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# United States Patent [19]

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Pavcnik et al.

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- [54] **PROSTHETIC VALVE FOR PERCUTANEOUS INSERTION**
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[21] Appl. No.: **699,195**

[22] Filed: **May 13, 1991**

[51] Int. Cl.<sup>6</sup> ..... **A61F 2/02; A61F 2/24**

[52] U.S. Cl. .... **623/11; 623/2;**

**623/3; 623/1; 623/900**

[58] Field of Search ..... **623/1, 11, 2, 3, 900**

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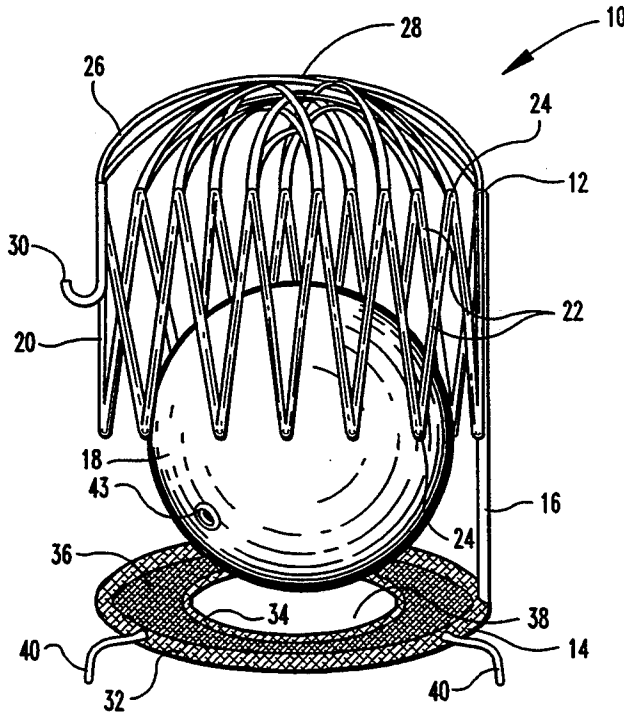
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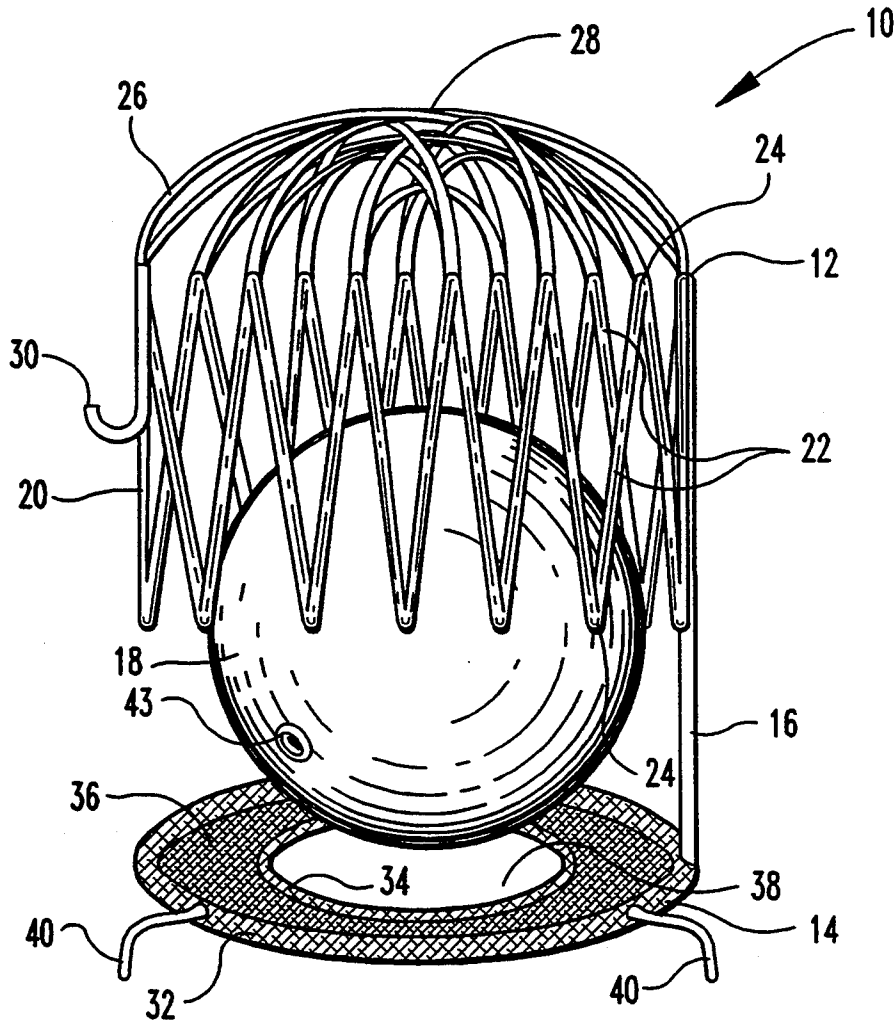
[57] **ABSTRACT**

A prosthetic valve comprises a poppet, a seat and a restraining element. The poppet, seat and restraining element include an insertion form for percutaneously inserting into a fluid passageway within a living body and an operational form for operating within the fluid passageway. The valve is self-expanding so that upon insertion the valve automatically assumes the operational form. In the operational form the poppet is movably restrained between the valve seat and restraining element. The poppet seals against the valve seat to prevent fluid flow through the valve and unseats from the valve seat to permit fluid flow through the valve.

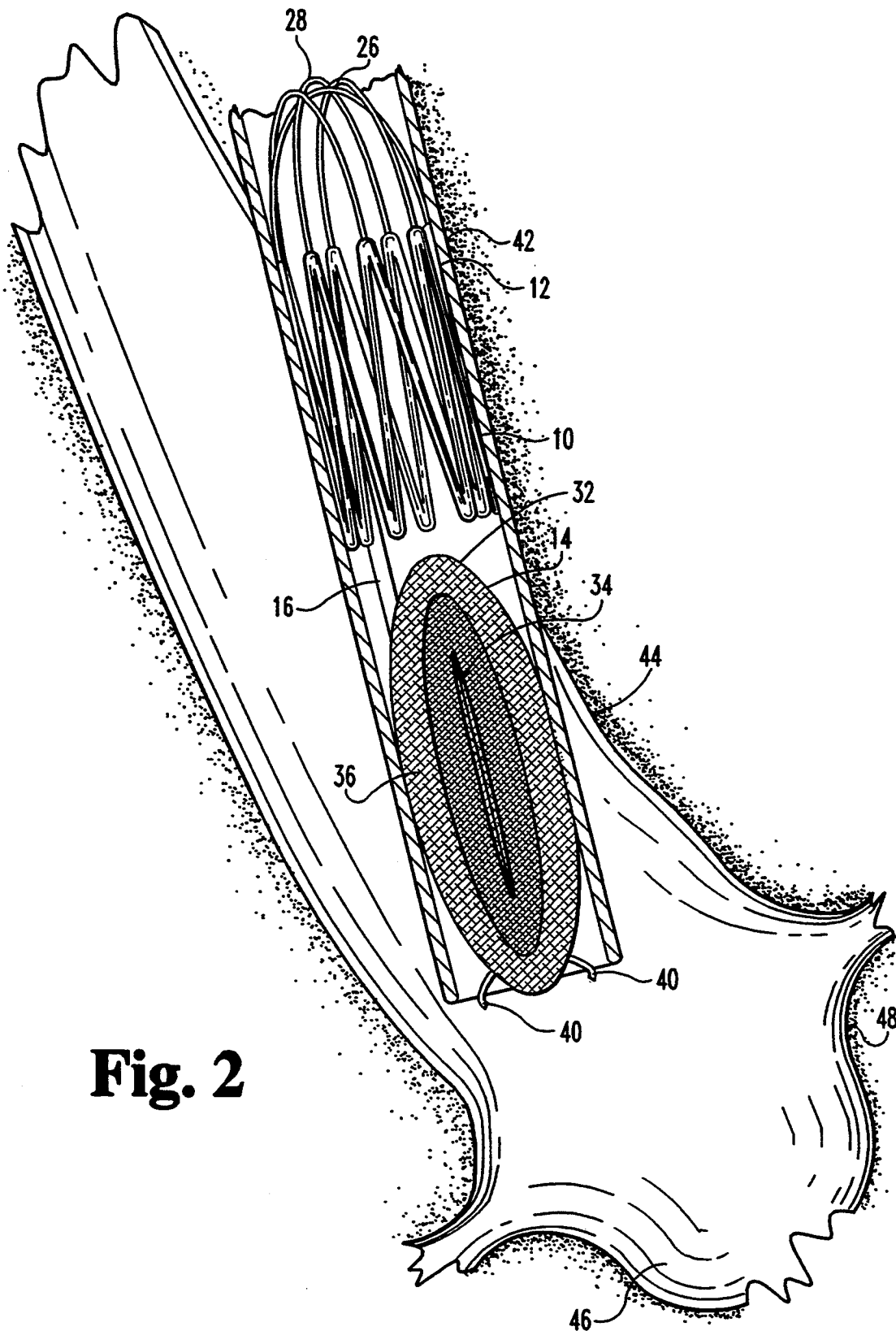
**16 Claims, 6 Drawing Sheets**



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**Fig. 1**



**Fig. 2**

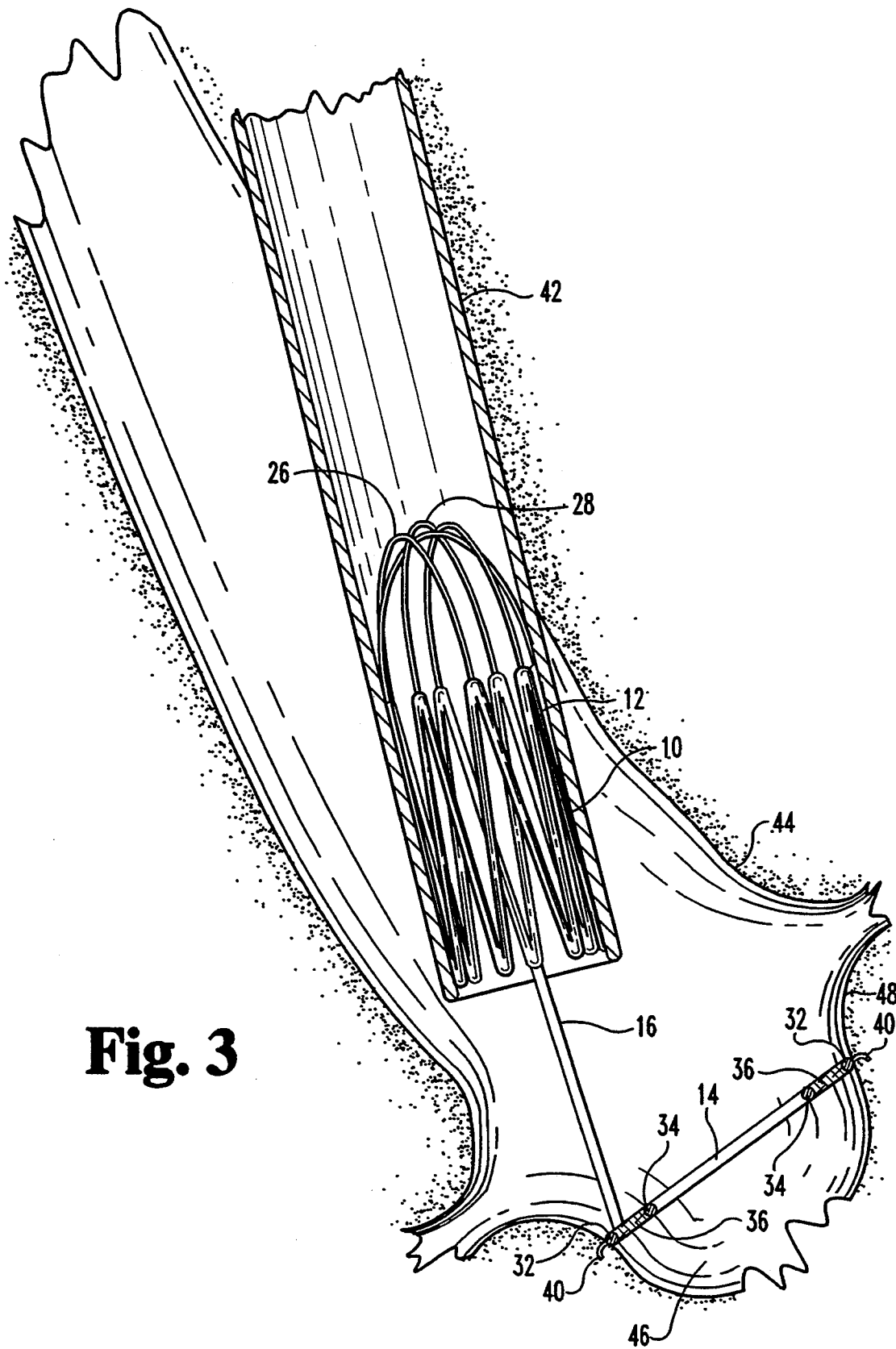
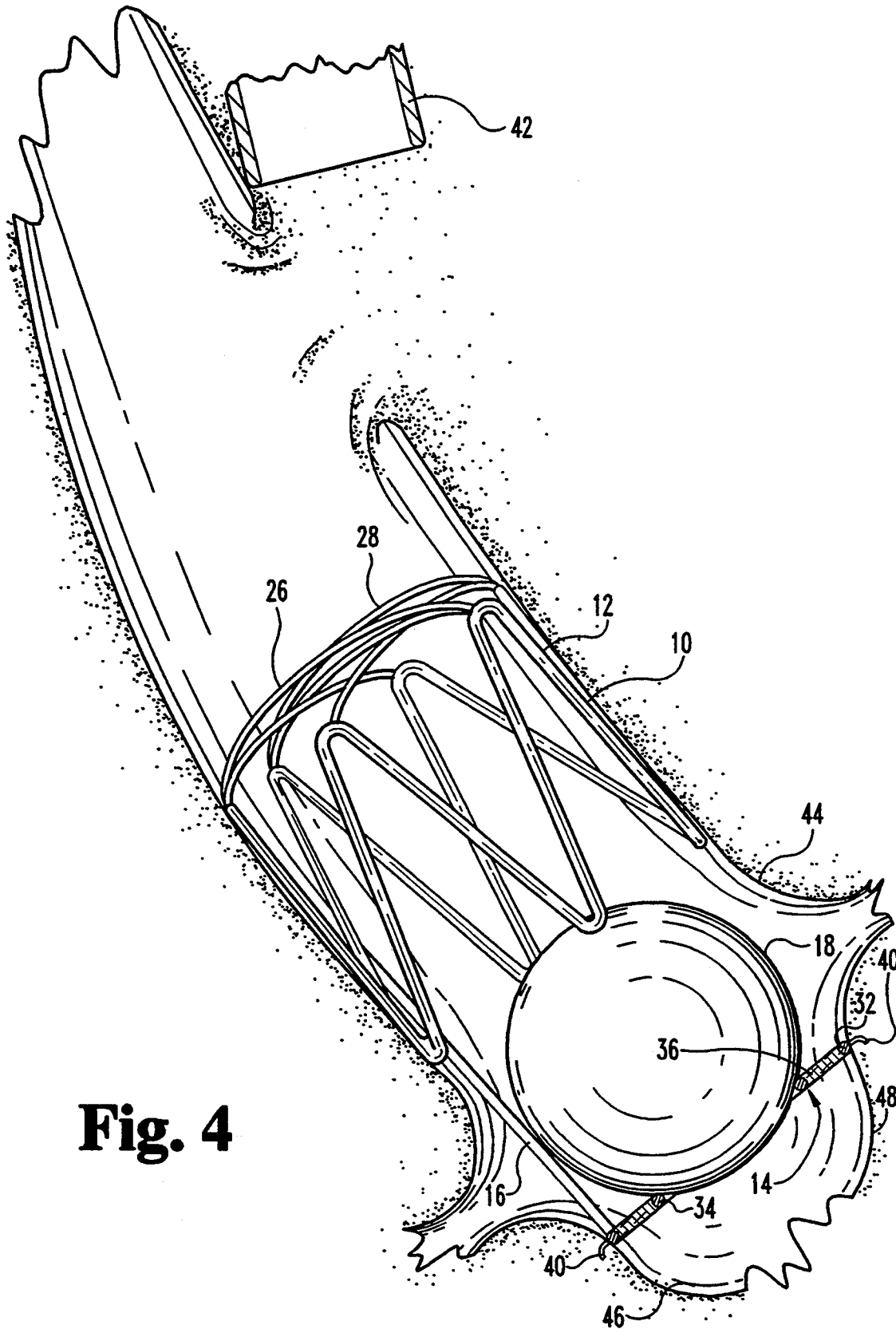


Fig. 3



**Fig. 4**

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