

United States Patent [19]  
Cottone, Jr.

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[54] HAND HELD STENT CRIMPING DEVICE

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[75] Inventor: Robert J. Cottone, Jr. Fort  
Lauderdale, Fla.

Primary Examiner—Michael Buiz  
Assistant Examiner—Patrick W. Rasche  
Attorney, Agent, or Firm—Lockwood, Alex. Fitzgibbon &  
Cummings

[73] Assignee: Cordis Corporation, Miami Lakes, Fla.

[21] Appl. No.: 567,313

[57] ABSTRACT

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A stent loading device is provided for loading a stent on a catheter of the type used in percutaneous transluminal angioplasty (PTA) or percutaneous transluminal coronary angioplasty (PTCA) procedures. The device has an end unit for holding a stent, a collet having a plurality of radially compressible fingers fitted to said end unit, a main body having a plurality of finger-like extensions whose distal ends can be fitted into openings in said base unit, a proximal extension for receiving a cap with compressible washer therein fitted to said main body proximal extension, a rotatable sleeve with collet driver fitted about said collet and main body finger-like extensions and a guide wire embedded in end unit and longitudinally extending through said device to either terminate at the proximal end of said cap or extend a distance from the proximal end of said cap. The stent loading device serves as a stent delivery tool within which a catheter is inserted, after which the stent is crimped onto the catheter balloon. The stent loading device is disposable and well-suited for one-time use.

[51] Int. Cl.<sup>6</sup> ..... A61M 29/00

[52] U.S. Cl. .... 606/198; 606/1; 606/108;  
606/192

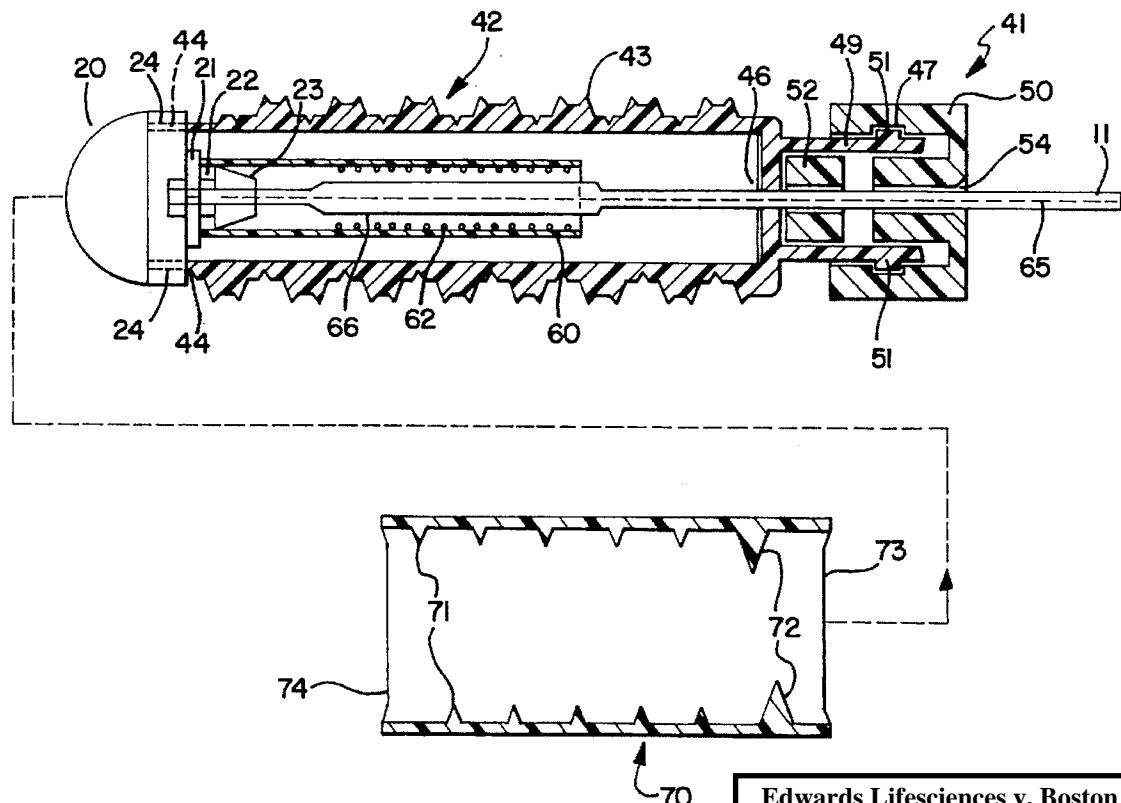
[58] Field of Search ..... 29/235, 234, 282,  
29/283; 606/108, 192, 194, 198

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19 Claims, 6 Drawing Sheets



Edwards Lifesciences v. Boston Scientific  
U.S. Patent No. 6,915,560  
IPR2017-00072 EX 2003

FIG. 1

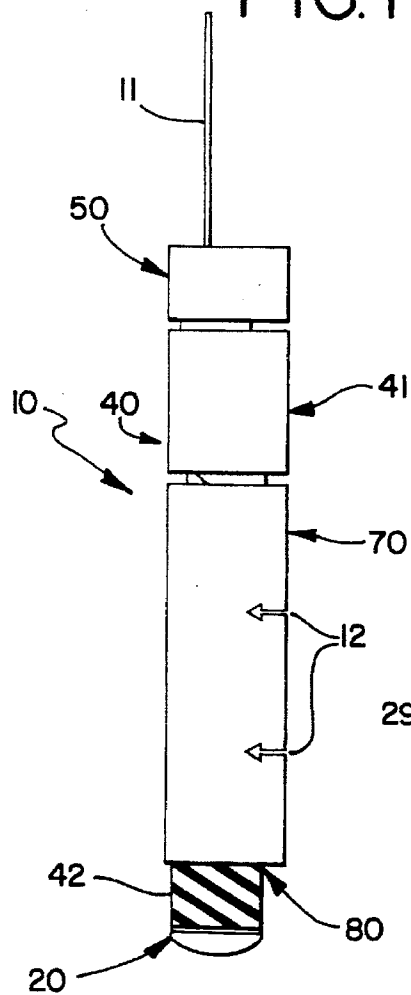


FIG. 4

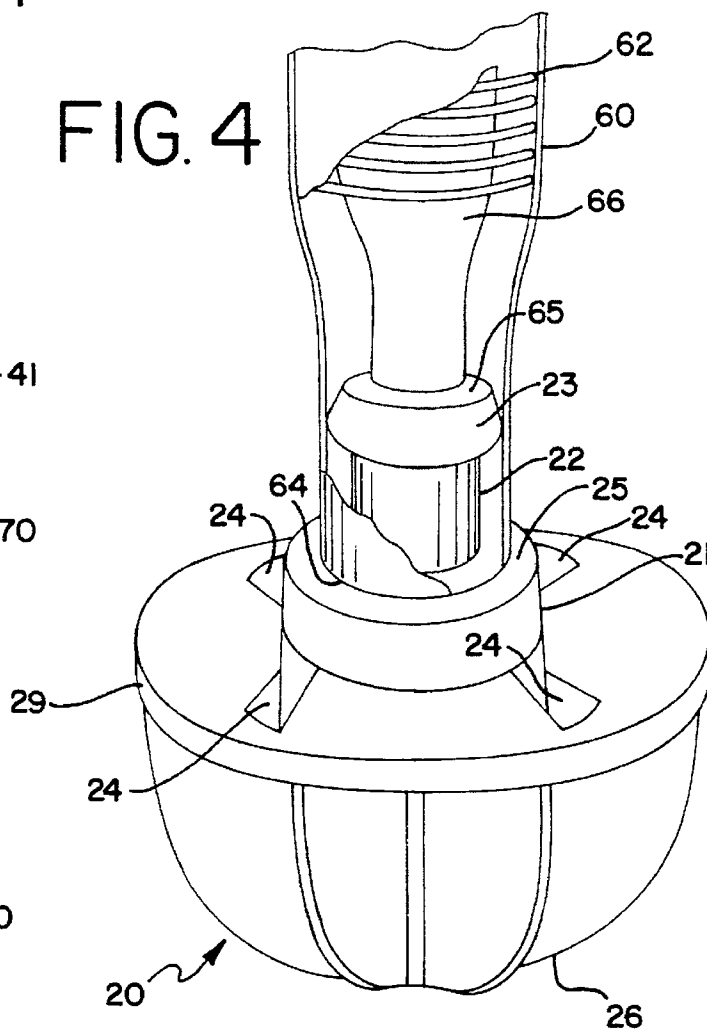


FIG. 9

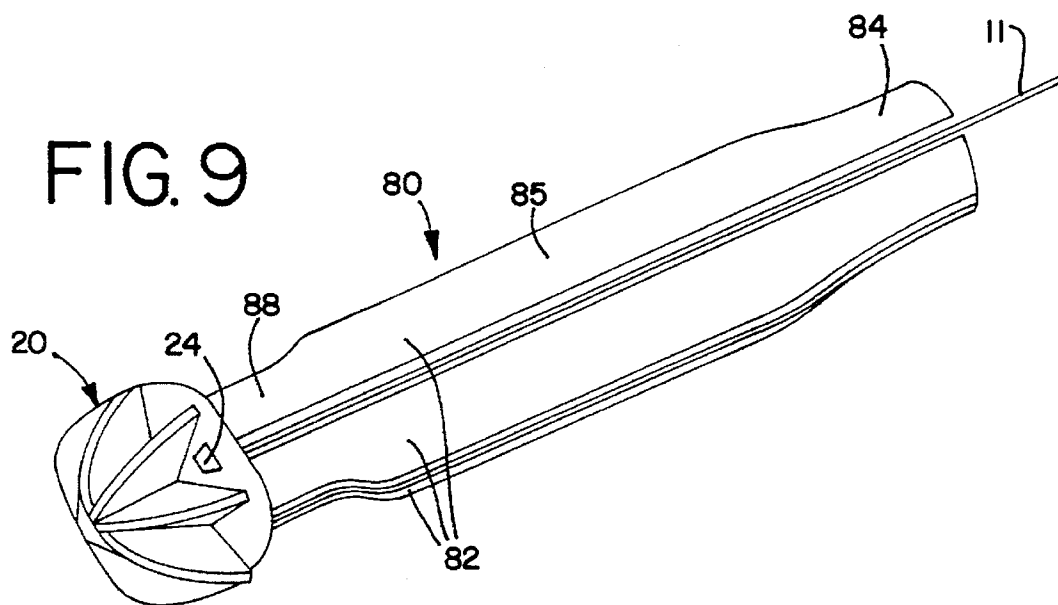


FIG. 2

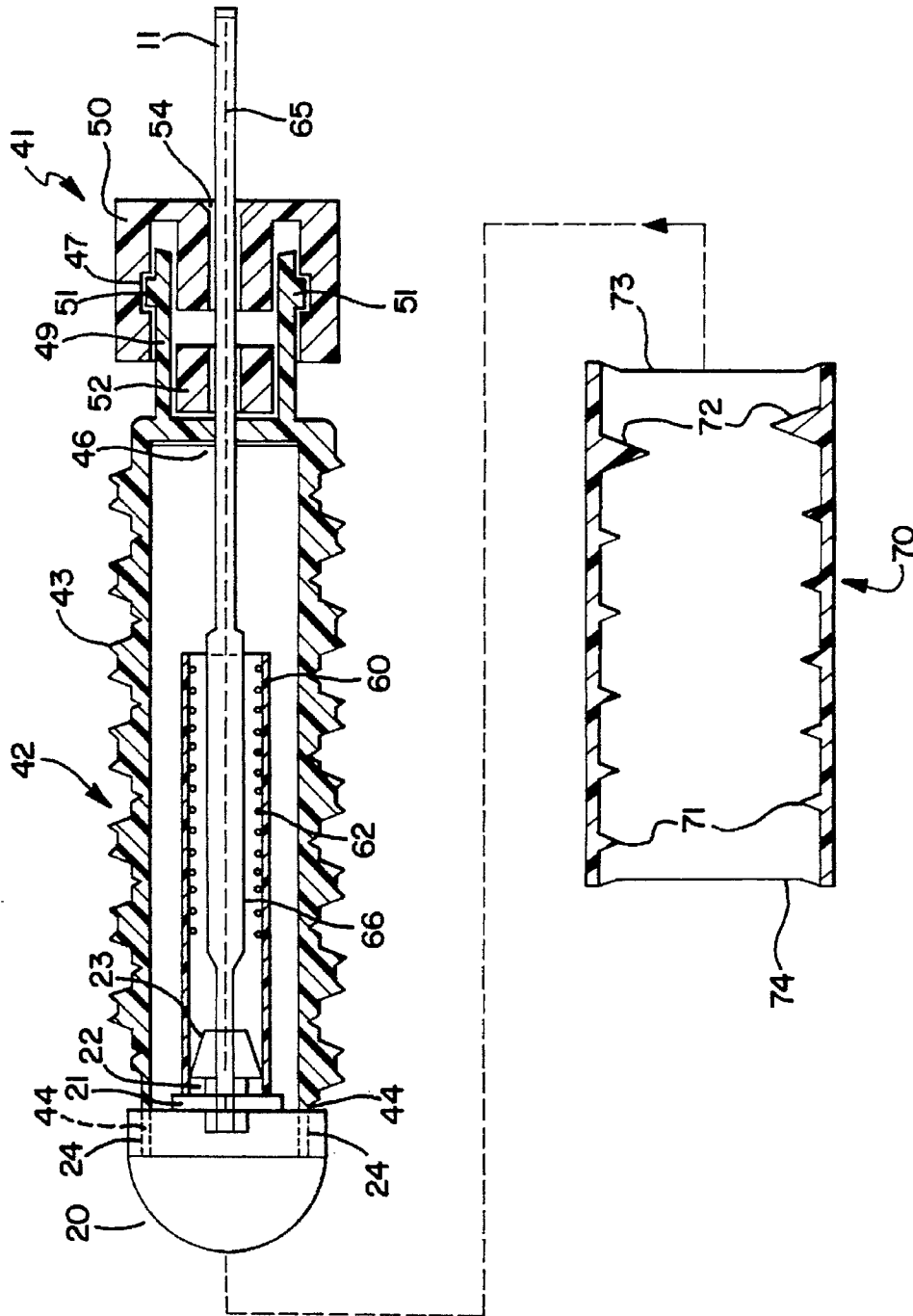


FIG. 3a

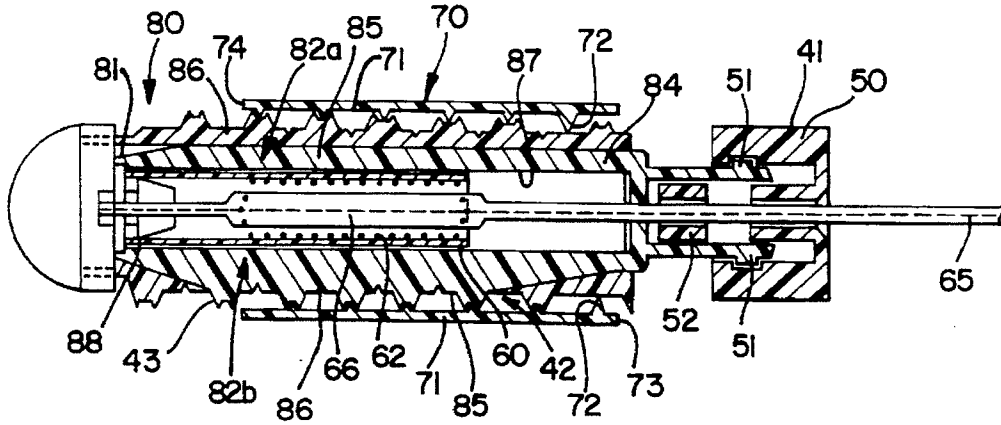


FIG. 3b

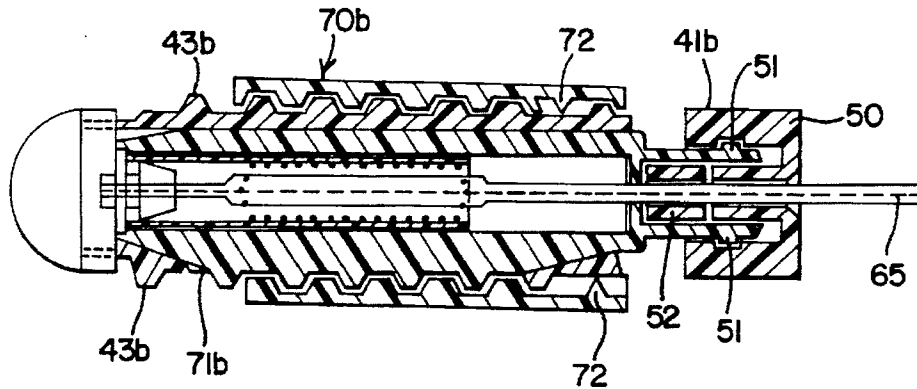


FIG. 3c

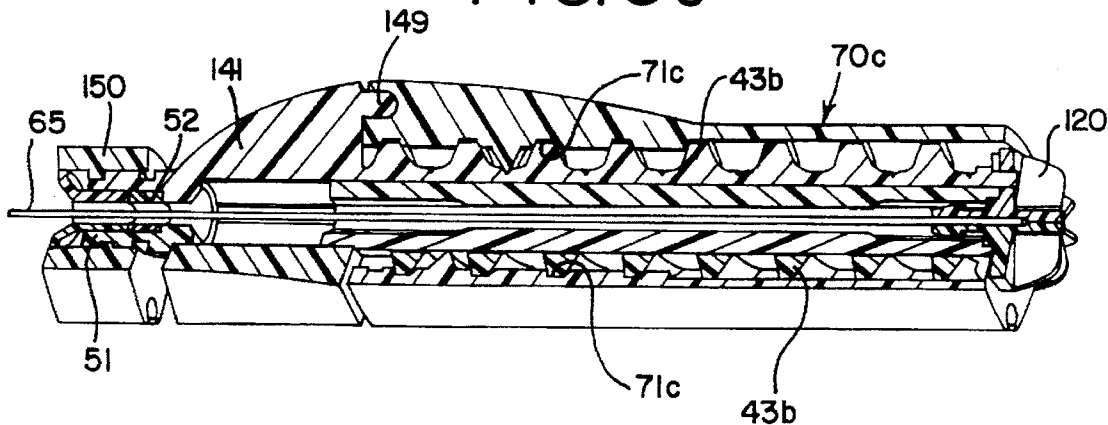


FIG. 5

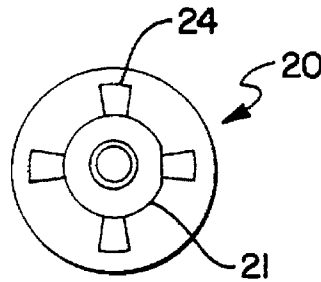


FIG. 6

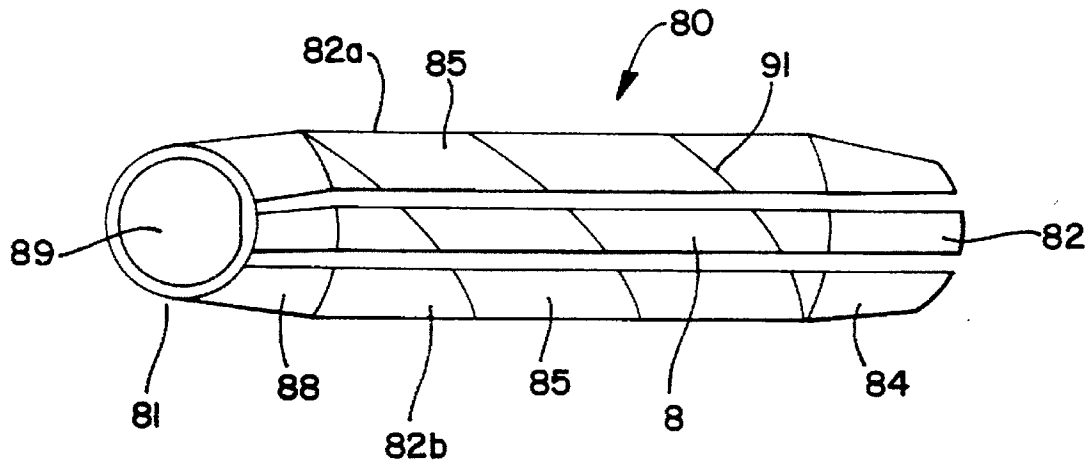


FIG. 8

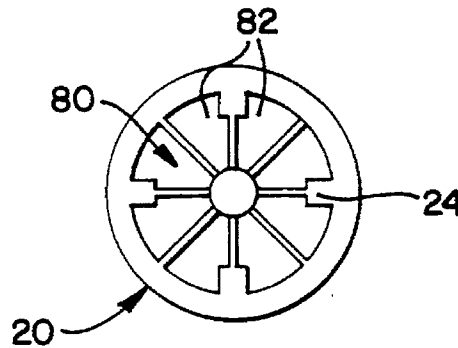
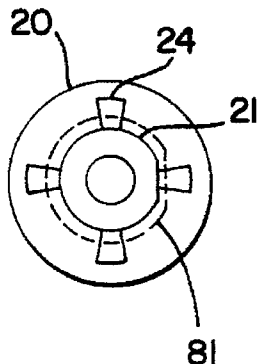


FIG. 7



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