



US007025780B2

(12) **United States Patent**
Gabbay

(10) **Patent No.:** **US 7,025,780 B2**

(45) **Date of Patent:** **Apr. 11, 2006**

(54) **VALVULAR PROSTHESIS**

(56) **References Cited**

(76) Inventor: **Shlomo Gabbay**, #1 Randall Dr., Short Hills, NJ (US) 07078

U.S. PATENT DOCUMENTS

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 213 days.

| | | | |
|-----------------|--------|-----------------|----------|
| 5,855,597 A | 1/1999 | Jayaraman | 623/1.16 |
| 5,855,601 A * | 1/1999 | Bessler et al. | 623/900 |
| 5,935,163 A * | 8/1999 | Gabbay | 623/2.14 |
| 6,425,916 B1 * | 7/2002 | Garrison et al. | 623/1.26 |
| 2001/0020181 A1 | 9/2001 | Layne | |
| 2001/0021872 A1 | 9/2001 | Bailey et al. | |

(21) Appl. No.: **10/373,138**

OTHER PUBLICATIONS

(22) Filed: **Feb. 24, 2003**

Ross D., Pulmonary valve autotransplantation (the Ross operation), Sep. 1988, J. Cardiac Surgery, 3:313-9.*

* cited by examiner

(65) **Prior Publication Data**

US 2003/0149477 A1 Aug. 7, 2003

Primary Examiner—Brian E. Pellegrino

(74) *Attorney, Agent, or Firm*—Tarolli, Sundheim, Covell & Tummino L.L.P.

Related U.S. Application Data

(63) Continuation of application No. 09/659,882, filed on Sep. 12, 2000, now abandoned.

(57) **ABSTRACT**

A valvular prosthesis and method of using the prosthesis are disclosed. A valve apparatus is located within a stent apparatus, such that the prosthesis is deformable between a first condition and a second condition, in which the prosthesis has a reduced cross-sectional dimension relative to the first condition, whereby implantation of the prosthesis is facilitated when in the second condition.

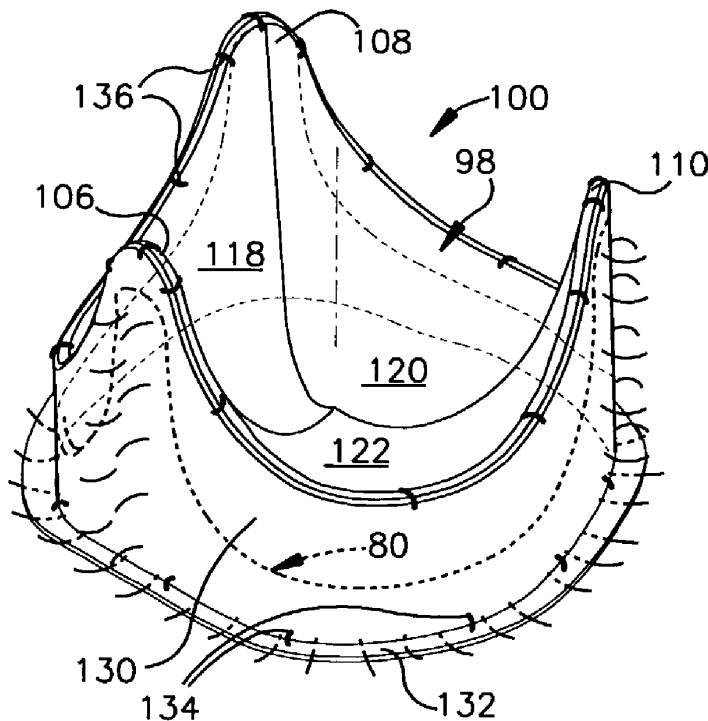
(51) **Int. Cl.**
A61F 2/24 (2006.01)

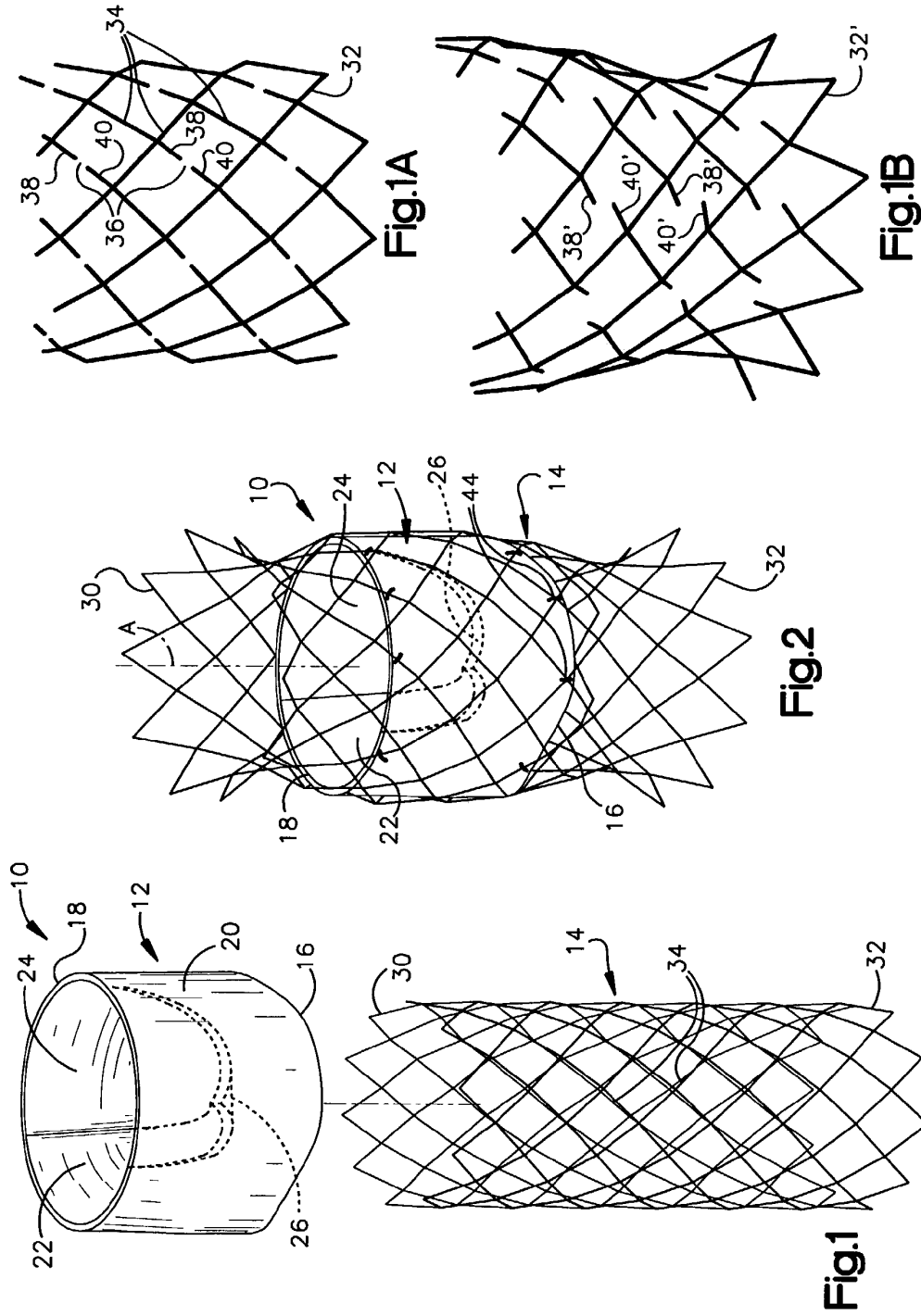
(52) **U.S. Cl.** **623/2.13; 623/2.17; 623/900**

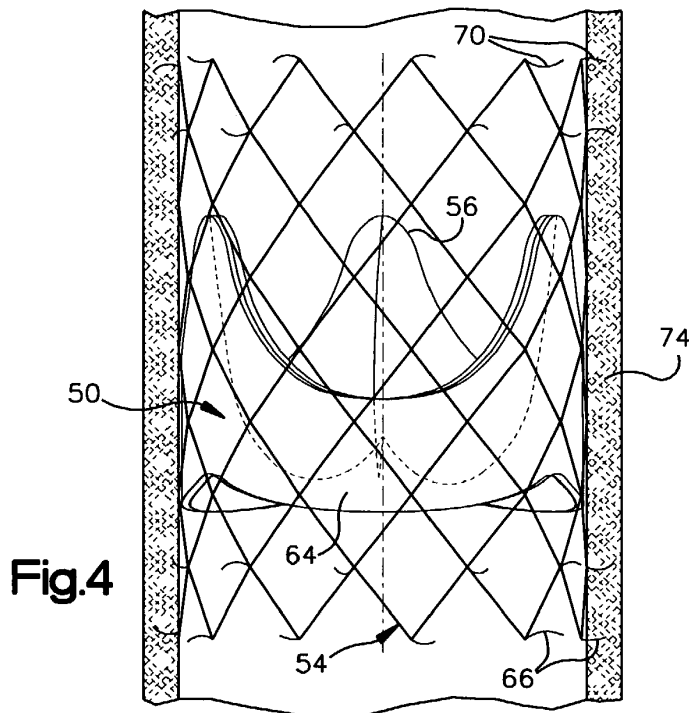
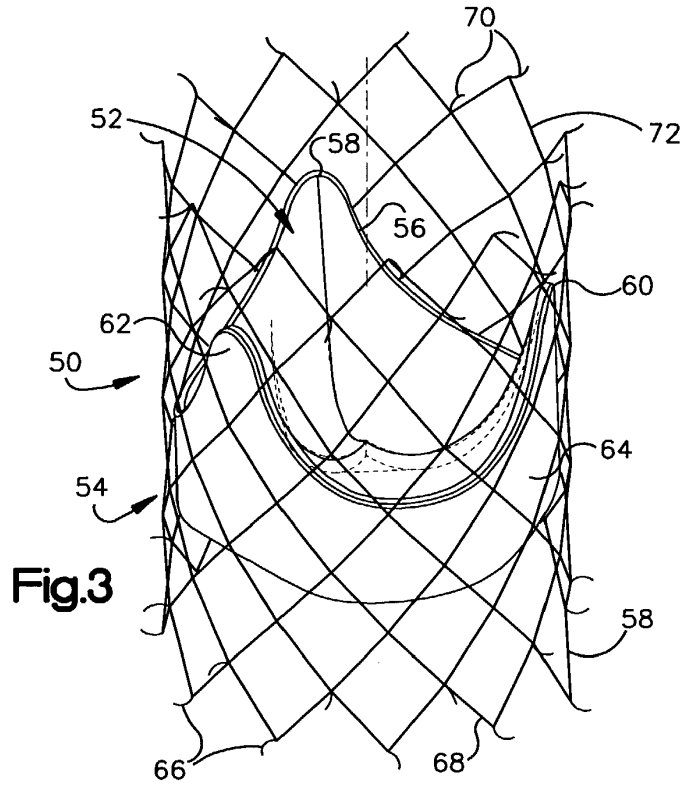
(58) **Field of Classification Search** **623/1.24, 623/1.26, 2.14, 2.15, 2.16, 2.17, 2.18, 2.19, 623/900**

See application file for complete search history.

6 Claims, 5 Drawing Sheets







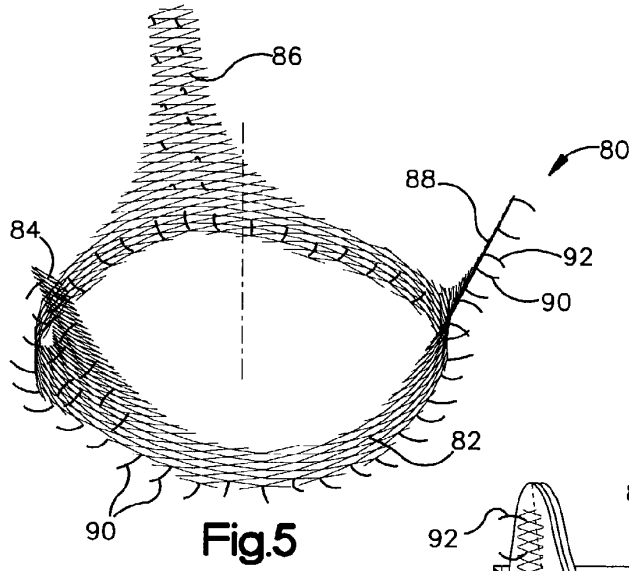


Fig.5

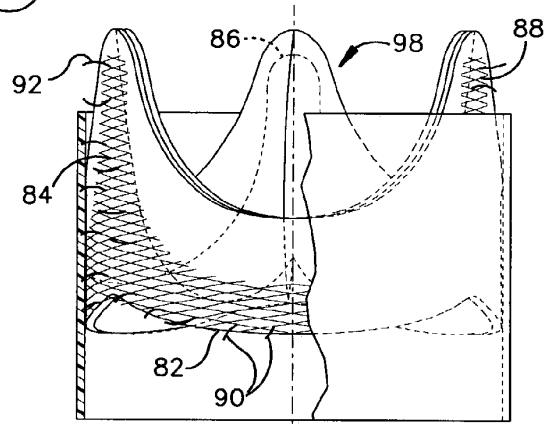


Fig.6A

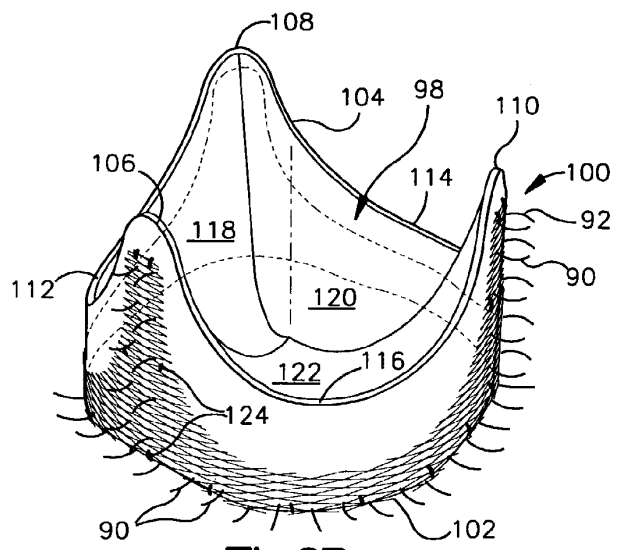


Fig.6B

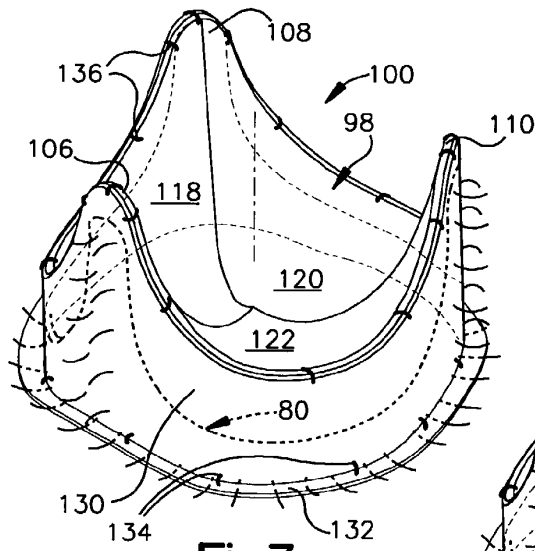


Fig. 7

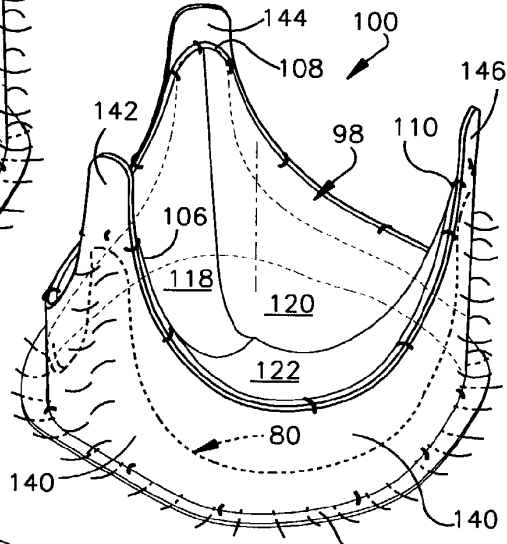


Fig. 8

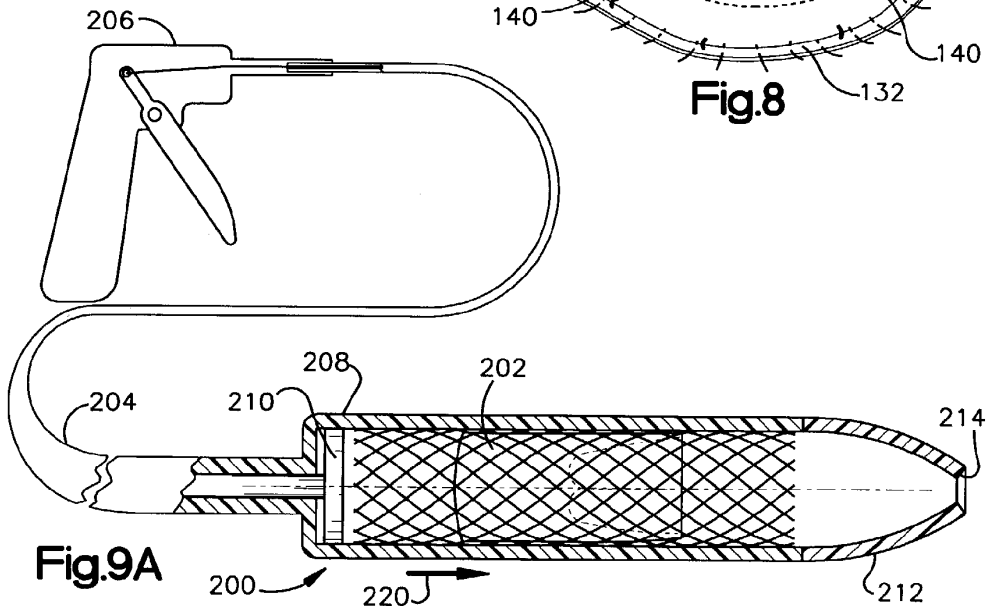


Fig. 9A

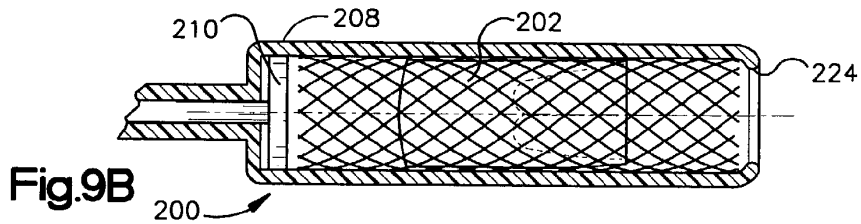


Fig. 9B

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.