

Title (en)
Improvements relating to microwave heating.

Title (de)
Mikrowellenaufheizung.

Title (fr)
Chaussage à micro-ondes.

Publication
EP 0348156 A2 19891227 (EN)

Application
EP 89306233 A 19890620

Priority
CA 570096 A 19880622

Abstract (en)
A container (10) for heating a substance, e.g. food, in a microwave oven has a bottom (12) transparent to microwave energy. The container is supported on a stand (22) that contains one or more electrically conductive plates (32) (or apertures in an electrically conductive sheet) that generate at least one mode of microwave energy of higher order than the fundamental modes. The stand (22) also serves to support the container (10) above the higher order mode generating plates (or apertures) so that the undersurface of the substance is spaced from them by a uniform predetermined distance. The arrangement has the known features of "bottom heating", i.e. taking advantage of the natural heat flow in the substance, while achieving more uniform heating of the substance by virtue of the higher order mode or modes. As an alternative to or in addition to the generation of higher order modes, the stand may embody elements that modify the microwave pattern in a manner that enhances the coupling of microwave energy into the undersurface of the substance to be heated.

IPC 1-7
B65D 81/34; H05B 6/64

IPC 8 full level
F24C 7/02 (2006.01); **B65D 81/34** (2006.01); **H05B 6/64** (2006.01)

CPC (source: EP)
B65D 81/3453 (2013.01); **H05B 6/6494** (2013.01); **B65D 2581/3441** (2013.01); **B65D 2581/3494** (2013.01)

Cited by
US5117078A; EP1059245A1; FR2898591A1; US6486455B1; JP2014230688A; WO2007113415A3; WO2006087753A1; WO9219511A1; WO9638352A1

Designated contracting state (EPC)
AT BE CH DE ES FR GB IT LI LU NL SE

DOCDB simple family (publication)
EP 0348156 A2 19891227; EP 0348156 A3 19911127; AU 3665489 A 19900104; AU 615755 B2 19911010; BR 8903046 A 19900206; CA 1306509 C 19920818; DK 306489 A 19891223; DK 306489 D0 19890621; FI 893049 A0 19890621; FI 893049 A 19891223; JP H0264323 A 19900305; NO 892519 D0 19890616; NO 892519 L 19891227; NZ 229606 A 19911223; ZA 894620 B 19900328

DOCDB simple family (application)
EP 89306233 A 19890620; AU 3665489 A 19890621; BR 8903046 A 19890622; CA 570096 A 19880622; DK 306489 A 19890621; FI 893049 A 19890621; JP 16060789 A 19890622; NO 892519 A 19890616; NZ 22960689 A 19890616; ZA 894620 A 19890616