

# United States Patent [19]

Vesely et al.

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[45] Date of Patent: **Aug. 27, 1996**

[54] **BIOPROSTHETIC VALVE**

8300617 3/1983 WIPO ..... 623/2  
WO94/01060 1/1994 WIPO .

[75] Inventors: **Ivan Vesely; Slawomir Krucinski; Gordon Campbell; Derek Boughner; Mohan Dokainish**, all of London, Canada

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[73] Assignee: **London Health Association**, London, Canada

*Primary Examiner*—Michael Milano  
*Attorney, Agent, or Firm*—Fay, Sharpe, Beall, Fagan, Minnich & McKee

[21] Appl. No.: **261,983**

[22] Filed: **Jun. 17, 1994**

### [30] Foreign Application Priority Data

Jun. 18, 1993 [GB] United Kingdom ..... 9312666

[51] Int. Cl.<sup>6</sup> ..... **A61F 2/24**

[52] U.S. Cl. .... **623/2; 623/900**

[58] Field of Search ..... **623/2, 66, 900**

### [57] ABSTRACT

A bioprosthetic valve comprising a support ring having three spaced apart end stops projecting upwardly therefrom, a stent post ring having three spaced apart stent posts pivotally connected thereto and adapted to engage respective ones of the end stops so as to permit outward pivoting of the stent posts and to prevent inward pivoting thereof, a leaflet valve having three generally triangular leaflets defining respective cusps, the leaflets being joined at respective commissures, and a sewing ring for attaching the leaflet valve to the stent post ring and support ring.

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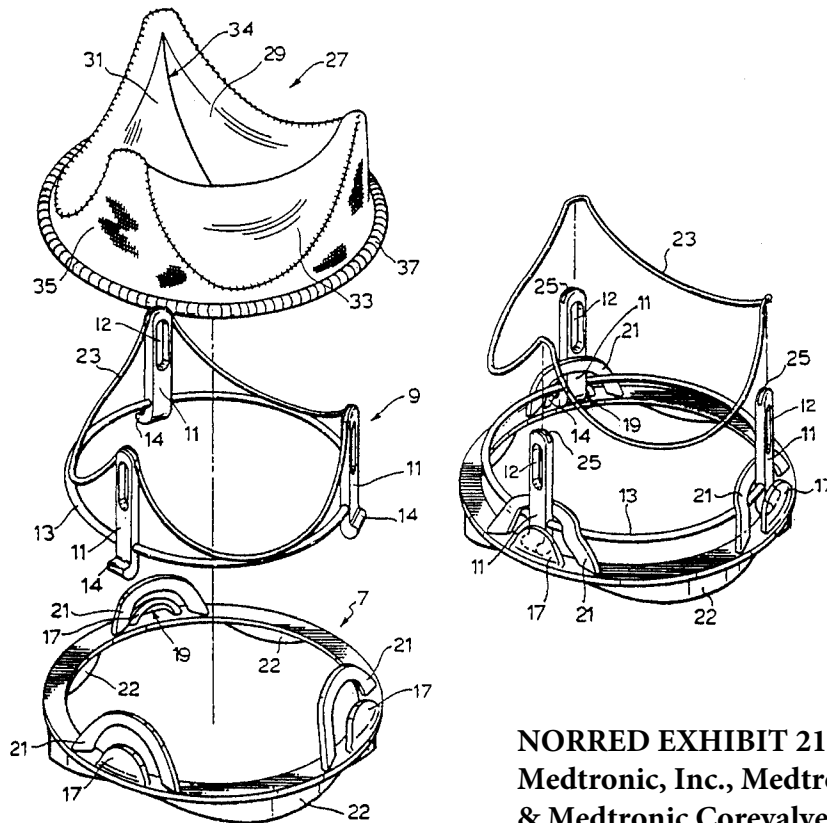
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**21 Claims, 4 Drawing Sheets**



**NORRED EXHIBIT 2105 - Page 1**  
**Medtronic, Inc., Medtronic Vascular, Inc.,**  
**& Medtronic Corevalve, LLC**

FIG. 1.  
(PRIOR ART)

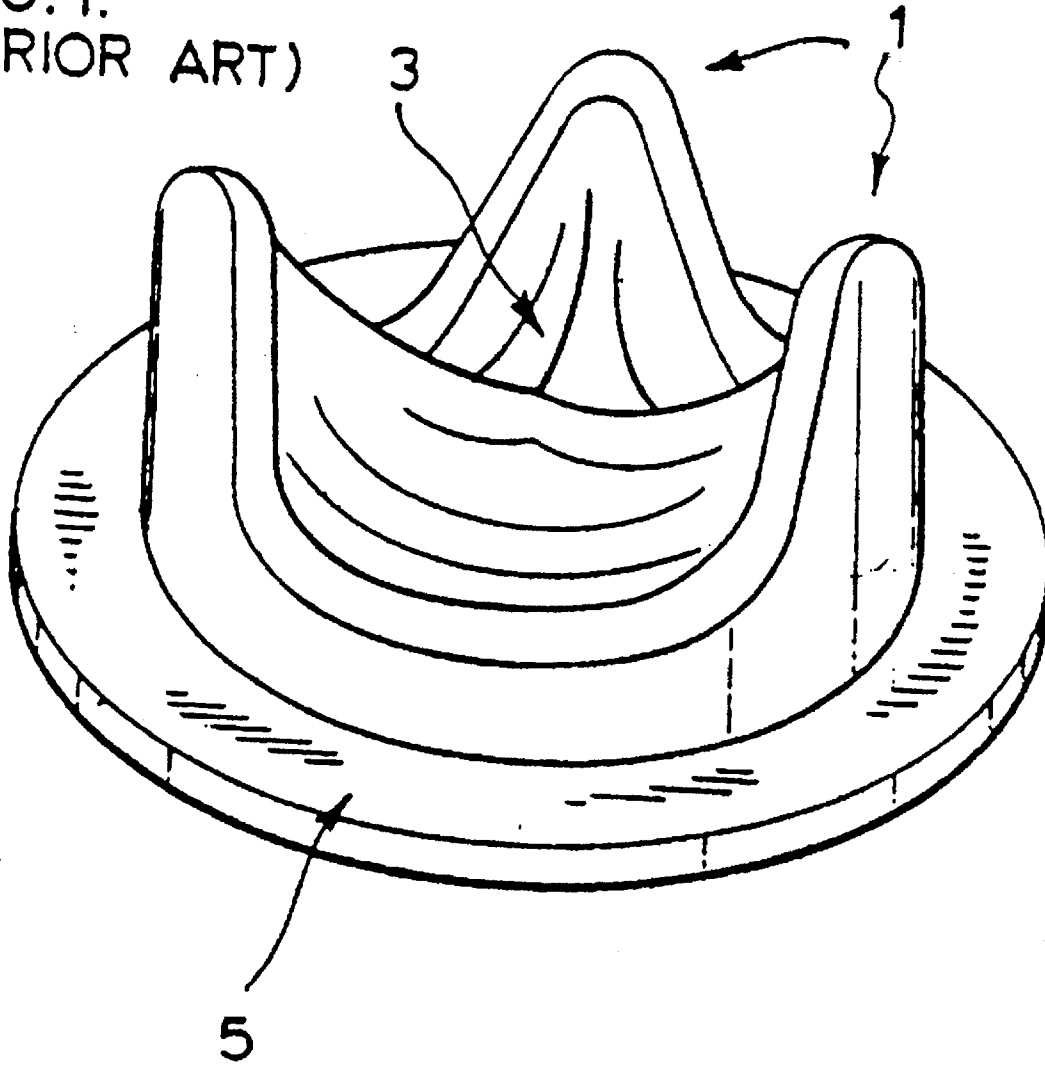


FIG. 2.

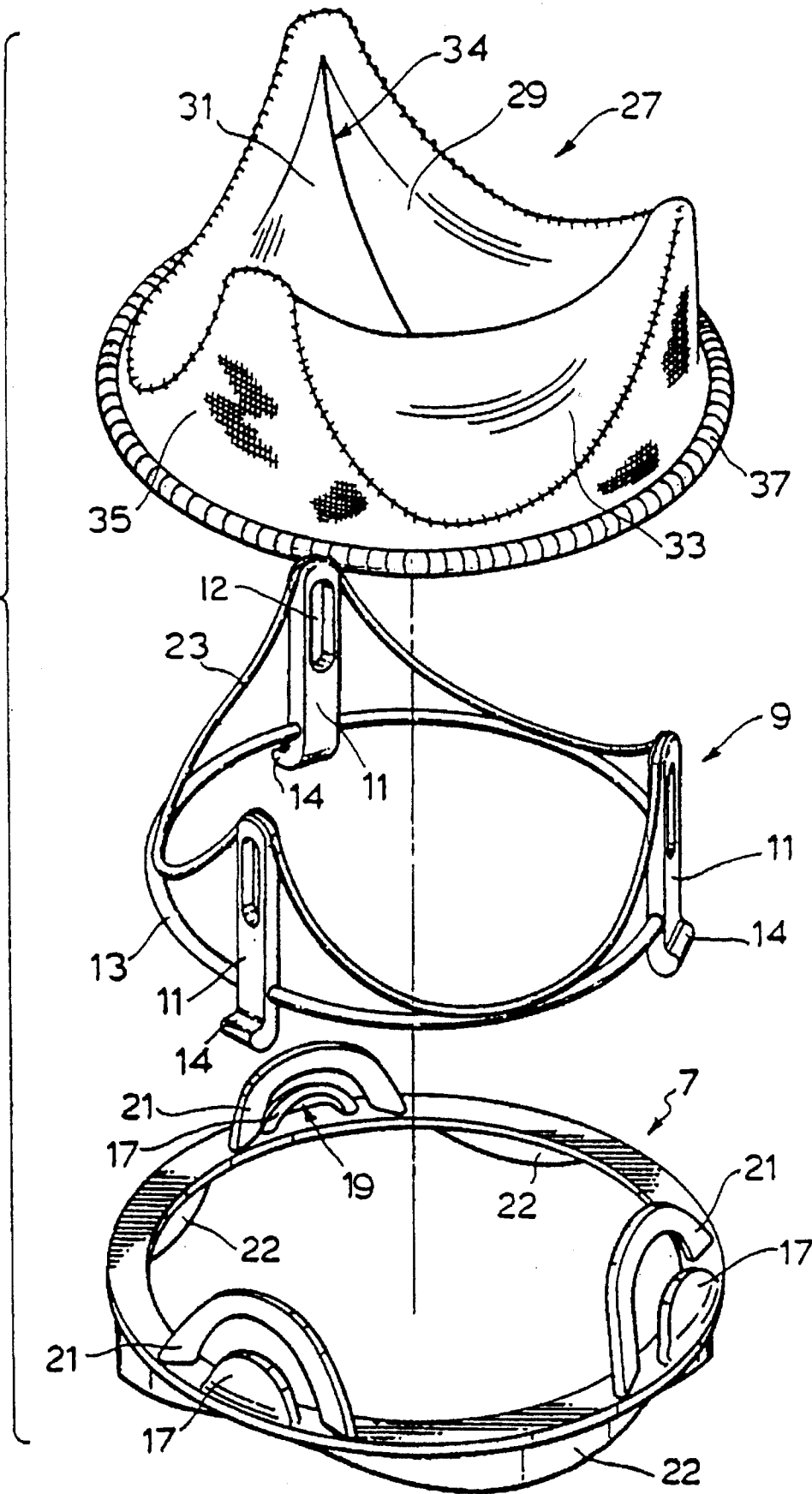


FIG. 3.

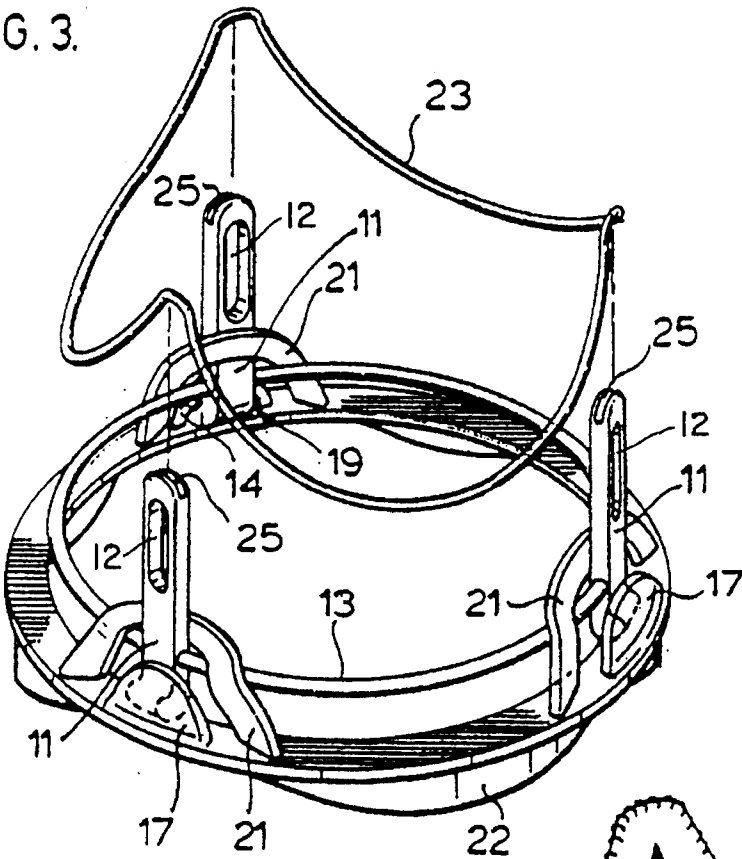


FIG. 4.

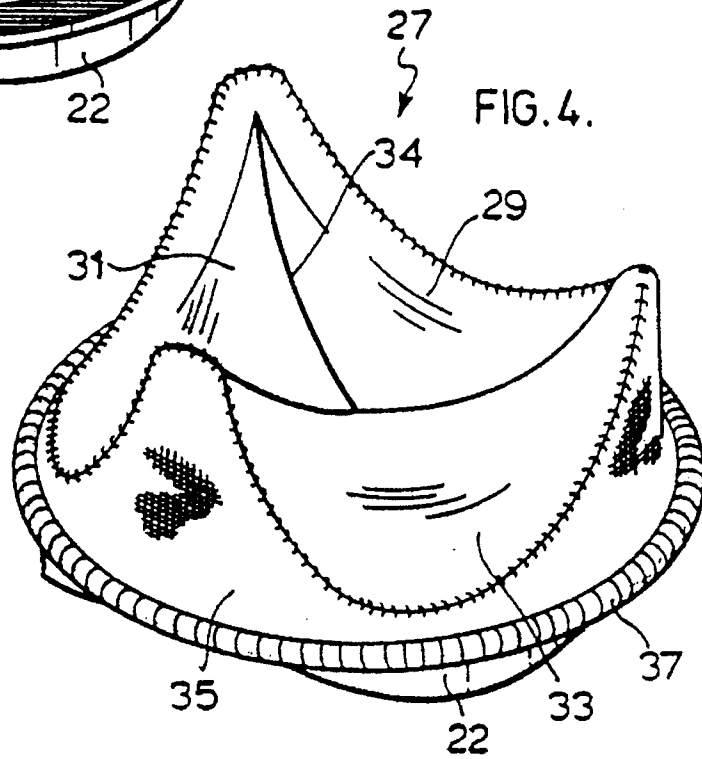


FIG. 5.

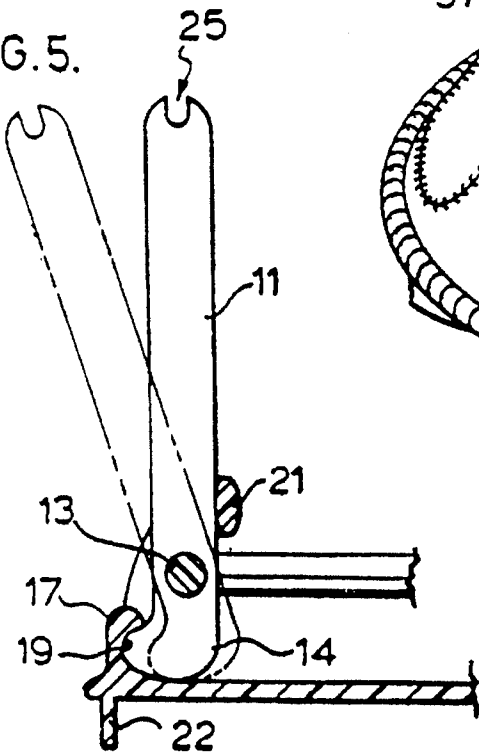
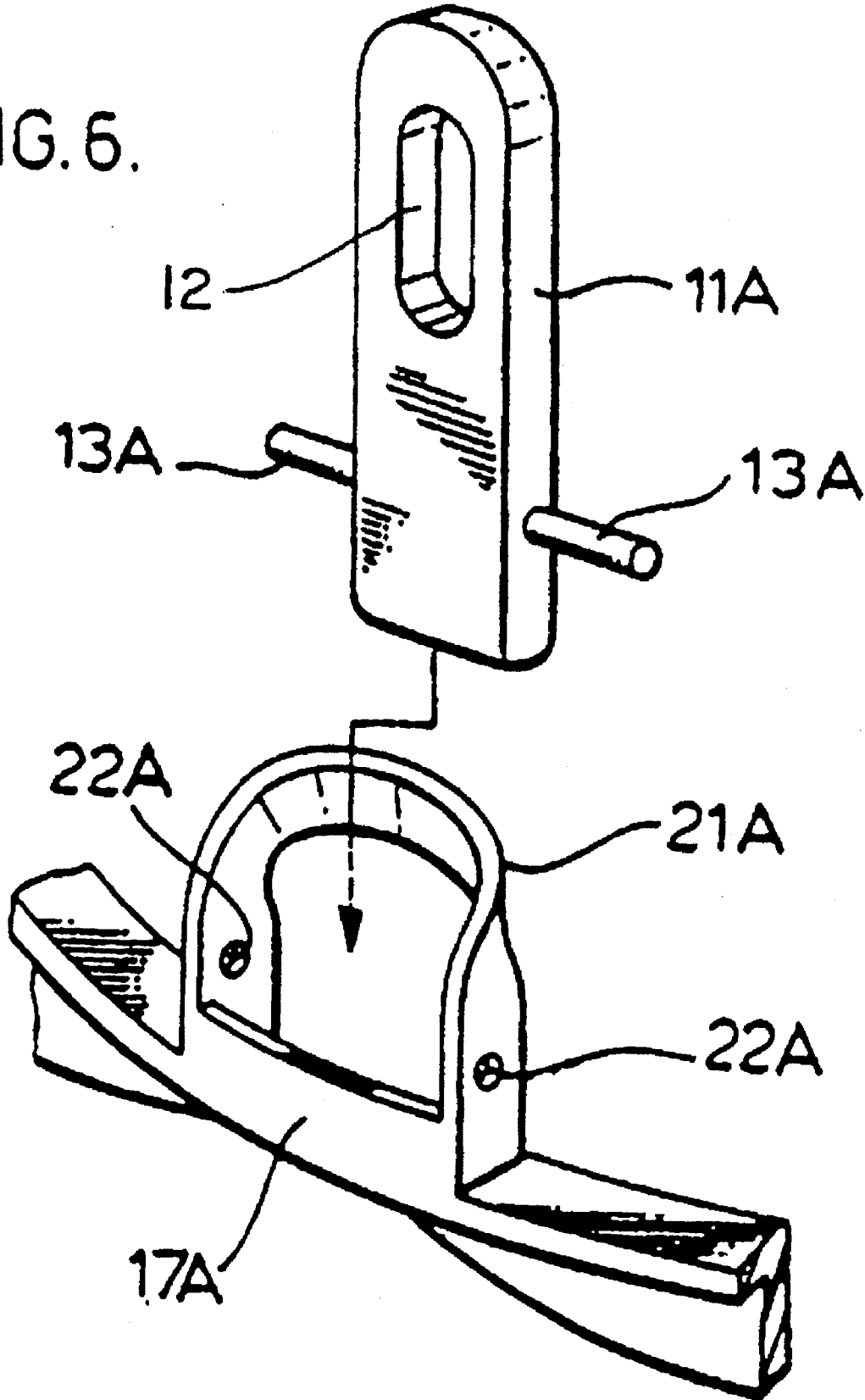


FIG. 6.



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