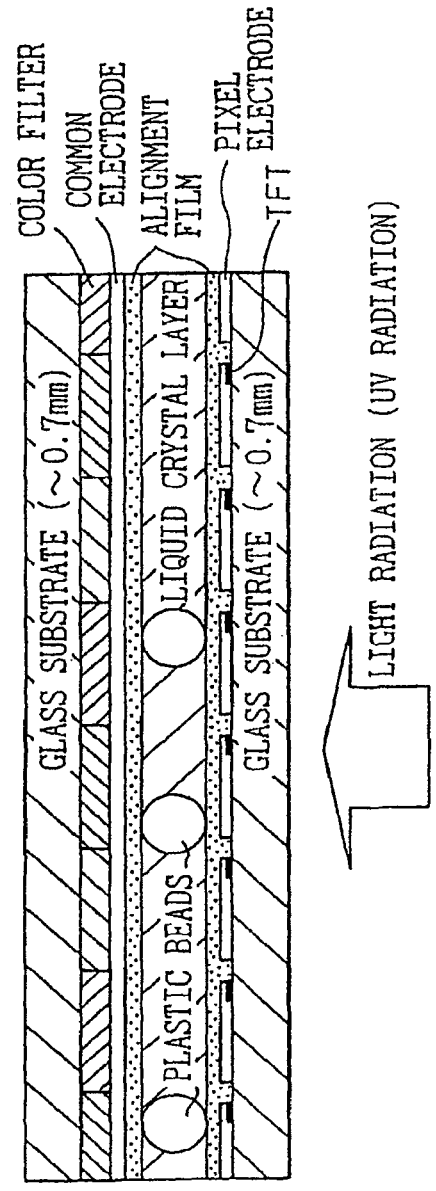


Fig. 2



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