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(54) Title: PROCESS FOR PRODUCING FOAM ARTICLE

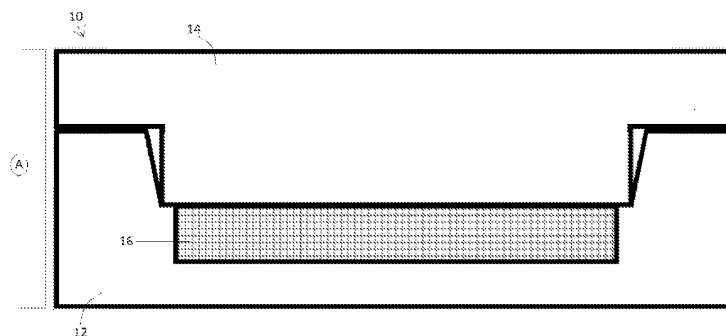


FIG. 1

(57) Abstract: The present disclosure provides a process. In an embodiment, the process includes providing a foamable composition. The foamable composition includes an ethylene-based elastomer, a blowing agent, and a peroxide. The process includes heating the foamable composition to form a pliable formulation. The pliable formulation has (i) a viscosity (0.1 rad/s at 180°C) from greater than 70,000 Pa.s to 2,000,000 Pa.s, (ii) a tan delta (0.1 rad/s at 180°C) from 0.2 to less than 2, (iii) a strain hardening index greater than 2.5 to 6, and (iv) an extensional viscosity (1 s⁻¹ at 180°C) from greater than 400,000 Pa.s to 7,000,000 Pa.s. The process includes introducing the pliable formulation into a mold having an expandable mold cavity and unidirectionally expanding the expandable mold to form a crosslinked foam article. The process includes cooling, in the expanded mold, the crosslinked foam article; and removing the crosslinked foam article from the expandable mold.

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