



[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.

[21] Appl. No.: 09/169,270

[22] Filed: Oct. 9, 1998

[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

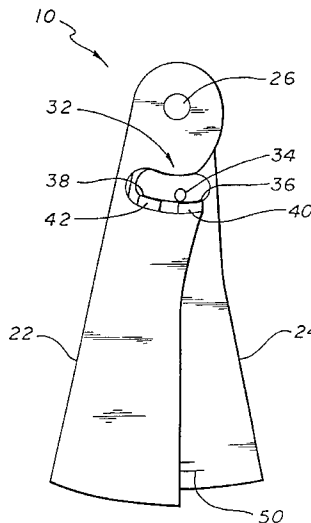
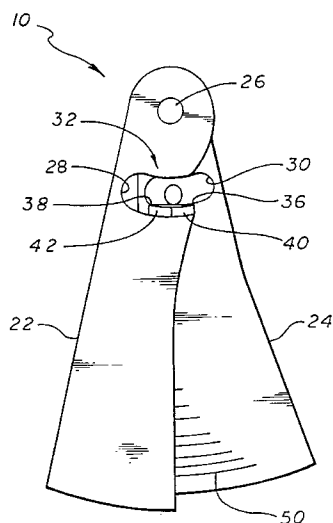
- U.S. Patent Application Serial No. 08/795,335 filed Feb. 4, 1997 No Drawings are enclosed.
U.S. Patent Application Serial No. 08/837,771 filed Apr. 22, 1997.
U.S. Patent Application Serial No. 08/893,936 filed Jul. 15, 1997.
U.S. Patent Application Serial No. 08/962,632 filed Nov. 3, 1997.
U.S. Patent 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



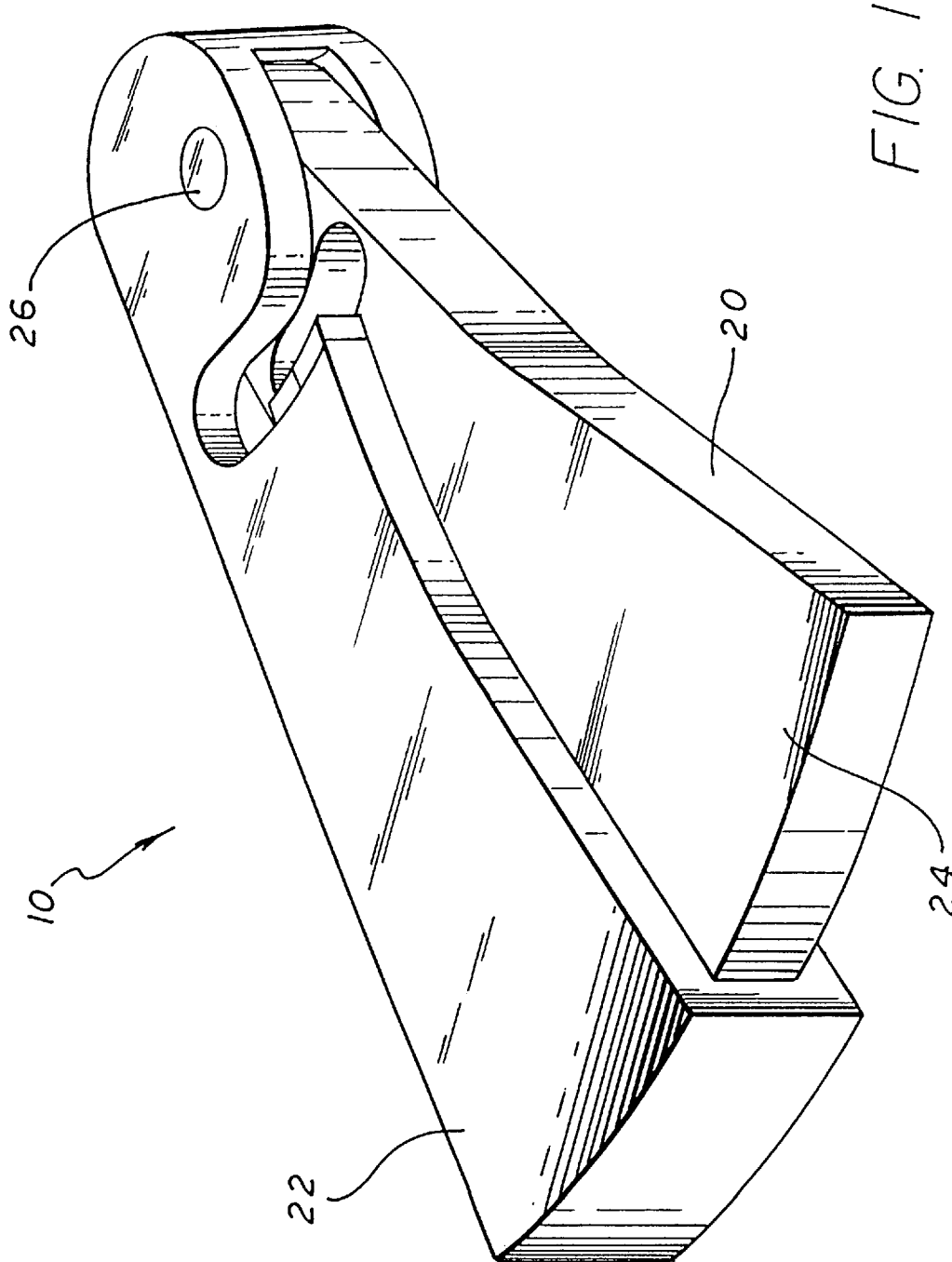


FIG. 2

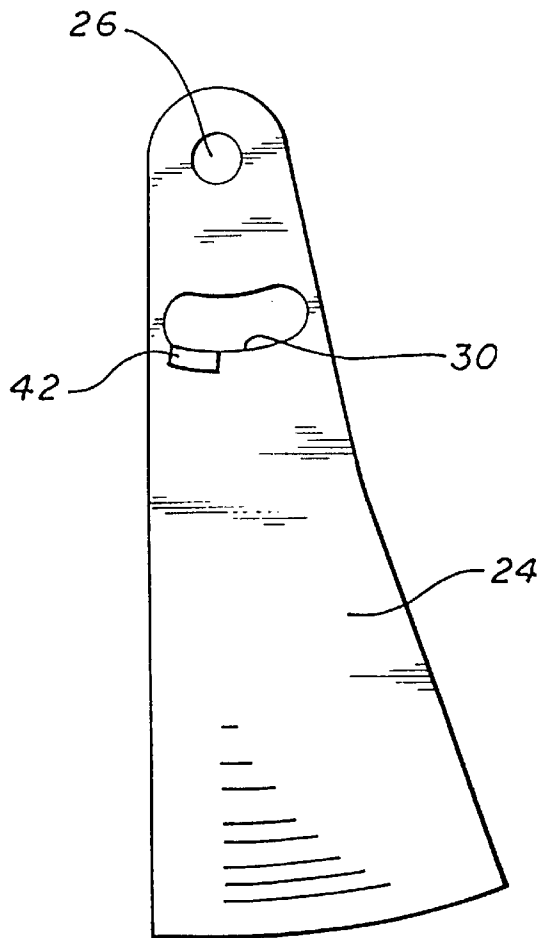
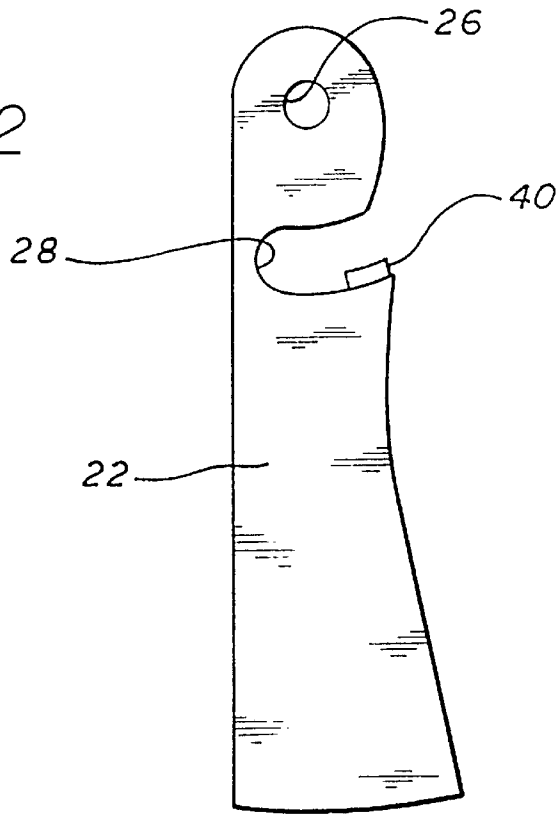


FIG. 3

FIG. 5

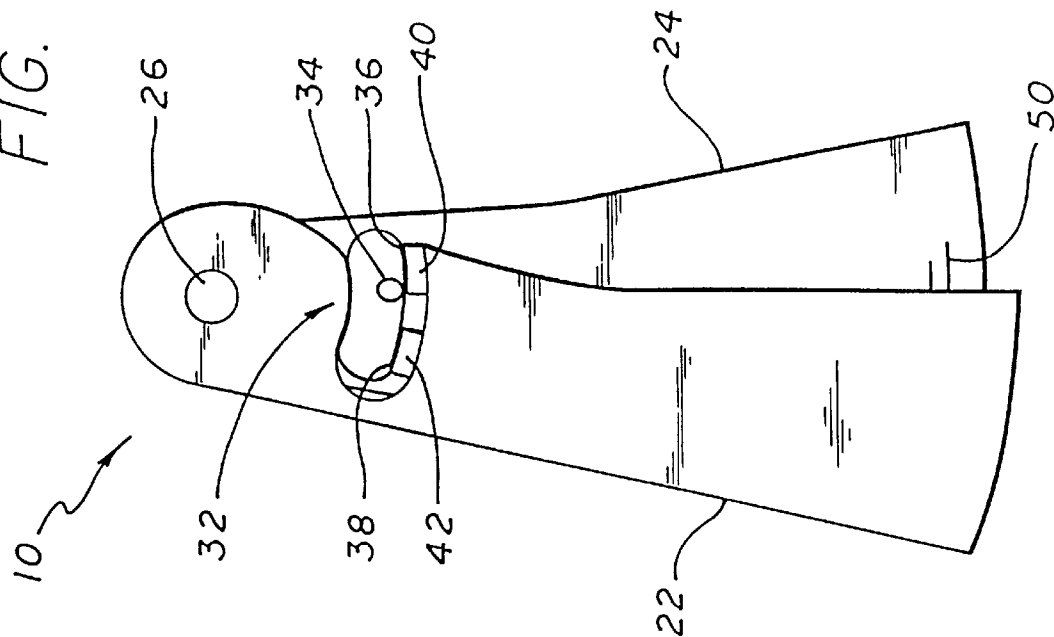


FIG. 4

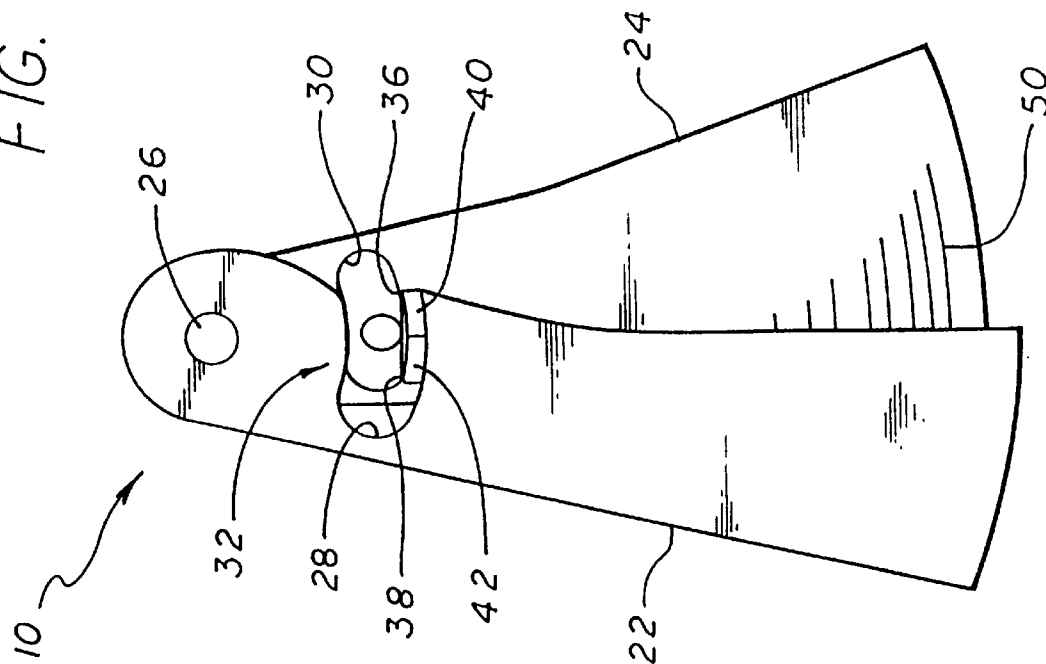


FIG. 7

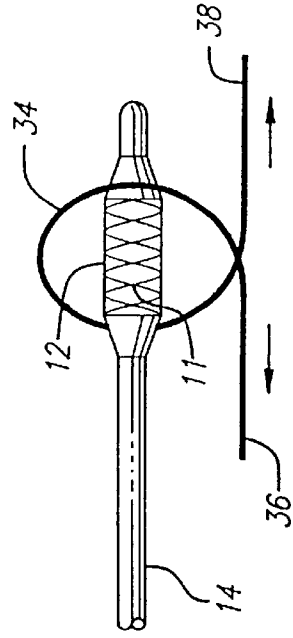


FIG. 6

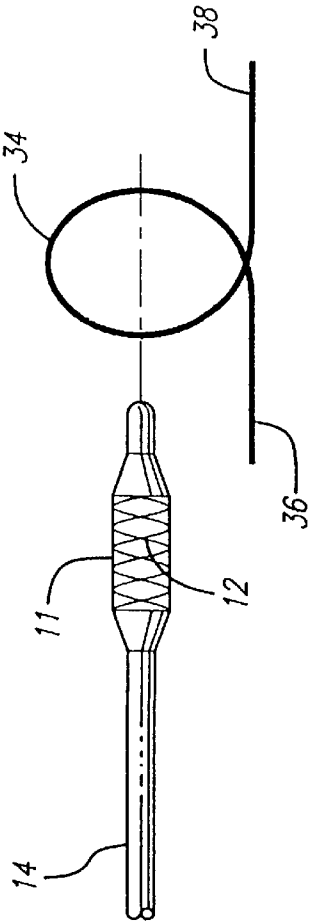


FIG. 9

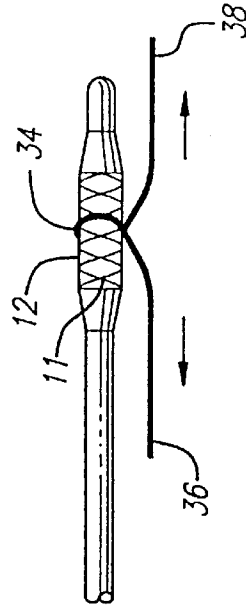
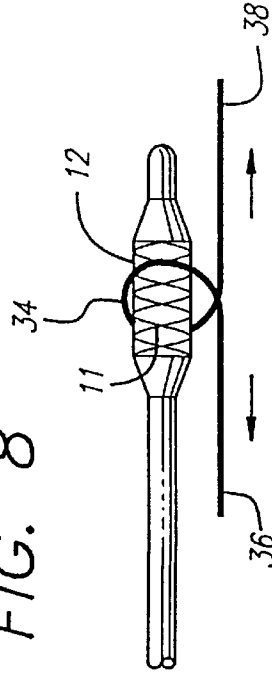


FIG. 8



Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.