# **Petitioner Bluehouse Global Ltd.**

**Ex. 1004** 

**DOCKET A L A R M** Find authenticated court documents without watermarks at <u>docketalarm.com</u>.



US 20080299693A1

## (19) United States (12) Patent Application Publication (10) Pub. No.: US 2008/0299693 A1

### Toyota et al.

### Dec. 4, 2008 (43) **Pub. Date:**

### (54) MANUFACTURING METHOD FOR DISPLAY DEVICE

(75) Inventors: Yoshiaki Toyota, Hachioji (JP); Takeshi Sato, Kokubunji (JP)

> Correspondence Address: **Stanley P. Fisher Reed Smith Hazel & Thomas LLP** Suite 1400, 3110 Fairview Park Drive Falls Church, VA 22042-4503 (US)

- (73) Assignee: Hitachi Displays, Ltd.
- (21)Appl. No.: 12/155,204
- (22)Filed: May 30, 2008

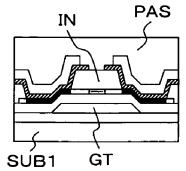
#### (30)**Foreign Application Priority Data**

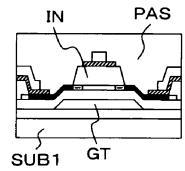
May 31, 2007 (JP) ..... 2007-144957

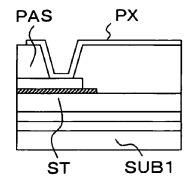
#### **Publication Classification**

- (51) Int. Cl. H01L 33/00 (2006.01)U.S. Cl. ..... 438/34; 257/E33.053 (52)
- ABSTRACT (57)

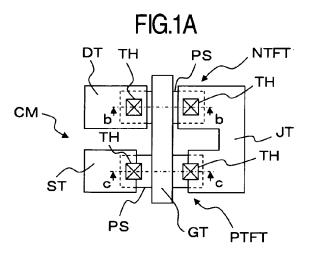
A manufacturing method for a display device having a first conductive type thin film transistor and a second conductive type thin film transistor, comprising the steps of: in formation regions for a first conductive type thin film transistor and a second conductive type thin film transistor forming a semiconductor layer, a first insulating film covering the semiconductor layer and a gate electrode disposed on the first insulating film so as to intersect the semiconductor layer, on substrate having first conductive type impurity regions on both outer sides of a channel region of the semiconductor layer below the gate electrode forming a second insulating film, in the second insulating film and the first insulating film forming a contact hole for a drain electrode and a source electrode, in the formation region for the second conductive type thin film transistor forming electrodes and a second conductive type impurity region.

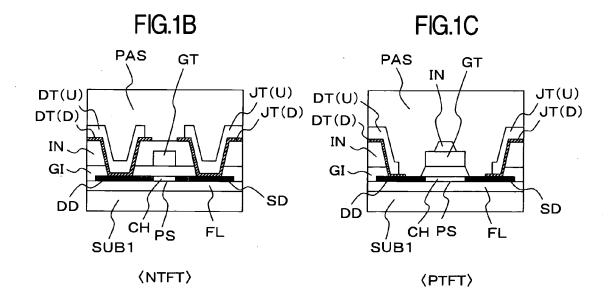


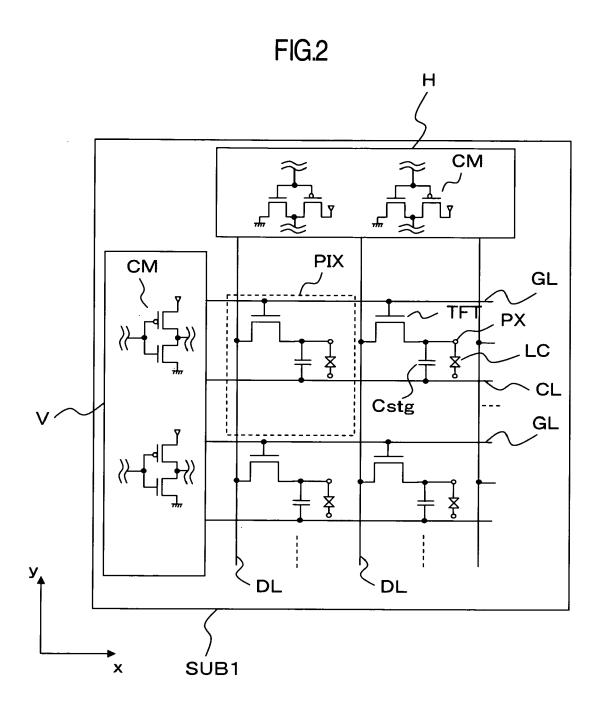




# Find authenticated court documents without watermarks at docketalarm.com.







**DOCKET A L A R M** Find authenticated court documents without watermarks at <u>docketalarm.com</u>.

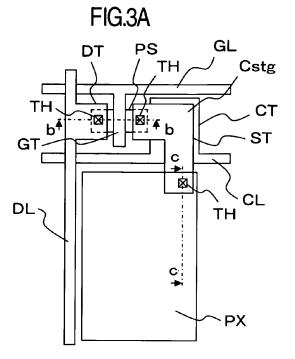
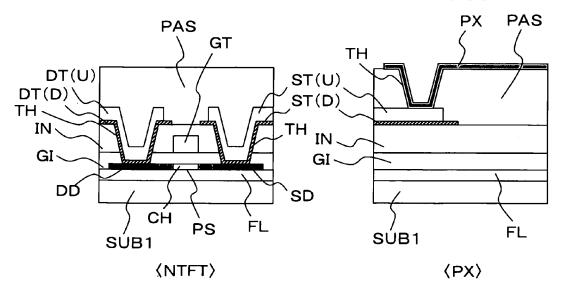


FIG.3B

FIG.3C



Α

# DOCKET A L A R M



# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

# **Real-Time Litigation Alerts**



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## **Advanced Docket Research**



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

# **Analytics At Your Fingertips**



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

### LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

### FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

### E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.