



US 20220361335A1

(19) **United States**(12) **Patent Application Publication**
SHIM et al.(10) **Pub. No.: US 2022/0361335 A1**(43) **Pub. Date: Nov. 10, 2022**(54) **CIRCUIT BOARD MODULE AND
ELECTRONIC DEVICE INCLUDING THE
SAME***H05K 1/02* (2006.01)*H05K 7/14* (2006.01)*H04M 1/02* (2006.01)(71) Applicant: **SAMSUNG ELECTRONICS CO.,
LTD.**, Suwon-si, Gyeonggi-do (KR)(52) **U.S. Cl.**CPC *H05K 1/14* (2013.01); *H05K 1/181*
(2013.01); *H05K 1/0216* (2013.01); *H05K*
7/1427 (2013.01); *H04M 1/0249* (2013.01);
H05K 2201/10378 (2013.01)(72) Inventors: **Seungbo SHIM**, Suwon-si,
Gyeonggi-do (KR); **Junghoon PARK**,
Suwon-si, Gyeonggi-do (KR); **Dongil**
SON, Suwon-si, Gyeonggi-do (KR)

(57)

ABSTRACT

According to various embodiments of the disclosure, an electronic device may comprise: a display, a first circuit board disposed under the display, at least one component disposed on one surface of the first circuit board, an interposer surrounding at least two sides of the at least one component and disposed on the first circuit board, and a second circuit board spaced apart from the first circuit board and including an area joined with the interposer. The interposer may include: a first interposer portion disposed along a first area of the first circuit board, a first end of the first interposer having at least a portion including a non-shielding area, and a second interposer portion disposed along a second area, adjacent to the first area, of the first circuit board, a second end of the second interposer facing the first end and having at least a portion including a non-shielding area.

(21) Appl. No.: **17/431,917**(22) PCT Filed: **Aug. 13, 2021**(86) PCT No.: **PCT/KR2021/010808**

§ 371 (c)(1),

(2) Date: **Aug. 18, 2021**(30) **Foreign Application Priority Data**

Aug. 18, 2020 (KR) 10-2020-0103172

Publication Classification(51) **Int. Cl.***H05K 1/14* (2006.01)*H05K 1/18* (2006.01)