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Norred

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(54) **PERCUTANEOUS AORTIC VALVE REPLACEMENT**

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(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(51) **Int. Cl.<sup>7</sup>** ..... **A61F 2/06**

(52) **U.S. Cl.** ..... **623/2.17; 623/1.24**

(58) **Field of Search** ..... 623/2.1, 2.12, 623/2.13, 2.14, 2.18, 2.2, 2.22, 2.17

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*Primary Examiner*—Corrine McDermott

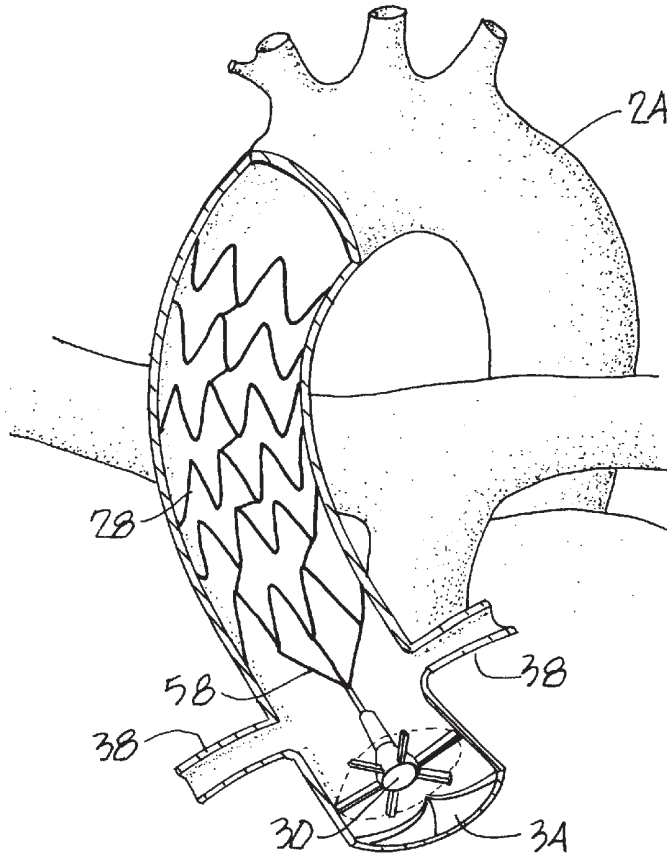
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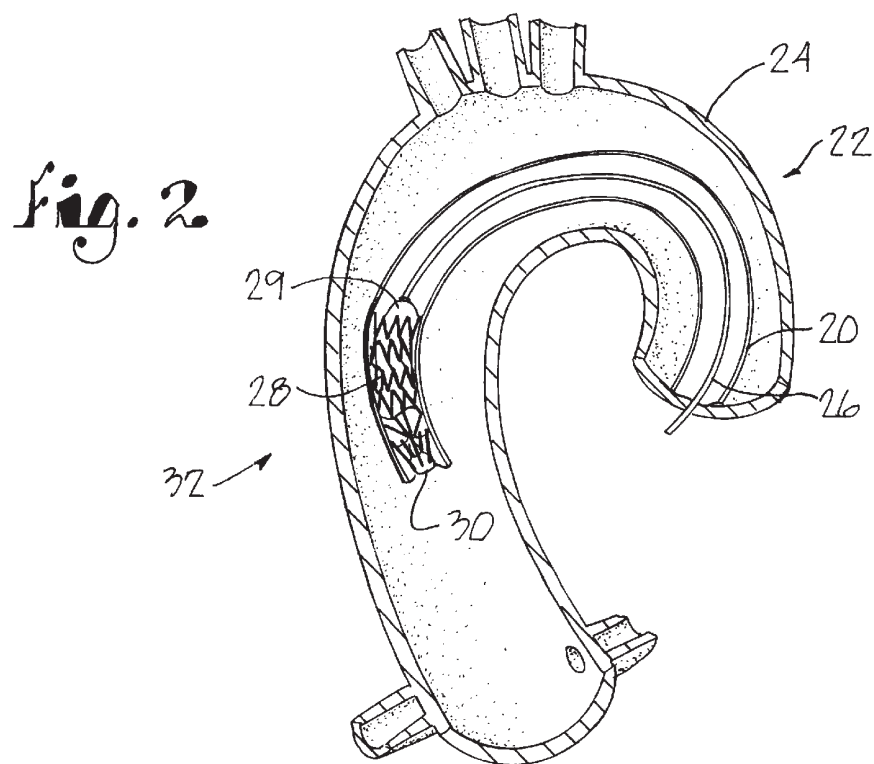
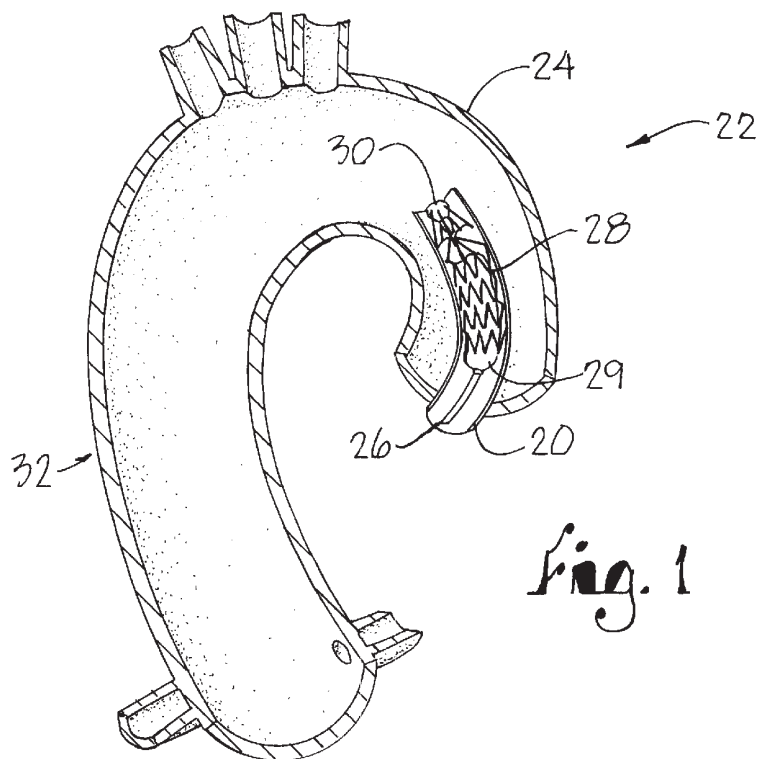
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(57) **ABSTRACT**

An aortic heart valve which is adapted to be placed percutaneously without the need for open-heart surgery is placed by a catheter and held in place with a stent system. The stent system is expanded in the ascending aorta to anchor the valve in the aortic channel above the native aortic valve.

**24 Claims, 7 Drawing Sheets**





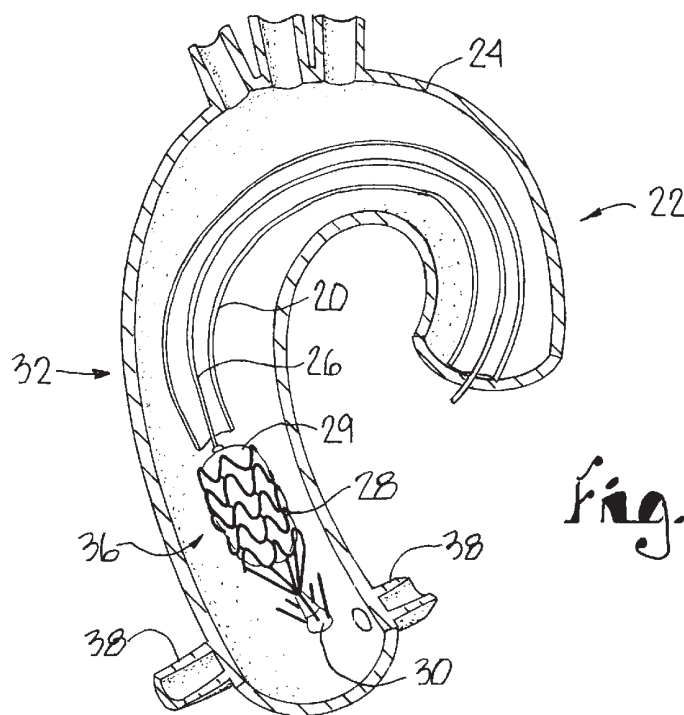


Fig. 3

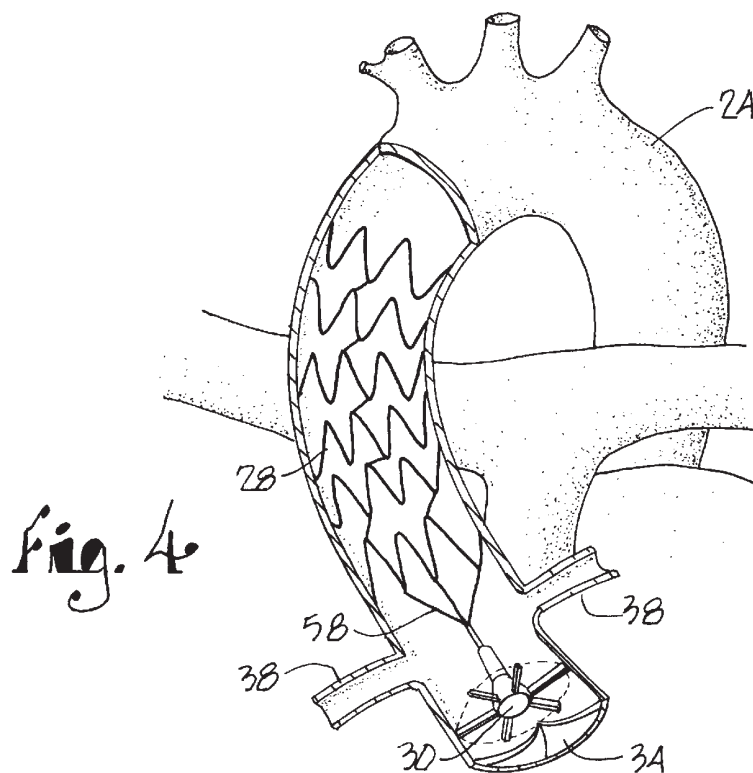
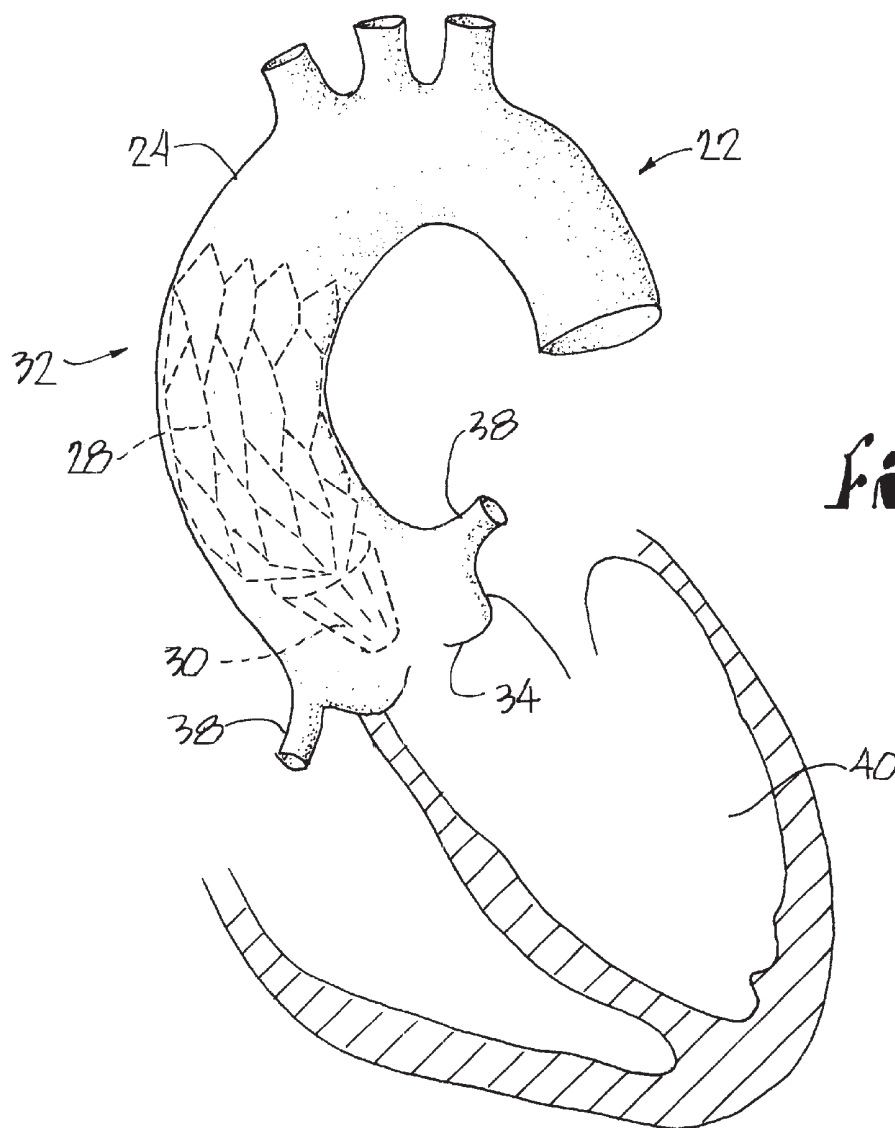
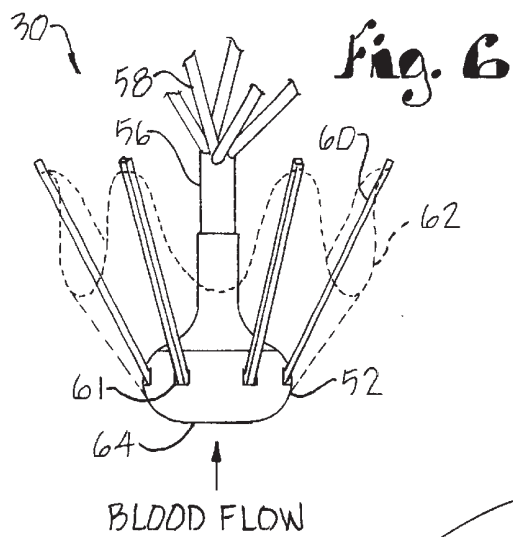


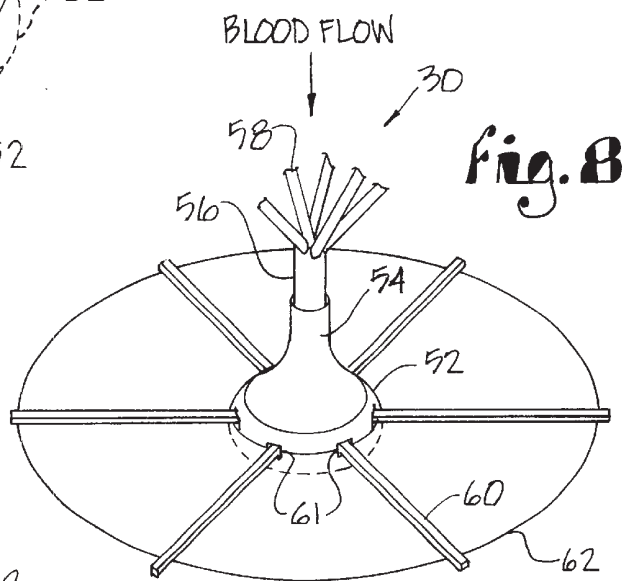
Fig. 4



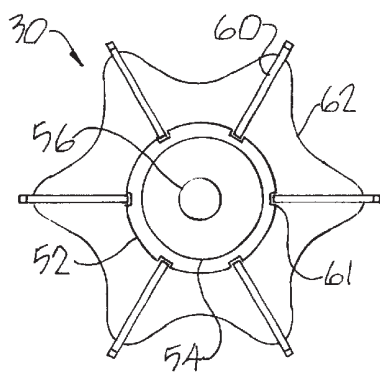
*Fig. 5*



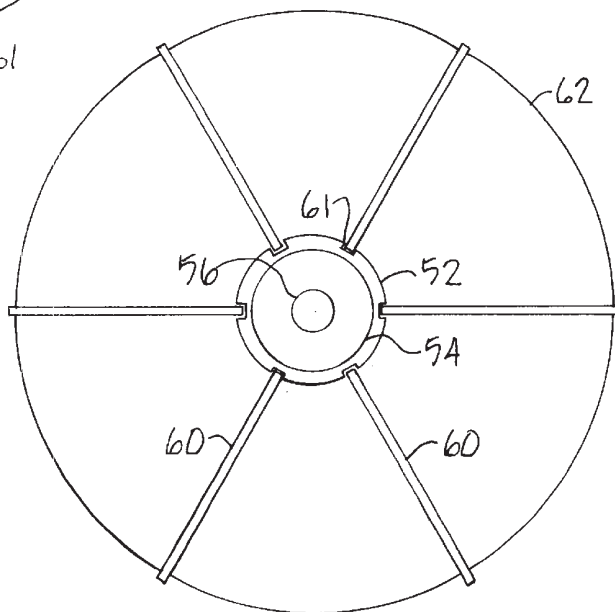
*Fig. 6*



*Fig. 8*



*Fig. 7*



*Fig. 9*

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