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(54) **Surgical instrument with clips having transecting blades**

(57) A transecting fastener (110, 210, 310) is operable to cut and secure tissue (150). The transecting fastener comprises a plurality of legs (132, 232, 332) configured to grip tissue. The transecting fastener further comprises a crown portion (134) and at least one blade (136, 236, 336). The crown portion joins the plurality of legs and is malleable. The at least one blade is positioned on each of the plurality of legs. The at least one blade is operable to cut tissue. A fastener deploying instrument (100) may be used to deploy the transecting fastener. The fastener deploying instrument may deploy the fasteners in parallel pairs, in an end to end manner.

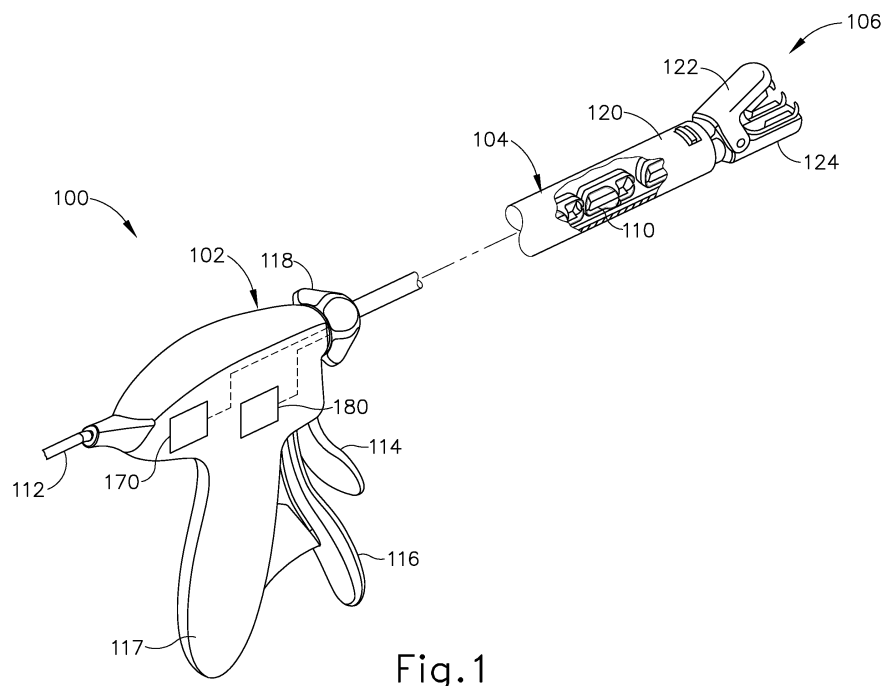


Fig.1

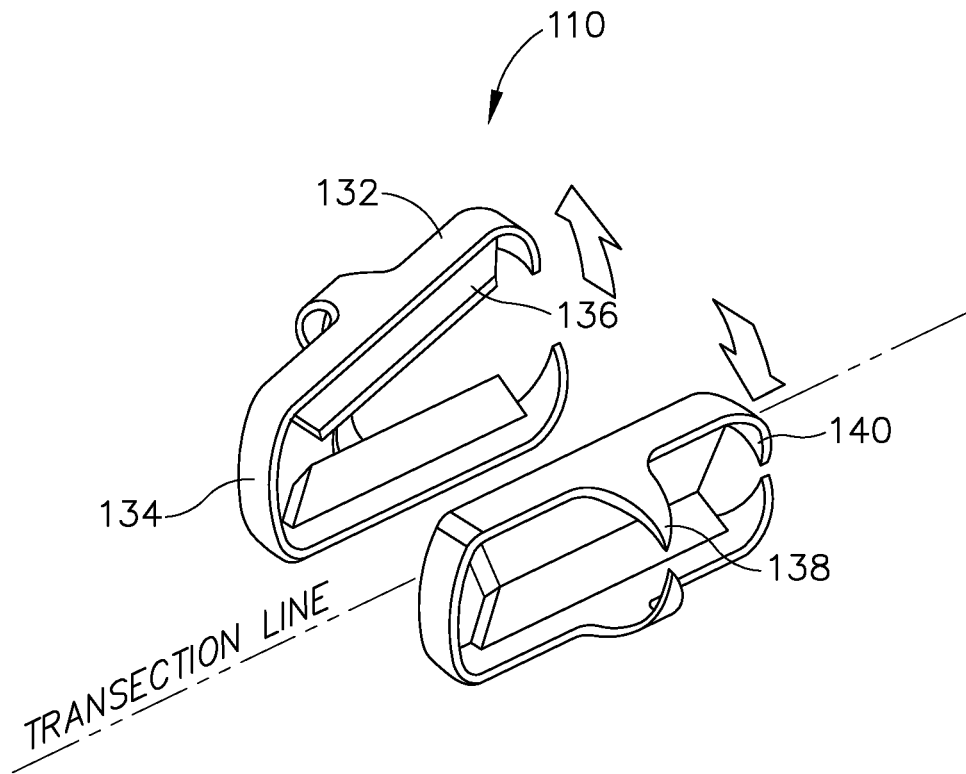


Fig.2



EUROPEAN SEARCH REPORT

 Application Number
EP 14 18 1055

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	WO 2012/129317 A2 (UNIV TULANE [US]; KETHMAN WILLIAM [US]; SCHWARTZ DANN [US]; FRANSEEN S) 27 September 2012 (2012-09-27)	1-7	INV. A61B17/122 A61B17/064
Y	* paragraphs [0039] - [0046], [0058] * * figures 1-7B *	8-15	ADD. A61B17/128
Y	----- US 5 906 625 A (BITO SHIRO [US] ET AL) 25 May 1999 (1999-05-25) * column 17, line 31 - column 18, line 10 * * figures 32A, 32B, 88A-94 *	8,10,13,15	
Y	----- WO 94/24949 A1 (MEDICAL SCIENT INC [US]; ETHICON INC [US]) 10 November 1994 (1994-11-10) * figures 8-11C * * page 14, paragraph 4 - page 16, paragraph 3 *	9-12,14,15	
A	----- US 2003/036755 A1 (GINN RICHARD S [US]) 20 February 2003 (2003-02-20) * the whole document *	1-15	
			TECHNICAL FIELDS SEARCHED (IPC)
			A61B
<div style="border: 1px solid black; padding: 5px;"> <p>The present search report has been drawn up for all claims</p> </div>			
Place of search		Date of completion of the search	Examiner
Munich		28 November 2014	Mathis, Martin
CATEGORY OF CITED DOCUMENTS 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 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			

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EPO FORM 1503 03.82 (P04C01)



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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☒ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

1-15

☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



**LACK OF UNITY OF INVENTION
SHEET B**

Application Number

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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-15

An apparatus comprising a transecting fastener, wherein the transecting fastener comprises specific features, so that the transecting fastener is able to grip and cut tissue in a single operation.

2. claims: 16-20

An apparatus with specific features, so that a plurality of transecting fasteners can be delivered to tissue.

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

EP 14 18 1055

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
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

28-11-2014

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专利名称(译)	具有横切刀片的夹子的手术器械		
公开(公告)号	EP2837338A3	公开(公告)日	2015-04-22
申请号	EP2014181055	申请日	2014-08-14
[标]申请(专利权)人(译)	伊西康内外科公司		
申请(专利权)人(译)	爱惜康内镜手术，INC.		
当前申请(专利权)人(译)	爱惜康内镜手术，INC.		
[标]发明人	SCHEIB CHARLES J OVERMYER MARK D		
发明人	SCHEIB, CHARLES J. OVERMYER, MARK D.		
IPC分类号	A61B17/122 A61B17/064 A61B17/128		
CPC分类号	A61B17/064 A61B17/068 A61B17/122 A61B17/1285 A61B17/320092 A61B18/1445 A61B2017/0641 A61B2017/0645 A61B2017/1225 A61B2017/320071 A61B2017/320093 A61B2017/320094 A61B2017/ /320097 A61B2018/00601 A61B2018/0063 A61B2018/1415		
审查员(译)	MATHIS，MARTIN		
优先权	13/967578 2013-08-15 US		
其他公开文献	EP2837338A2 EP2837338B1		
外部链接	Espacenet		

摘要(译)

横切紧固件 (110,210,310) 可操作以切割和固定组织 (150)。横切紧固件包括构造成夹持组织的多个腿 (132,232,332)。横切紧固件还包括冠部 (134) 和至少一个刀片 (136,236,336)。冠部连接多个腿并且是可延展的。至少一个刀片定位在多个腿中的每个腿上。至少一个刀片可操作以切割组织。紧固件展开器械 (100) 可用于展开横切紧固件。紧固件展开器械可以以端对端的方式平行地展开紧固件。

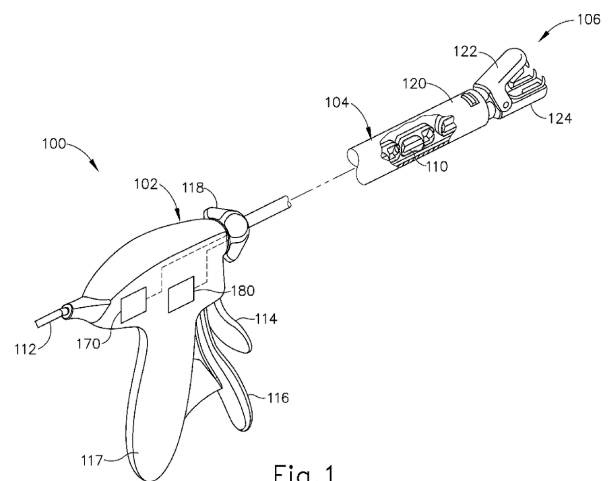


Fig.1