



US 20220377905A1

(19) **United States**(12) **Patent Application Publication**
Yang(10) **Pub. No.: US 2022/0377905 A1**(43) **Pub. Date: Nov. 24, 2022**(54) **METHOD FOR DESIGNING PCB PADS,
DEVICE AND MEDIUM***H05K 1/11* (2006.01)*H05K 3/42* (2006.01)(71) Applicant: **Inspur Suzhou Intelligent Technology
Co., Ltd., Suzhou (CN)**(52) **U.S. Cl.**CPC *H05K 3/0047* (2013.01); *G05B 19/182*
(2013.01); *H05K 3/0005* (2013.01); *H05K*
1/116 (2013.01); *H05K 3/423* (2013.01); *G05B*
2219/45035 (2013.01); *H05K 2201/09827*
(2013.01); *H05K 2201/09481* (2013.01)(72) Inventor: **Caikun Yang, Suzhou (CN)**(21) Appl. No.: **17/772,946**(22) PCT Filed: **Jun. 28, 2020**

(57)

ABSTRACT(86) PCT No.: **PCT/CN2020/098405**

§ 371 (c)(1),

(2) Date: **Apr. 28, 2022**

A method for designing PCB pads: using a drill bit of a first size to drill through a PCB from a first side; using a drill bit of a second size to back-drill a second side of the PCB so as to form a pyramid-shaped through hole; setting the connection means of a second layer and third layer of an inner layer of the PCB that comprises the pyramid-shaped through hole to full connection; and disposing a pad of a third size on a first layer of the inner layer, and disposing a pad of a fourth size on the last layer of the inner layer, wherein the fourth size is bigger than the third size, the fourth size is bigger than the second size, the second size is bigger than the first size, and the third size is bigger than the first size.

(30) **Foreign Application Priority Data**

Oct. 31, 2019 (CN) 201911049653.8

Publication Classification(51) **Int. Cl.***H05K 3/00* (2006.01)*G05B 19/18* (2006.01)