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**Bensason et al.**

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(54) **PROCESS FOR PRODUCING ULTRASONIC SEAL, AND FILM STRUCTURES AND FLEXIBLE CONTAINERS WITH SAME**

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(57) **ABSTRACT**

The present disclosure is directed to processes for producing ultrasonic sealable film structures and flexible containers with ultrasonic seals. The film structure includes a first multilayer film and a second multilayer film. Each multilayer film includes a backing layer and a seal layer. Each seal layer includes an ultrasonic sealable olefin-based polymer (USOP) having the following properties: (a) a heat of melting,  $\Delta H_m$ , less than 130 J/g, (b) a peak melting temperature,  $T_m$ , less than 125° C., (c) a storage modulus in shear ( $G'$ ) from 50 MPa to 500 MPa, and (d) a loss modulus in shear ( $G''$ ) greater than 10 MPa. The multilayer films are arranged such that the seal layer of the first multilayer film is in contact with the seal layer of the second multilayer film. The seal layers form an ultrasonic seal having a seal strength

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