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**PARK et al.**(10) **Pub. No.: US 2022/0386478 A1**(43) **Pub. Date: Dec. 1, 2022**(54) **MULTI-LAYER PRINTED CIRCUIT BOARD  
MADE OF DIFFERENT MATERIALS AND  
MANUFACTURING METHOD THEREOF****Publication Classification**

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(57) **ABSTRACT**

A circuit board including an adhesive part, a ceramic board part with the adhesive part, and a printed circuit board part with the adhesive part. The ceramic board and printed circuit board parts are made of different materials. The adhesive part includes: an adhesive layer including an adhesive material, an adhesive part opening, and a conductive paste filled in an inside of the adhesive part opening.

A method including providing a ceramic board part, providing a printed circuit board part, and producing an adhesive part. Batch-bonding the printed circuit board part, the adhesive part, and the ceramic board part with one another. Producing the adhesive part includes: bonding a protection layer on two surfaces of an adhesive layer, forming an adhesive part opening penetrating the adhesive layer and the protection layer, filling the adhesive part opening with a conductive paste, and removing the protection layer.

