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(54) Title (EN): MOLDED DEVICE PACKAGE WITH AIR CAVTIY

(54) Title (FR): EMBALLAGE DE DISPOSITIF MOULÉ AVEC CAVITÉ À AIR

(57) Abstract:

(EN): Conventional packages for 5G applications suffer from disadvantages including high mold stress on the die, reduced performance, and increased keep-out zone. To address these and other issues of the conventional packages, it is proposed to pre-apply a wafer-applied material, which remains in place, to form an air cavity between the die and the substrate. The air cavity can enhance the dies performance. Also, since the wafer-applied material can remain in place, the keep-out zone can be reduced. As a result, higher density modules can be fabricated.

(FR): Les boîtiers classiques pour des applications 5G souffrent d'inconvénients comprenant une contrainte de moule élevée sur la puce, une performance réduite et une zone de conservation accrue. Pour résoudre ces problèmes et d'autres problèmes des boîtiers classiques, il est proposé de pré-appliquer un matériau appliqué en tranche, qui reste en place, pour former une cavité d'air entre la puce et le substrat. La cavité d'air peut améliorer les performances de la puce. De plus, étant donné que le matériau appliqué à la tranche peut rester en place, la zone de maintien peut être réduite. Par conséquent, des modules de densité supérieure peuvent être fabriqués.

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Declarations:

Declaration made as applicant's entitlement, as at the international filing date, to apply for and be granted a patent (Rules 4.17(ii) and 51bis.1(a)(ii)), in a case where the declaration under Rule 4.17(iv) is not appropriate
Declaration made as applicant's entitlement, as at the international filing date, to claim the priority of the earlier application, where the applicant is not the applicant who filed the earlier application or where the applicant's name has changed since the filing of the earlier application (Rules 4.17(iii) and 51bis.1(a)(iii))