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(54) Title: MEDICAL DEVICE WITH ONE-WAY ROTARY DRIVE MECHANISM

(57) Abstract: Apparatuses and methods for accessing and disrupting a tissue are disclosed herein. In one embodiment, a method includes inserting a distal end portion of an elongate member into a biological body. After inserting the elongate member, an actuator is manually actuated to produce translational motion of a drive element. The translational motion is converted into rotational movement of the distal end portion of the elongate member. In one embodiment, an apparatus includes an elongate member having a tissue interaction member at a distal end portion that is configured to be inserted within a biological body. A conversion mechanism is coupled to the elongate member and includes a drive element. An actuator is coupled to the conversion mechanism and is configured to cause translational motion of the drive element. The conversion mechanism is configured to convert the translational motion of the drive element into rotational motion of the elongate member.

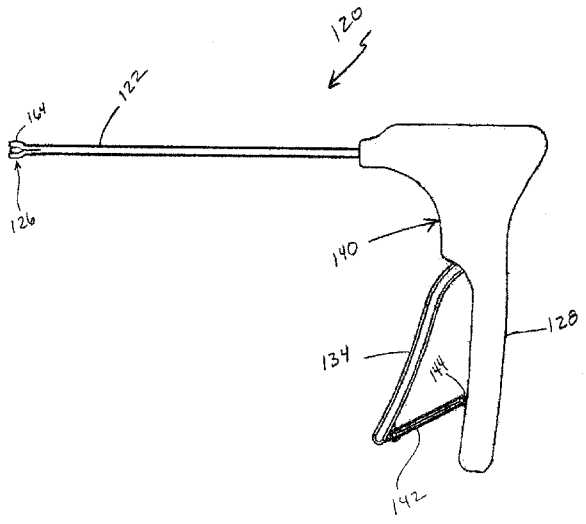

Fig. 2

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A. CLASSIFICATION OF SUBJECT MATTER

A61B 17/285(2006.01)i, A61B 17/32(2006.01)i, A61B 17/34(2006.01)i

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 A61B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Korean Utility models and applications for Utility models since 1975
Japanese Utility models and applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
eKOMPASS(KPA, PAJ, FPD, USPATFULL) in KIPO, CA online & keywords: cutting, disrupting tissue, rotary, surgical staple

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y A	US 7357287 B2 (SHELTON et al.) 15 April 2008 See the abstract; column 6, lines 20-67; column 7, lines 20-60; column 10, lines 50-64; columns 15, line 62 - column 16, line 20; figures 1,3,4,6,7,9,20,23,25; claims 1,9,12,14	1, 2, 8-10 5, 11, 12, 14, 16-18 3, 4, 6, 7, 13, 15
Y A	US 2008-0009876 A1 (SANKARAN et al.) 10 January 2008 See the abstract; paragraphs [0002],[0006],[0043],[0065],[0069],[0074],[0096],[0122],[0147]; claims 1-35	5, 11, 12, 14, 16-18 1-4, 6-10, 13, 15
A	US 2002-0117534 A1 (GREEN et al.) 29 August 2002 See the abstract; paragraphs [0006],[0013],[0022],[0101],[0104],[0107],[0110]; figures 1,3,4,7,20-22; claims 1,2,9,10,18,19,22,23,56	1-18
A	US 7128254 B2 (SHELTON IV et al.) 31 October 2006 See the abstract; figures 1,6,13,17,18; claims 1-3,5,8	1-18
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A	US 2006-0235431 A1 (GOODE et al.) 19 October 2006 See the abstract; paragraphs [0003],[0082],[0084]; figures 1-3,23; claims 1-3,5,11,12,15	1-18

☐ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents,such combination being obvious to a person skilled in the art
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