

## PATENT AWARD

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### Industrial Microwave Systems

A Microwave Techniques Company



### *Wide Waveguide Applicator*

A microwave waveguide applicator and a method for heating, drying, or curing generally planar materials or products. The applicator comprises a waveguide having a pair of opposing broad sides perpendicular to a pair of opposing narrow sides bounding a rectangular exposure chamber. A microwave source generates and propagates microwaves through the chamber in a propagation direction and with an electric field generally directed from one broad wall to the other. Slotted openings in the narrow sides act as entrance and exit ports for a conveyor transporting a product along a conveying path through the chamber perpendicular to the propagation direction and perpendicular to the electric field. The waveguide may be ridged to focus or bend the electric field, especially for heating thin materials.