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United States Patent [19]

Ryan et al.

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[54] **STENT INTRODUCER SYSTEM**

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[73] Assignee: **C. R. Bard, Inc.**, Murray Hill, N.J.

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[51] **Int. Cl.**[5] **A61M 29/00**

[52] **U.S. Cl.** **606/194**; 623/1; 604/96

[58] **Field of Search** 606/191, 194, 195, 192; 604/96, 104; 623/1, 12

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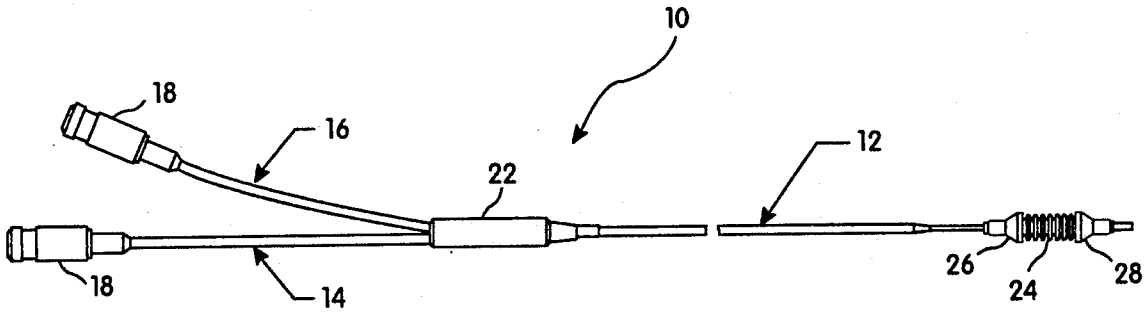
Attorney, Agent, or Firm—Wolf, Greenfield & Sacks

[57] **ABSTRACT**

A system for introducing a stent into a patient at a site of stenosis is disclosed. The system comprises a balloon catheter having a stent surrounding the balloon portion of the catheter. At least one stent-retaining means is located adjacent to at least one end of the balloon to retain the stent in position on the catheter until the balloon is inflated. Upon inflation of the balloon, the stent is expanded and the retention means releases the stent. The balloon is then deflated and the catheter is removed from the patient, leaving the expanded stent in place.

43 Claims, 16 Drawing Sheets



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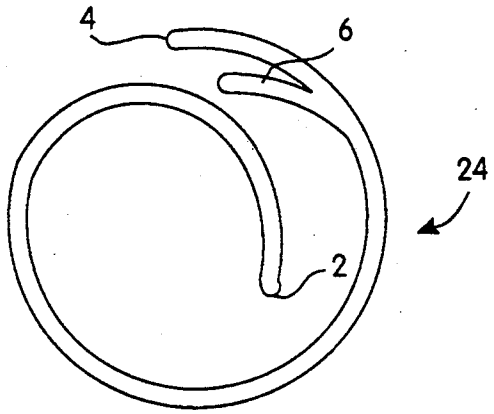

Fig. 1A

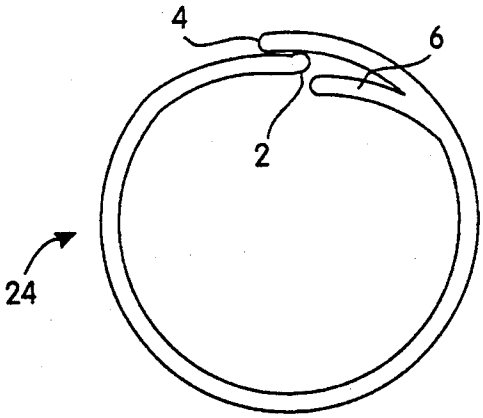

Fig. 1B

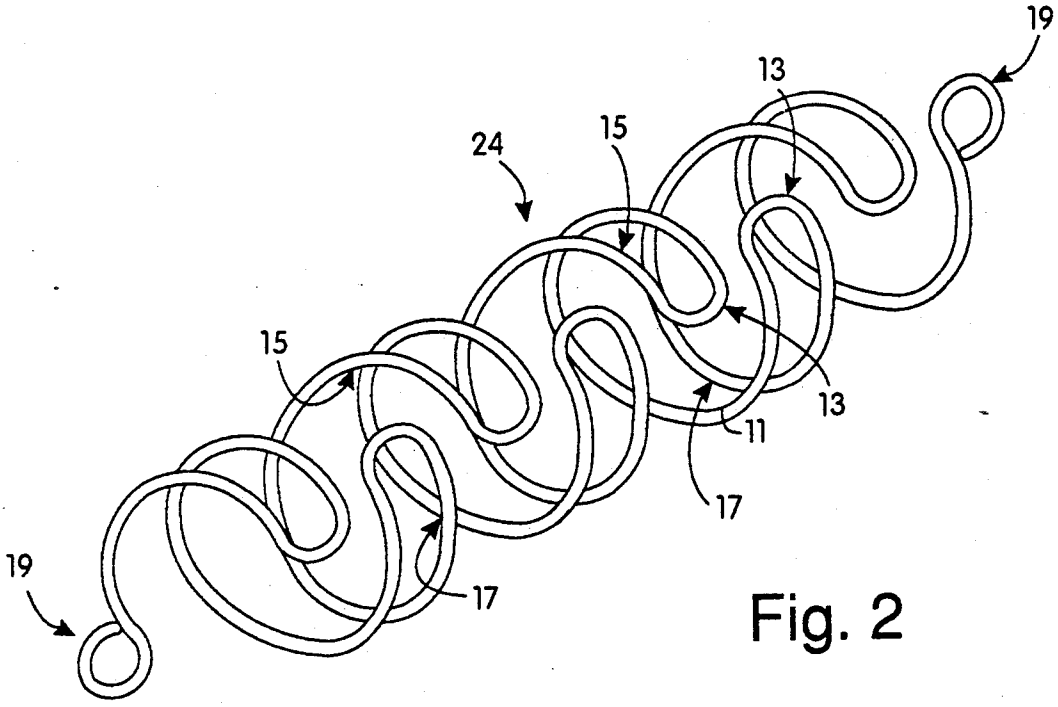

Fig. 2

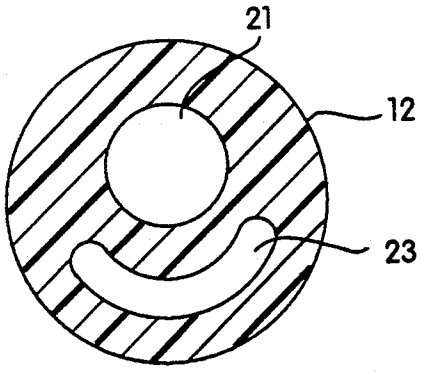

Fig. 3

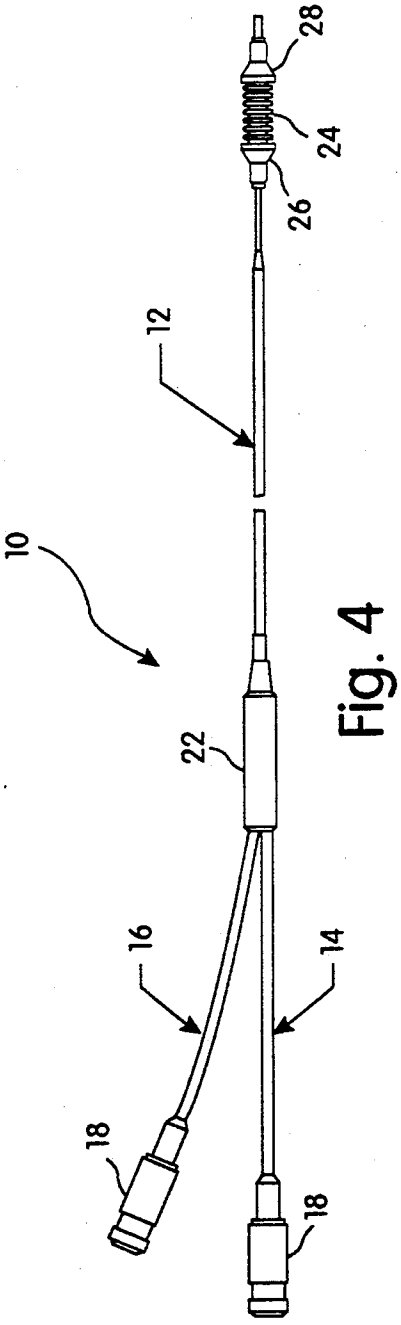

Fig. 4

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