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(54) Title: **THREAD FORMING SCREW THREAD AND CORRESPONDING THREAD ROLL DIE**

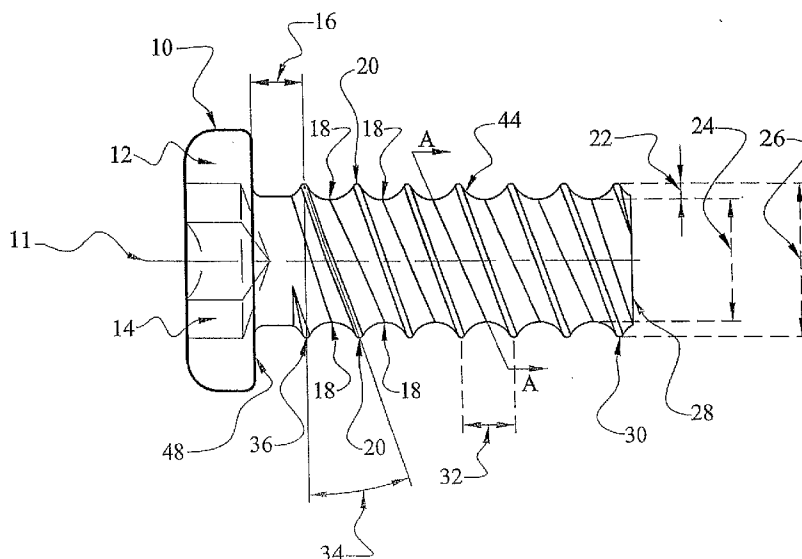


FIG. 2A

(57) Abstract: A thread forming screw thread fastener and a corresponding thread roll die are disclosed for fastening into a hole of a workpiece composed of low ductility material. More specifically, the thread forming screw thread has smooth radius thread flank which has a capability of deforming low ductile material such as magnesium, soft aluminum, thermoset plastics and other low ductility materials to deform the ductile material efficiently minimizing cracks, debris, low friction during installation and a maximum engagement of the screw with mating parts with the ductile material.