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(54) Title (EN): CERAMIC CIRCUIT SUBSTRATE, POWER MODULE, AND LIGHT EMISSION DEVICE

(54) Title (FR): SUBSTRAT DE CIRCUIT CÉRAMIQUE, MODULE DE PUISSANCE, ET DISPOSITIF D'ÉMISSION DE LUMIÈRE

(54) Title (JA): セラミック回路基板、パワーモジュールおよび発光装置

(57) Abstract:

(EN): The present invention pertains to a ceramic circuit substrate in which the strength of bonding with a sealing resin is enhanced, and a power module and a light emission device with which it is possible to achieve a high degree of reliability. The ceramic circuit substrate 1 is provided with a ceramic substrate 2, a conductor layer 3 made of Cu, and a metal coating 4 coating the conductor layer 3. The metal coating 4 is made of a material having, as the main component, one or more elements selected from the group consisting of Ir, Rh, Pd, Pt, Al, Ti, W, Ta, and Nb.

(FR): La présente invention concerne un substrat de circuit céramique dans lequel la force de liaison avec une résine de scellage est améliorée, ainsi qu'un module de puissance et un dispositif d'émission de lumière au moyen desquels il est possible d'obtenir un degré élevé de fiabilité. Le substrat de circuit céramique 1 comprend un substrat en céramique 2, une couche conductrice 3 faite de Cu, et un revêtement métallique 4 recouvrant la couche conductrice 3. Le revêtement métallique 4 est fait d'un matériau ayant, comme constituant principal, un ou plusieurs éléments choisis dans le groupe constitué par Ir, Rh, Pd, Pt, Al, Ti, W, Ta et Nb.

(JA): 本発明は、封止樹脂との接合強度が向上するセラミック回路基板ならびに高い信頼性を実現できるパワーモジュールおよび発光装置に関する。セラミック回路基板１は、セラミック基板２と、Ｃｕからなる導体層３と、導体層３を被覆する金属皮膜４と、を備えている。金属皮膜４は、Ｉｒ、Ｒｈ、Ｐｄ、Ｐｔ、Ａｌ、Ｔｉ、Ｗ、ＴａおよびＮｂからなる群から選ばれる１種または２種以上を主成分とする材料からなる。

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