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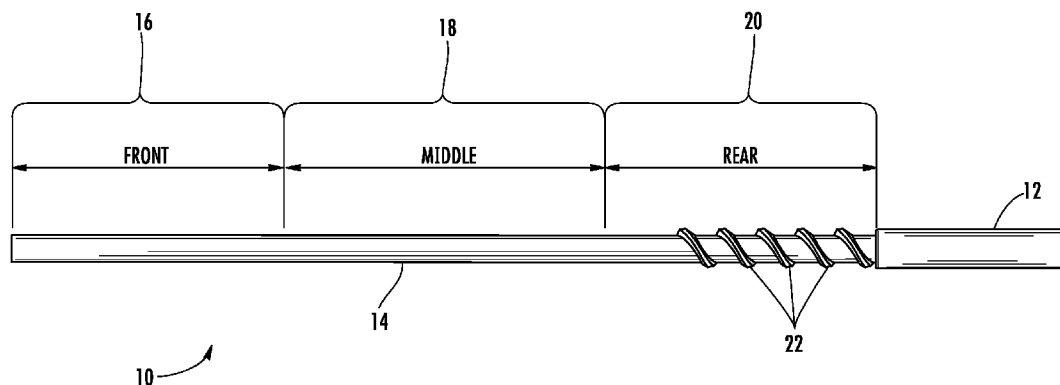


FIG. 1

(57) Abstract: A screw (10) and method for processing metal, metallic alloys, and metal matrix composites in a plastic injection molding machine (24) is disclosed. The screw (10) includes shank (12) with a screw shaft (14) extending therefrom. The screw shaft (14) includes a rear portion (20) proximate to the shank (12), a middle portion proximate (18) the rear portion (20), and a front portion (16) proximate the middle portion (18). Flights (22) extend from the rear portion (20) of the screw shaft (14) for advancing material (K) through the plastic injection molding machine (24) into the middle portion (18) of the screw shaft (14). Flights (22) may optionally be included in the front portion (16) of the screw (10).