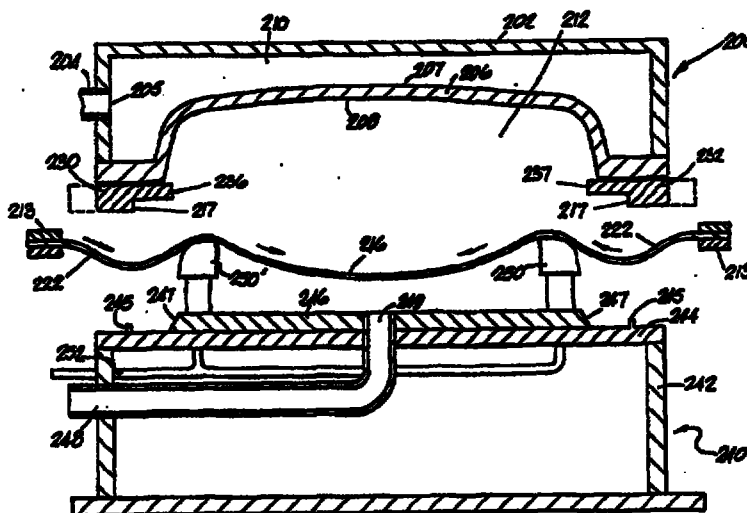


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(54) Title: APPARATUS FOR DIFFERENTIAL PRESSURE FORMING PLASTIC SHEETS



(57) Abstract

The invention relates to an apparatus for making hard-sided luggage shells and other containers by vacuum forming or pressure forming thermoplastic sheets (216). An apparatus for forming shells and containers with integrally molded frames which avoids later attachment to a separate frame is disclosed. The apparatus includes corner plugs (250, 250') which reduce undesirable stretching of shell material that occurs during differential pressure forming, particularly the thinning of corner portions of the shell. The apparatus includes side draw forms (230, 232) for more efficiently using offal portions of the thermoplastic sheet to form the integrally molded frame. The apparatus also includes pinch off plate (246) for severing offal material from the final product while the article is on the mold shell (208).

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