

Title (en)

Device for heating sheet products by microwaves.

Title (de)

Anlage zur Behandlung von blattförmigen Produkten mittels Mikrowellen.

Title (fr)

Dispositif de traitement par micro-ondes de produits en feuille.

Publication

**EP 0089288 A1 19830921 (FR)**

Application

**EP 83400518 A 19830314**

Priority

FR 8204398 A 19820316

Abstract (en)

1. Device for treating sheet products by microwaves, comprising at least two elongate micro-wave applicators of the resonant type, with the nodes and antinodes of intensity the length of their principal axes, and provided with passage openings for conducting the product to be treated, the applicators having their principal axes parallel to each other and being spaced transversely in the direction of conduction of the product by an amount  $1/2 \lambda g/2$  where  $n$  represents the total number of applicators and  $\lambda g$  the wavelength of the microwaves in the applicator, the applicators being defined by a prismatic shape of rectangular section where  $a$  indicates the length of the side of the section of the rectangle which is perpendicular to the electrical field and  $b$  the length of the side of the rectangular section which is parallel to the electric field, said prismatic shape being limited at one end by a short circuit and at the other end by a conducting partition with a coupling iris, characterized by the fact that the length of the side  $b$  is in fact adjusted to an optimum value greater than  $a/2$ .

Abstract (fr)

L'invention concerne un procédé et un dispositif de traitement par micro-ondes de produits en feuille. Selon l'invention on fait défiler le produit à traiter successivement à travers au moins deux applicateurs micro-ondes (10, 12) allongés du type résonnant, avec des noeuds et des ventres d'intensité le long de leur axe principal, les applicateurs ayant leurs axes principaux parallèles entre eux et étant décalés transversalement à la direction de défilement du produit d'une quantité  $\lambda g/2$  où  $n$  représente le nombre total d'applicateurs et  $\lambda g$  la longueur d'onde des micro-ondes dans l'applicateur. Application notamment au séchage du papier en feuille revêtu d'encre d'imprimerie.

IPC 1-7

**H05B 6/78**

IPC 8 full level

**H05B 6/78** (2006.01)

CPC (source: EP)

**H05B 6/788** (2013.01)

Citation (search report)

- [X] FR 2448699 A1 19800905 - CIBA GEIGY AG [CH]
- [X] GB 650337 A 19510221 - GEN ELECTRIC CO LTD, et al
- [A] US 3052856 A 19620904 - CARTER JOHN L, et al
- [A] US 3247472 A 19660419 - TURNER EDWARD H
- [A] FR 1264758 A 19610623 - ASS ELECT IND
- [A] GB 633916 A 19491230 - WESTINGHOUSE ELECTRIC INT CO
- [A] US 3564458 A 19710216 - CUMMING WILLIAM A

Cited by

GB2282564A; GB2282564B; US5631685A; EP2933081A1; US6323470B2

Designated contracting state (EPC)

AT BE CH DE GB IT LI LU NL SE

DOCDB simple family (publication)

**EP 0089288 A1 19830921; EP 0089288 B1 19870128**; AT E25315 T1 19870215; DE 3369626 D1 19870305; FR 2523797 A1 19830923; FR 2523797 B1 19850927

DOCDB simple family (application)

**EP 83400518 A 19830314**; AT 83400518 T 19830314; DE 3369626 T 19830314; FR 8204398 A 19820316