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(19) **United States**(12) **Patent Application Publication**
PARK(10) **Pub. No.: US 2022/0377916 A1**(43) **Pub. Date: Nov. 24, 2022**(54) **ROTATING DISPLAY APPARATUS USING
SEMICONDUCTOR LIGHT-EMITTING
DEVICE**(52) **U.S. Cl.**CPC **H05K 5/0021** (2013.01); **H05K 5/0217**
(2013.01); **G02B 30/54** (2020.01)(71) Applicant: **LG ELECTRONICS INC.**, Seoul
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ABSTRACT(72) Inventor: **Seongjin PARK**, Seoul (KR)(73) Assignee: **LG ELECTRONICS INC.**, Seoul
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The present disclosure is applicable to a display apparatus-related technical field, and relates to, for example, a rotating display apparatus using a light-emitting diode (LED) which is a semiconductor light-emitting device. The rotating display apparatus using a light-emitting device of the present disclosure may comprise: a fixed part including a motor; a rotary part positioned on the fixed part and coupled to a rotary shaft of the motor so as to rotate; a first light source module installed on the rotary part and including at least one first panel disposed on an outer peripheral surface of an imaginary cylinder in the same direction as the rotary shaft, and a first light-emitting device array in which individual pixels are disposed on respective first panels in the length direction of the first panel; and a second light source module installed on the rotary part and including at least one second panel disposed in a direction perpendicular to the rotary shaft, and a second light-emitting device array in which individual pixels are disposed on respective second panels.

