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(12) **United States Patent**
Murray

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(54) **RULE ASSEMBLY WITH INCREASED
BLADE STANDOUT**

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(57) **ABSTRACT**

A retractable rule assembly includes a housing assembly and a reel rotatably mounted in the housing assembly. An elongated blade formed of a ribbon of metal having one end connected to the reel is constructed and arranged with respect to the housing assembly to extend from a position tangential to the reel outwardly through a spaced opening in the housing assembly. A coil spring formed of a ribbon of metal has a construction and arrangement between the housing assembly and the reel to rotate the reel in the housing assembly in a direction to wind up the elongated blade when extending outwardly of the housing assembly opening in a normal concavo-convex cross-sectional configuration onto the reel in an abutting volute coil formation in a flattened cross-sectional configuration. A blade holding assembly is constructed and arranged to be manually actuated to hold the blade in any position of extension outwardly of the housing assembly opening and to release the blade from any position in which it is held. The blade has a blade width, thickness and height of concavo-convex curvature sufficient to enable the blade to stand out arcuately a length measured along the blade of at least 10.5 feet with a horizontal linear length of standout thereof being greater than 97% of the arcuate length of standout.

(21) Appl. No.: **09/366,781**

(22) Filed: **Aug. 4, 1999**

(51) **Int. Cl.**⁷ **G01B 3/10**

(52) **U.S. Cl.** **33/755; 33/757; 33/769**

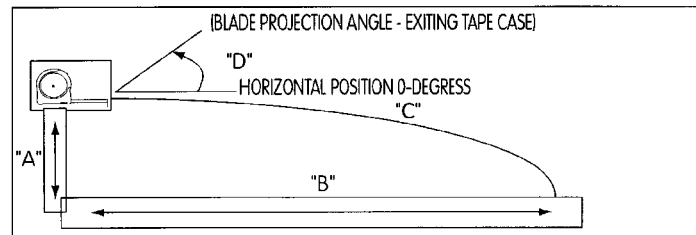
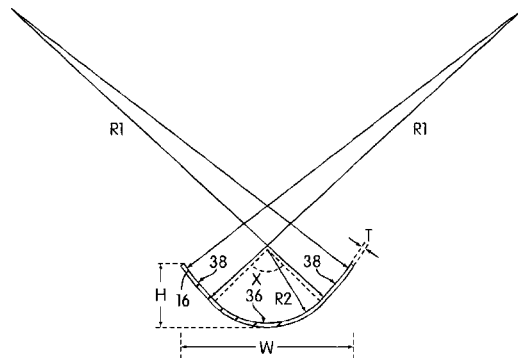
(58) **Field of Search** **33/755, 757, 559, 33/760, 761, 769; 242/381.3, 381.6**

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29 Claims, 10 Drawing Sheets



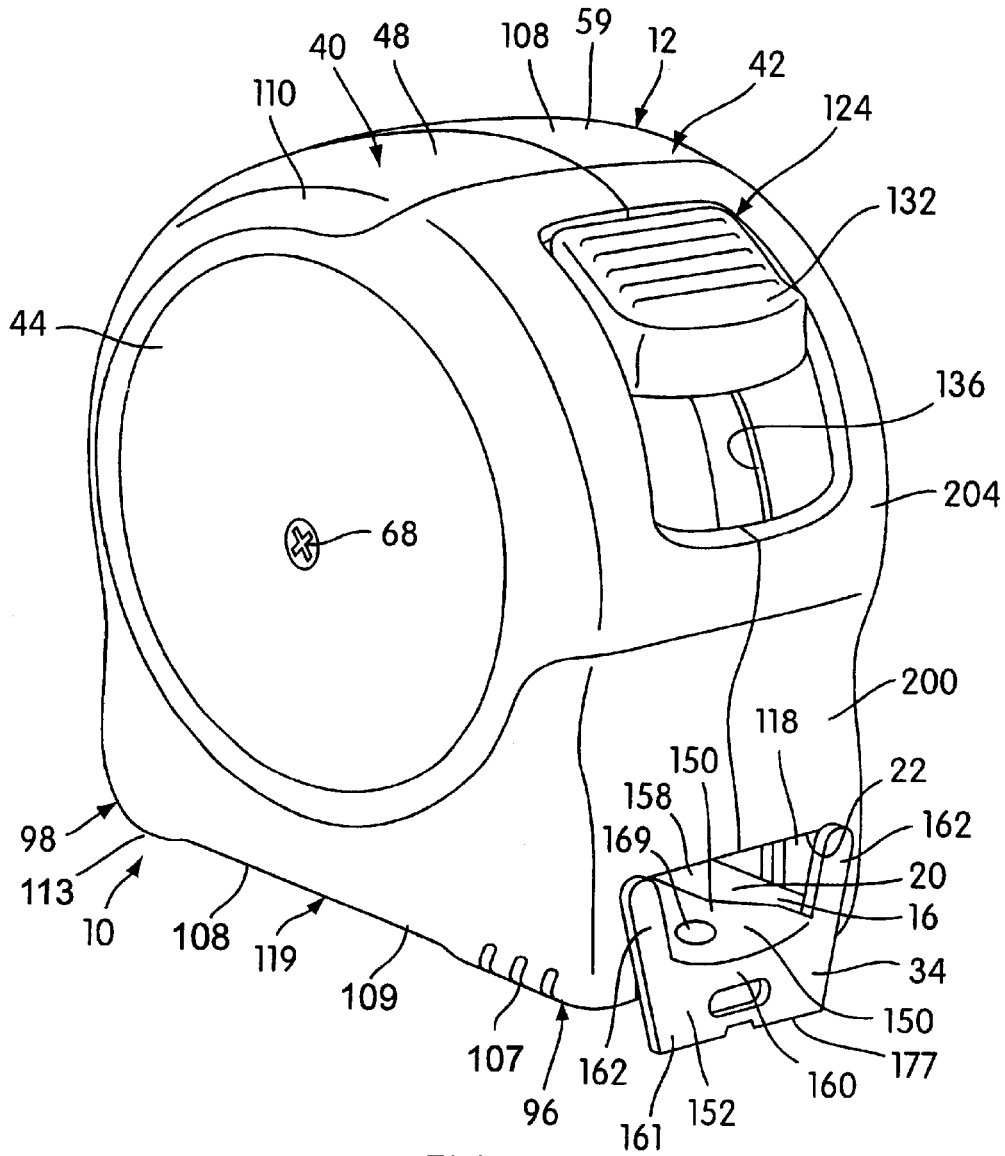


FIG. 1

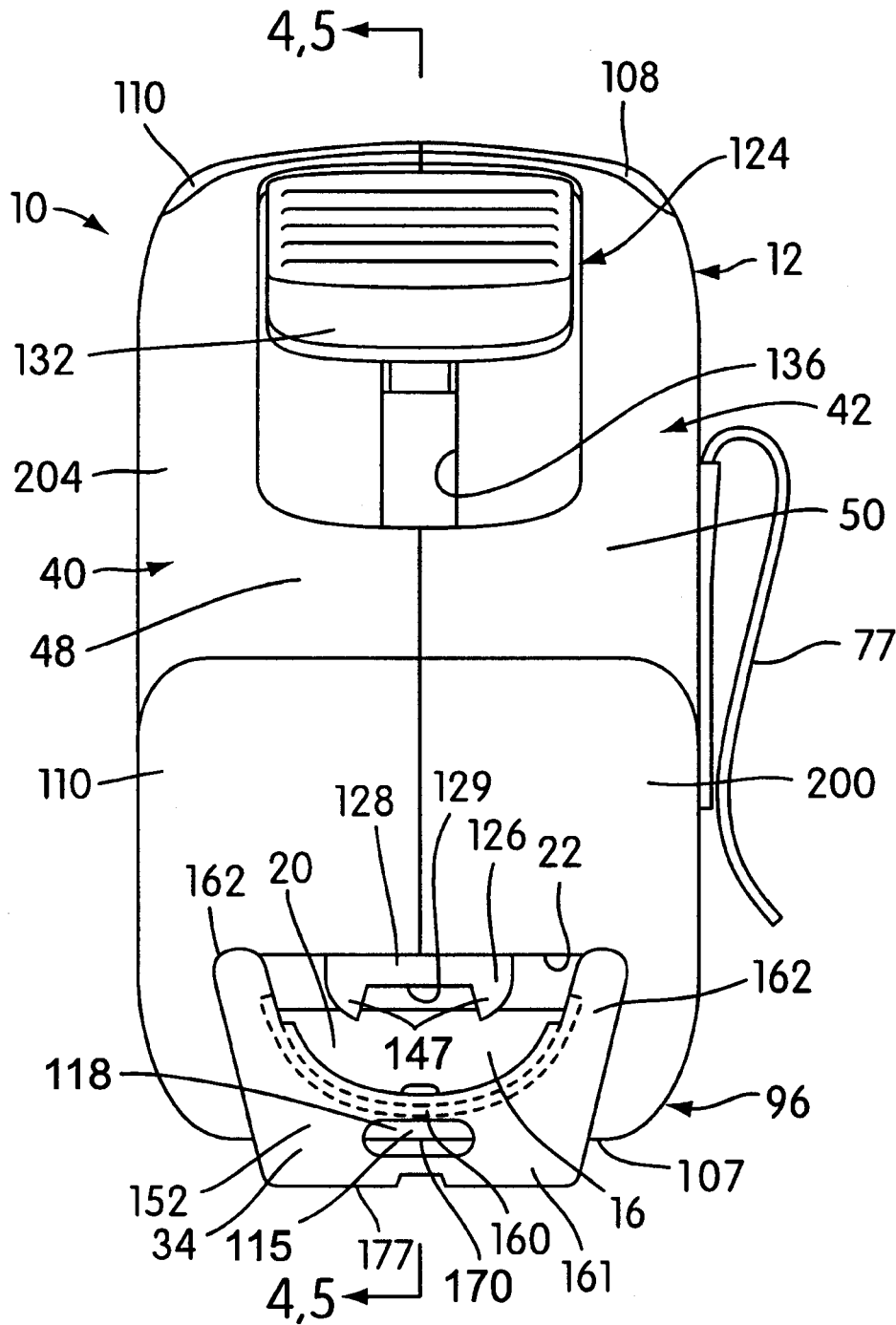


FIG. 2

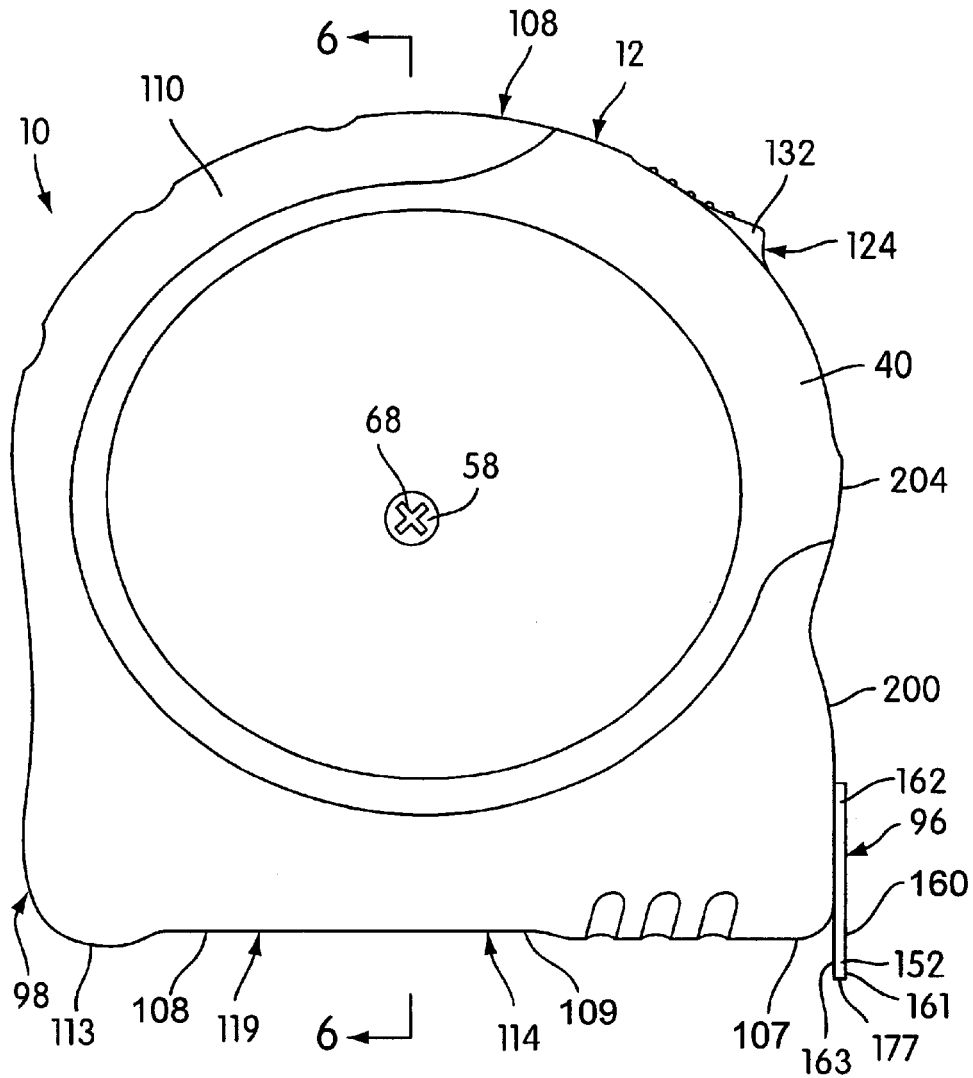


FIG. 3

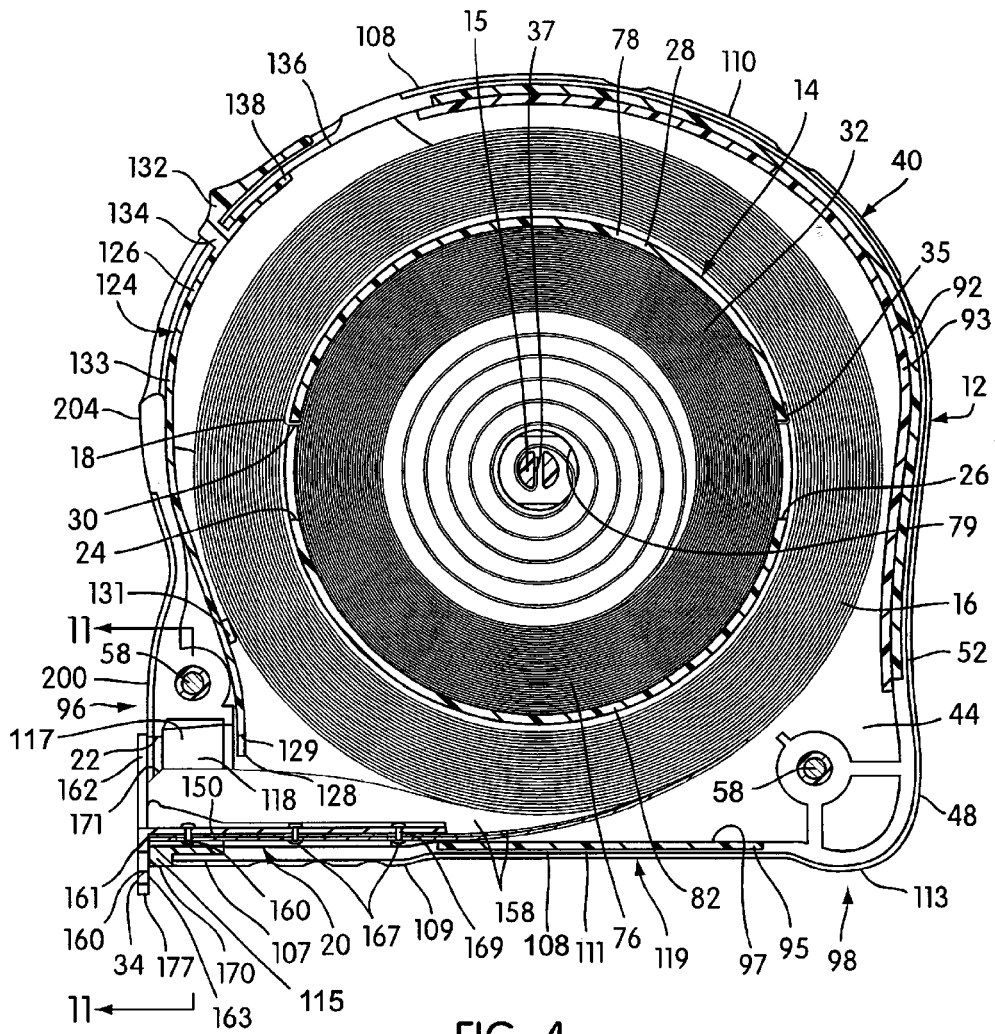


FIG. 4

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