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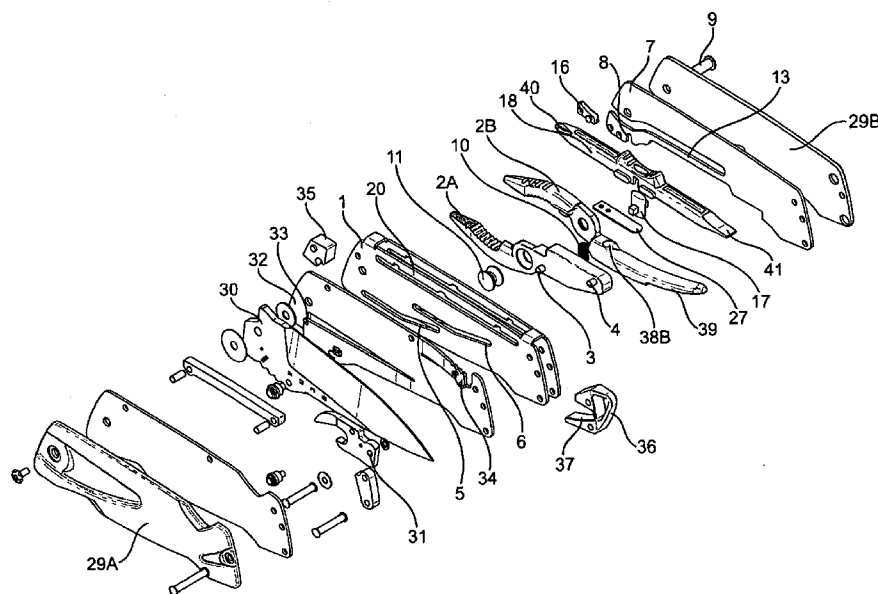
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[Continued on next page]

(54) Title: MULTI FUNCTION TOOL



(57) Abstract: The present disclosure relates to multi-function tools, and particularly to a mechanism for extending and retracting pliers (2) and the like into the handle (29). Along with the pliers (2) the multi-tool may have various other implements including a full-size blade (30, 112), a driver tool (118, 218), a can opener (214), a punch tool and the like. Furthermore a lighting element (125, 225), being either an LED or non-LED type mechanism, and either fixed in place or rotatable or flexible about the handle is contemplated.

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— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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INTERNATIONAL SEARCH REPORT

International application No

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A. CLASSIFICATION OF SUBJECT MATTER
 INV. B26B11/00 B25F1/00

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)

B26B B25F

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)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2004/003472 A1 (DALLAS EDGAR A [US] ET AL DALLAS EDGAR A [US] ET AL) 8 January 2004 (2004-01-08)	1-3
Y	paragraph [0011] - paragraph [0036]; figures 1-5	5-8
Y	US 2004/211007 A1 (PING QIU JIAN [CN]) 28 October 2004 (2004-10-28) paragraphs [0001] - [0003] paragraph [0026] - paragraph [0032]; figures 1-7	5-8
Y	US 5 727 319 A (MYERCHIN JOHN [US] ET AL) 17 March 1998 (1998-03-17) column 1, line 4 - line 37 column 2, line 45 - column 4, line 7; figures 1-4	5-7
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☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* 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 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.

G document member of the same patent family

Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 088 860 A (POEHLMANN PAUL W [CA] ET AL) 18 July 2000 (2000-07-18) column 1, line 4 - line 11 column 3, line 40 - column 4, line 65; figures 1-4 column 6, line 16 - column 9, line 15; figures 2,3,8-17 -----	1-3
X	US 5 212 844 A (SESSIONS GEORGE C [US] ET AL) 25 May 1993 (1993-05-25) column 1, line 12 - line 18 column 2, line 56 - column 7, line 46; figures 1-6 -----	1-3
X	US 4 783 867 A (TSAO DAN-CHERN [TW]) 15 November 1988 (1988-11-15) column 2, line 4 - column 3, line 59; figures 1-4B -----	1,3

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2007/002806

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:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an 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 reportcovers 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.:

see additional sheet(s)

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.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-3, 5-8

A multi-function tool comprising:

a handle;
a folding blade implement;
and a two-piece tool implement;
wherein said folding blade implement is pivotally connected to the handle of said multi-function tool,
is folded within the handle when in a stored state,
and is pivotally rotated out of the handle when in use;
wherein said two-piece tool implement is slidably held so that said two-piece tool implement is retracted within the handle when in the stored state,
and slidably extended to protrude from said handle when in use.
The tool may further comprise an illuminating element.

1.1. claim: 2

The multi-function tool of claim 1, wherein said two-piece tool implement is a retractable pliers.

1.2. claims: 3, 8

The multi-function tool of claim 1 further comprising a drive tool implement.

1.3. claims: 5-8

The multi-function tool of claim 1 further comprising an illuminating element.

2. claims: 4, 9-13

A multi-function tool comprising:

a handle;
a folding blade implement; a drive tool implement;
and a two-piece tool implement;
wherein said folding blade implement is pivotally connected to the handle of said multi-function tool,
is folded within the handle when in a stored state, and is pivotally rotated out of the handle when in use;
wherein said drive tool implement is slidably held so that said drive tool implement is retracted within the handle when in the stored state, and slidably extended to protrude from said handle when in use;
wherein said two-piece tool implement is slidably held so that said two-piece tool implement is retracted within the handle when in the stored state,
and slidably extended to protrude from said handle when in use, and locked into an extended position while in use.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

3. claims: 14-20

A folding knife tool comprising:

a handle;
supporting liners within the handle;
locking liners within the handle which lock the blade or
pliers in a fixed open position,
and a tracking liner within the handle for retracting and
extending pliers, and a double-ended driver;
a blade pivotally connected to the handle;
and a means for retracting and extending pliers;
wherein the pliers having a first exposed handle and a
second unexposed handle slidably connected to the folding
knife handle;
wherein the exposed pliers handle is extended or retracted
within the folding knife handle;
the pliers having two button pins fixed to its second
unexposed handle;
and the pins allow the pliers to slide within two tracks
within the tracking liner,
one for each pin keeping the pliers pointing in a fixed
orientation.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2007/002806

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