

US 20240237499A9

(19) United States

(12) Patent Application Publication PARK et al.

(10) Pub. No.: US 2024/0237499 A9

(48) **Pub. Date: Jul. 11, 2024 CORRECTED PUBLICATION**

(54) **DISPLAY DEVICE**

(71) Applicant: **SAMSUNG DISPLAY CO., LTD.,** Yongin-si (KR)

(72) Inventors: Jung Woo PARK, Yongin-si (KR); Kwang Soo BAE, Yongin-si (KR); Byung Han YOO, Yongin-si (KR); Dae Young LEE, Yongin-si (KR); Hyun

Dae LEE, Yongin-si (KR)

(21) Appl. No.: 18/364,606

(22) Filed: Aug. 3, 2023

Prior Publication Data

(15) Correction of US 2024/0138241 A1 Apr. 25, 2024See (22) Filed.See (30) Foreign Application Priority Data.

(65) US 2024/0138241 A1 Apr. 25, 2024

(30) Foreign Application Priority Data

Oct. 20, 2022 (KR) 10-2022-0135947

Publication Classification

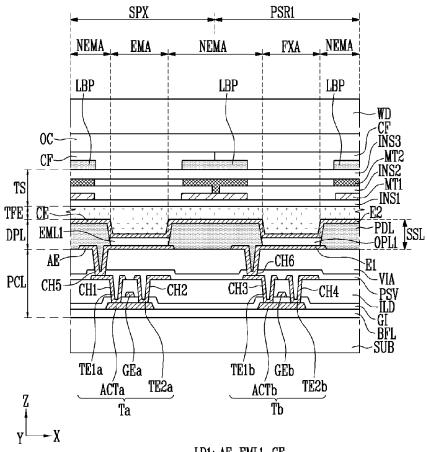
(51)	Int. Cl.	
	H10K 59/80	(2006.01)
	G06F 3/041	(2006.01)
	G06F 3/044	(2006.01)
	H10K 39/34	(2006.01)
	H10K 59/40	(2006.01)

(52) U.S. Cl.

CPC *H10K 59/8791* (2023.02); *G06F 3/0418* (2013.01); *G06F 3/0445* (2019.05); *H10K 39/34* (2023.02); *H10K 59/40* (2023.02); *G06F 2203/04111* (2013.01); *G06V 40/12* (2022.01)

(57) ABSTRACT

A display device includes a light emitting sub-pixel disposed in a display area, a light receiving pixel disposed in one of the display area or a non-display area, and a touch sensing layer including a sensing conductive layer overlapping with the light receiving pixel.



LD1: AE, EML1, CE OPD1: E1, OPL1, E2 MT: MT1, MT2