

Title (en)
A METHOD AND A JIG FOR MANUFACTURING A PIN-FIN TYPE POWER MODULE

Title (de)
VERFAHREN UND VORRICHTUNG ZUR HERSTELLUNG EINES STIFTRIPPENARTIGEN LEISTUNGSMODULS

Title (fr)
PROCÉDÉ ET GABARIT DE FABRICATION D'UN MODULE DE PUISSANCE DE TYPE BROCHE-AILETTE

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Application
EP 19700871 A 20190110

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Abstract (en)
[origin: WO2019145154A1] A method and a jig for manufacturing a Pin-Fin type power module are disclosed. The method including: providing a Pin-Fin type power module and a jig, the power module comprises a Pin-Fin baseplate, insulation material connecting the base plate and power chips provided on the insulation material, the jig includes a main body having a flat upper surface and a flat lower surface, and holes provided on the upper surface of the main body, wherein the distribution of the holes is the same as the arrangement of the Fins, the aperture of the holes is larger than the dimension of the Fins, and the length of the holes is not shorter than that of the Fins, inserting the Pin-Fin into the jig so each Fin is inside the corresponding hole, placing the power module combined with the jig in a cavity between a top mold and a bottom mold while the lower surface of the jig is placed on the upper surface of the bottom mold, performing the molding process by injecting epoxy resin, removing the jig from the Pin-Fin. The pressure is distributed uniformly during the epoxy resin molding since the flat surface is contacting the bottom mold, thus the insulation material and Pin-Fin cracking or bending can be avoided.

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