

[54] SELF-EXPANDING PROSTHESIS

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[57] ABSTRACT

A resilient, elastic self-expanding prosthesis comprising a flexible tubular body, the diameter of which is variable under axial movement of the ends of the body relative to each other, said body being composed of several individual rigid but resiliently flexible thread elements with spring properties each of which extends in helix configuration with the center line of the body as a common axis, a number of elements having same direction of winding but being axially displaced relative to each other crossing a number of elements also axially displaced relative to each other but having the opposite direction of winding to form a braided structure, characterized in that the residual tension of the thread elements as they form the structural elements of the tubular body, at least at the end sections thereof, is such that the diameter of the unloaded helix-shaped thread element, at least at the end sections thereof, when removed from the other elements forming the tubular body is not more than about 60% and preferably at most about 30% greater than the diameter of the said body in an unloaded state; and processes for the manufacture of such self-expanding prosthesis.

30 Claims, 2 Drawing Sheets

