

Title (en)

Method for uniformly heating, pasteurizing and sterilizing of a product by micro-waves

Title (de)

Verfahren zum gleichmässigen Erwärmen, Pasteurisieren und Sterilisieren von Produkten mittels Mikrowellen

Title (fr)

Méthode pour chauffer, pasteuriser et stériliser uniformément un produit par micro-ondes

Publication

EP 0621740 B1 19970903 (DE)

Application

EP 94106167 A 19940421

Priority

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Abstract (en)

[origin: EP0621740A2] A method is shown for uniform and fast heating by means of microwaves which are fed pulse-like into the products, the products to be treated, such as for example chemical or pharmaceutical products or foods, in particular convenience foods, are guided in open or closed microwave-transparent containers on a continuously conveying endless transport belt through a treatment chamber in which feeding channels of microwave generators are arranged aligned perpendicularly or obliquely with respect to the transport belt. The unit is operated at a microwave power profile which reduces the switch-on and switch-off transient of the microwave pulses as well as at an operating frequency of 50 kHz, which has an edge gradient which is smaller than 1 millisecond, and with pulses of largely square-wave amplitude shape and a length which is in the microsecond to millisecond range. <IMAGE>

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