

Title (en)
PROCESS FOR PRODUCING A METAL-CERAMIC SUBSTRATE AND METAL-CERAMIC SUBSTRATE PRODUCED USING SUCH A PROCESS

Title (de)
VERFAHREN ZUM HERSTELLEN EINES METALL-KERAMIK-SUBSTRATS UND METALL-KERAMIK-SUBSTRAT HERGESTELLT MIT EINEM SOLCHEN VERFAHREN

Title (fr)
PROCÉDÉ DE FABRICATION D'UN SUBSTRAT MÉTAL-CÉRAMIQUE ET SUBSTRAT MÉTAL-CÉRAMIQUE FABRIQUÉ PAR UN TEL PROCÉDÉ

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Abstract (en)
[origin: WO2022152788A1] The present invention relates to a process for producing a metal-ceramic substrate (1) comprising: • - providing a metal layer (10) and a ceramic element (20), • - forming at least one first recess (21) on a first side (S1) of the metal layer (10) and • - joining the metal layer (10) and the ceramic element (20), preferably using a soldering process or a direct bonding process, wherein the ceramic element (20) is bonded to the first side (S1) of the metal layer (10), wherein upon forming the at least one first recess (10) on a second side (S2) opposite the first side (S1) a first residual metal partial layer (31) extending parallel to the main extension plane (HSE) is left behind, wherein after the joining of the metal layer (10) and the ceramic layer (20) the first residual metal partial layer (31) is removed at least in regions to reveal an insulation trench, wherein a ratio of the first thickness (D1) of the first residual metal partial layer (31) to the thickness (D) of the metal layer (10) is greater than 0.1, preferably greater than 0.25 and particularly preferably greater than 0.4 or even greater than 0.5, to counter sagging of the metal-ceramic substrate (1) during joining of the metal layer (10) and the ceramic element (20).

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