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Guglielmi et al.

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[54] ENDOVASCULAR ELECTROLYTICALLY DETACHABLE GUIDEWIRE TIP FOR THE ELECTROFORMATION OF THROMBUS IN ARTERIES, VEINS, ANEURYSMS, VASCULAR MALFORMATIONS AND ARTERIOVENOUS FISTULAS

FOREIGN PATENT DOCUMENTS

8801851 3/1988 World Int. Prop. O. .... 606/49

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[57] ABSTRACT

An artery, vein, aneurysm, vascular malformation or arterial fistula is occluded through endovascular electrothrombosis by the endovascular insertion of a platinum guidewire tip into the vascular cavity followed by application of a positive current. The guidewire tip is then separated from the guidewire by electrolytic separation of the tip from the guidewire. A portion of the guidewire connected between the tip and the body of the guidewire is comprised of stainless steel and exposed to the bloodstream so that upon continued application of a positive current to the exposed portion, the exposed portion is corroded away at least at one location and the tip is separated from the body of the guidewire. The guidewire and the microcatheter are thereafter removed leaving the guidewire tip embedded in the thrombus formed within the vascular cavity.

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[52] U.S. Cl. .... 606/32; 606/41; 128/772; 128/784

[58] Field of Search ..... 606/32, 41, 49, 28; 128/772, 784, 786

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23 Claims, 4 Drawing Sheets

