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(54) **Surgical stapling instrument**

(57) A surgical instrument for being endoscopically or laparoscopically inserted to a surgical site for simultaneous stapling and severing of tissue includes electrically actuated deployment of buttress pads held on inner surfaces of upper and lower jaws of a staple applying assembly. Thereby, thick or thin layers may be stapled and severed without improper staple formation nor with non-

optimal deployment of the buttress pads. Electroactive polymer (EAP) actuated latches, an EAP channel, or a rigid channel with an EAP pinch lock reliably hold the buttress pad until deployment is desired with a low force to separate the stapled and severed buttress pad/tissue combination with the respective EAP mechanism activated for deployment.

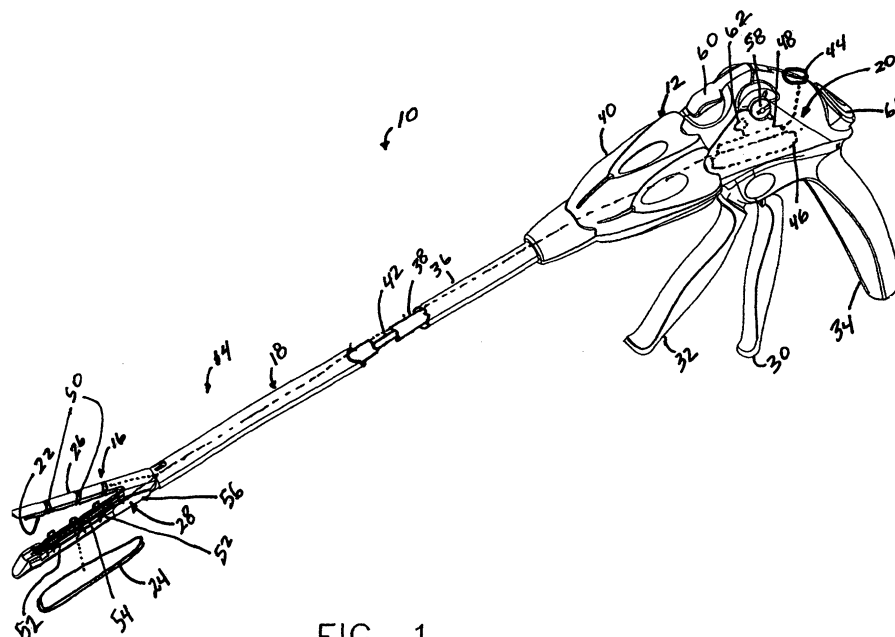


FIG. 1



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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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A	* page 28 - page 30; figure 24 *	2,12	
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			TECHNICAL FIELDS SEARCHED (IPC)
			A61B
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 22 December 2005	Examiner Barton, S
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

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EPO FORM 1503 03/82 (P04G01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 05 25 4685

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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专利名称(译)	外科缝合器械		
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优先权	60/591694 2004-07-28 US 11/181471 2005-07-14 US		
其他公开文献	EP1621141A2 EP1621141B1		
外部链接	Espacenet		

摘要(译)

用于内窥镜或腹腔镜插入手术部位以同时缝合和切断组织的手术器械包括保持在钉释放组件的上颚和下颌的内表面上的支撑垫的电致动展开。因此，可以缝合和切割厚或薄的层而没有不正确的钉形成，也没有支撑垫的非最佳展开。电活性聚合物 (EAP) 致动门锁，EAP通道或带有EAP捏锁的刚性通道可靠地保持支撑垫，直到需要展开，力量小，以将钉合和切断的支撑垫/组织组合与相应的EAP机构分离激活部署。

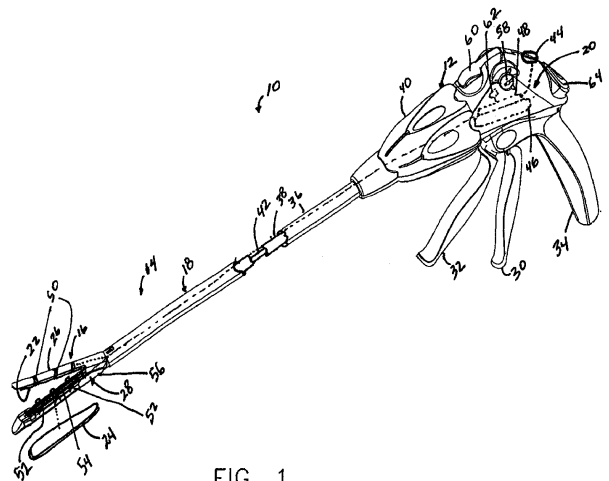


FIG. 1