



(12) **United States Patent**
Pinchasik

(10) **Patent No.:** **US 6,364,870 B1**
(45) **Date of Patent:** **Apr. 2, 2002**

- (54) **APPARATUS AND METHOD FOR SECURING A STENT ON A BALLOON**
- (75) Inventor: **Gregory Pinchasik, Herzlia (IL)**
- (73) Assignee: **Medinol Ltd., Tel Aviv (IL)**
- (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

5,725,519 A	3/1998	Penner et al.	
5,893,867 A *	4/1999	Bagoisan et al.	606/198
5,893,868 A	4/1999	Hanson et al.	
5,931,851 A	8/1999	Mroales	
5,951,540 A *	9/1999	Verbeek	606/1
5,992,000 A	11/1999	Humphrey et al.	
6,009,614 A *	1/2000	Morales	29/561
6,024,737 A	2/2000	Morales	

- (21) Appl. No.: **09/360,415**
- (22) Filed: **Jul. 23, 1999**

Related U.S. Application Data

- (63) Continuation of application No. 09/218,503, filed on Dec. 22, 1998, now abandoned.
- (51) **Int. Cl.⁷** **A61B 17/00**
- (52) **U.S. Cl.** **606/1; 29/516**
- (58) **Field of Search** 606/1, 108, 198; 72/409.19, 402, 410, 466.8, 416; 425/517; 29/516, 235, 270, 407.01, 282, 283.5; 623/1.11, 1.12, 1.23

References Cited

U.S. PATENT DOCUMENTS

5,183,085 A	2/1993	Timmermans	
5,353,623 A *	10/1994	Bobenhausen	72/402
5,546,646 A	8/1996	Williams et al.	
5,630,830 A	5/1997	Verbeek	

FOREIGN PATENT DOCUMENTS

DE	195 32 288	3/1999
WO	WO97/20593	6/1997

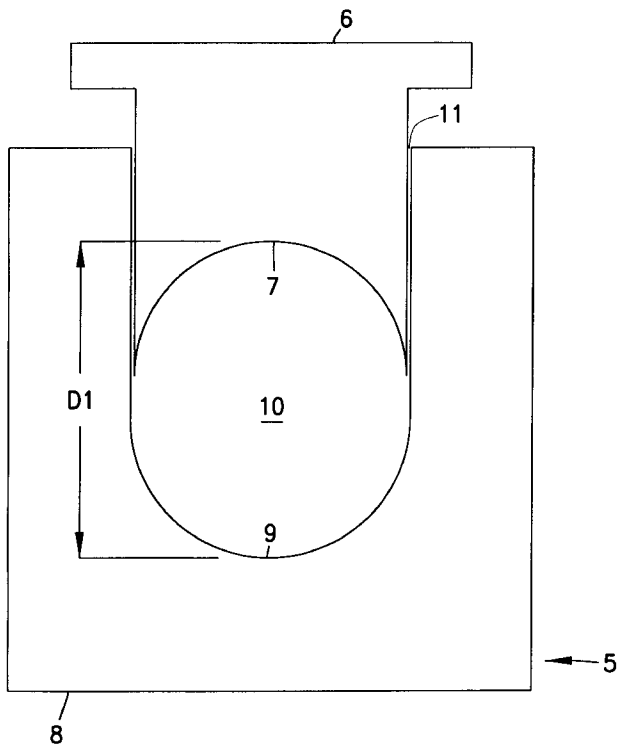
* cited by examiner

Primary Examiner—Eduardo C. Robert
(74) *Attorney, Agent, or Firm*—Kenyon & Kenyon

(57) **ABSTRACT**

Apparatus and method for securing a stent to a balloon catheter. A first clamping portion and a second clamping portion are arranged for movement toward and away from each other and are provided with recesses defining a channel to receive a stent crimping sleeve having a longitudinal bore. The stent is slid into the longitudinal bore of the stent crimping sleeve and the balloon catheter is then slid into the longitudinal bore of the stent. The first and second clamping portions are moved towards each other and apply pressure to the external surface of the stent crimping sleeve causing the internal diameter of the longitudinal bore to get smaller and apply pressure to the external surface of the stent and crimp the stent to the balloon.

5 Claims, 8 Drawing Sheets



EDWARDS LIFESCIENCES EX. 1214

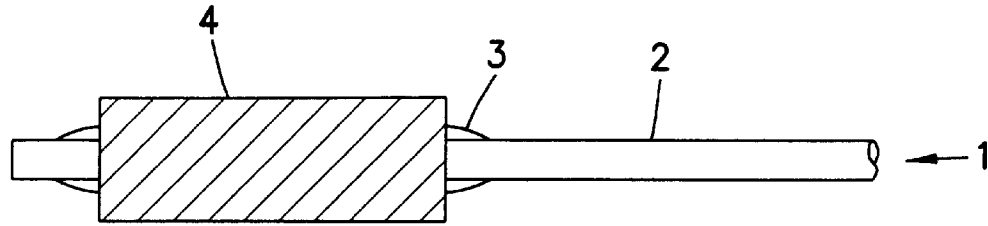


FIG. 1

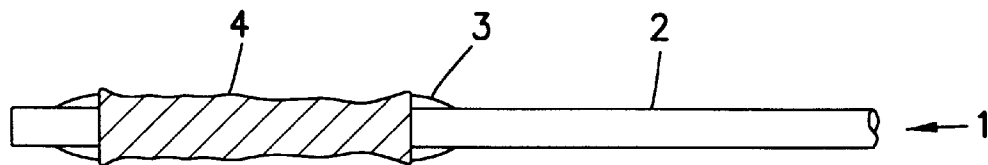


FIG. 2

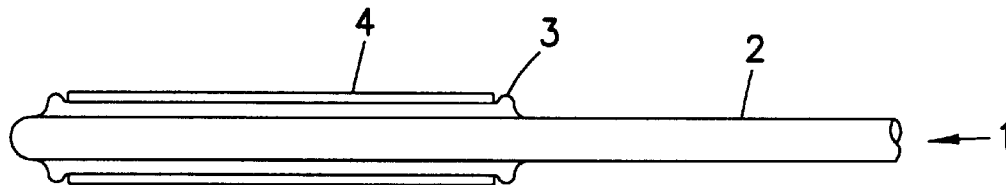


FIG. 11

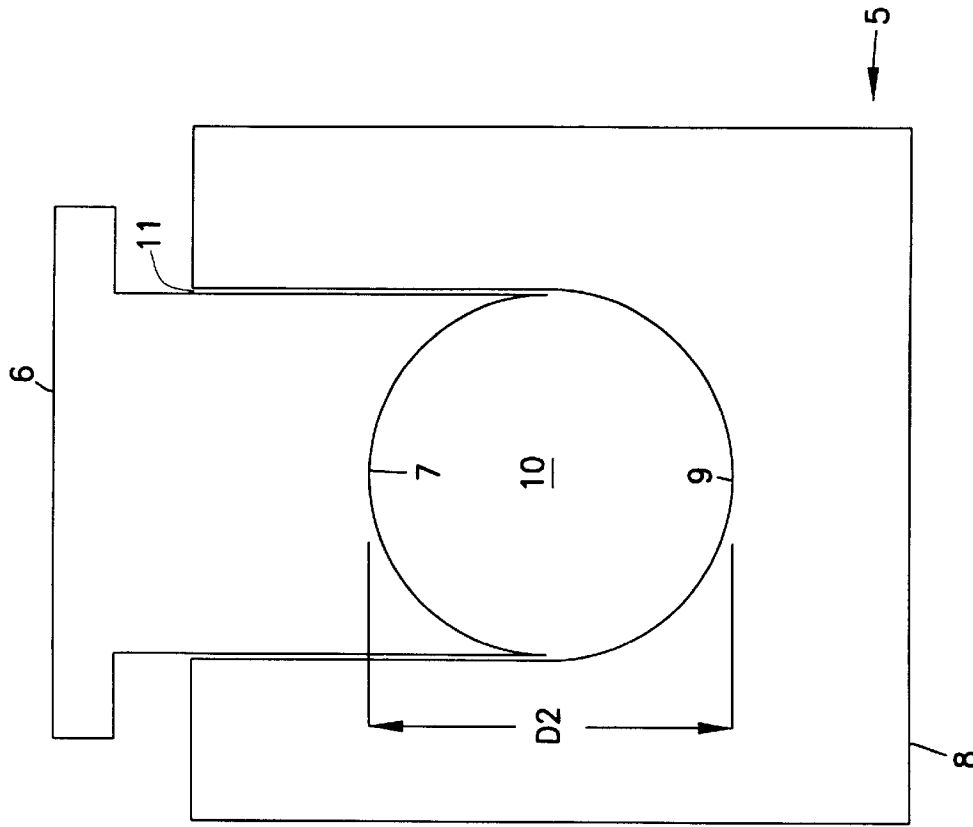


FIG. 4

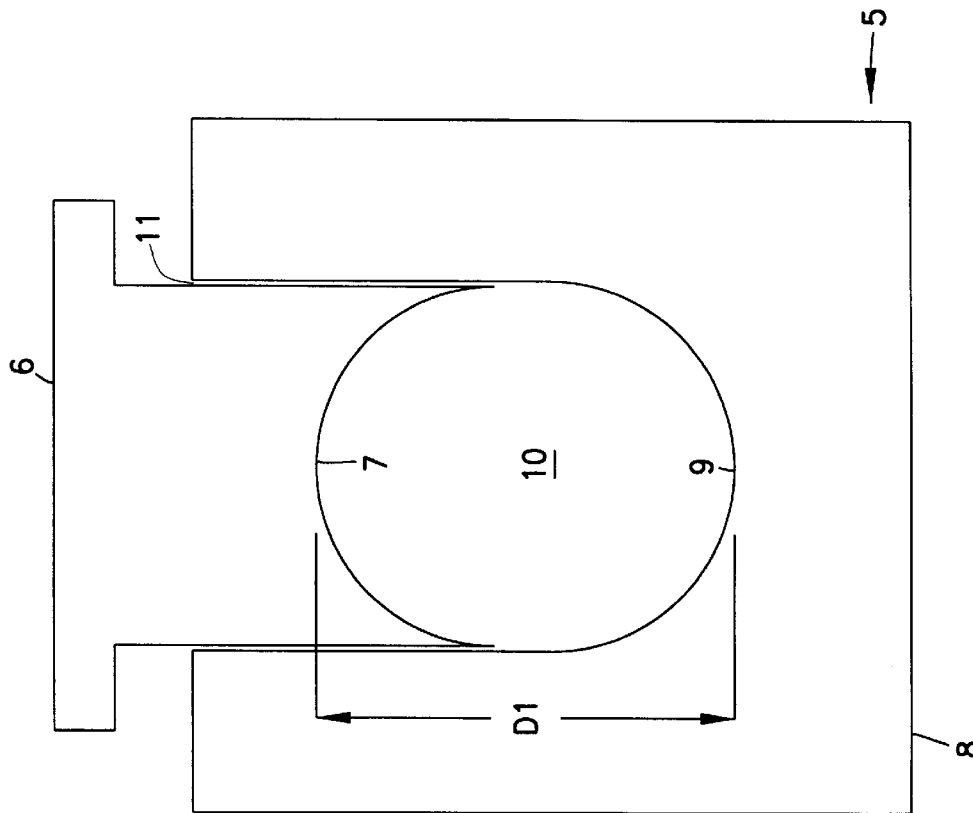


FIG. 3

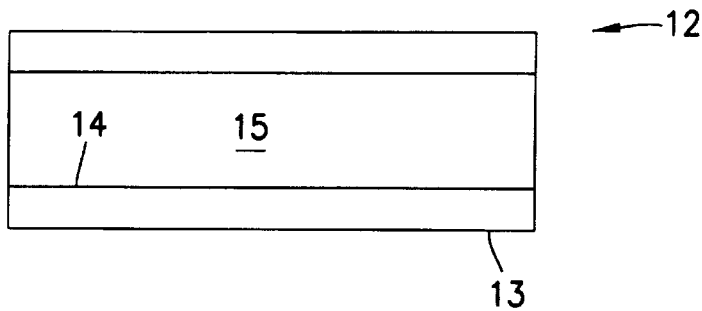


FIG. 5

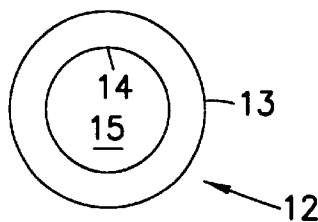


FIG. 6

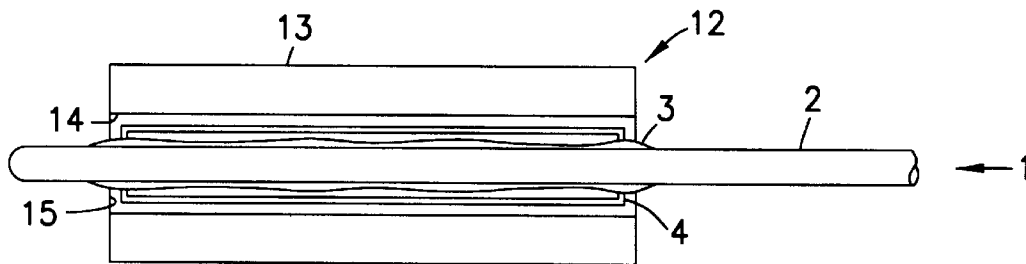


FIG. 7

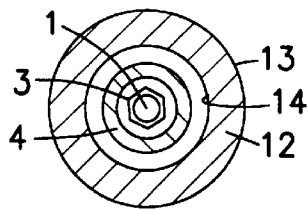


FIG. 8

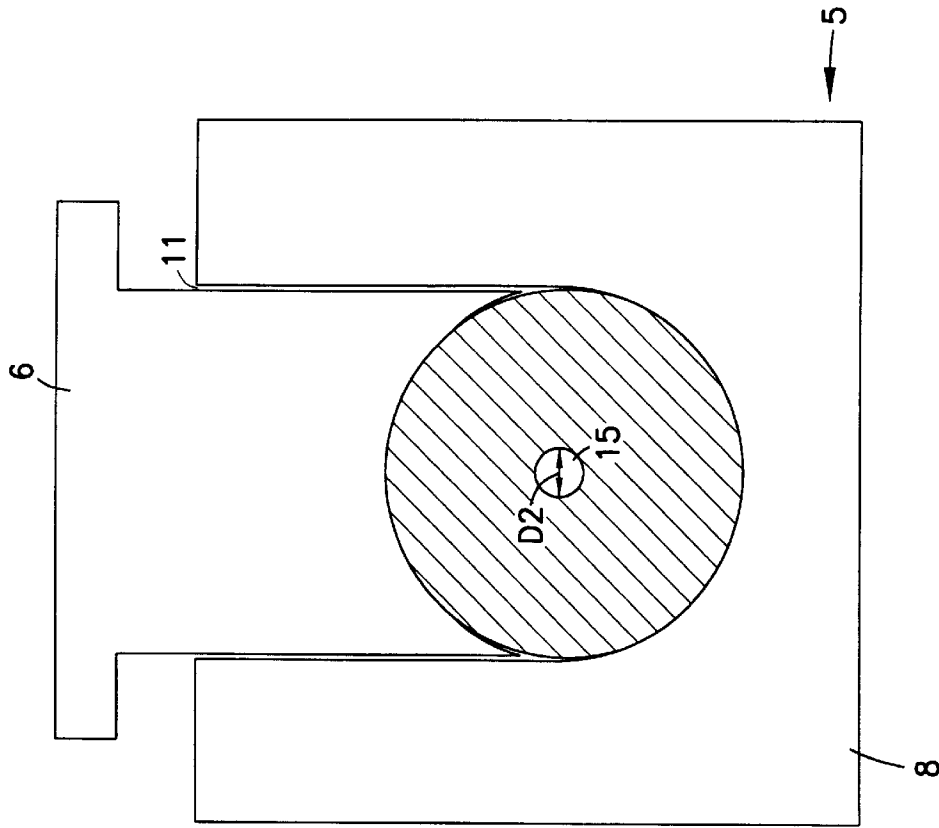


FIG. 9

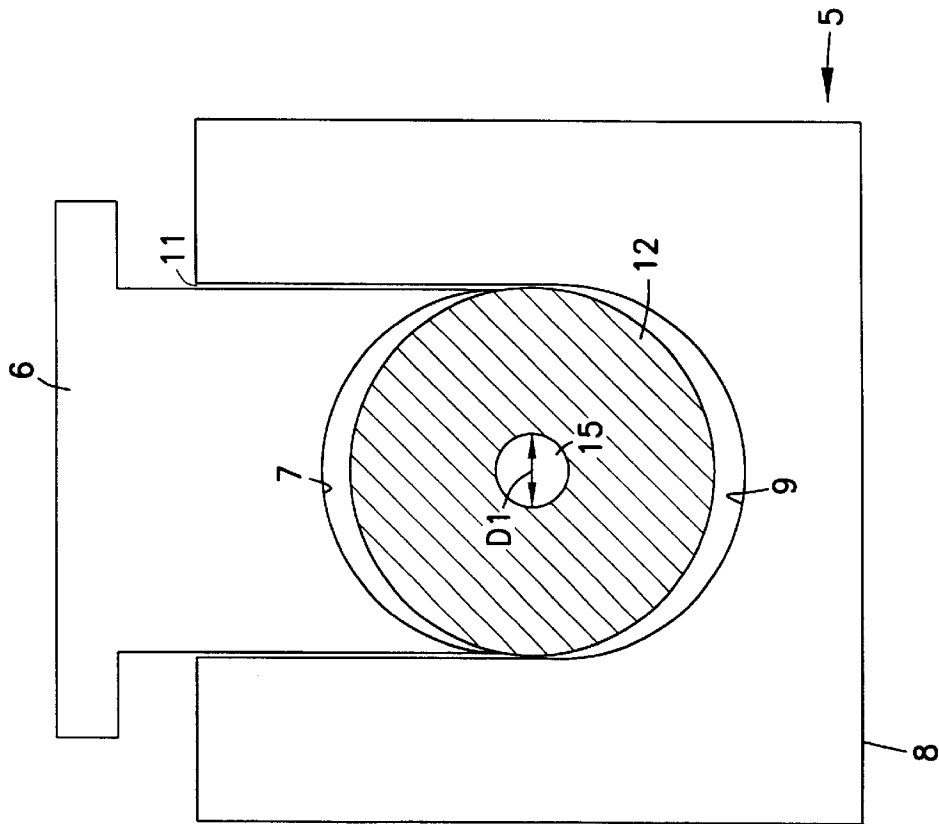


FIG. 10

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.