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(54) **ROTARY ELECTROSURGICAL APPARATUS
AND METHODS THEREOF**

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See application file for complete search history.

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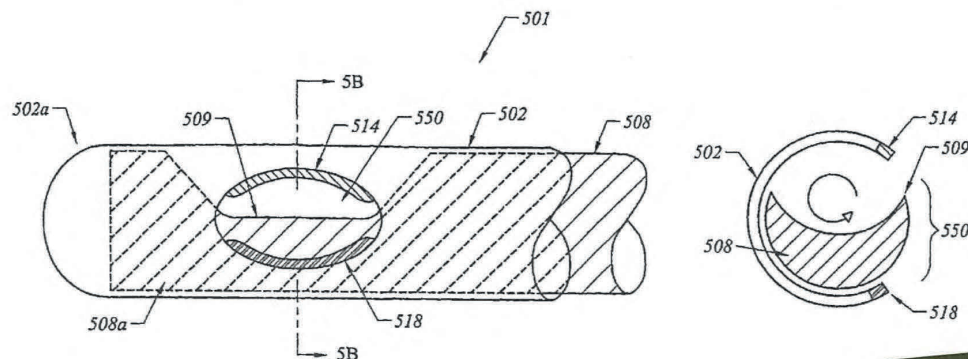
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(57) **ABSTRACT**

Electrosurgical systems, apparatus, and methods for the controlled removal and treatment of a target tissue. An instrument of the invention includes a rotating member housed longitudinally within a shaft, a tissue removal port disposed at the shaft distal end portion, and an active electrode disposed at the instrument distal end. The active electrode is adapted to electrosurgically remove at least a portion of the target tissue as the rotating member rotates within the shaft. According to alternative embodiments, the active electrode may be disposed on the rotating member or on the shaft.

37 Claims, 11 Drawing Sheets



CX-1092.1

Serendia, LLC
Exhibit 2028
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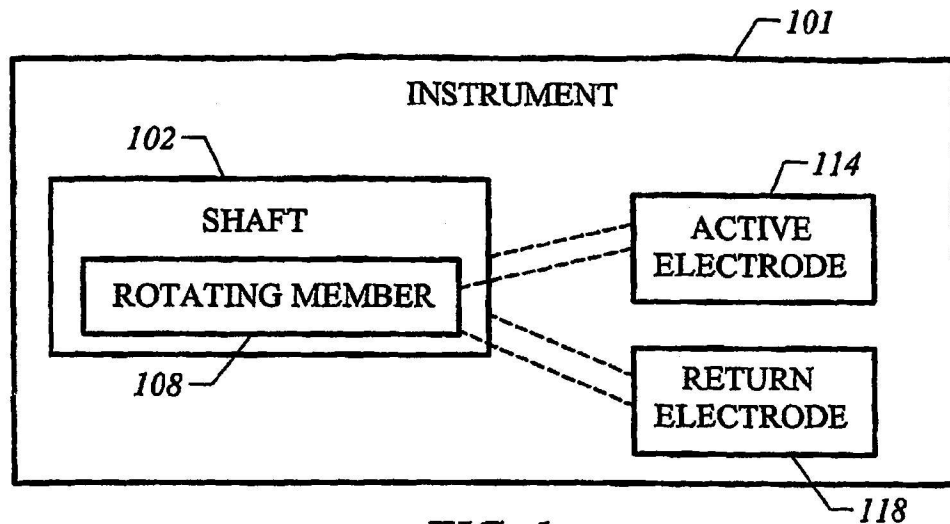


FIG. 1

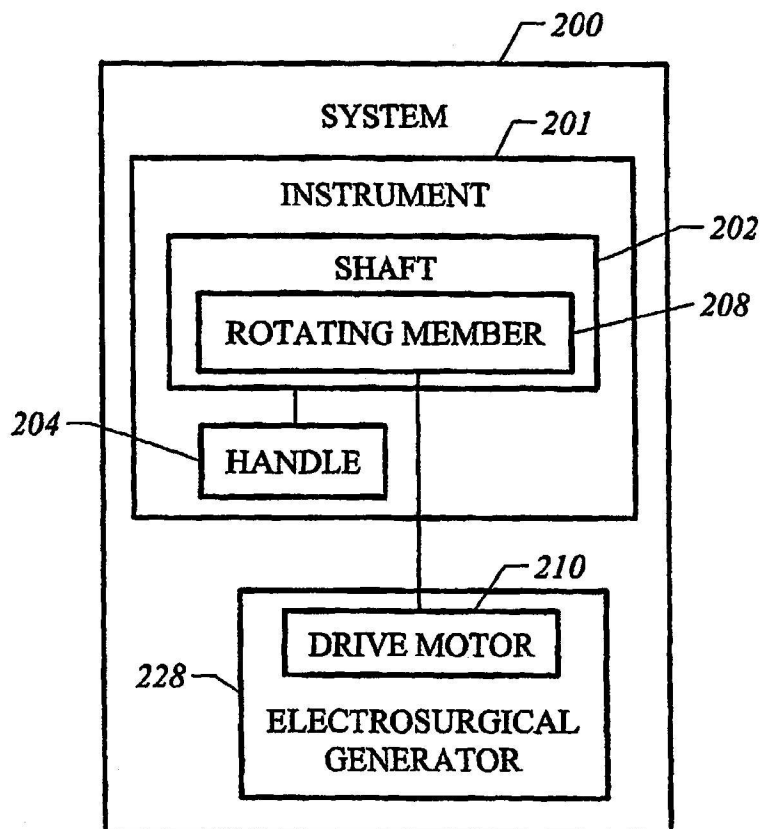


FIG. 2

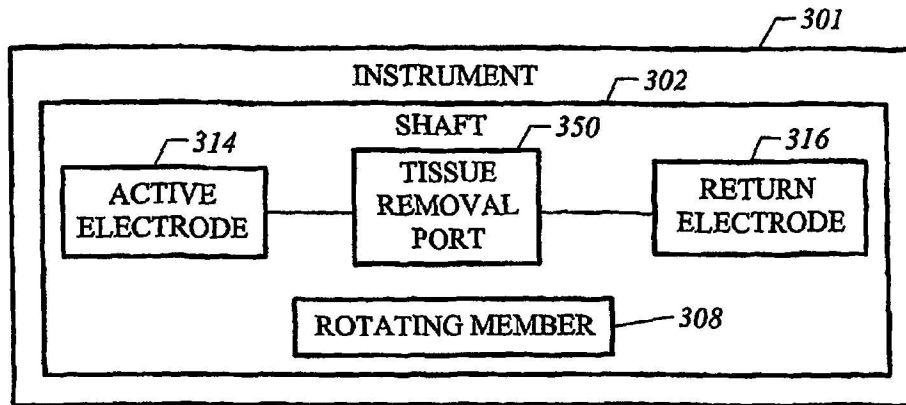


FIG. 3A

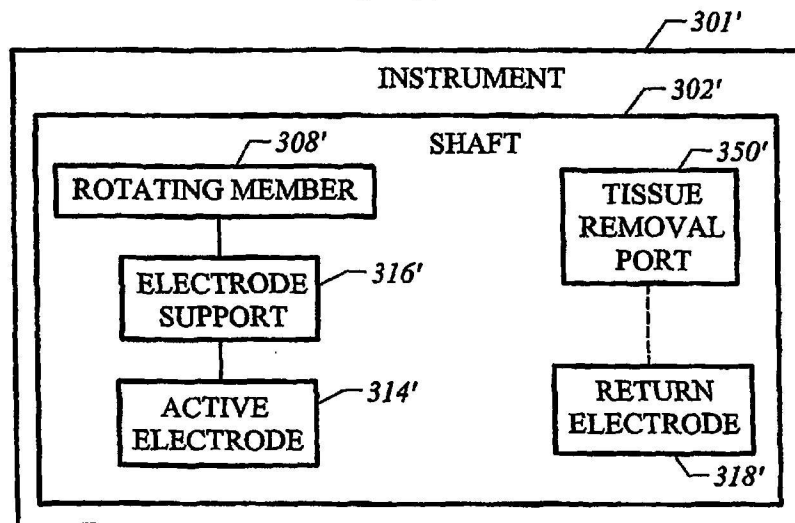


FIG. 3B

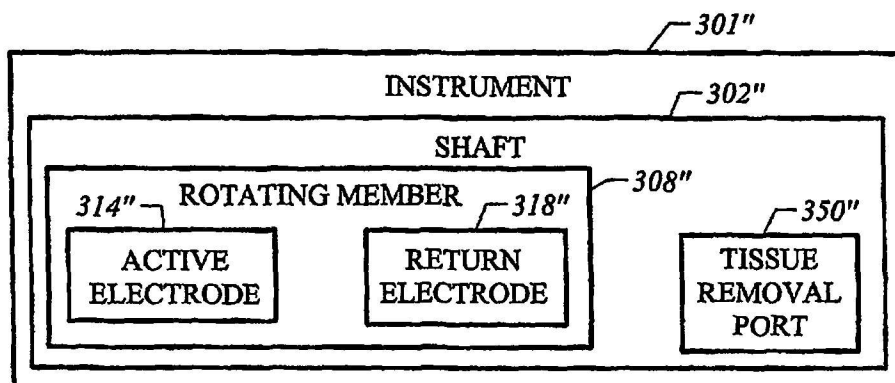


FIG. 3C

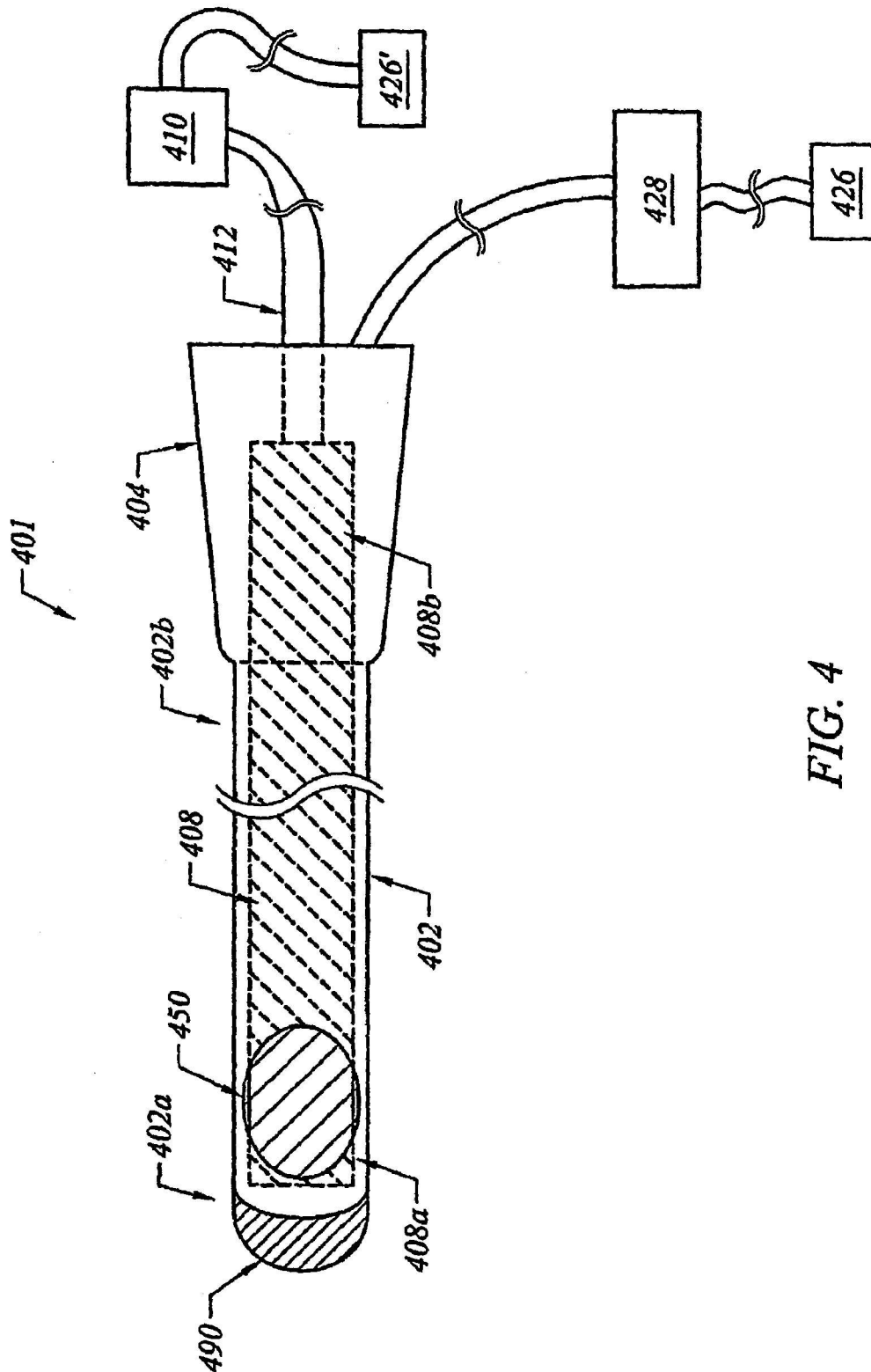


FIG. 4

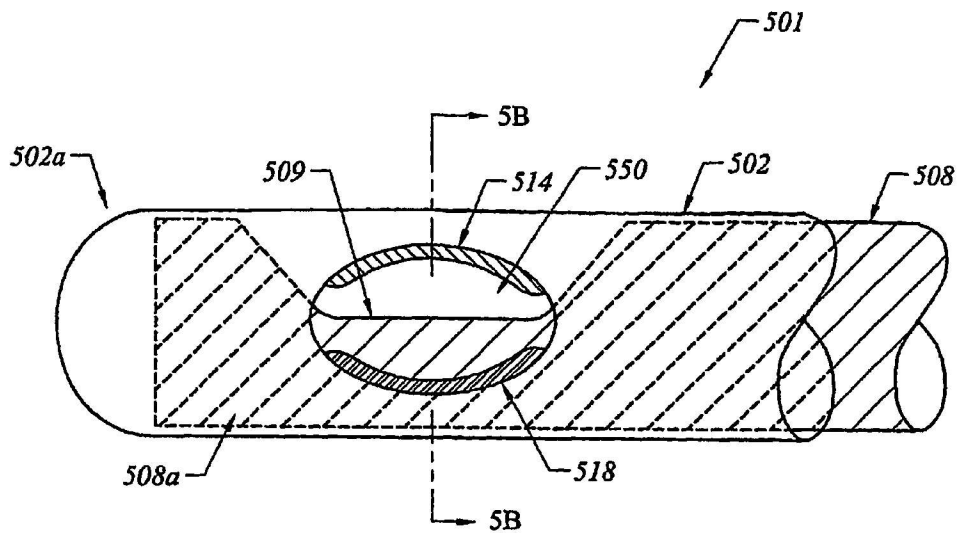


FIG. 5A

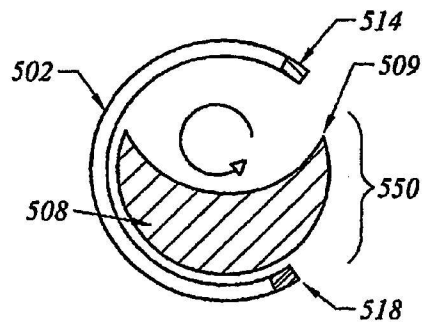


FIG. 5B

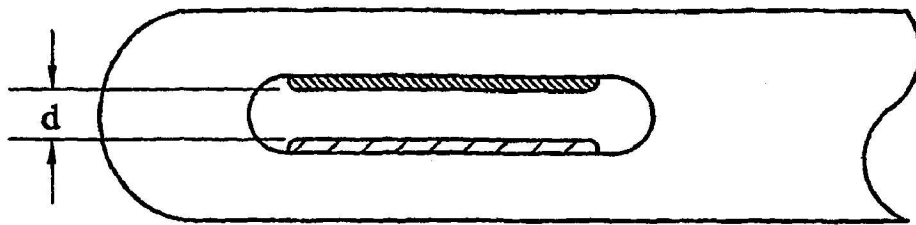


FIG. 5C

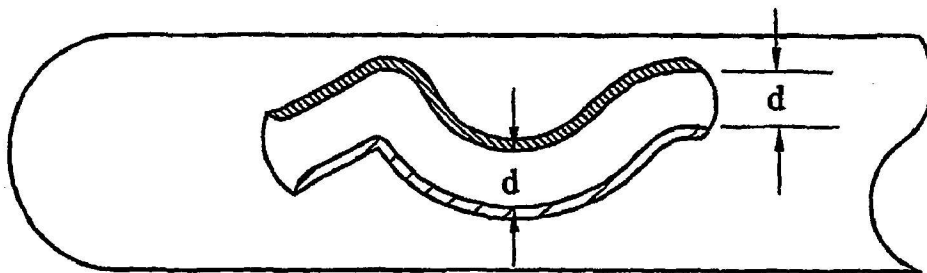


FIG. 5D

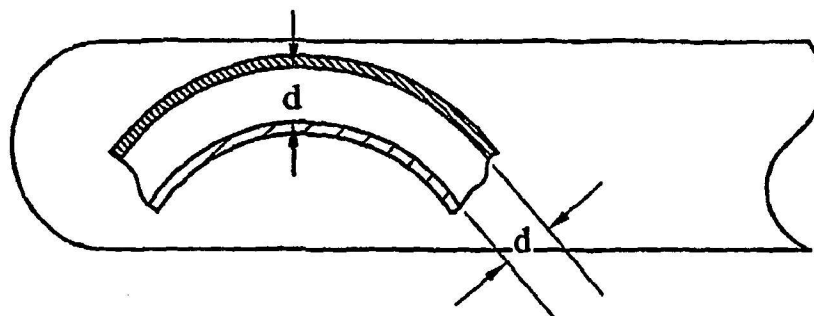


FIG. 5E

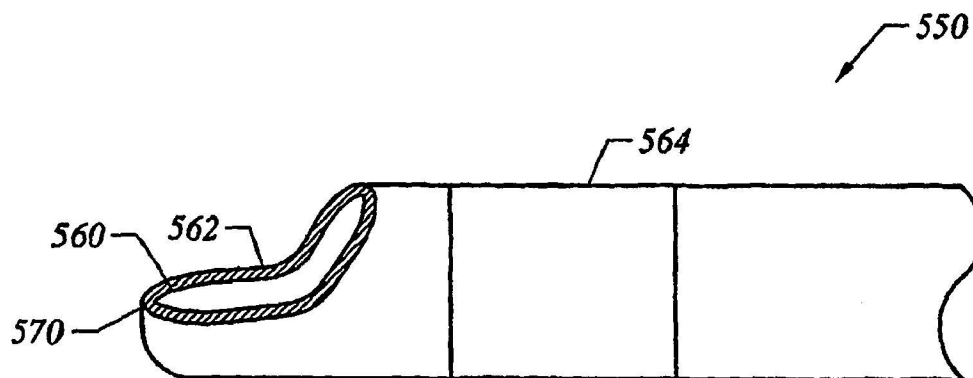


FIG. 5F

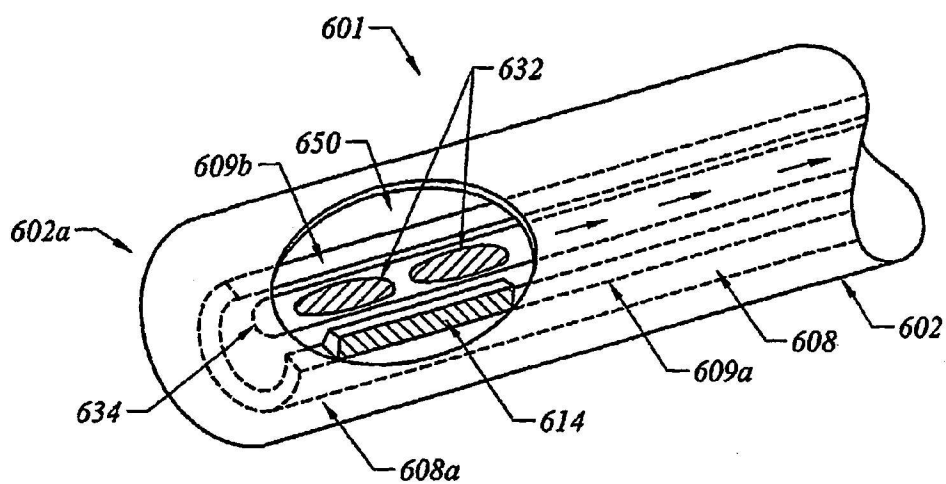


FIG. 6A

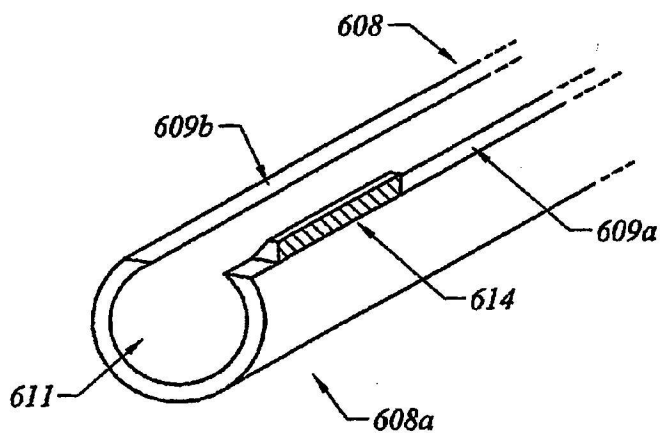


FIG. 6B