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United States Patent [19]

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Hillstead

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[54] ENDOVASCULAR STENT AND METHOD

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[21] Appl. No.: **650,699**

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[57] ABSTRACT

[51] Int. Cl.⁵ **A61M 29/00**; A61F 2/06;
A61F 2/04

A stent for reinforcing a vessel wall is disclosed. The stent is constructed from a single elongated wire. The wire is first bent into a series of tight bends. The wire is then rolled around a mandrel to create junctions of wire which are permanently adhered. The completed stent forms a cylindrical form which can be expanded from an initial diameter to a larger implanted diameter by application of a radially outward force from a balloon catheter or the like.

[52] U.S. Cl. **606/195**; 623/1;
623/12

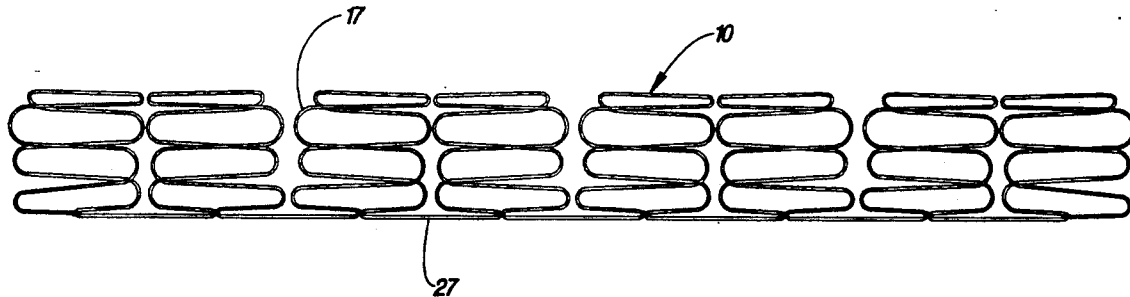
[58] Field of Search 606/108, 191-195;
623/1, 12; 604/96

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24 Claims, 4 Drawing Sheets



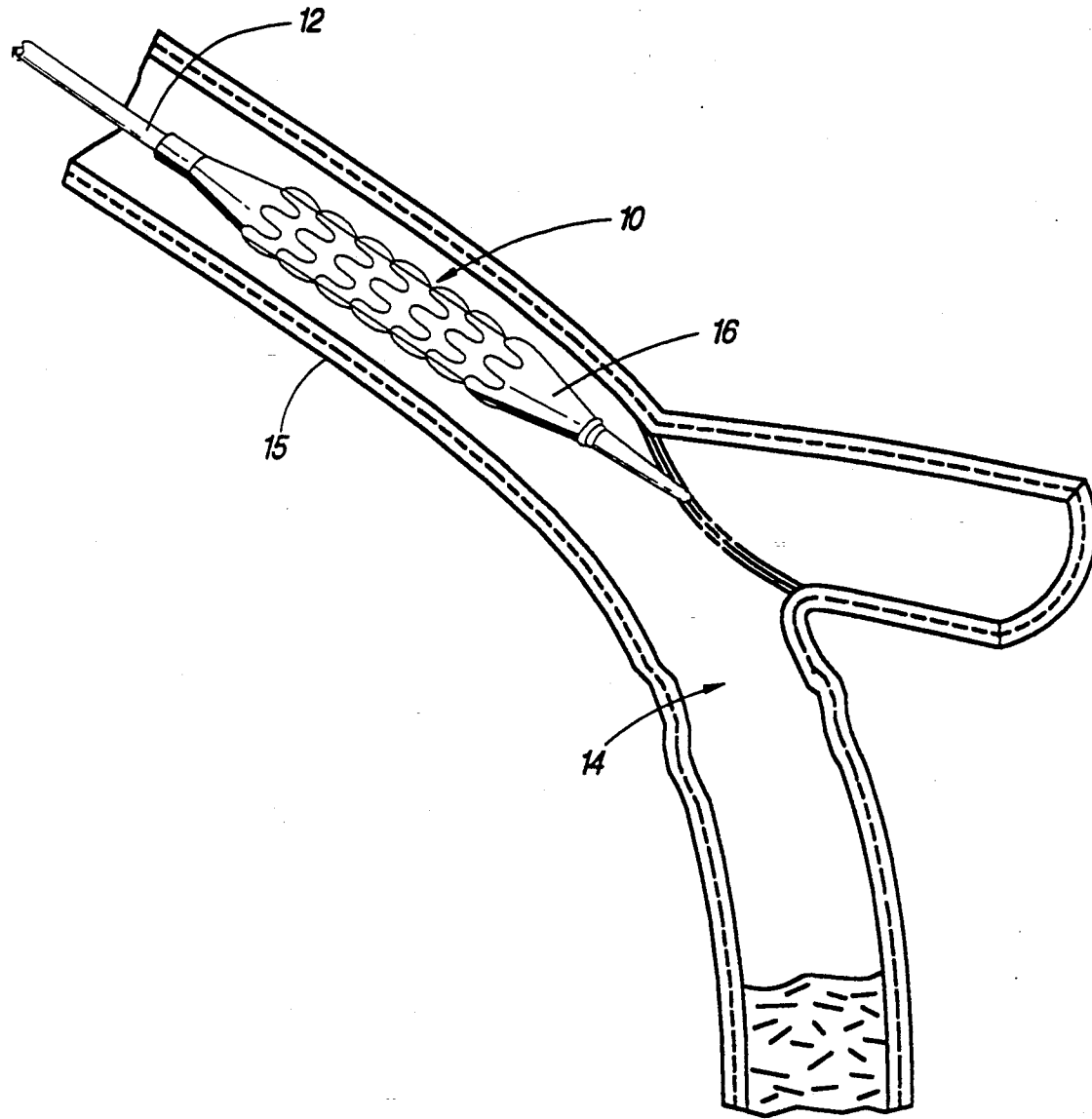


Fig. 1

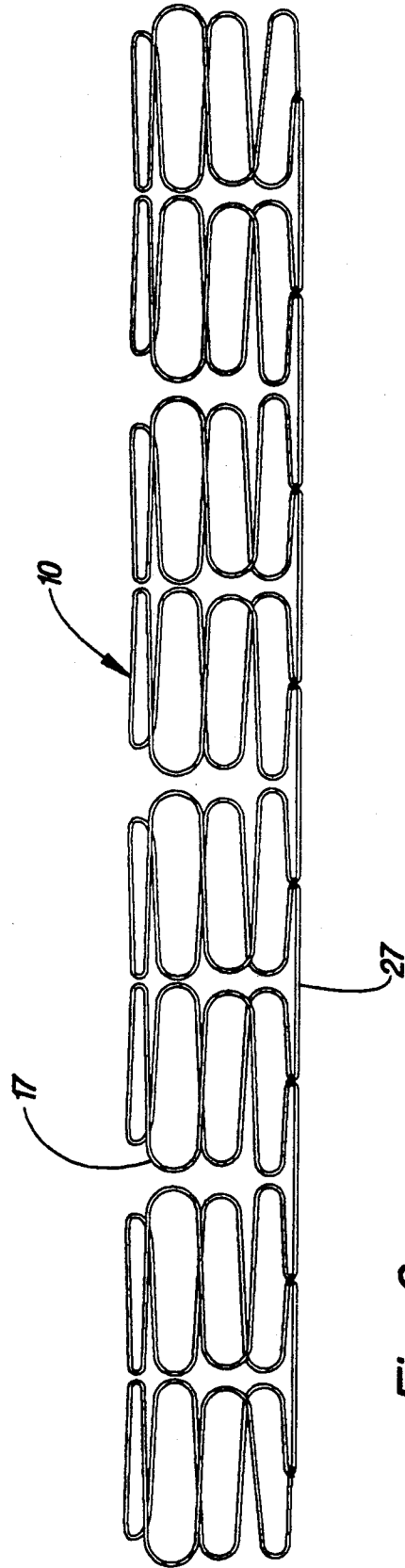


Fig. 2

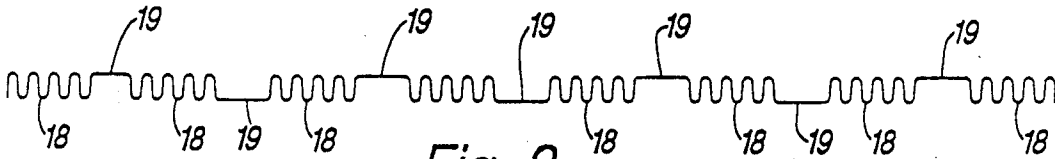


Fig. 3

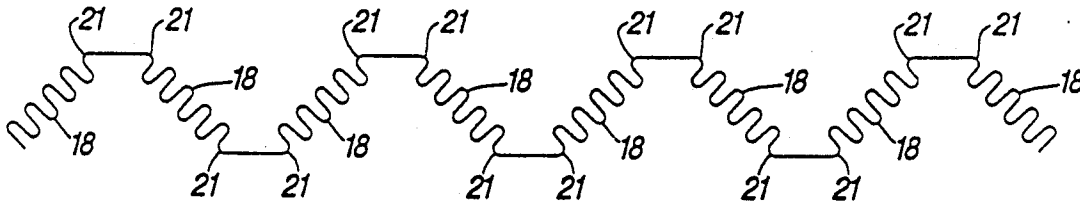


Fig. 4

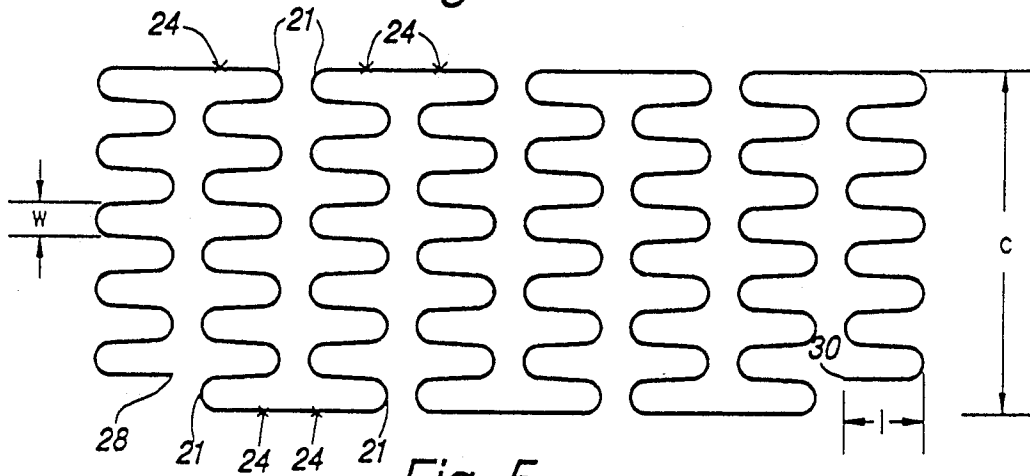


Fig. 5

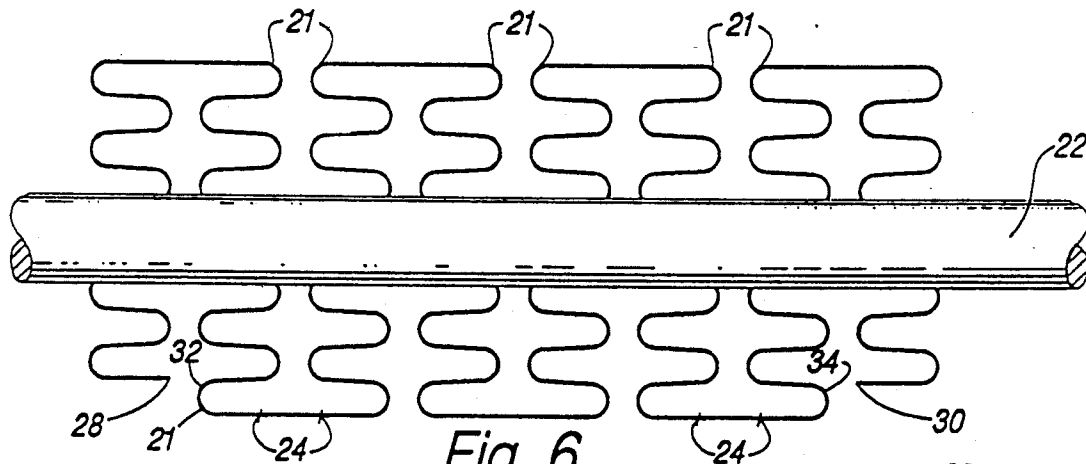


Fig. 6

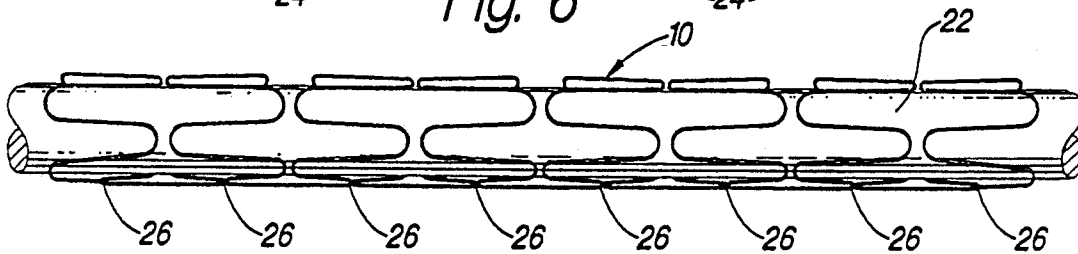


Fig. 7

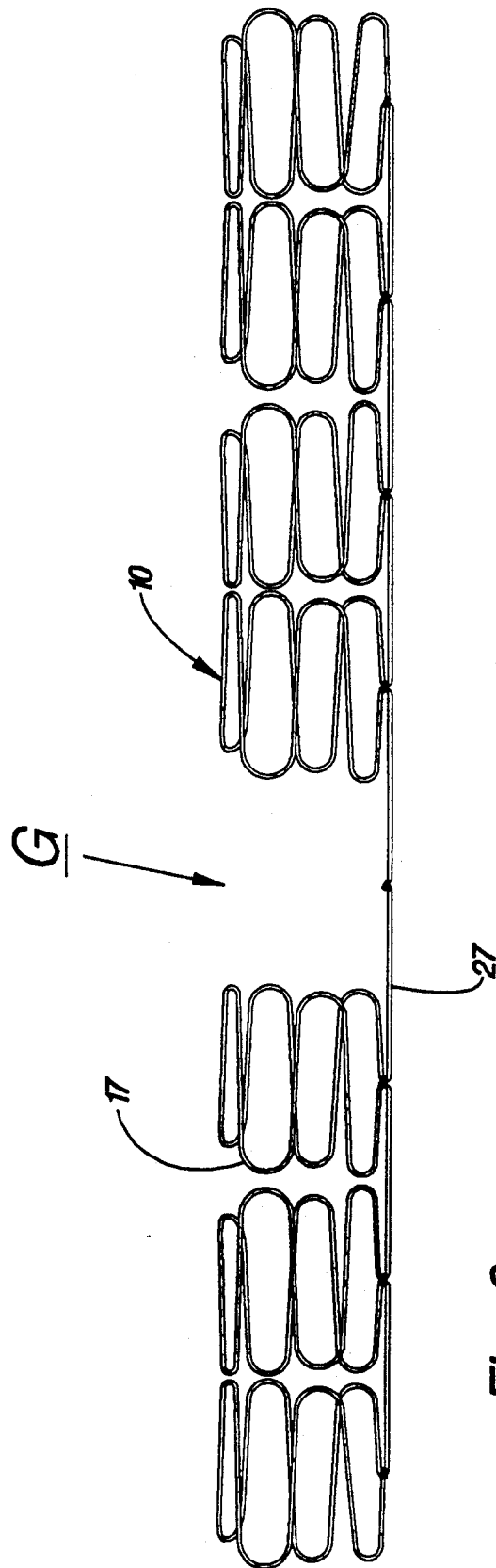


Fig. 8

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