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(12) United States Patent Itou et al.

(54) INTRAVASCULAR FOREIGN MATTER

(75) Inventors: Takenari Itou, Shizuoka (JP); Tetsuya

Fukuoka, Shizuoka (JP)

(73) Assignee: Terumo Kabushiki Kaisha,

SUCTION ASSEMBLY

Shibuya-Ku, Tokyo (JP)

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patent is extended or adjusted under 35

U.S.C. 154(b) by 1300 days.

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(51) **Int. Cl.**

A61M 25/00 (2006.01)

(52) **U.S. Cl.** 604/523; 604/264

See application file for complete search history.

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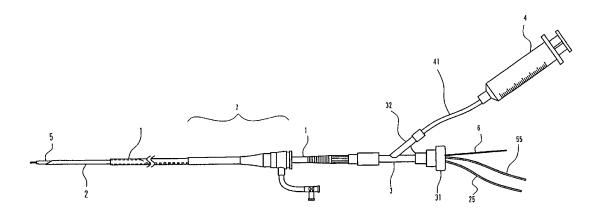
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Primary Examiner—Nicholas D Lucchesi Assistant Examiner—Christopher D Koharski (74) Attorney, Agent, or Firm—Buchanan Ingersoll & Rooney PC

(57) ABSTRACT

An intravascular foreign matter suction assembly is insertable into a blood vessel having a relatively small diameter and exhibits a high suction force. The intravascular foreign matter suction assembly includes a combination of a guiding catheter for being inserted to an ostium of a coronary artery of the aorta and a suction catheter inserted in the lumen of the guiding catheter and extending farther than the distal end of the guiding catheter for removing foreign matter in a blood vessel which exists at a target location in the coronary artery. The suction catheter includes a tubular portion provided on the proximal end side and a wire portion provided on the proximal end side of the tubular portion and wherein the wire portion has a distal end embedded in a wall which forms the tubular portion.

11 Claims, 10 Drawing Sheets





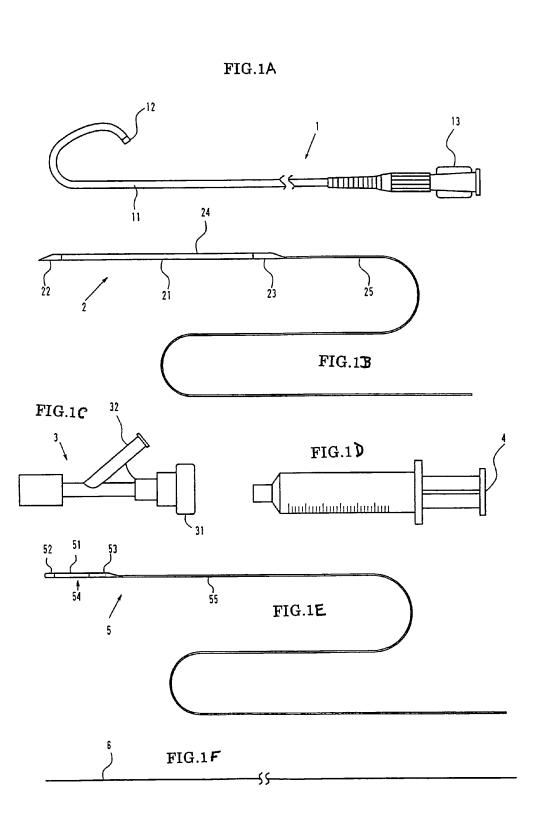


FIG.2

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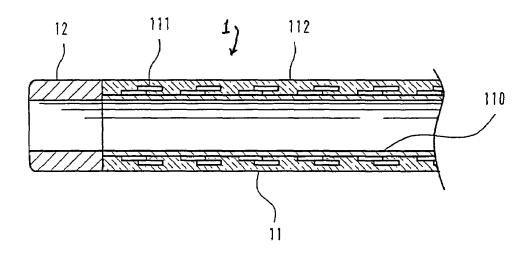


FIG.3

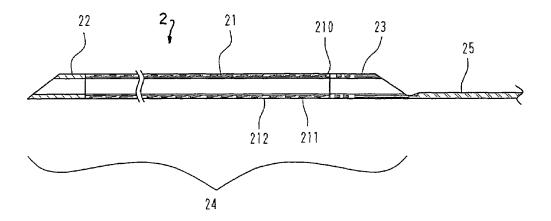
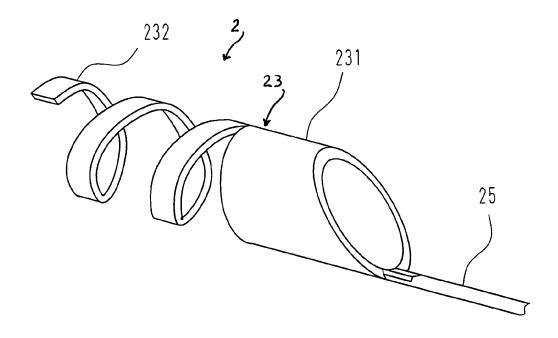


FIG.4

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