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(54) Title: DISPOSABLE SURGICAL SWING SCALPEL WITH REUSABLE SCISSOR ACTION HANDLE

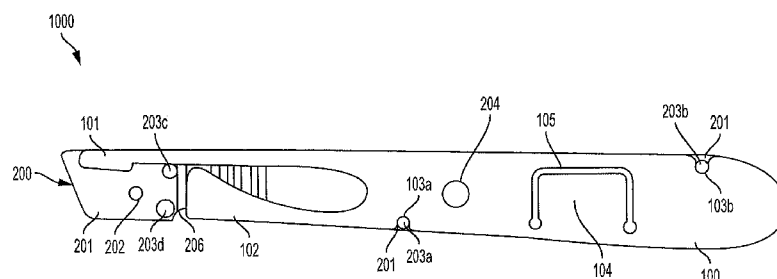


FIG. 1

(57) Abstract: There is a surgical scalpel blade and a handle. The handle is constructed with a scissor action for opening an internal liner lock. The handle has a small window on one side to allow for at least actuation of the internal liner about locking mechanisms thereof. The surgical blade and attaching mechanism that may be located on the proximal end of the handle uses a blade that can quickly and safely be attached and removed from the handle via a rotating and locking mechanism. There is also a cover shield to cover a blade of the scalpel.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 16/22846

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 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:

2. ☐ 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 No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:
This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I: Claims 1-10 directed to a surgical scalpel comprising an external handle and an inner liner.

Group II: Claims 11-14 directed to a surgical scalpel comprising a scalpel body, a slot, and a cover shield.

---See Supplemental Box---

1. ☐ 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 additional fees, this Authority did not invite payment of additional fees.
3. ☐ 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.:
Claims 1-10

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☒ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 16/22846

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A61B 17/3211, A61B 17/3213, A61B 17/3217 (2016.01)

CPC - A61B 17/3211, A61B 17/3213, A61B 17/3217, A61B 2017/32113, A61B 2017/32116

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(8): B26B 1/02*, B26B 1/04*, B26B 29/*, A61B 17/* (2016.01)

CPC: B26B 1/02*, B26B 1/04*, B26B 29/*, A61B 17/*

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

IPC(8): B26B*, A61B* (2016.01)

CPC: B26B*, A61B*

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

PatBase, Google Patents, Google Web

Keywords: pivot, pin, spring, blade, bias, scalpel, lock, stop, swing, surgical

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	DE 10339166 A1 (AESCULAP AG & CO KG) 31 March 2005 (31.03.2005), entire document	1-2, 4, 10 ----- 1, 5-6 ----- 8-9
X	US 3,247,592 A (ARDEN) 26 April 1966 (26.04.1966), entire document	1-4
X -- A	US 2013/0245655 A1 (MAHURKAR) 19 September 2013 (19.09.2013), entire document	1, 7 ----- 8-9
Y	US 5,437,101 A (COLLINS) 01 August 1995 (01.08.1995), entire document	1, 5-6
A	US 8,291,601 B2 (KEHR et al.) 23 October 2012 (23.10.2012), entire document	8-9

☒ Further documents are listed in the continuation of Box C.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent 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

01 July 2016 (01.07.2016)

Date of mailing of the international search report

08 AUG 2016

Name and mailing address of the ISA/US

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 16/22846

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2,263,415 A (BERG et al.) 18 November 1941 (18.11.1941), entire document	1-10
A	US 4,669,188 A (EVRELL) 02 June 1987 (02.06.1987), entire document	1-10
A	US 5,400,509 A (COLLINS) 29 March 1995 (29.03.1995), entire document	1-10
A	US 6,675,484 B2 (McHENRY et al.) 13 January 2004 (13.01.2004), entire document	1-10

INTERNATIONAL SEARCH REPORT

International application No.

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---Continued from Box III---

The inventions listed as Groups I-II do not relate to a single general inventive concept under PCT Rule 13.1 because under PCT Rule 13.2 they lack the same or corresponding technical features for the following reasons:

Group I does not include the technical feature of a slot extending through a scalpel body, as required by Group II.

Group II does not include the technical features of an inner liner, as required by Group I.

The common features between Group I and Group II of:
a surgical scalpel comprising a scalpel body and an external handle or shield
are taught by US 5,250,064 A to SCHNEIDER (hereinafter 'Schneider').

Schneider teaches a surgical scalpel comprising a scalpel body and an external handle or shield (abstract: surgical instrument guard described herein comprises a shield which fits over the blade of a scalpel).

Therefore, the common features are not an improvement over the prior art.

Unity of invention is lacking under PCT Rule 13.2, because Groups I and II do not share a same or corresponding special technical feature providing a contribution over prior art.