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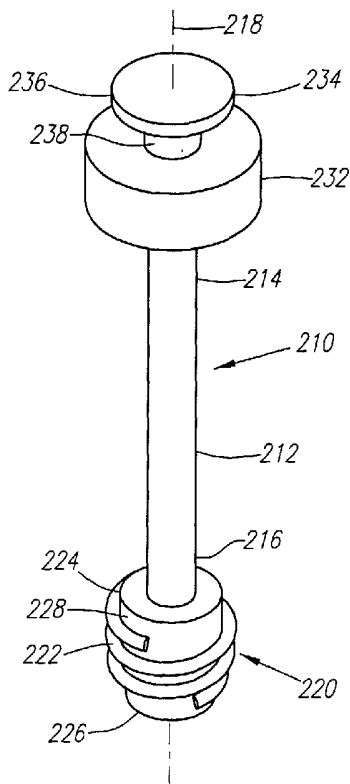
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[Continued on next page]

(54) Title: DEVICES FOR SEALING OPENINGS THROUGH TISSUE AND APPARATUS FOR DELIVERING THEM



(57) Abstract: An apparatus for sealing a passage through tissue includes an elongate shaft and a cylindrical plug disposed on a distal end of the shaft, the plug including a helical thread on its outer surface. Intestinal submucosa may be secured to the plug, e.g., in a cavity in its distal end, that may be delivered into the passage. Alternatively, the plug may be formed from a bioabsorbable material and may be released from the shaft within the passage. The plug is threaded into the passage, thereby engaging the tissue to seal the passage. The shaft is rotated until it engages a blood vessel within the tissue while monitoring blood flow through the vessel. The shaft is rotated to thread the plug into the passage until blood flow ceases through the vessel, whereupon rotation of the shaft is reversed to back the plug until blood flow through the vessel resumes.



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INTERNATIONAL SEARCH REPORT

International Application No
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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61B17/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 A61B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Y	---	18,19
Y	US 5 425 757 A (TIEFENBRUN JONATHAN ET AL) 20 June 1995 (1995-06-20) column 4, line 62 - line 64; figure 11	18,19
A	US 5 645 565 A (RUDD RAY G ET AL) 8 July 1997 (1997-07-08) column 3, line 16 - line 51; figure 1	1,2,18, 56,61,69
A	US 6 016 806 A (WEBB NICHOLAS J) 25 January 2000 (2000-01-25) abstract; figure 2	1,2,18, 56

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Further documents are listed in the continuation of box C. Patent family members are listed in annex.

° Special categories of cited documents :

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

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T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

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Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Ducreau, F
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International Application No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
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