

Title (en)
Cooking apparatus containing a coated microwave connection

Title (de)
Gargerät mit einer beschichteten Mikrowellensteckverbindung

Title (fr)
Appareil de cuisine comportant un connecteur de microondes revêtu

Publication
EP 1852934 B1 20080521 (DE)

Application
EP 06290732 A 20060503

Priority
EP 06290732 A 20060503

Abstract (en)
[origin: EP1852934A1] Cooking appliance comprises cooking chamber, technical chamber separated from cooking chamber by cooking chamber wall(s) (10), and a microwave plug connector (100). The microwave plug connector comprises emitter (102) and receiver unit (101). The emitter unit is connected to a microwave source for feeding in microwaves with a wavelength (λ). The emitter unit is arranged in technical chamber. The emitter unit comprises a metallic conductor (12, 13) in connection with a metallic $\lambda/4$ structure. The receiver unit comprises metallic conductor(s) connected with metallic $\lambda/4$ structure. Cooking appliance comprises cooking chamber, a technical chamber separated from the cooking chamber by cooking chamber wall(s), and a microwave plug connector. The microwave plug connector comprises emitter unit and a receiver unit. The emitter unit is connected to a microwave source for feeding in microwaves with a wavelength (λ). The emitter unit is arranged in the technical chamber. The emitter unit comprises a metallic conductor in connection with a metallic $\lambda/4$ structure. The receiver unit is connected to the emitter unit for the transmission of microwaves. The receiver unit is arranged in the cooking chamber. The receiver unit comprises metallic conductor(s) in connection with a metallic $\lambda/4$ structure. The two $\lambda/4$ structures can be connected on top of one another and together, separably. A dielectric is arranged in region(s) between the emitter unit and the receiver unit. The dielectric is provided as a dielectric coating of part(s) of one $\lambda/4$ structures which serves as a metallic substrate in a region where there is a connection of the $\lambda/4$ structures by plugging them on top of one another and together. The dielectric coating is connected elastically to the metallic substrate. The dielectric coating is porous. The dielectric coating is sealed with a mineral melt for stabilization at least in some areas. The dielectric coating comprises ceramic material, preferably aluminum oxide. The dielectric coating completely fills the intermediate space between the $\lambda/4$ structures.

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