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United States Patent [19]

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Fontaine

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[54] **VASCULAR STENT**

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[73] Assignee: **Cook Incorporated**, Bloomington, Ind.

[21] Appl. No.: **192,064**

[22] Filed: **Feb. 4, 1994**

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Primary Examiner—C. Fred Rosenbaum
Assistant Examiner—N. Kent Gring
Attorney, Agent, or Firm—Richard J. Godlewski

Related U.S. Application Data

[63] Continuation of Ser. No. 858,304, Mar. 25, 1992, abandoned.

[51] Int. Cl.⁵ **A61F 2/06**

[52] U.S. Cl. **623/1; 606/198; 623/12**

[58] Field of Search **606/198, 200; 623/1, 623/11, 12, 900**

[57] **ABSTRACT**

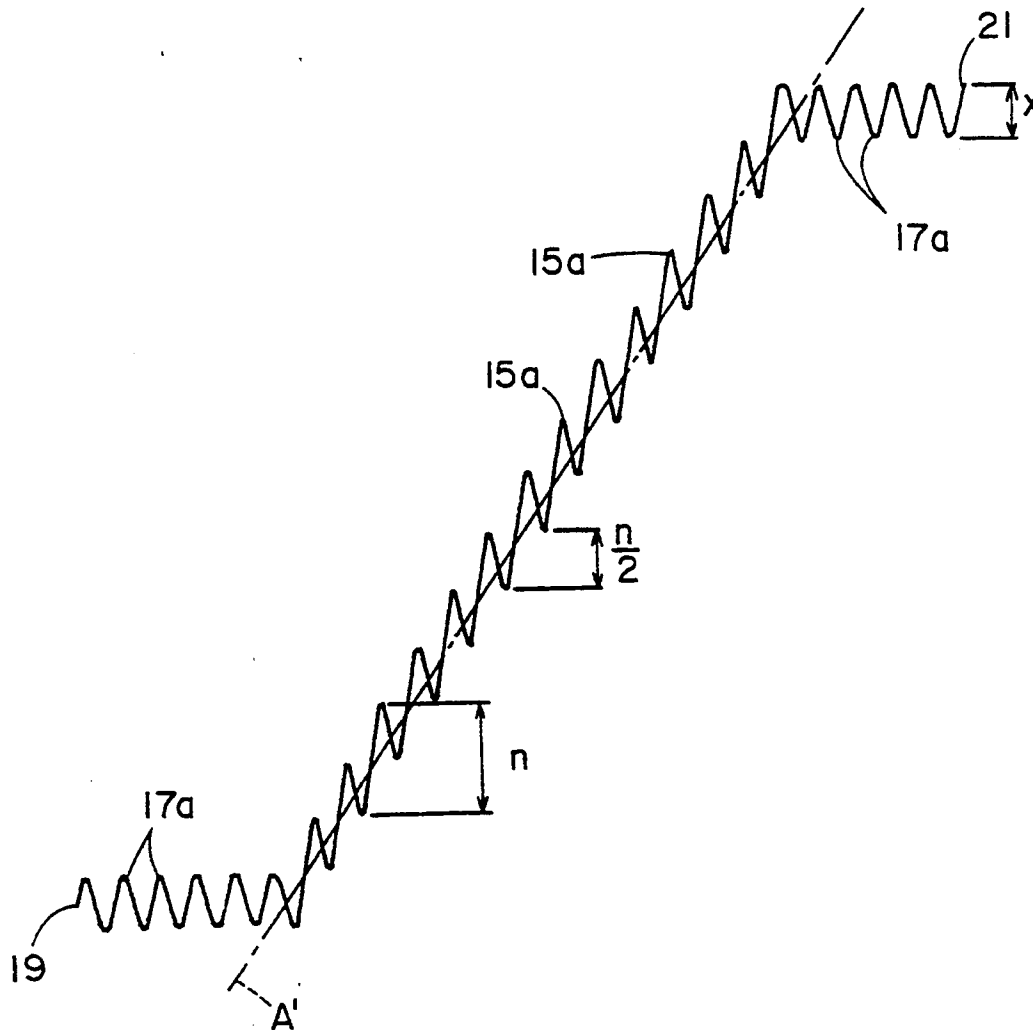
A vascular stent for reducing hemodynamic disturbances caused by angioplasty. The stent is formed from a single filament of low memory biocompatible material having a series of U-shaped bends. The filament is wrapped around a mandril, in a circular fashion, in order to align the curved portions of each bend which may then be connected. The stent provides a maximum amount of structural support for the lumen while minimizing hemodynamic disturbances inside the lumen.

[56] **References Cited**

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14 Claims, 6 Drawing Sheets



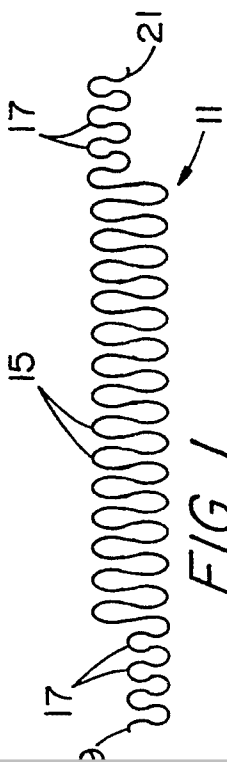


FIG. 1

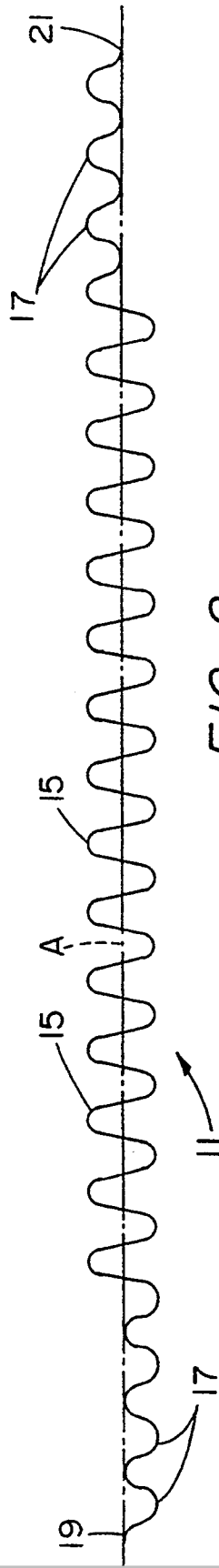


FIG. 2

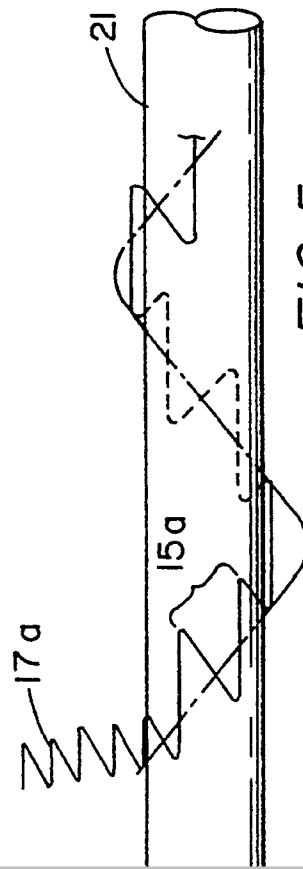


FIG. 5

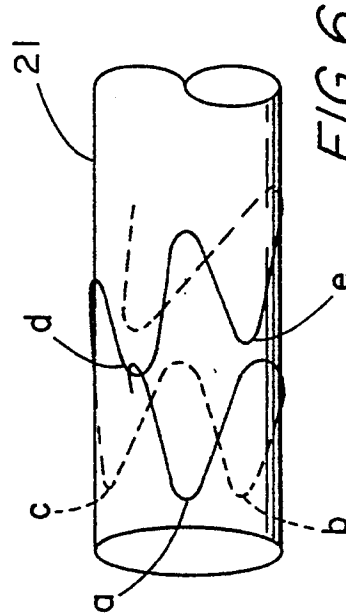
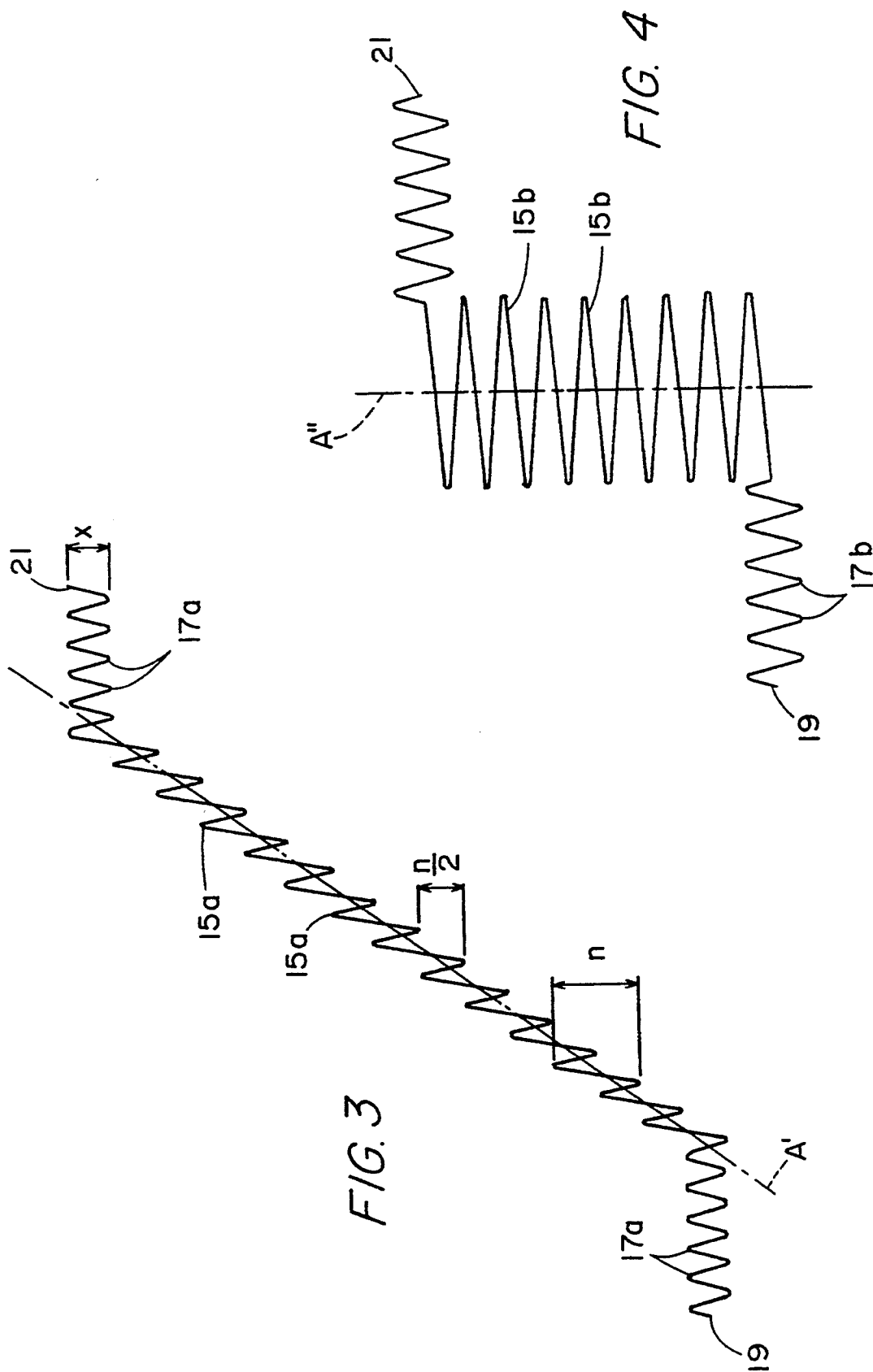
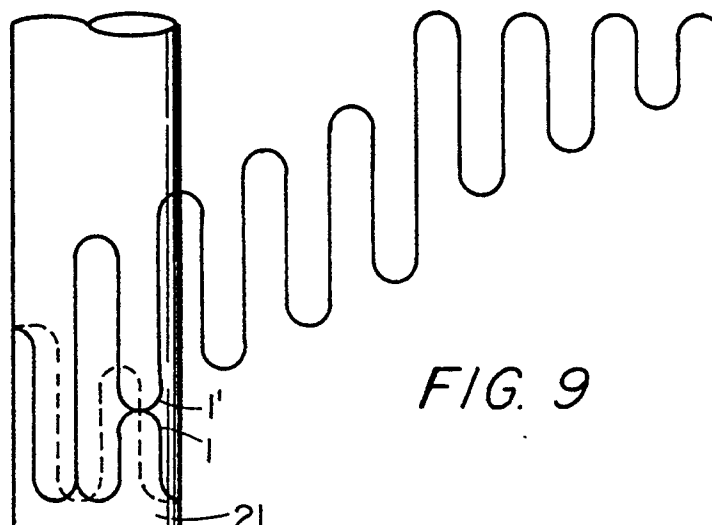
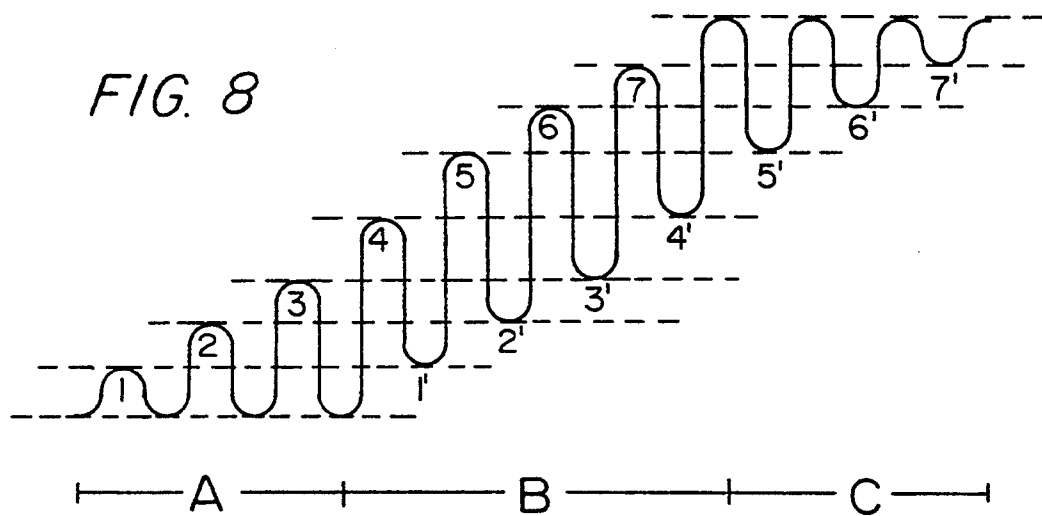
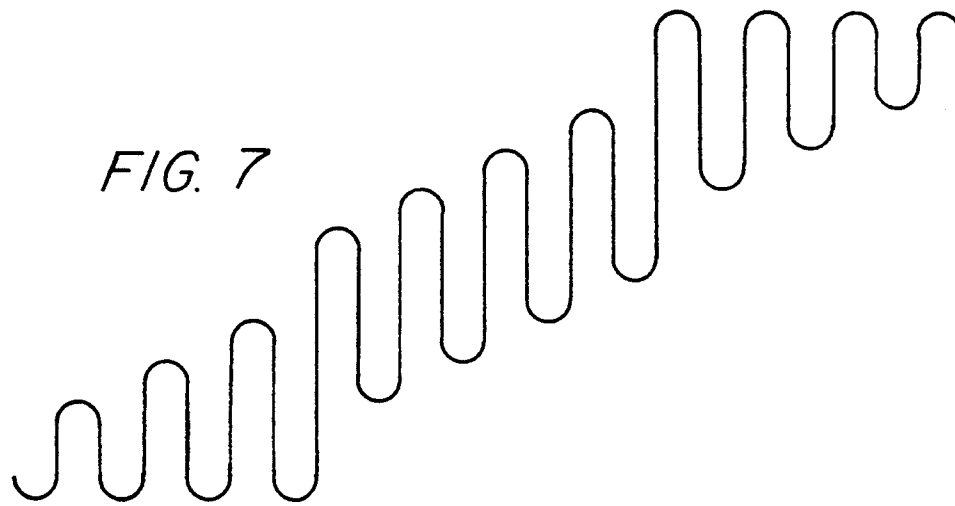


FIG. 6





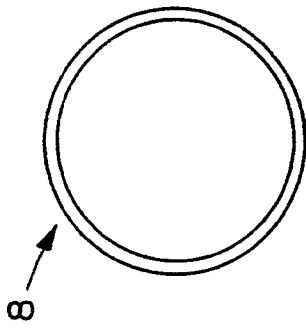


FIG. 12

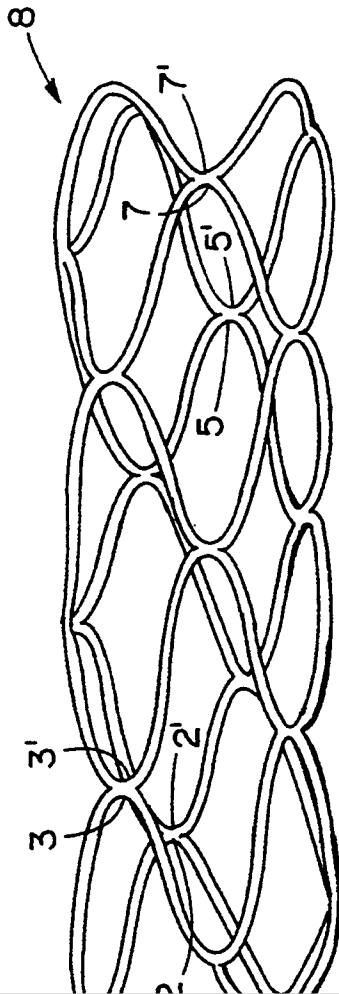


FIG. 10

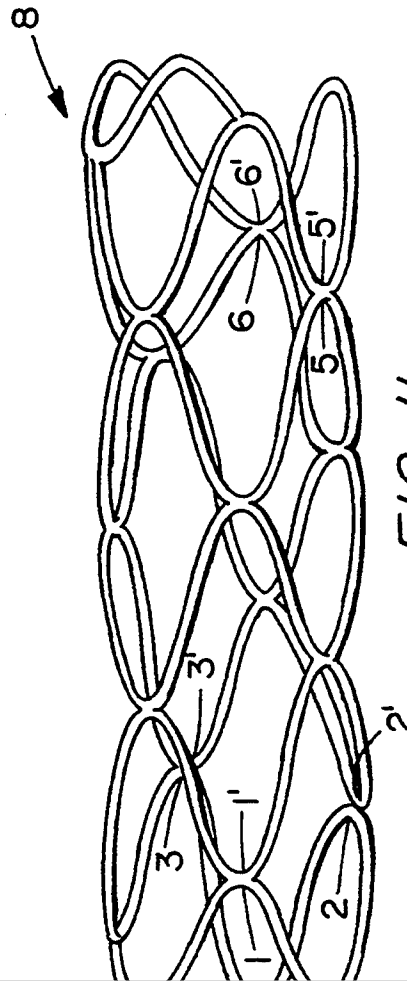


FIG. 11

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