

[54] COMPRESSIVE STENT AND DELIVERY SYSTEM

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[56] References Cited

U.S. PATENT DOCUMENTS

4,503,569	3/1985	Dotter	128/303
4,553,545	11/1985	Maass et al.	128/341
4,580,568	4/1986	Gianturco	128/348
4,647,416	3/1987	Seiler	623/1
4,649,922	3/1987	Wiktor	128/344
4,655,771	4/1987	Wallsten	128/343
4,733,665	3/1988	Palmaz	128/343

OTHER PUBLICATIONS

Palmaz et al., Expandable Intraluminal Vascular Graft: A Feasibility Study, Feb., 1986, Surgery, pp. 199-205.
Palmaz et al., Expandable Intraluminal Graft: A Preliminary Study, 1985, Radiology, pp. 73-77.
Palmaz et al., Atherosclerotic Rabbit Aortas: Expandable Intraluminal Grafting, 1986, Radiology, pp. 723-726.

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[57] ABSTRACT

A cylindrical shaped stent to prevent arterial acute closure and subsequent restenosis formed of longitudinal wires of biocompatible metal. The wires are welded together in pairs at alternate ends with each pair of wires bent into a V-section. The wires are all formed into a cylinder welded closed to form the stent. The stent is compressed and loaded into an outer catheter by a special tool. The stent is positioned and released for self expansion in situ by an inner catheter. A guide wire through both assists in threading the catheters through blood vessels.

10 Claims, 2 Drawing Sheets

