

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2022/0369456 A1 IKEDA et al.

Nov. 17, 2022 (43) **Pub. Date:**

(54) WIRING SUBSTRATE AND METHOD FOR MANUFACTURING WIRING SUBSTRATE

(71) Applicant: **IBIDEN CO., LTD.**, Ogaki (JP)

Inventors: Tomoyuki IKEDA, Ogaki (JP); Kentaro WADA, Ogaki (JP)

Assignee: IBIDEN CO., LTD., Ogaki (JP)

Appl. No.: 17/730,283

Filed: Apr. 27, 2022 (22)

(30)Foreign Application Priority Data

May 14, 2021 (JP) 2021-082387

Publication Classification

(51) Int. Cl.

H05K 1/11 (2006.01)H05K 3/40 (2006.01) (52) U.S. Cl.

CPC H05K 1/112 (2013.01); H05K 3/4007 (2013.01); H05K 3/4038 (2013.01); H05K 2201/096 (2013.01)

(57)ABSTRACT

A wiring substrate includes a first insulating layer, a conductor layer formed on the first insulating layer, a second insulating layer formed on the first insulating layer such that the second insulating layer is covering the conductor layer, and a coating film formed on a surface of the conductor layer such that the coating film is adhering the conductor layer and the second insulating layer. The conductor layer includes a conductor pad and a wiring pattern, and the conductor pad of the conductor layer has a mounting surface including a first region and a component mounting region formed such that the second insulating layer has a through hole exposing the component mounting region and that the first region is covered by the second insulating layer and roughened to have a surface roughness higher than a first surface roughness of a surface of the wiring pattern facing the second insulating layer.

