

[54] MELTABLE STENT FOR ANASTOMOSIS

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[58] Field of Search 128/1 R, 334 R; 623/1, 623/12, 66

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[57] ABSTRACT

A stent for the anastomosis of a vessel comprises an integral solid of biologically compatible material which is adapted to melt from a solid into a fluid in response to heat energy or body temperature into the fluid which flows through the vessel. Preferably the stent is formed of frozen material, and has a temperature which is substantially less than the temperature of the vessel upon insertion. Upon melting, the biologically compatible material naturally integrates with the fluid normally conducted by the vessel. The stent may be advantageously formed of frozen blood plasma or other blood fluid which is compatible with the blood normally conducted by an artery or a vein. When used in conjunction with thermal bonding techniques, the stent aligns the ends of the vessel for thermal bonding without the necessity for taking the time-consuming circumferentially-spaced stay sutures. The thermal mass and temperature of the stent protects the inner coating, the tunica intima, from substantial damage from the heat applied during thermal bonding.

17 Claims, 2 Drawing Figures

