

[54] **INTRAVASCULAR DEVICE FOR CORONARY HEART TREATMENT**

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[73] Assignee: **SciMed Life Systems, Inc.**, Maple Grove, Minn.

A Technique For Exchanging A Clotted Intravascular Catheter Using The Original Arteriopuncture Site—M. Leon Skolnick, M.D., Syracuse, New York.

[21] Appl. No.: **303,590**

“Replacing the Occluded Percutaneous Nephrostomy Catheter”, *Radiology*, p. 824, Dec. 1981, Baron et al.

[22] Filed: **Sep. 9, 1994**

“Spiral Exchange Cannula for the Occluded Drainage Catheter”, *Radiology*, pp. 543-544, Nov. 1985. McCain et al.

Related U.S. Application Data

[63] Continuation of Ser. No. 874,079, Apr. 24, 1992, abandoned, which is a continuation-in-part of Ser. No. 605,398, Oct. 29, 1990, abandoned.

“An Alternate Method for Repair of a Leaking Arterial Chemotherapy Infusion Catheter”, *Journal of Surgical Oncology*, pp. 27-28, 1987. Burkhalter et al.

[51] **Int. Cl.⁶** **A61M 5/00**

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[52] **U.S. Cl.** **604/171; 604/264; 604/280; 604/96; 604/164; 128/772**

USCI, Product Brochure for Probing Catheter.

[58] **Field of Search** **604/162, 163, 604/160, 158, 159, 161, 166, 282, 283, 93, 96, 100, 164, 171, 264, 280, 281, 284; 128/657, 658, 772; 606/108, 119, 121**

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Assistant Examiner—Ronald K. Stright, Jr.
Attorney, Agent, or Firm—Kinney & Lange

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[57] **ABSTRACT**

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An intravascular device having an elongated flexible tube sized for insertion into a coronary vessel beyond a distal end of a guide catheter. In use, the flexible tube has its proximal end within a guide catheter and has its distal end extending to a treatment site in a coronary artery. The device also including a push rod attached to a proximal end of the flexible tube to facilitate placement of the flexible tube within the coronary artery requiring treatment. In certain applications, the intravascular device is used as a drug (or other fluid) delivery device or as an aspiration device. In other applications, the intravascular device is used as a guiding means for placement of an angioplasty device, such as a guide wire or a balloon catheter. Additionally, an attachment tube may be provided which is designed to couple with a proximal end of the flexible tube to provide a continuous conduit for aspiration or fluid delivery to a treatment site in a coronary artery.

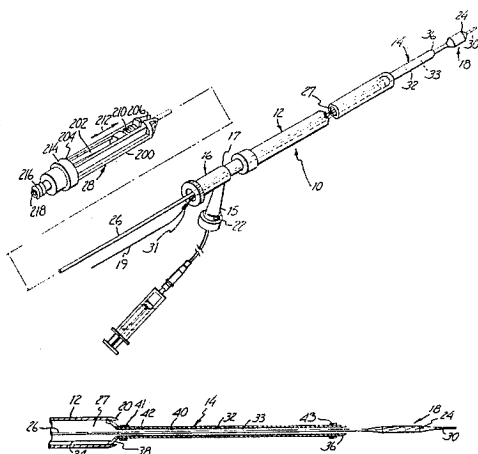
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41 Claims, 10 Drawing Sheets



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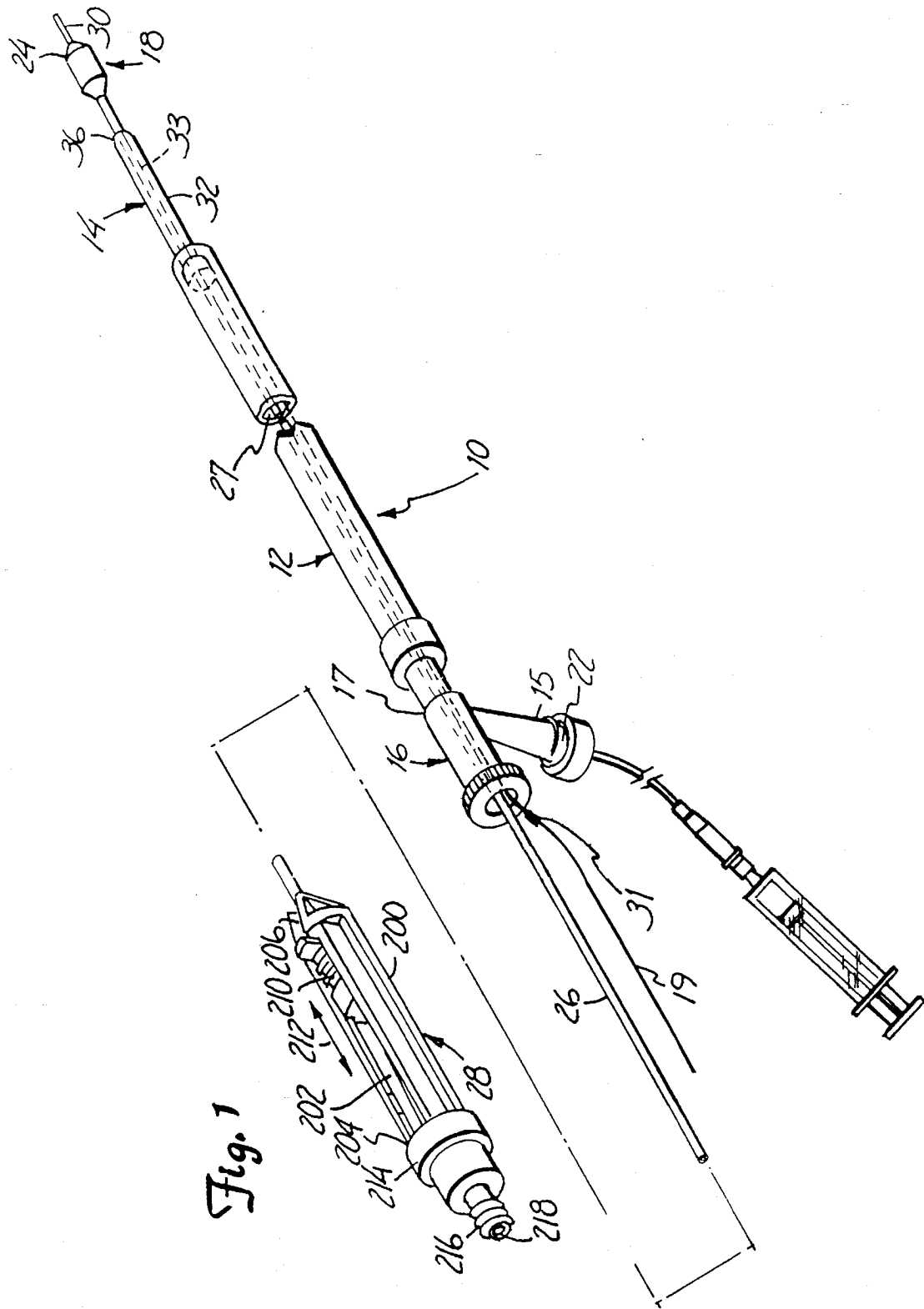


Fig. 1

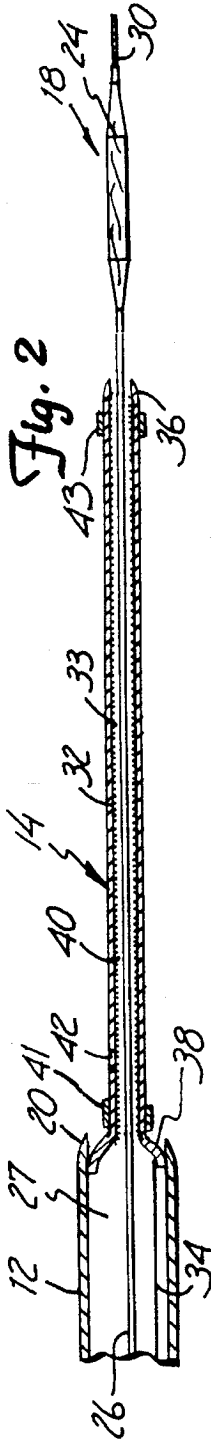


Fig. 2

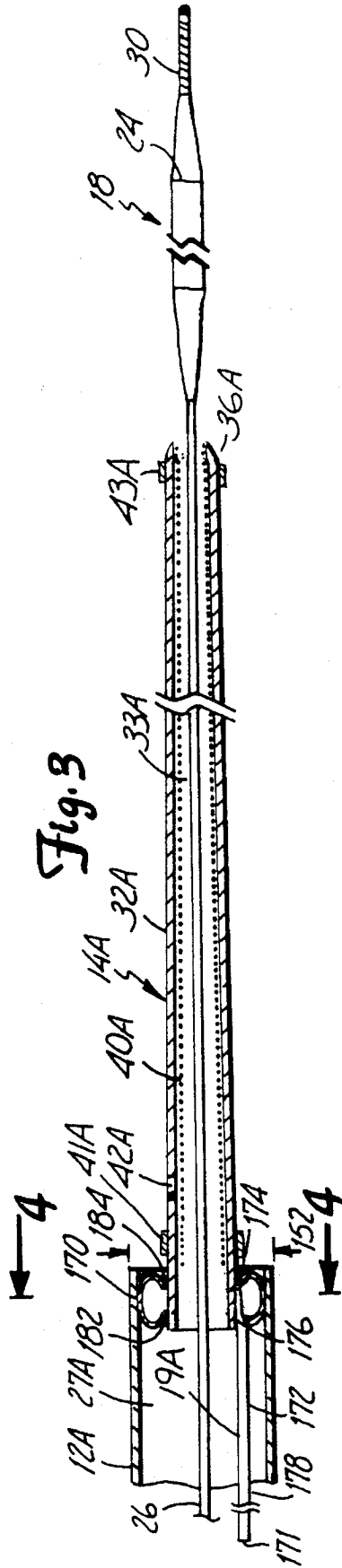


Fig. 3

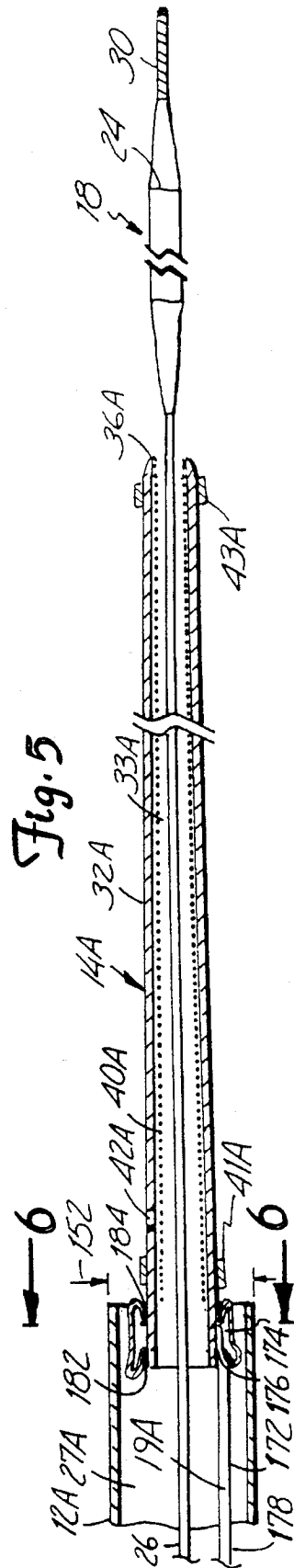


Fig. 5

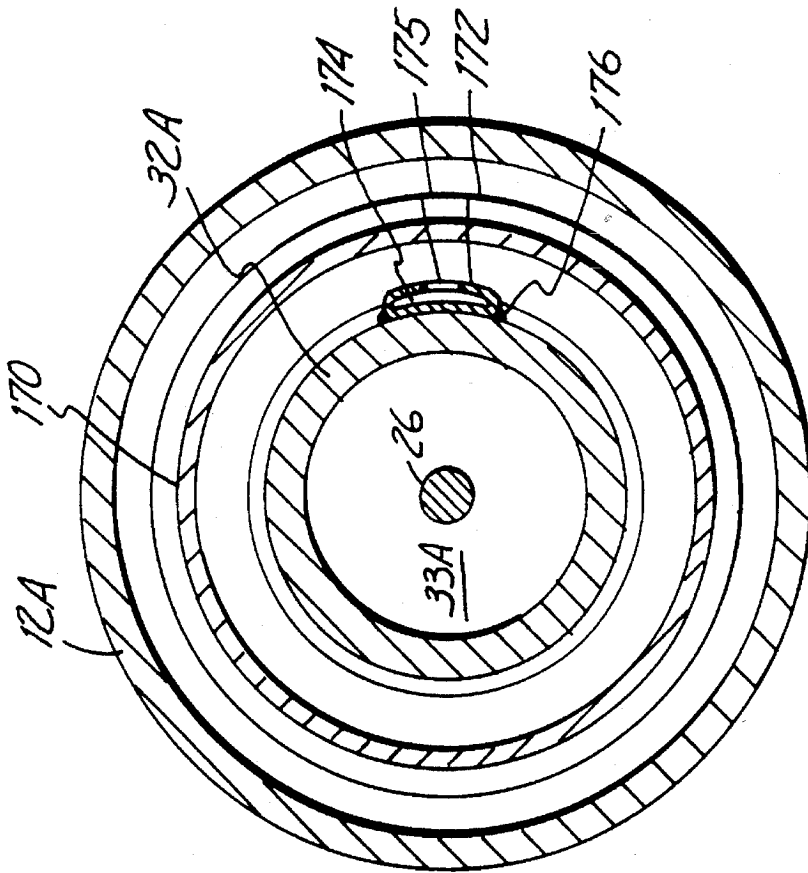


Fig. 6

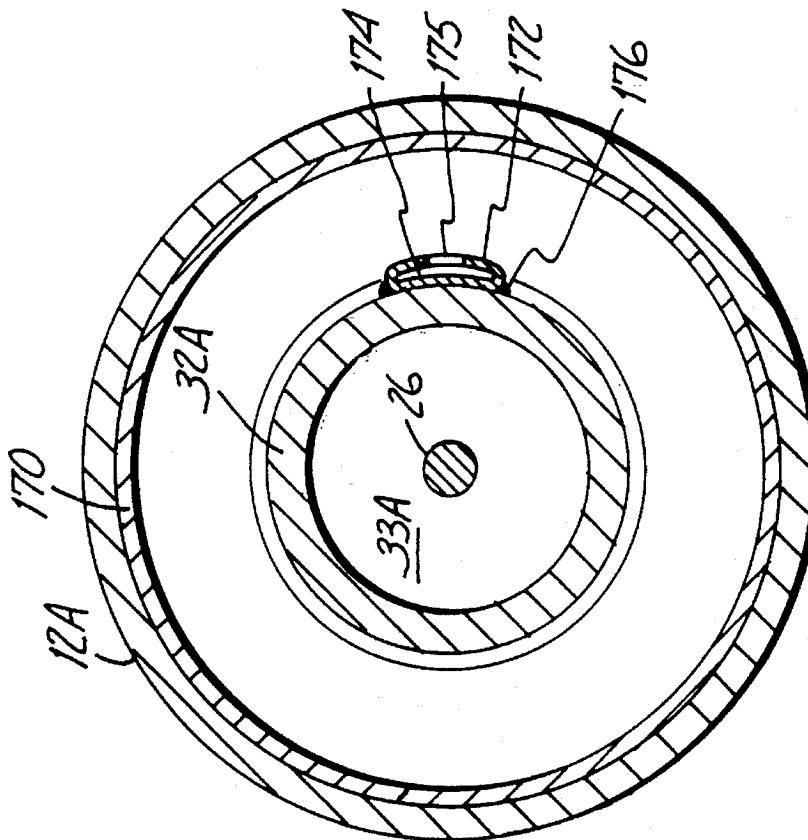


Fig. 4

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