



[54] STENT CRIMPING DEVICE AND METHOD OF USE

[75] Inventor: Stephen A. Morales, Mountain View, Calif.

[73] Assignee: Advanced Cardiovascular Systems, Inc., Santa Clara, Calif.

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[51] Int. Cl.⁷ A61F 11/00

[52] U.S. Cl. 606/108

[58] Field of Search 606/108, 194, 606/198; 623/1, 11, 12

[56] References Cited

U.S. PATENT DOCUMENTS

696,289	3/1902	Williams .
4,468,224	8/1984	Enzmann et al. .
4,576,142	3/1986	Schiff .
4,644,936	2/1987	Schiff .
4,681,092	7/1987	Cho et al. .
4,697,573	10/1987	Schiff .
4,901,707	2/1990	Schiff .
4,907,336	3/1990	Gianturco .
5,189,786	3/1993	Ishikawa et al. .
5,437,083	8/1995	Williams et al. .
5,546,646	8/1996	Williams et al. .
5,626,604	5/1997	Cottone, Jr. .
5,653,691	8/1997	Rupp et al. .
5,672,169	9/1997	Verbeek .
5,738,674	4/1998	Williams et al. .
5,746,764	5/1998	Green et al. .
5,783,227	7/1998	Dunham .
5,785,715	7/1998	Schatz .
5,836,952	11/1998	Davis et al. .

FOREIGN PATENT DOCUMENTS

159065	2/1921	United Kingdom .
WO 98/14120	4/1998	WIPO .
WO 98/19633	5/1998	WIPO .

OTHER PUBLICATIONS

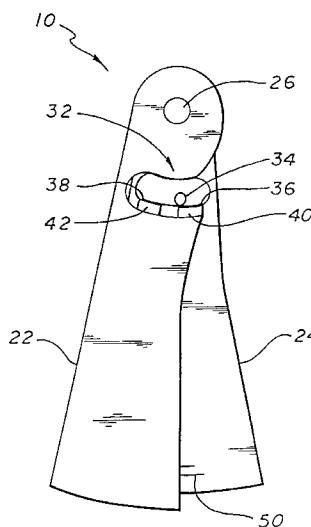
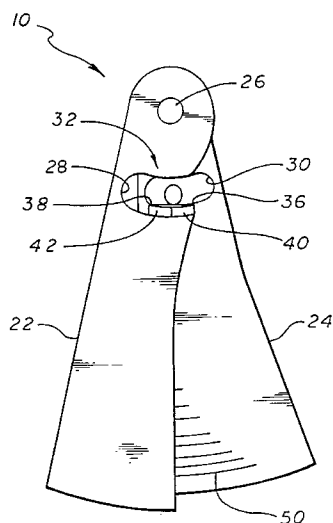
- U.S. Patent Application Serial No. 08/795,335 filed Feb. 4, 1997 No Drawings are enclosed.
- U.S. Patent Application Serial No. 08/837,771 filed Apr. 22, 1997.
- U.S. Patent Application Serial No. 08/893,936 filed Jul. 15, 1997.
- U.S. Patent Application Serial No. 08/962,632 filed Nov. 3, 1997.
- U.S. Patent Application Serial No. 09/024,910 filed Feb. 17, 1998.
- U.S. Patent Application Serial No. 09/030,261 filed Feb. 25, 1998.
- U.S. Patent Application Serial No. 09/063,905 filed Apr. 21, 1998.
- U.S. Patent Application Serial No. 09/063,587 filed Apr. 21, 1998.
- U.S. Patent Application Serial No. 09/069,010 filed Apr. 28, 1998.
- U.S. Patent Application Serial No. 09/069,011 filed Apr. 28, 1998.
- U.S. Patent Application Serial No. 09/072,925 filed May 5, 1998.
- U.S. Patent Application Serial No. 09/123,844 filed Jul. 28, 1998 Lost? Not available.
- The eXTraordinary Stent, C.R. Bard Brochure (Undated).

Primary Examiner—Michael Buiz
Assistant Examiner—Vy Q. Bui
Attorney, Agent, or Firm—Fulwider Patton Lee & Utecht

[57] ABSTRACT

A pivotally-engageable device for enabling uniform and tight crimping of an intravascular stent onto a balloon catheter assembly. The stent crimping device includes at least one releasable loop portion that enables the stent and catheter assembly to be supported therein. The ends of the loop portion are moved in opposite directions thereby reducing the size of loop radially inwardly to uniformly and tightly crimp the stent onto the balloon catheter assembly.

12 Claims, 7 Drawing Sheets



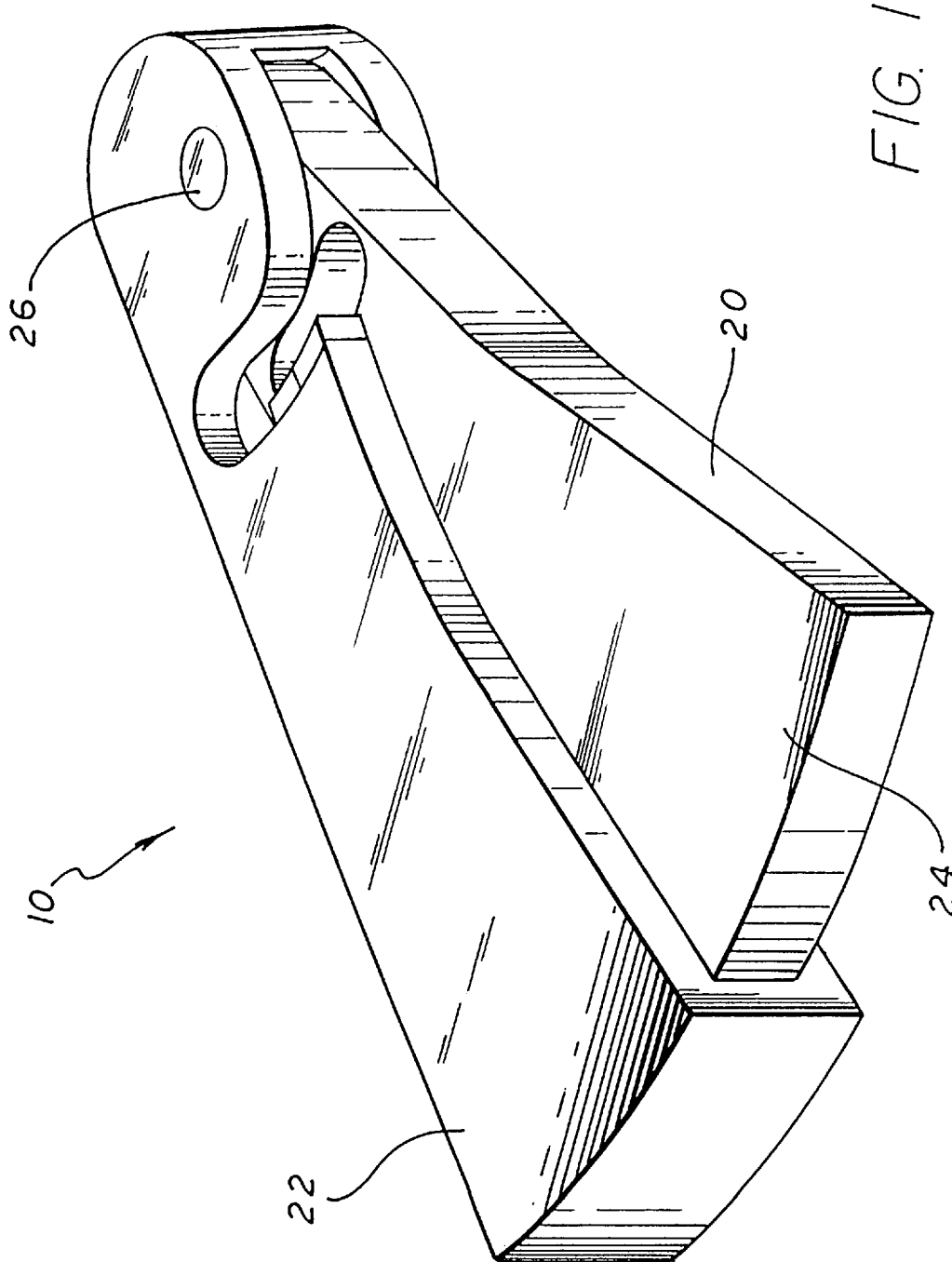


FIG. 2

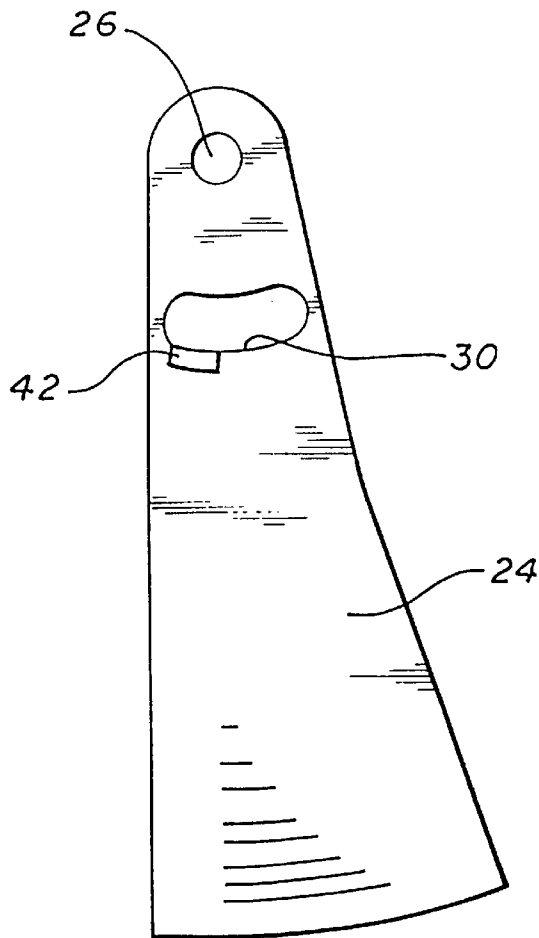
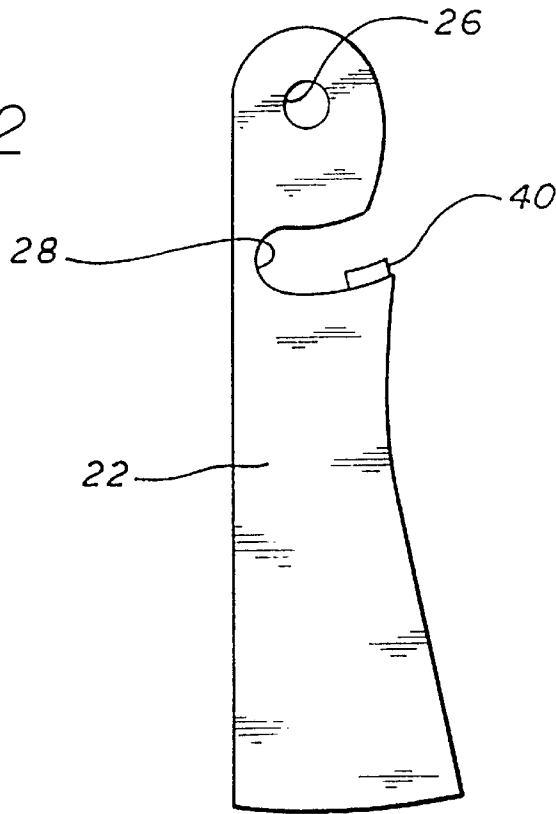


FIG. 3

FIG. 5

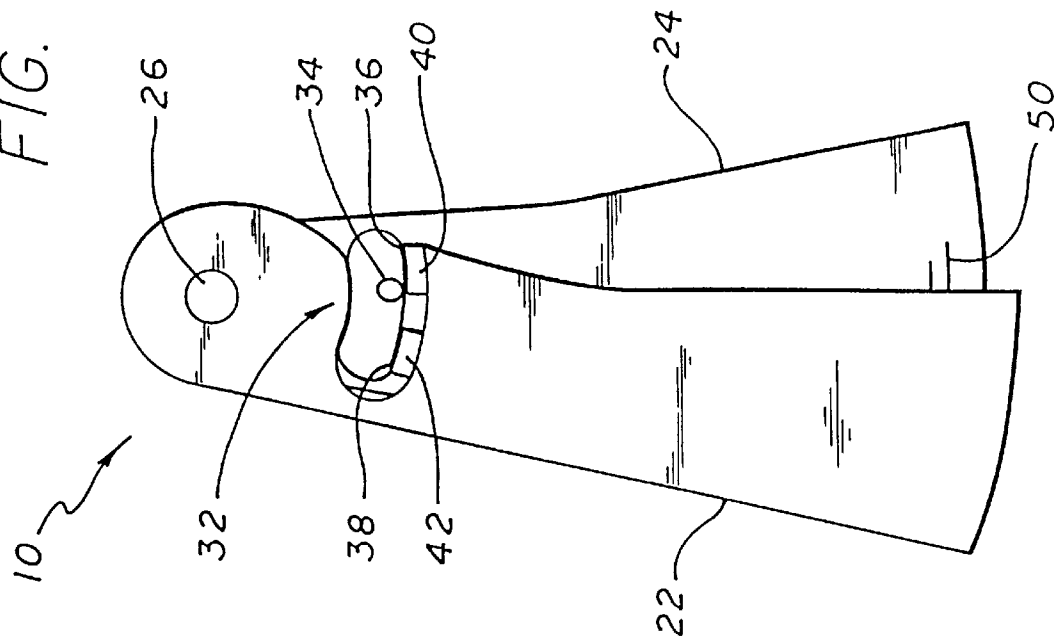


FIG. 4

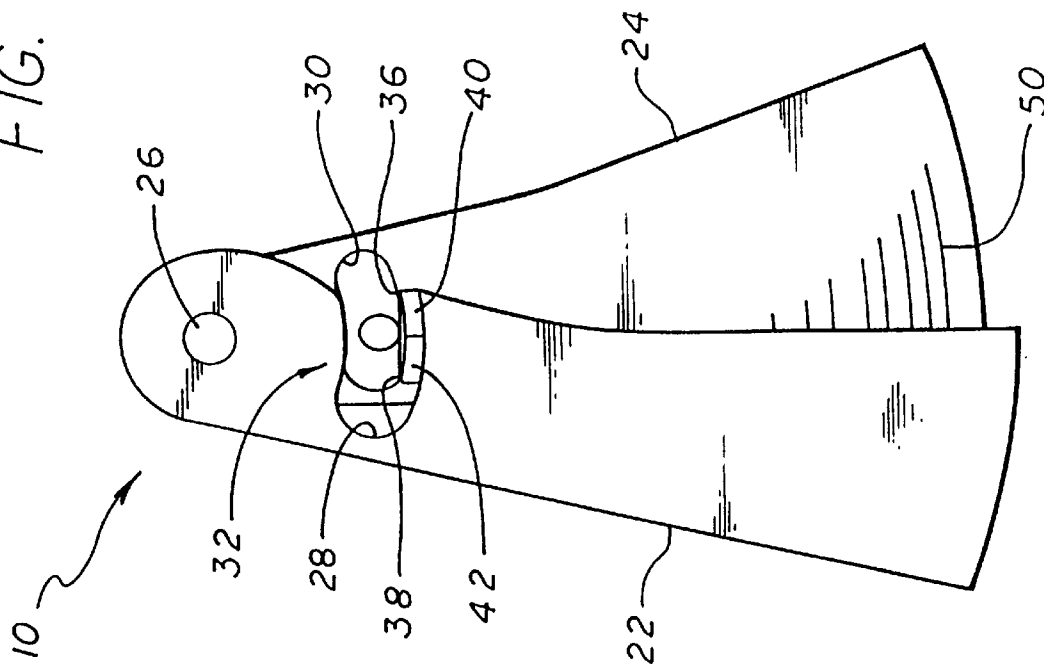


FIG. 7

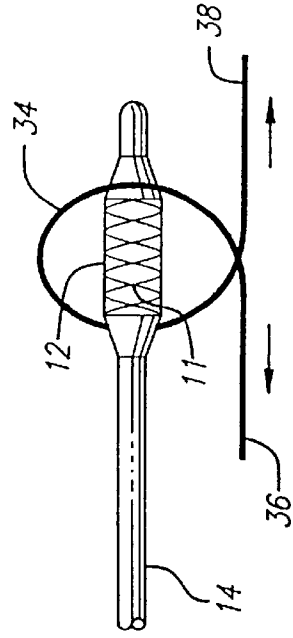


FIG. 6

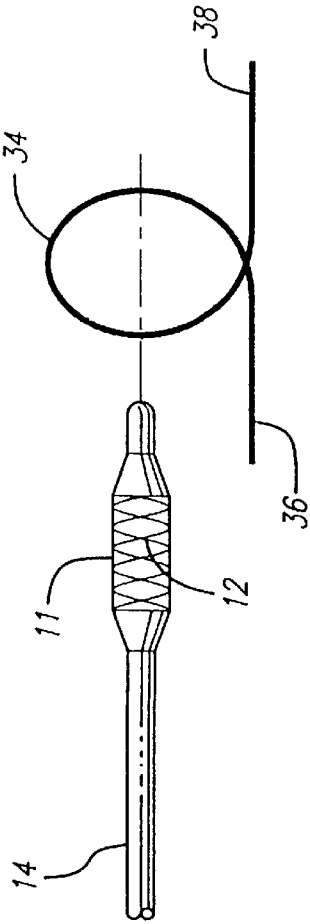


FIG. 9

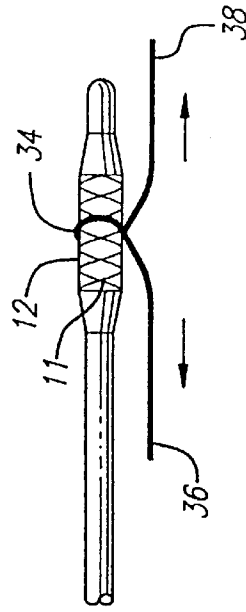
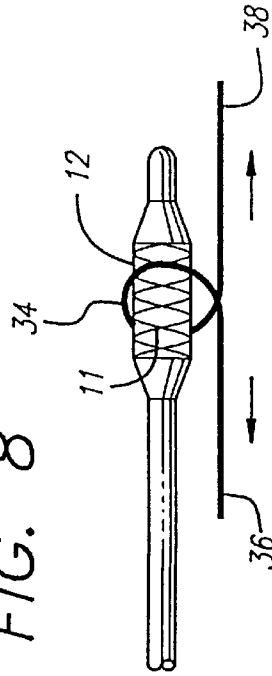


FIG. 8



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