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

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(75) Inventors: **Dennis W. Wahr**, Ann Arbor, MI (US);
Thomas V. Ressemann, St. Cloud, MN (US);
Peter T. Keith, St. Paul, MN (US);
David J. Blaeser, Champlin, MN (US);
Michael Berman, Minnetonka, MN (US)

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(73) Assignee: **St. Jude Medical Cardiology Division, Inc.**, Maple Grove, MN (US)

Theron, Jacques, G., MD, "Carotid Artery Stenosis: Treatment with Protected Balloon Angioplasty and Stent Placement," *Radiology*, vol. 201, No. 3, Dec. 1996, pp. 627-636.

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Primary Examiner—Manuel Mendez
(74) *Attorney, Agent, or Firm*—O'Melveny & Myers LLP

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(57) **ABSTRACT**

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A61M 31/00 (2006.01)

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604/164.13, 165.01, 264

See application file for complete search history.

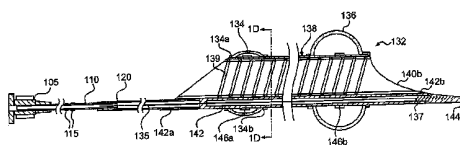
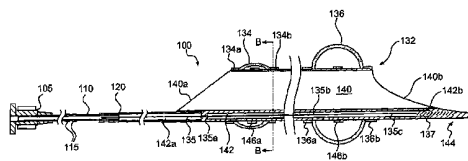
An evacuation sheath assembly and method of treating occluded vessels which reduces the risk of distal embolization during vascular interventions is provided. The evacuation sheath assembly includes an elongated tube defining an evacuation lumen having proximal and distal ends. A proximal sealing surface 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.

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124 Claims, 48 Drawing Sheets



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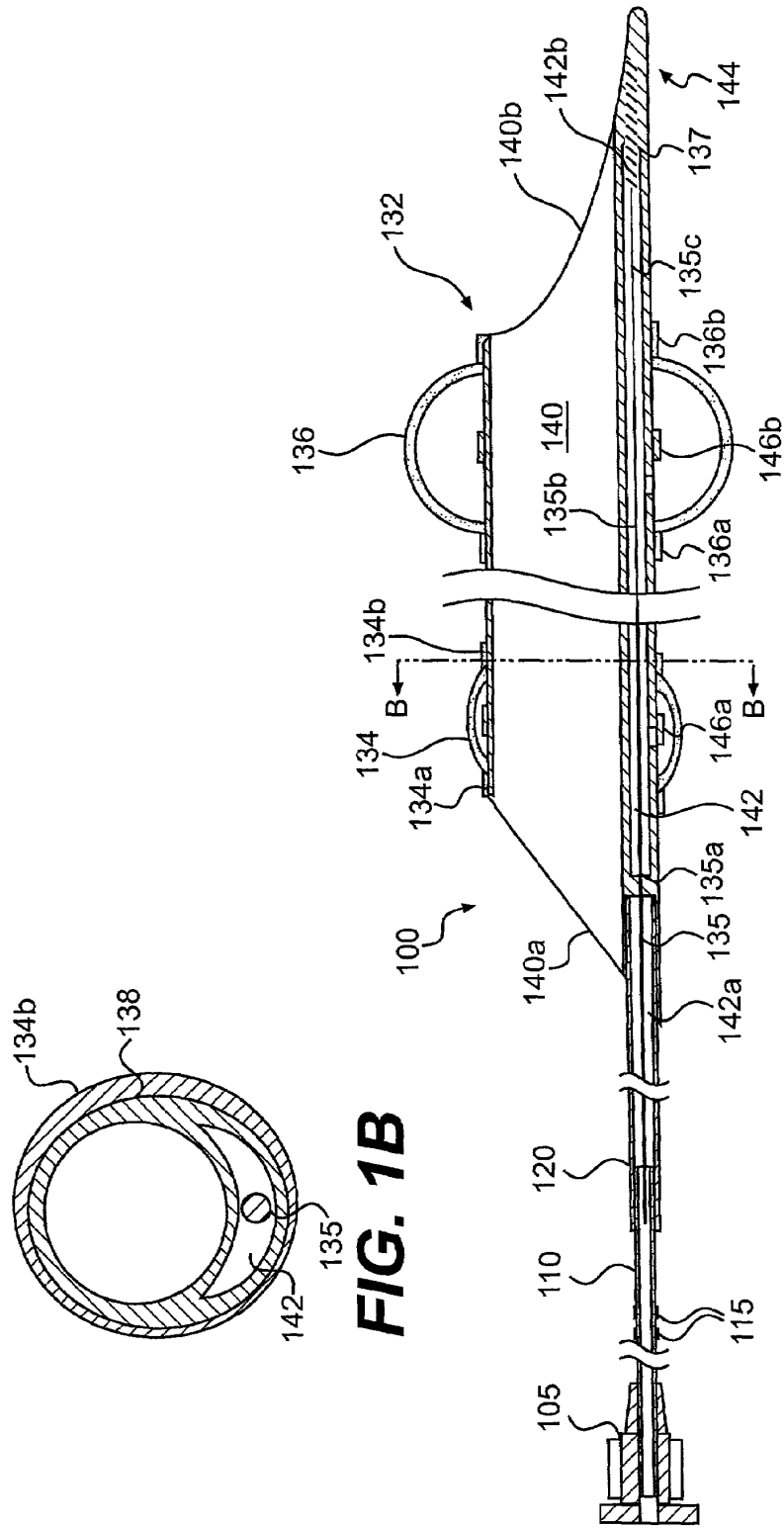


FIG. 1B

FIG. 1A

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