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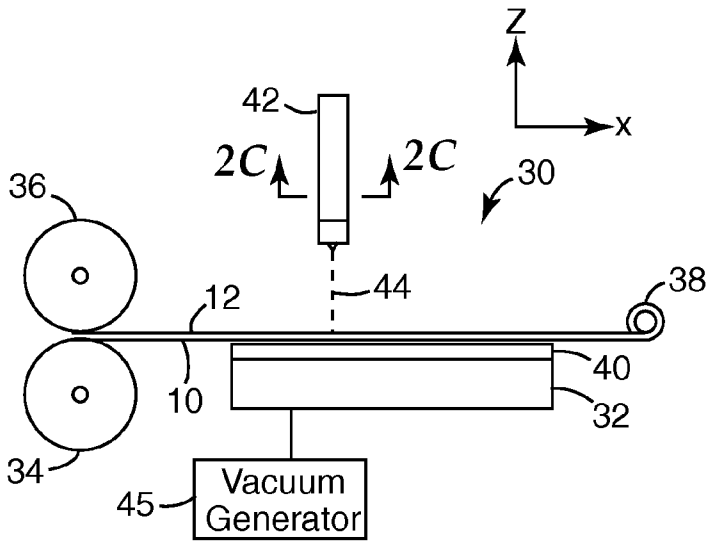
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(54) Title: FUSING MULTIPLE SHEETS OF POLYMERIC FILM



(57) Abstract: A method of forming a bladder for use in an occupant sensor includes positioning first and second sheets of polymeric film onto a bed. The method further includes positioning a laser beam generator above the bed. The laser beam generator is provided information to describe a path of movement over the bed and is then caused to move over the bed along the path and apply a laser beam to melt the first and second sheets to form a bond between the sheets. A system for manufacturing an occupant sensor bladder from polymeric material is also provided. The system includes a bed capable of accepting two layers of polymeric material and a laser beam generator directed at the bed. The laser beam generator can move along a path above the bed and simultaneously apply a laser beam to the polymeric material.

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