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(54) Title: APPARATUS AND METHODS FOR TREATING OBSTRUCTIONS WITHIN BODY LUMENS

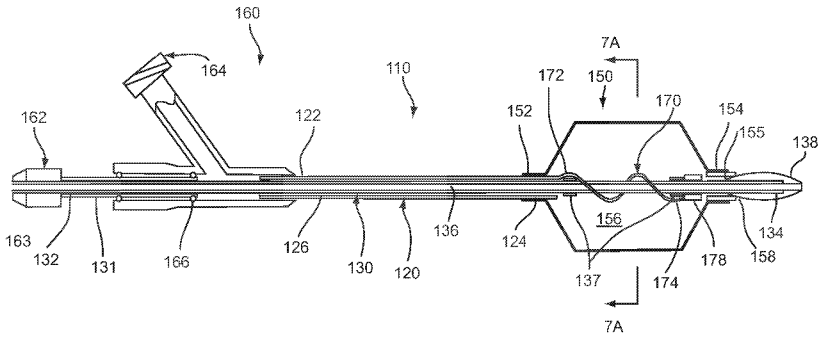


FIG. 7

(57) Abstract: An apparatus is provided that is operable in different modes to perform various functions for treating a body lumen. The apparatus includes a shaft including a proximal end, a distal end, a lumen extending therebetween, and a balloon on the distal end having an interior communicating with the lumen. The apparatus includes a valve on the distal end that selectively opens or closes an outlet communicating with the lumen. With the valve open, fluid introduced into the lumen exits the outlet into a body lumen. With the valve closed, fluid introduced into the lumen expands the balloon. The apparatus also includes an actuator for axially compressing the balloon, and a helical member extends between ends of the balloon interior that expands the balloon from a contracted condition to an expanded helical shape when the actuator is activated.

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