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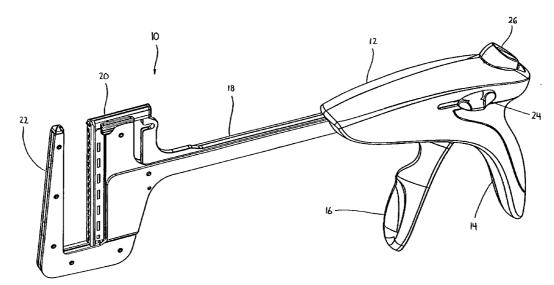
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(54) Title: SURGICAL STAPLING DEVICE



(57) Abstract: A surgical stapling device for applying an array of surgical staples to tissue is provided. The stapling device includes an approximation mechanism for moving a cartridge assembly and an anvil assembly between spaced and approximated positions and a firing mechanism for ejecting the array of staples from the cartridge assembly. A single trigger is operable to effect approximation and firing of the device. The device also includes an alignment pin assembly which can be selectively manually or automatically advanced. The anvil assembly includes a stiffener plate which allows the device to have a reduced head portion profile.

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### INTERNATIONAL SEARCH REPORT

In onal Application No

## A. CLASSIFICATION OF SUBJECT MATTER IPC 7 A61B17/072

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

#### B. FIELDS SEARCHED

 $\begin{tabular}{ll} \begin{tabular}{ll} Minimum documentation searched (classification system followed by classification symbols) \\ IPC 7 & A61B \end{tabular}$ 

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)

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	
Х	US 3 494 533 A (GREEN DAVID T ET AL) 10 February 1970 (1970-02-10) column 6, line 63 - line 67; figure 27 column 12, line 72 -column 13, line 19; figures 26,28 column 14, line 44 - line 73; figure 1	1,2	
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A .	US 4 520 817 A (GREEN DAVID T) 4 June 1985 (1985-06-04) column 7, line 40 - line 43; figures 13,14 figure 16	1	

Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
"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  "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  "O" document referring to an oral disclosure, use, exhibition or other means  "P" document published prior to the international filing date but later than the priority date claimed	"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  "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  "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.  "&" document member of the same patent family
Date of the actual completion of the international search	Date of mailing of the international search report
14 May 2002	2 4. 09. 2002
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### INTERNATIONAL SEARCH REPORT

Into pal Application No Full US 01/31950

C.(Continu	lation) DOCUMENTS CONSIDERED TO BE RELEVANT	101/03 01/31330
Category °		Relevant to claim No.
A	US 5 964 394 A (ROBERTSON JOHN C) 12 October 1999 (1999-10-12) column 4, line 64 -column 5, line 8; figure 4 figure 1	1,3
Α	US 5 480 089 A (BLEWETT JEFFREY J) 2 January 1996 (1996-01-02) column 3, line 8 - line 23; figures 4-6	1,2
A	US 5 697 543 A (BURDORFF MARK A) 16 December 1997 (1997-12-16) column 4, line 31 - line 33; figure 1 column 5, line 11 - line 19; figure 4	1,3

rnational application No. PCT/US 01/31950

### INTERNATIONAL SEARCH REPORT

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
Claims Nos.:  because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  1-4
Remark on Protest  The additional search fees were accompanied by the applicant's protest.  No protest accompanied the payment of additional search fees.

International Application No. PCT/US 01/31950

### FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

1. Claims: 1-4

Surgical stapling device with an anvil assembly including a plurality of staple forming pockets and a stiffener plate providing added strength to the anvil assembly to permit a reduction in size of the head portion.

2. Claims: 5-18

Surgical stapling device with an approximation mechanism, an alignment pin assembly which is releasably coupled to the approximation assembly such that the alignment pin assembly can be manually actuated independently of the approximation mechanism or automatically actuated in response to actuation of the approximation mechanism.

### INTERNATIONAL SEARCH REPORT

formation on patent family members

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