

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2002/0158835 A1

Kobayashi et al.

(43) Pub. Date: Oct. 31, 2002

(54) DISPLAY DEVICE AND METHOD OF MANUFACTURING THE SAME

Publication Classification

(76) Inventors: Michiya Kobayashi, Fukaya-shi (JP); Kazushige Yamamoto, Yokohama-shi (JP)

(51) Int. Cl.⁷ G09G 3/36
(52) U.S. Cl. 345/100

Correspondence Address:
Pillsbury Winthrop LLP
1600 Tysons Boulevard
McLean, VA 22102 (US)

(57) ABSTRACT

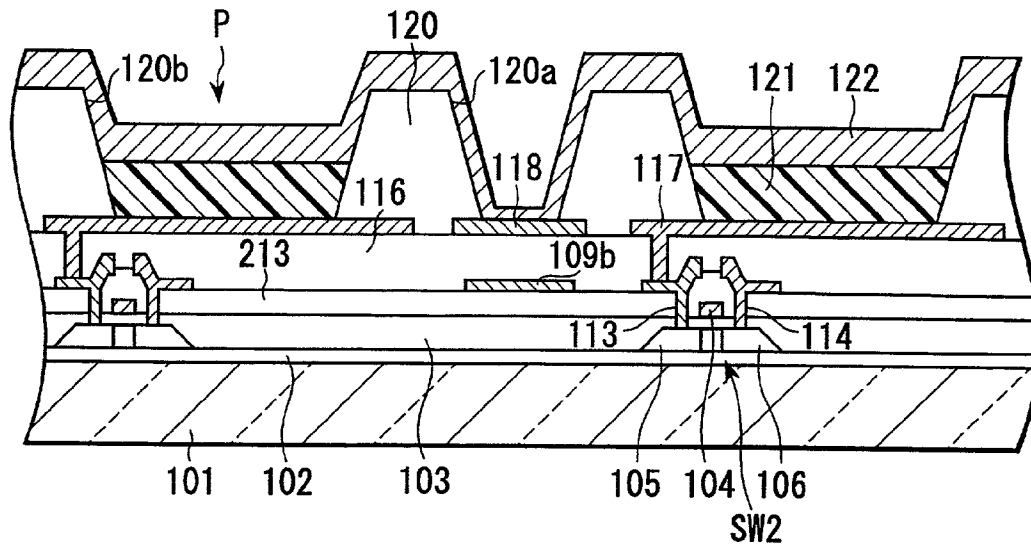
(21) Appl. No.: 10/125,612

(22) Filed: Apr. 19, 2002

(30) Foreign Application Priority Data

Apr. 20, 2001 (JP) 2001-122485
Apr. 20, 2001 (JP) 2001-122884

An active matrix type planar display device includes display elements arranged in a matrix and auxiliary wiring elements. The display element has an optical active layer between a first electrode formed on a substrate and a second electrode. The auxiliary wiring element is formed in the same layer or on the same surface as the first electrode, electrically insulated from the first electrode, and electrically connected to the second electrode.



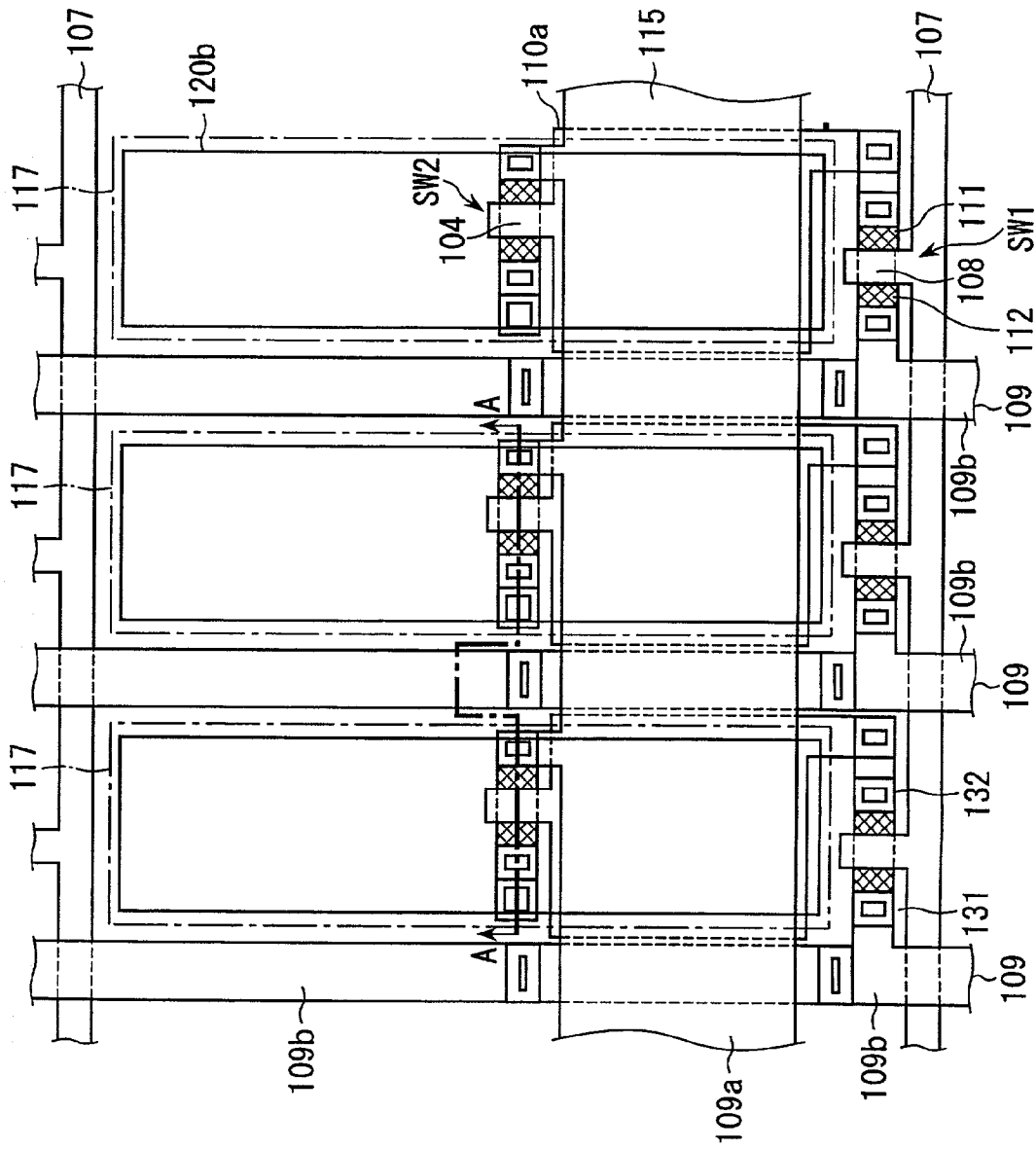


FIG. 2

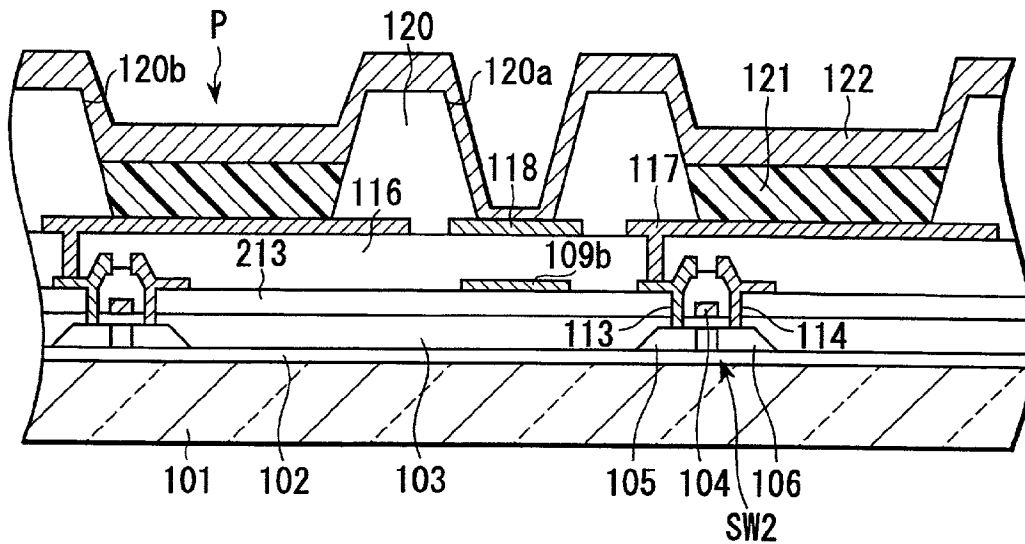


FIG. 3

METAL MATERIAL	ELECTRICAL RESISTIVITY ($\mu \Omega \text{ cm}$)	TRANSPARENT CONDUCTIVE MATERIAL	ELECTRICAL RESISTIVITY ($\mu \Omega \text{ cm}$)
Ag	1.6	ITO	100~1000
Cu	1.7	IZO	100~1000
APC alloy	2.2		
Au	2.4		
Al	3.0		
Al-Nd alloy	4.7		
Ti	5.0		
Mo	5.6		
W	5.6		

FIG. 4

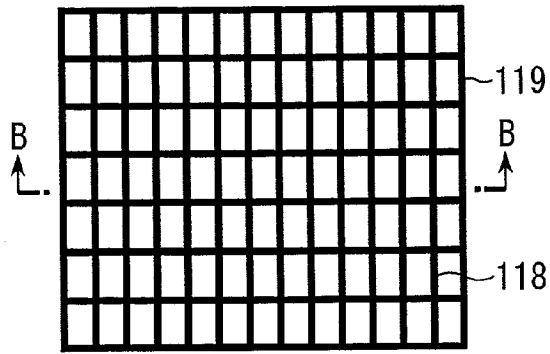


FIG. 5A

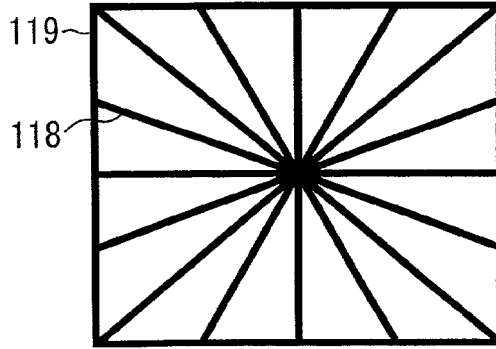


FIG. 5D

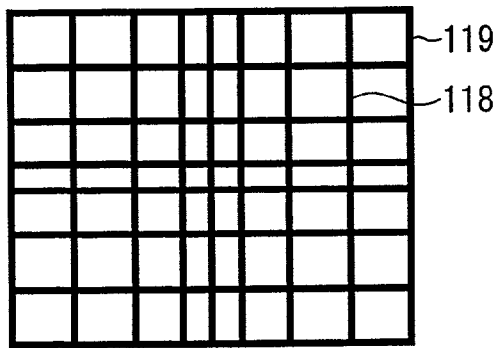


FIG. 5B

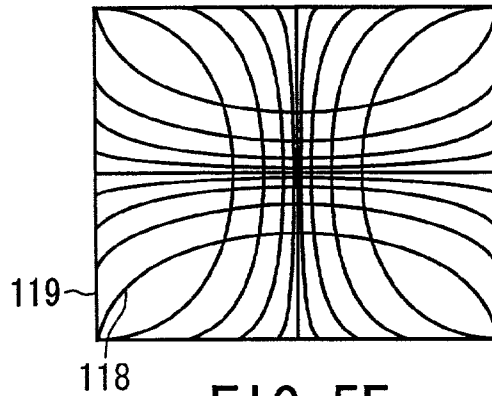


FIG. 5E

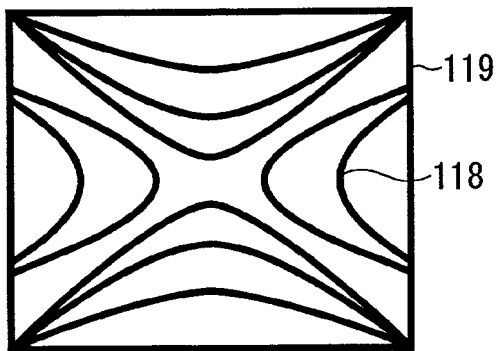


FIG. 5C

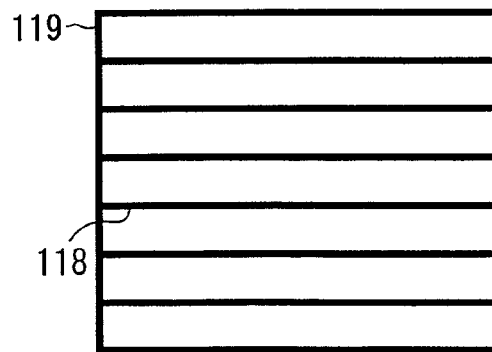


FIG. 5F

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.