

# United States Patent [19]

## Isenberg et al.

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[54] PROCESS AND DEVICE FOR THE ULTRASONIC TESTING FOR WELDS BETWEEN PLASTICS PACKAGING AND **COVER FOILS** 

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#### [57] ABSTRACT

A process and an apparatus for the ultrasonic testing of welds between plastic packaging like food trays and cover foils. The welded joint between the tray and cover foil is periodically exposed to pulses of ultrasonic radiation. The pulses pass through the weld and are picked up or received by a receiver. The amplitude of the received pulses is evaluated. The cross-section of the beam of ultrasonic radiation is so small that the radiation only passes through the weld itself. The packages and the ultrasonic tester are moved relative to each other in order to examine the whole circuit of the weld. The pulse rate is such that the weld areas covered by successive pulses overlap.

### 20 Claims, 3 Drawing Sheets

