

Title (en)

METHOD FOR INCREASING THERMAL CONVECTION SPEED IN A THERMOFUSIBLE POLYMER

Title (de)

VERFAHREN ZUM BESCHLEUNIGEN DES KONFEKTIVEN WÄRMETRANSFERS IN EINEM THERMOSCHMELZBAREN POLYMER

Title (fr)

PROCEDE POUR AUGMENTER LA VITESSE DE CONVECTION THERMIQUE DANS UN POLYMERE THERMOFUSIBLE

Publication

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Application

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Abstract (en)

[origin: FR2782665A1] The invention concerns a method for increasing thermal convection speed in a thermofusible polymer, in particular a polyethylene terephthalate, enabling to increase the speed of heat transmission by thermal convection in said polymer, by exposing it simultaneously to at least a thermal radiation source and ultrasonic vibrations. The ultrasonic vibrations are preferably applied intermittently on a surface of the polymer by means of a sonotrode supplied by an ultrasound generator, either directly, or via a liquid in contact with the polymer. Thus the physical characteristics of the polymer can be improved and the heat transmission speed can be varied depending on its form, mass and type.

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