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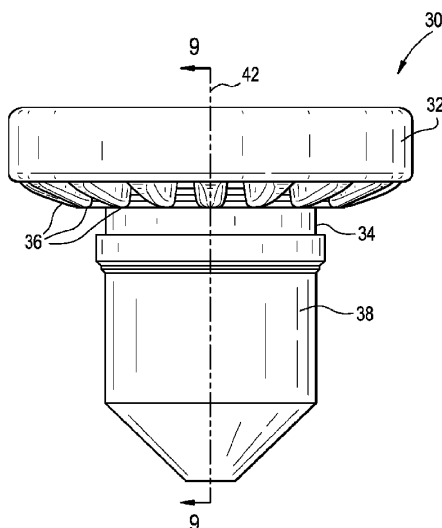
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(54) Title: CLINCH FASTENER

FIG. 6



(57) Abstract: A clinch fastener includes a shaft defining a central axis and a head having an outer periphery cooperating with the shaft. A plurality of ribs disposed under the head to engage a workpiece. The plurality of ribs extending radially outward in a direction from a displacement collar positioned proximate the central axis of the clinch fastener to the outer periphery of the head. Each of the plurality of ribs includes multiple sections forming at least a sidewall and a parametric profile for each rib. The clinch fastener includes a retaining ring cooperating with the shaft and a retaining groove cooperating with the shaft positioned between the displacement collar and retaining ring. The plurality of ribs and displacement collar are configured to radially displace workpiece material into the retaining groove and diffuse stress within the workpiece material when the fastener is secured to the workpiece.