

United States Patent [19]

Verbeek

[11] **Patent Number:** **5,951,540**

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[54] **DEVICE AND METHOD FOR MOUNTING STENTS**

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[21] Appl. No.: **09/176,968**

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[51] **Int. Cl.⁶** **A61B 17/00**

[52] **U.S. Cl.** **606/1**

[58] **Field of Search** 606/1, 198, 194, 606/192, 195, 108; 623/1, 12

[56] **References Cited**
U.S. PATENT DOCUMENTS

3,637,447	1/1972	Berger et al.	156/180
3,862,482	1/1975	Green	29/203 DT
4,515,550	5/1985	Miller .	
4,655,064	4/1987	Hoback .	
4,825,682	5/1989	Orav et al. .	
4,886,062	12/1989	Wiktor .	
5,138,864	8/1992	Tarpill .	
5,314,464	5/1994	Knight et al.	607/132
5,437,083	8/1995	Williams et al.	606/1
5,458,581	10/1995	Hull	604/248

5,476,506	12/1995	Lunn	623/1
5,571,540	11/1996	Weyenberg et al.	425/343
5,626,604	5/1997	Cottone, Jr.	606/198
5,630,830	5/1997	Verbeek	606/198
5,672,169	9/1997	Verbeek	606/1
5,681,346	10/1997	Orth et al.	606/198
5,693,066	12/1997	Rupp et al.	606/198
5,725,519	3/1998	Penner et al.	606/198
5,738,674	4/1998	Williams et al.	606/1
5,785,715	7/1998	Schatz	606/108
5,810,838	9/1998	Solar	606/108

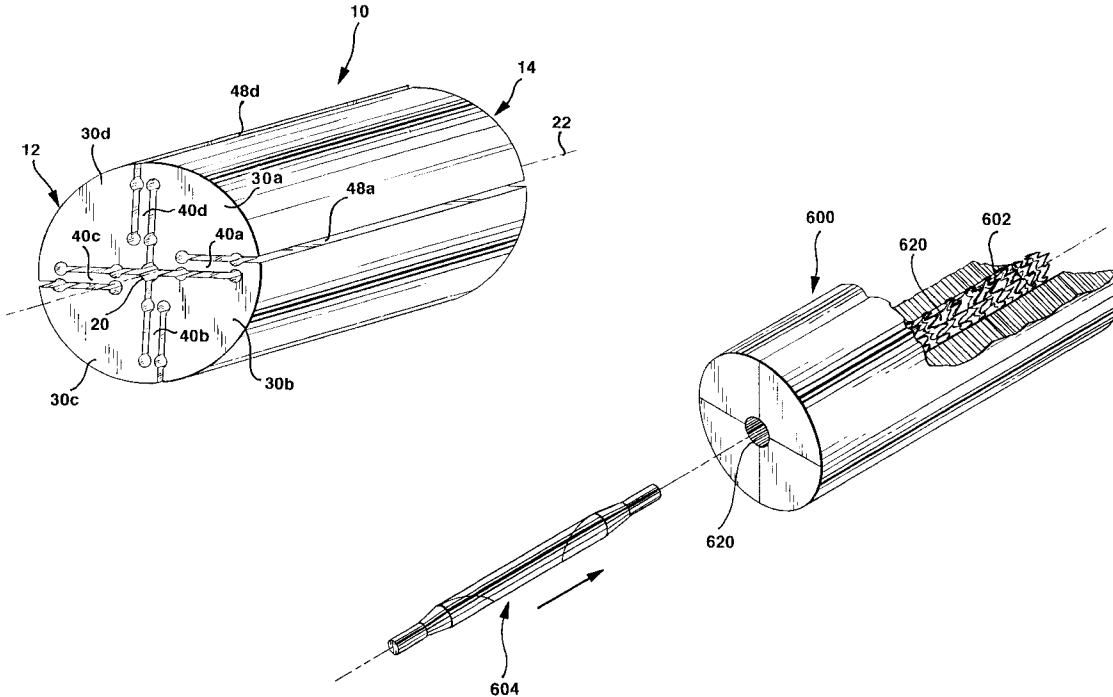
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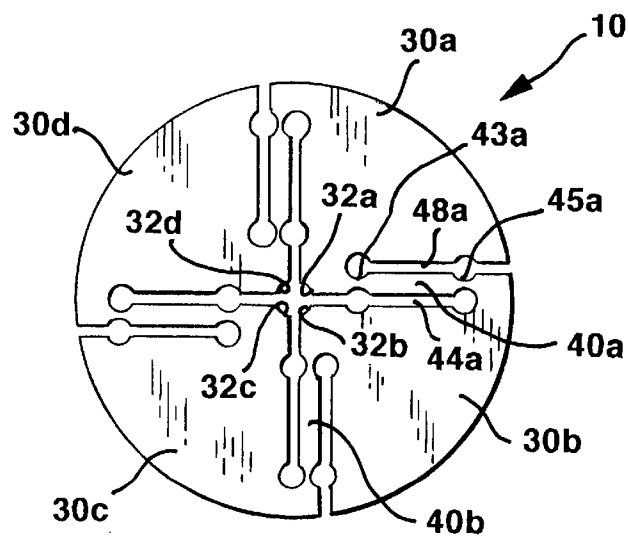
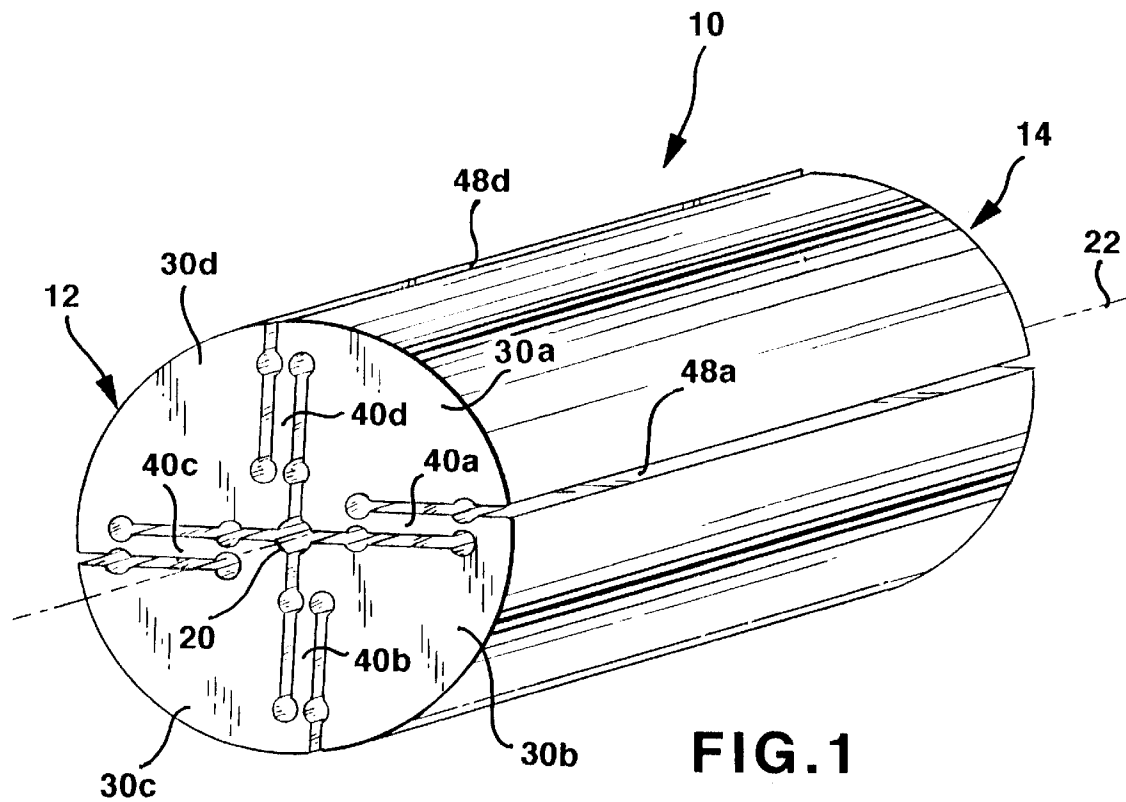
Attorney, Agent, or Firm—Kevin W. Raasch; Dianne Plunkett Latham; Harold R. Patton

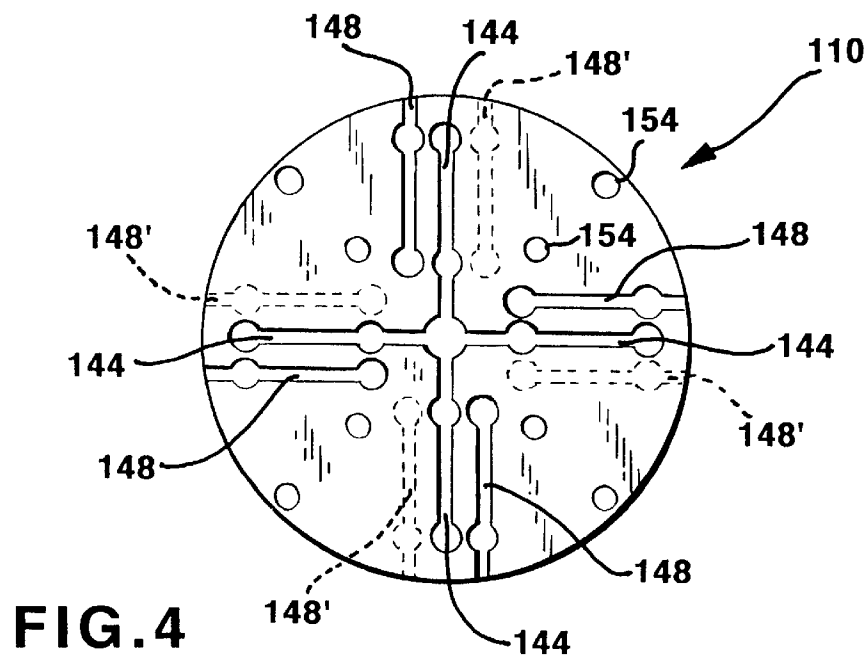
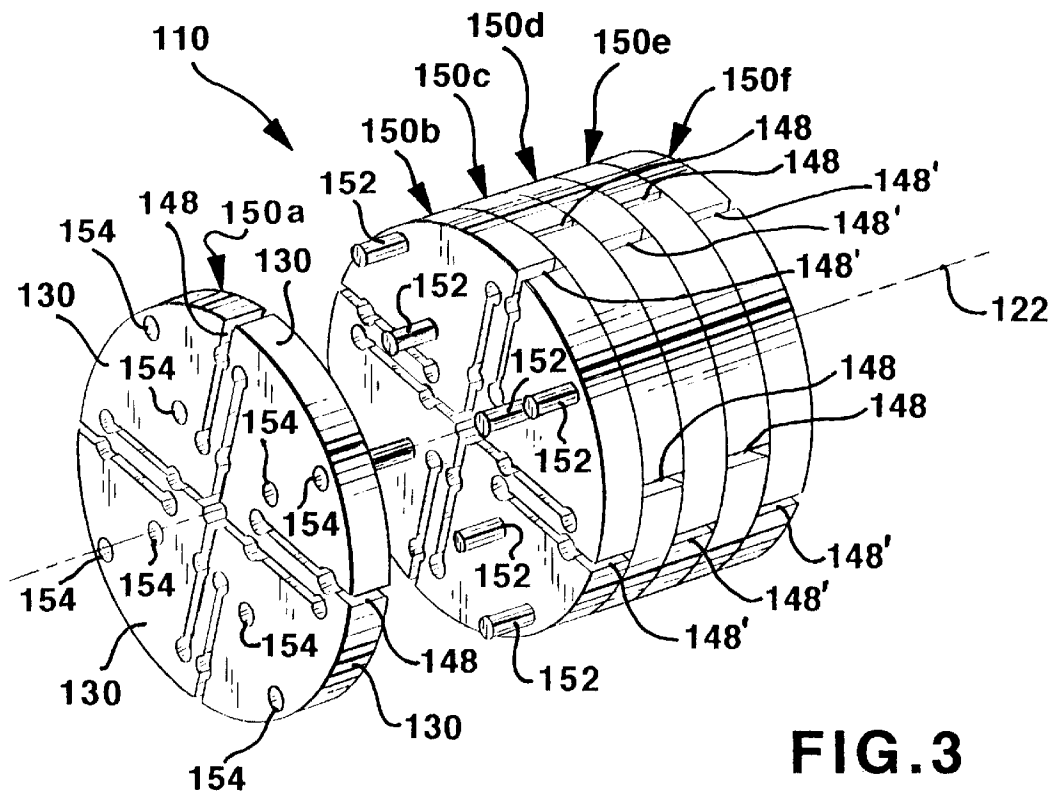
[57] **ABSTRACT**

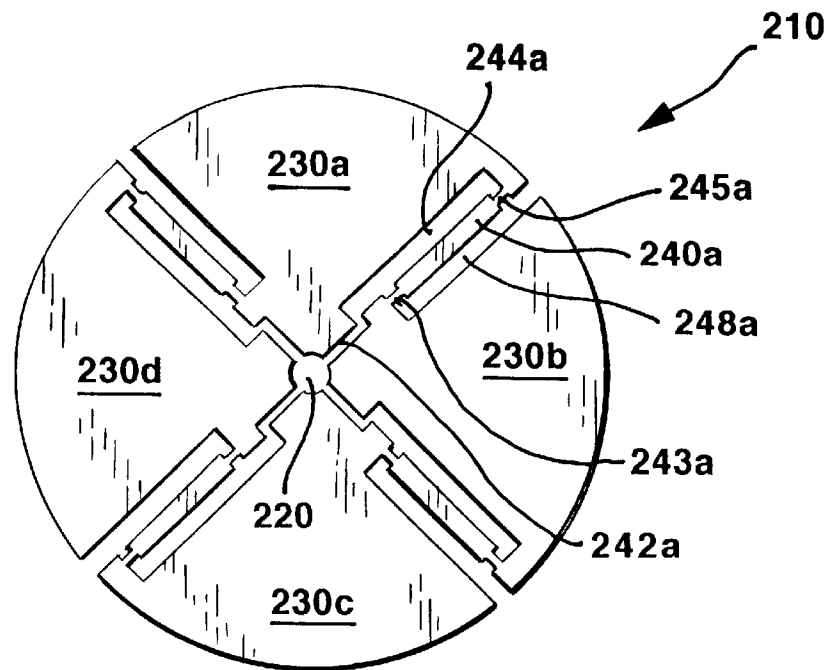
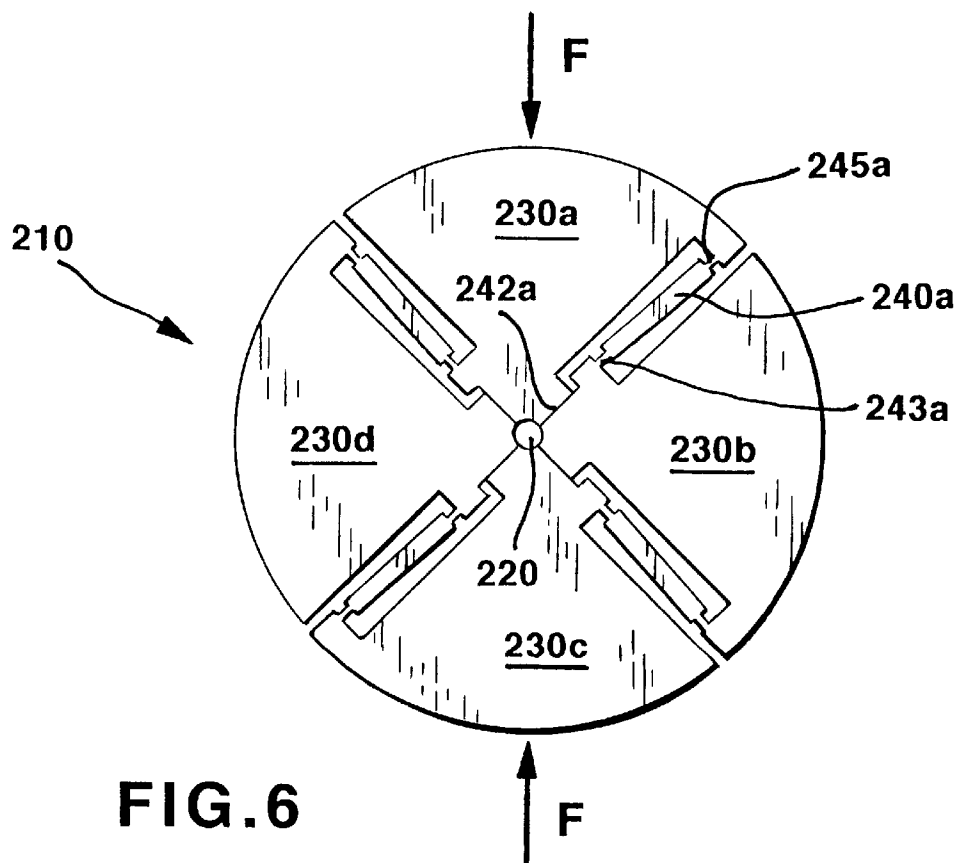
Crimping sleeves, devices and methods of crimping stents onto delivery devices are disclosed. The stent is located within a channel formed by a crimping sleeve including a set of crimping elements located about the channel. The crimping elements are connected by rotatable links such that compressing at least two opposing crimping elements together results in a reduction in the diameter of the channel and crimping of a stent located therein on a delivery device located therein.

20 Claims, 6 Drawing Sheets


Edwards Lifesciences v. Boston Scientific
U.S. Patent No. 6,915,560
IPR2017-00072 EX. 2008





**FIG. 5****FIG. 6**

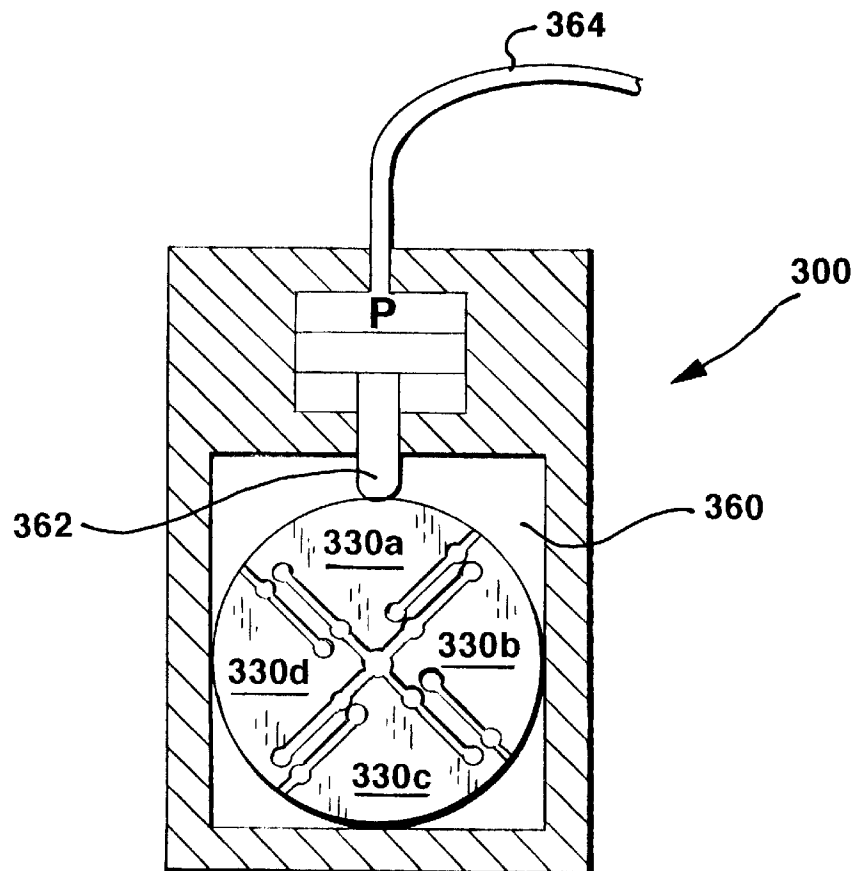


FIG. 7

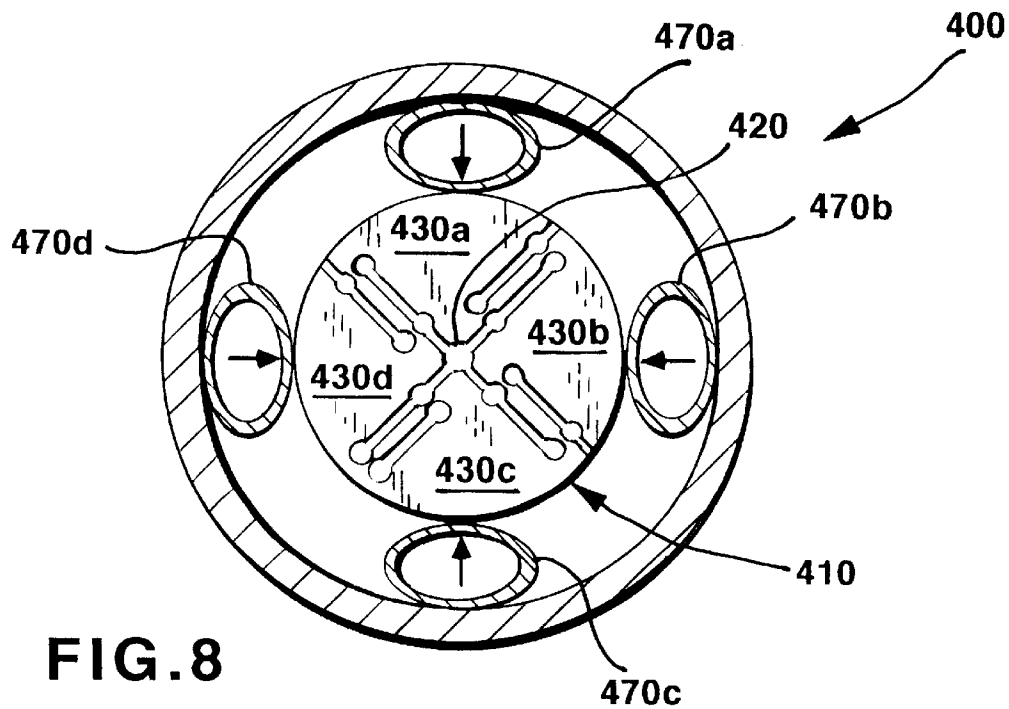


FIG. 8

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