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(54) **EMBOLI PROTECTION DEVICES AND RELATED METHODS OF USE**

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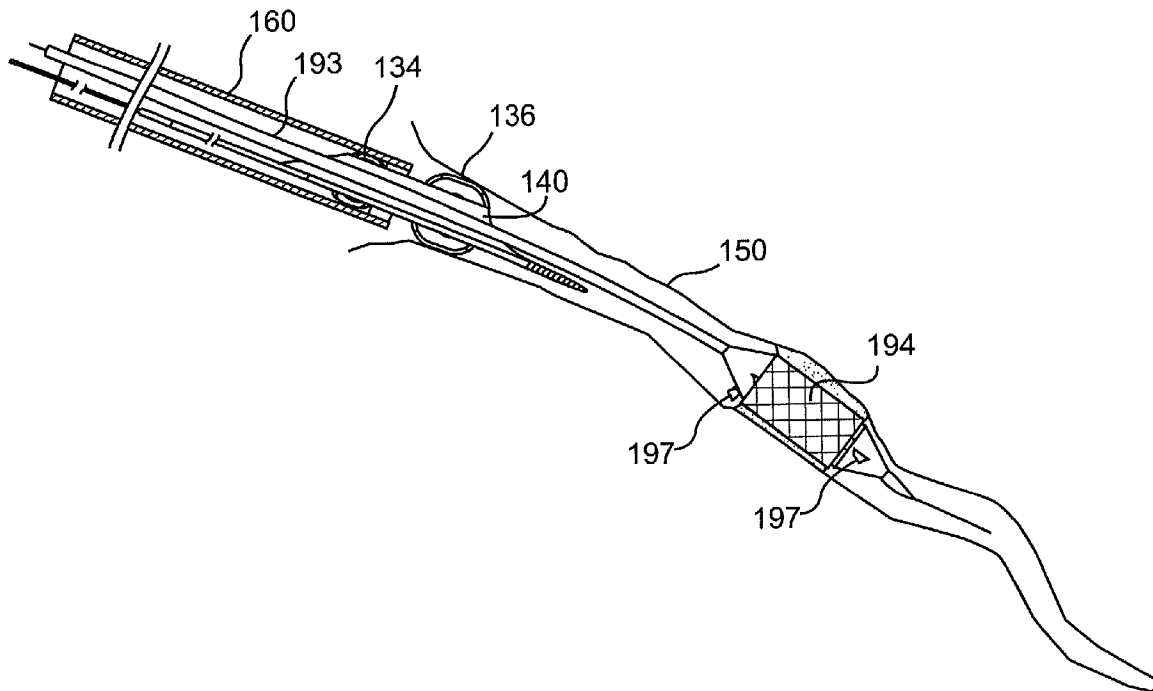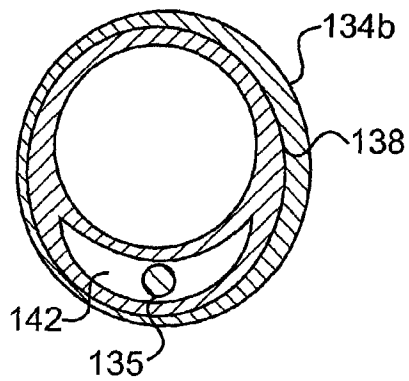
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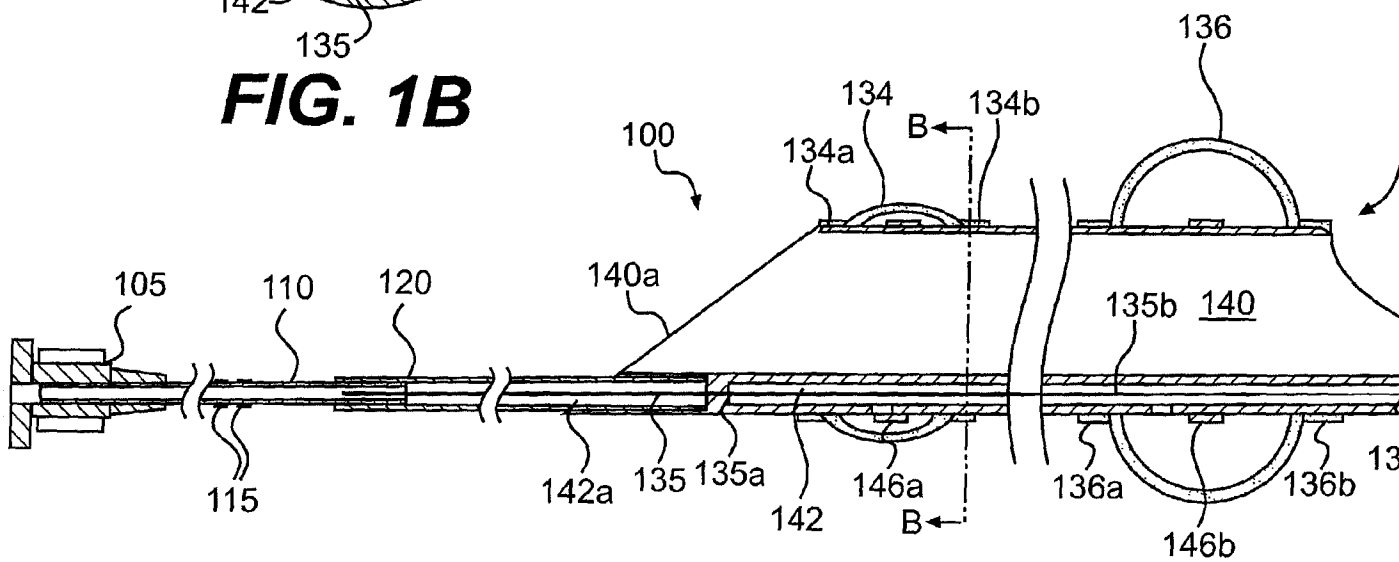(21) Appl. No.: **09/845,162**

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(57) **ABSTRACT**

An evacuation sheath assembly and method of treating occluded vessels which reduces the risk of distal embolization during vascular interventions is provided. The evacuation sheath assembly includes an elongated tube defining an evacuation lumen having proximal and distal ends. A proximal sealing surface is provided on a proximal portion of the tube and is configured to form a seal with a lumen of a guided catheter. A distal sealing surface is provided on a distal portion of the tube and is configured to form a seal with a blood vessel. A method of treatment of a blood vessel using the evacuation sheath assembly includes advancing the evacuation sheath assembly into the blood vessel through a guide catheter. Prior to advancing a device across a stenosis to be treated, normal antegrade blood flow in the blood vessel proximate to the stenosis is stopped. While blood flow is stopped, the stenosis is treated. Retrograde blood flow is induced within the blood vessel to carry embolic material dislodged during treating into the evacuation sheath assembly.

FIG. 1B

FIG. 1A

FIG. 1C

FIG. 1D

FIG. 2A

FIG. 2B

232
228
226
235 242

FIG. 2C

260
246a 234b 233a E D 233b
205
210 220 232a 233
215
235 242 226 233
234 228 233

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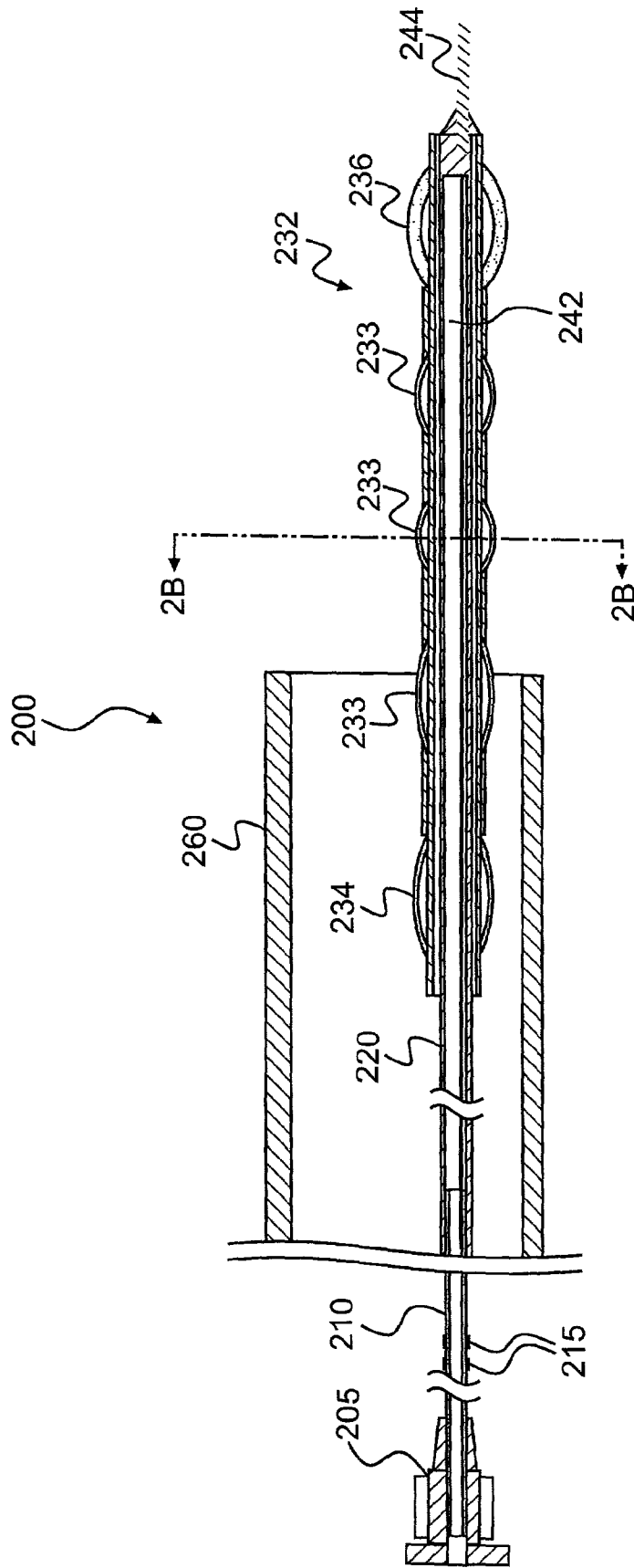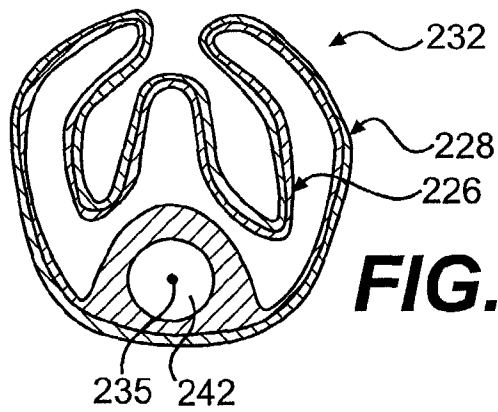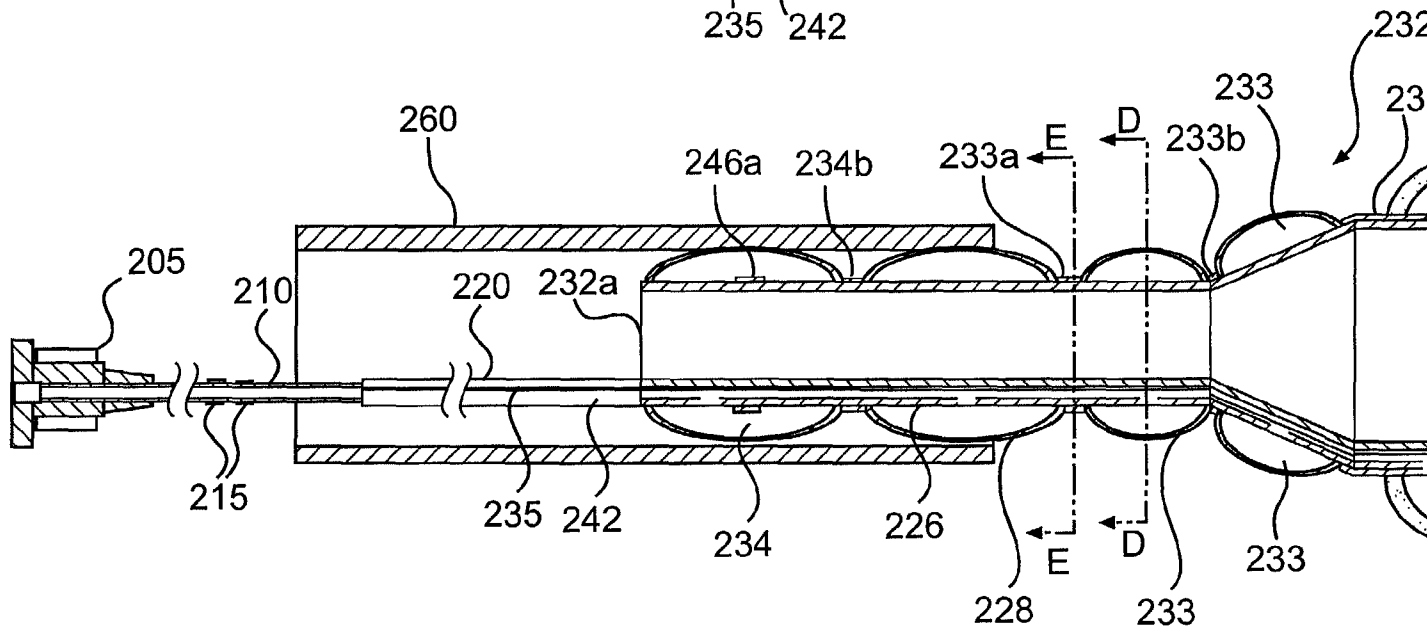
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