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ATIAS et al.(10) **Pub. No.: US 2022/0377912 A1**(43) **Pub. Date: Nov. 24, 2022**(54) **PROCESS FOR LAMINATING
GRAPHENE-COATED PRINTED CIRCUIT
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(2013.01)(57) **ABSTRACT**

Processes for laminating a graphene-coated printed circuit board (PCB) are disclosed. An example laminated PCB may include a lamination stack that may include an inner core, an adhesive layer, and at least one graphene-metal structure. Pressure and heat—which may be applied under vacuum or controlled gas atmosphere—may be applied to the lamination stack, after all materials have been placed. The graphene of the graphene-metal structure is designed to promote high frequency performance and heat management within the PCB.

