

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2024/0213423 A1

Jun. 27, 2024 (43) **Pub. Date:**

(54) **DISPLAY DEVICE**

(71) Applicant: LG DISPLAY CO., LTD., Seoul (KR)

(72) Inventor: HeeJin IM, Paju-si (KR)

Jul. 7, 2023

(73) Assignee: LG DISPLAY CO., LTD., Seoul (KR)

(21) Appl. No.: 18/219,403

(30)Foreign Application Priority Data

Dec. 27, 2022 (KR) 10-2022-0185440

Publication Classification

(51) Int. Cl.

(22) Filed:

H01L 33/60 (2006.01)(2006.01)H01L 25/075

H01L 27/15 (2006.01) (52) U.S. Cl.

CPC H01L 33/60 (2013.01); H01L 25/0753

(2013.01); H01L 27/156 (2013.01)

(57)ABSTRACT

A display device includes a substrate provided with a plurality of subpixels and configured to include a central area and a peripheral area surrounding the central area, a light emitting diode formed in each of the plurality of subpixels on the substrate, and an optical structure formed on the light emitting diode, wherein the plurality of subpixels includes a first subpixel formed in the central area and a second subpixel formed in the peripheral area, the optical structure disposed in the first subpixel is disposed in the center of the first subpixel, and the optical structure disposed in the second subpixel is disposed closer to the other side of the second subpixel than one side of the second subpixel.

