



US 20220361324A1

(19) **United States**(12) **Patent Application Publication**
JI et al.(10) **Pub. No.: US 2022/0361324 A1**(43) **Pub. Date: Nov. 10, 2022**(54) **PRINTED CIRCUIT BOARD****Publication Classification**(71) Applicant: **SAMSUNG**
ELECTRO-MECHANICS CO., LTD.,
Suwon-si (KR)(51) **Int. Cl.**
H05K 1/02 (2006.01)
H05K 1/18 (2006.01)(72) Inventors: **Yun Je JI**, Suwon-si (KR); **Seung Eun**
LEE, Suwon-si (KR); **Yong Hoon**
KIM, Suwon-si (KR)(52) **U.S. Cl.**
CPC **H05K 1/0298** (2013.01); **H05K 1/181**
(2013.01); **H05K 2201/2009** (2013.01); **H05K**
2201/10287 (2013.01)(21) Appl. No.: **17/459,212**(22) Filed: **Aug. 27, 2021**(30) **Foreign Application Priority Data**

May 6, 2021 (KR) 10-2021-0058672

(57) **ABSTRACT**

The present disclosure relates to a printed circuit board. The printed circuit board includes: a plurality of insulating layers; a plurality of circuit layers disposed on at least one of an interior and an exterior of the plurality of insulating layers; and a reinforcing layer disposed on one surface of the plurality of insulating layers, and having a first opening having a first width and a second opening having a second width, different from the first width.

