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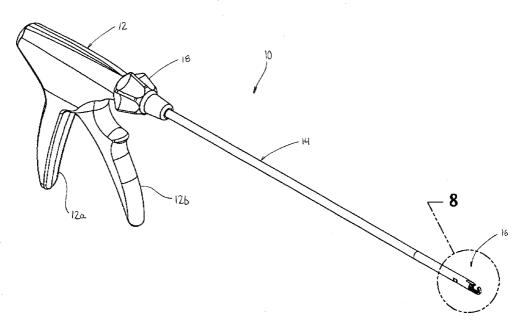
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(54) Title: CLIP APPLYING APPARATUS AND LIGATION CLIP



(57) Abstract: A clip applying apparatus is provided for applying a ligating clip to tissue. The clip applying apparatus includes, inter alia, a handle assembly, a central body portion, an anvil jaw, and a slide member movably supported in relation to the anvil jaw. The anvil jaw and the slide member are configured to define an enclosed tissue receiving area when the slide member is in an advanced position. A method is also provided for ligating tissue using the presently disclosed clip applying apparatus.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US05/33981

A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - A61B 17/00 (2006.01) USPC - 606/143			
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) USPC: 227/901,19,901; 292/43.56; 606/139, 142, 143, IPC (8): A61B 17/00, 17/10 (2006.01)			
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 practicable, search terms used)			
Micropatent; DialogPro; Google Scholar			
Surgical and clip and jaw and apparatus and applier			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where a	opropriate, of the relevant passages	Relevant to claim No.
Α	US 5,300,081 A (YOUNG et al) 05 April 1994 (05.04.1	994) entire document	1-3
Α	US 2004/0133215 A1 (BAXTER) 08 July 2004 (08.07.	2004) entire document	1-3
Α	EP 1405601 A1 (WHITFIELD) 07 April 2004 (07.04.2004) summary		1-3
Α	US 2002/0198537 A1 (SMITH et al) 26 December 2002 (26.12.2002) summary		1-3
Α	US 2004/0097971 A1 (HUGHETT) 20 May 2004 (20.05.2004) summary		1-3
Α	US 4,169,476 A (HILTEBRANDT) 02 October 1979 (02.10.1979) summary		1-3
Α	US 4,375,866 A (GIERSCH et al) 08 March 1983 (08.03.1983) summary		1-3
A	US 4,043,504 A (HUEIL et al) 23 August 1977 (23.08.1977) summary		1-3
Α	US 4,246,903 A (LARKIN) 27 January 1981 (27.01.1981) summary		1-3
A	US 5,497,933 A (DEFONZO et al) 12 March 1996 (12.03.1996) summary		1-3
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special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means considered to involve an inventive combined with one or more other subeing obvious to a person skilled in		ocuments, such combination	
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