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[54] **VARIABLE CROSS-SECTION CONICAL VASOOCCLUSIVE COILS**

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[52] **U.S. Cl.** **606/191**; 606/198; 600/200; 604/104; 623/1; 623/11

[58] **Field of Search** 606/194, 198, 606/200, 191; 604/104; 623/1, 11, 12

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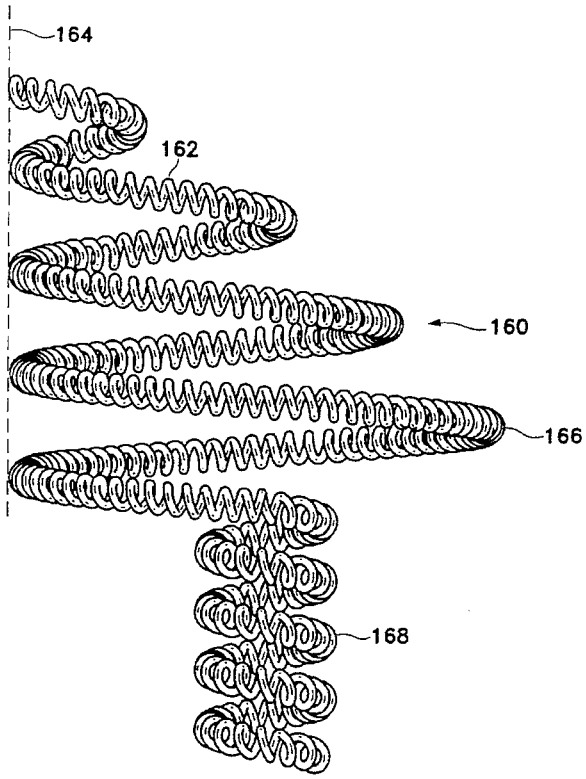
[57] **ABSTRACT**

This is an implantable vasoocclusive device. It is constructed of a primary helically wound coil, which primary coil is further wound into secondary shapes which are at least partially substantially conical. Other portions of the secondary shape may have sections of constant diameter or of other conical shapes. The primary coil may be made in such a way that it has regions of differing flexibility. Fibrous materials may be placed on the coils in tufted, streamer, or woven configurations so to increase the thrombogenicity of the overall assembled device.

28 Claims, 8 Drawing Sheets