

(19)



(11)

EP 3 398 538 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
13.02.2019 Bulletin 2019/07

(51) Int Cl.:
A61B 17/122 (2006.01) A61B 17/128 (2006.01)

(43) Date of publication A2:
07.11.2018 Bulletin 2018/45

(21) Application number: **18166701.5**

(22) Date of filing: **31.01.2011**

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

(30) Priority: **29.01.2010 US 29972510 P**

(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC:
11737828.1 / 2 528 512

(71) Applicant: **Advanced Bariatric Technology, LLC Coral Gables, FL 33134 (US)**

(72) Inventors:
• **FRENCH, C. Kenneth Dripping Springs Texas 78620 (US)**
• **BARKER, Garrett Meridian, Texas 76665 (US)**
• **ARMENTEROS, Jesús R. Santo Domingo (Este) (DO)**
• **JACOBS, Moises Miami, Florida 33156 (US)**

(74) Representative: **Müller Schupfner & Partner Patent- und Rechtsanwaltspartnerschaft mbB Schellerdamm 19 21079 Hamburg (DE)**

(54) **SURGICAL CLAMP**

(57) A surgical clamp in certain embodiments may be configured to operate with a surgical Installation tool. The clamp may have two elongated members with a bight portion that joins the two elongated members at a proximal end of the clamp and that may bias the two elongated members in an open position at a distal end. The bight portion may have one or more engagement features, such as a slotted aperture or other engagement or cou-

pling feature. A clasp mechanism at the distal end of the clamp may have a male or first component disposed on or adjacent one of the two elongated members and a female or second component disposed on or adjacent the other of the two elongated members at the distal end of the clamp. The installation tool may include an elongated member with a proximal end and a distal end that has an engagement feature.

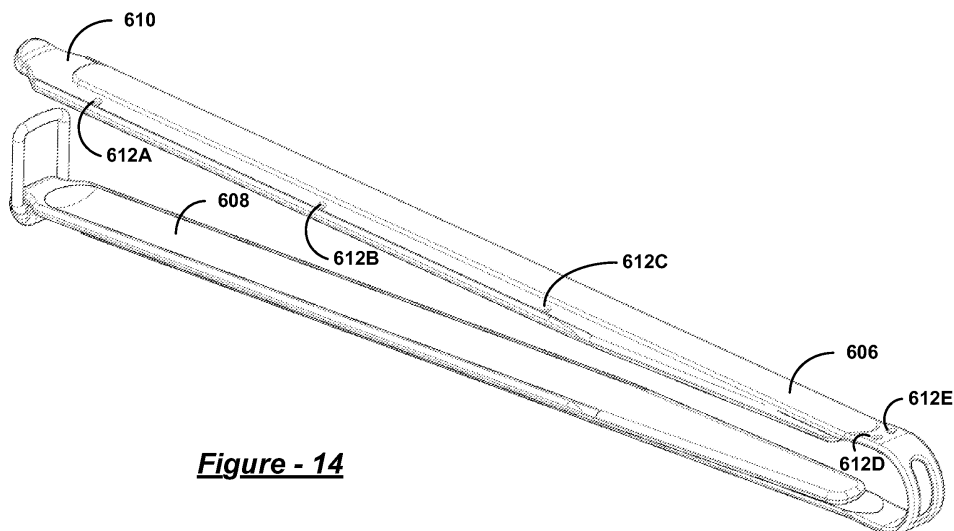


Figure - 14

EP 3 398 538 A3



EUROPEAN SEARCH REPORT

Application Number
EP 18 16 6701

5

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 A	EP 0 220 643 A2 (UNITED STATES SURGICAL CORP [US]) 6 May 1987 (1987-05-06) * figures 13,14 * * page 5 * * page 11, lines 13-15 * -----	1,4,5, 8-12 13	INV. A61B17/122 A61B17/128
X A	EP 1 600 108 A2 (IDX MEDICAL LTD [US]; CLEVELAND CLINIC FOUNDATION [US]) 30 November 2005 (2005-11-30) * paragraphs [0014], [0080], [0089]; figures 23,32 * -----	1,4,5, 8-12 13	
X A	US 5 127 915 A (MATTSON PHILIP D [US]) 7 July 1992 (1992-07-07) * figures 4,5 * -----	1,4,5, 8-12 13	
X A	US 5 156 609 A (NAKAO NAOMI L [US] ET AL) 20 October 1992 (1992-10-20) * figures 9,10 * * abstract * -----	1 13	
X A	US 5 423 831 A (NATES COLIN [ZA]) 13 June 1995 (1995-06-13) * figures 1-3 * -----	1,4,5, 8-12 13	TECHNICAL FIELDS SEARCHED (IPC) A61B
A	US 2008/033457 A1 (FRANCISCHELLI DAVID E [US] ET AL) 7 February 2008 (2008-02-07) * figures 13-14 * -----	1	
X A	DE 298 22 558 U1 (AESCULAP AG & CO KG [DE]) 18 February 1999 (1999-02-18) * figures 1,2 * -----	1,8-12 13	
X A	US 4 428 374 A (AUBURN ROBERT M [US]) 31 January 1984 (1984-01-31) * figures 12-16 * ----- -/--	1,2,4,5, 8-12 13	

-The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 6 September 2018	Examiner Erbel, Stephan
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	

10

15

20

25

30

35

40

45

EPO FORM 1503 03.02 (P04C01)

50

55



EUROPEAN SEARCH REPORT

Application Number
EP 18 16 6701

5

10

15

20

25

30

35

40

45

50

55

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 A	WO 80/01752 A1 (LEVEEN H [US]; LEVEEN E [US]) 4 September 1980 (1980-09-04) * figures 1-4 *	1,4,5, 8-12 13	
X A	----- US 5 428 871 A (IOSIF MARIO C [US]) 4 July 1995 (1995-07-04) * figures 2-4 * -----	1-3,8-12 13	
----- The present search report has been drawn up for all claims -----			TECHNICAL FIELDS SEARCHED (IPC)
Place of search Munich		Date of completion of the search 6 September 2018	Examiner Erbel, Stephan
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			

1 EPO FORM 1503 03.02 (P04C01)



5

CLAIMS INCURRING FEES

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

10

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):

15

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.

20

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:

25

see sheet B

30

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

35

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

40

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:

45

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:

50

1-5, 8-13

55

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
EP 18 16 6701

5

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:

10

1. claims: 1-5, 8-13

A surgical clamp with two elongate members joined via a bight portion and a clasp mechanism to maintain the jaws closed after clamping, directed at the selection of the materials and/or the use of a non-integral design for the elongate members and the bight portion.

15

2. claim: 7

A surgical clamp with two elongate members joined via a bight portion and a clasp mechanism to maintain the jaws closed after clamping, directed at the clasp mechanism being based on a hinged loop design.

20

3. claim: 14

A surgical clamp with two elongate members joined via a bight portion and a clasp mechanism to maintain the jaws closed after clamping, directed at an engagement feature integrated into the bight portion.

25

30

4. claims: 6, 15

A surgical clamp with two elongate members joined via a bight portion and a clasp mechanism to maintain the jaws closed after clamping, directed at padding material on at least one of the elongate members.

35

40

45

50

55

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

EP 18 16 6701

5 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.

06-09-2018

Patent document cited in search report	Publication date	Patent family member(s)	Publication date	
EP 0220643	A2	06-05-1987	AT 28973 T	15-09-1987
			AT 63047 T	15-05-1991
			AU 563033 B2	25-06-1987
			AU 597371 B2	31-05-1990
			BR 8307535 A	21-08-1984
			CA 1211332 A	16-09-1986
			CA 1235036 A	12-04-1988
			DE 3347987 C2	12-03-1987
			DE 3348045 C2	07-01-1988
			DE 3390226 C2	05-03-1987
			DE 3390226 T	04-10-1984
			EP 0105797 A2	18-04-1984
			EP 0220643 A2	06-05-1987
			GB 2135584 A	05-09-1984
			GB 2167670 A	04-06-1986
			JP S642639 A	06-01-1989
			JP H0352978 B2	13-08-1991
			JP S6352894 B2	20-10-1988
JP S59501656 A	04-10-1984			
US 4512345 A	23-04-1985			
WO 8401279 A1	12-04-1984			
EP 1600108	A2	30-11-2005	AT 450207 T	15-12-2009
			AU 2005202273 A1	15-12-2005
			CA 2508199 A1	26-11-2005
			EP 1600108 A2	30-11-2005
			JP 2005334649 A	08-12-2005
			US 2005277959 A1	15-12-2005
			US 2010082047 A1	01-04-2010
			US 2013245652 A1	19-09-2013
			US 2015320426 A1	12-11-2015
US 5127915	A	07-07-1992	NONE	
US 5156609	A	20-10-1992	AU 1925492 A	21-12-1992
			US 5156609 A	20-10-1992
			WO 9219144 A2	12-11-1992
US 5423831	A	13-06-1995	NONE	
US 2008033457	A1	07-02-2008	US 2008033457 A1	07-02-2008
			US 2010204716 A1	12-08-2010
DE 29822558	U1	18-02-1999	NONE	
US 4428374	A	31-01-1984	NONE	

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

55

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

EP 18 16 6701

5 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.

06-09-2018

10

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 8001752	A1	04-09-1980	DE 3034356 A1 26-03-1981
			EP 0025447 A1 25-03-1981
			GB 2055953 A 11-03-1981
			JP S6364221 B2 09-12-1988
			JP S56500242 A 05-03-1981
			US 4390019 A 28-06-1983
			WO 8001752 A1 04-09-1980
US 5428871	A	04-07-1995	NONE

15

20

25

30

35

40

45

50

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

55

专利名称(译)	手术钳		
公开(公告)号	EP3398538A3	公开(公告)日	2019-02-13
申请号	EP2018166701	申请日	2011-01-31
[标]申请(专利权)人(译)	高级肥胖症治疗技术公司		
申请(专利权)人(译)	BARIATRIC先进科技有限责任公司		
当前申请(专利权)人(译)	BARIATRIC先进科技有限责任公司		
[标]发明人	FRENCH C KENNETH BARKER GARRETT JACOBS MOISES		
发明人	FRENCH, C. KENNETH BARKER, GARRETT ARMENTEROS, JESÚS R. JACOBS, MOISES		
IPC分类号	A61B17/122 A61B17/128		
CPC分类号	A61B17/122 A61B17/1285 A61B2017/00473 A61B2017/00477 A61B2017/00818 A61B2017/00862 A61B2017/00876		
审查员(译)	ERBEL , STEPHAN		
优先权	61/299725 2010-01-29 US PCT/US2011/023205 2011-01-31 WO		
其他公开文献	EP3398538A2		
外部链接	Espacenet		

摘要(译)

在某些实施例中，外科夹具可以配置成与外科手术安装工具一起操作。夹具可以具有两个细长构件，其具有弯曲部分，该弯曲部分在夹具的近端处连接两个细长构件并且可以将两个细长构件偏置在远端处的打开位置。弯曲部分可以具有一个或多个接合特征，例如开槽孔或其他接合或连接特征。夹具远端处的扣紧机构可具有设置在两个细长构件中的一个上或附近的凸形或第一部件，以及设置在所述两个细长构件中的另一个上或附近的凹形或第二部件。钳。安装工具可包括细长构件，细长构件具有近端和具有接合特征的远端。

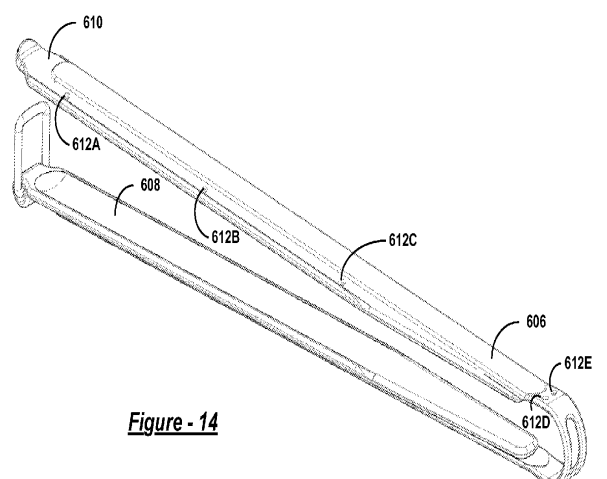


Figure - 14