

[54] **ENDOVASCULAR STENT AND DELIVERY SYSTEM**

4,878,906 11/1989 Lindemann et al. 623/1

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[*] **Notice:** The portion of the term of this patent subsequent to Jan. 31, 2006 has been disclaimed.

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[21] **Appl. No.:** 244,669

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[22] **Filed:** Sep. 14, 1988

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(List continued on next page.)

Related U.S. Application Data

[63] Continuation of Ser. No. 25,736, Mar. 13, 1987, Pat. No. 4,800,882.

[51] **Int. Cl.⁵** **A61M 29/02**

[52] **U.S. Cl.** **606/195; 604/104; 623/1**

[58] **Field of Search** 128/341, 343, 344; 604/96, 8, 104; 606/191-200; 623/1, 12, 900

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[57] **ABSTRACT**

A wire stent for insertion and expansion into a passageway comprises a plurality of curved sections that are formed into a generally circular configuration. Adjacent curved sections are joined by a bend or cusp, so that a series of alternating opposing loops are formed. The wire stent as formed has a cylindrical shape with a longitudinal opening through which a folded balloon catheter is inserted. The opposing loops are tightly contracted about the catheter so that the cylindrical shape has an overlapping region in which portions of adjacent loops longitudinally overlap. The loops are arranged so that when the balloon catheter is inflated, adjacent loops diverge circumferentially relative to each other, thereby decreasing the overlapping region while increasing the diameter of the cylindrical shape. As the diameter of the cylindrical shape increases, the wire stent contacts the surface of a passageway in which the stent is inserted.

3 Claims, 5 Drawing Sheets

