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- Declarations under Rule 4.17:**
- as to the identity of the inventor (Rule 4.17(i))
  - as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
  - as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))
  - of inventorship (Rule 4.17(iv))
- Published:**
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(54) Title: MULTIFUNCTIONAL SURGICAL DEVICE

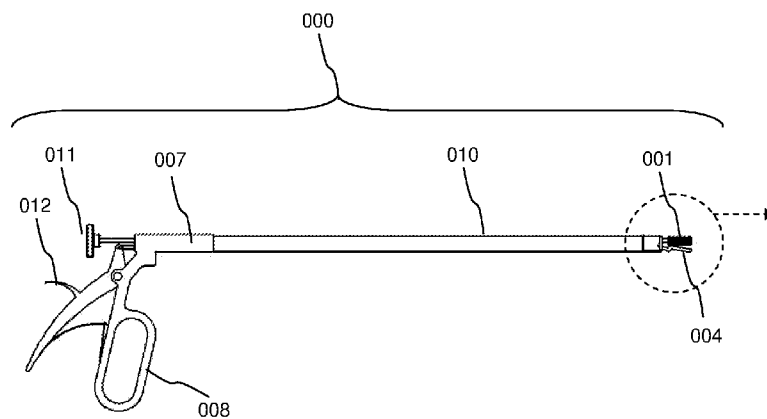


Fig 1.a

(57) Abstract: A multifunctional tool for use in minimally invasive surgery, comprising a pair of jaws forming an effector unit, an elongated hollow shaft in extension with the effector unit, locking elements for maintaining the jaws in position corresponding to a particular surgical functionality, and a handling unit at other end of the elongated hollow shaft, wherein the handling unit having actuators for performance and switching between the plurality of surgical functions. The multifunctional tool can reduce the quantity of instrumentation necessary for surgical procedures in which scissors, graspers, dissectors, needle driver, forceps and the like or change of end effectors otherwise required, and can be used without retraction of the instrument from surgery port.



# INTERNATIONAL SEARCH REPORT

International application No.

PCT/IB2013/058872

## A. CLASSIFICATION OF SUBJECT MATTER

A61B 17/295 (2006.01) i

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: A61B 17/-; A61B 1/-

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 practicable, search terms used)

CNKI, CNPAT, WPI, EPODOC: jaw, forcep?, clamp+, multi?function+, fuction?, surgical, surgery, operat+

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5456684 A (HUTCHINSON TECHNOLOGY INCORPORATED) 10 October 1995 (10.10.1995) description, column 3 line 40 to column 8 line 9 and figures 1-21	1,4,6,9,13-15
X	CN 202184798 U (HANGZHOU TONGLU YIDA EQUIP. CO. LTD) 11 April 2012 (11.04.2012) description, pages 1-2 and figures 1-3	1
A	US 2011/0028998 A1 (SYNTHES USA, LLC) 03 February 2011 (03.02.2011) the whole document	1-15
A	WO 96/22056 A1 (YOON, Inbae) 25 July 1996 (25.07.1996) the whole document	1-15

 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	“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
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“O” document referring to an oral disclosure, use, exhibition or other means	“&” document member of the same patent family
“P” document published prior to the international filing date but later than the priority date claimed	

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**INTERNATIONAL SEARCH REPORT**  
**Information on patent family members**

International application No.  
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Patent Documents referred in the Report	Publication Date	Patent Family	Publication Date
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