(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau





(10) International Publication Number WO 2012/127434 A3

(43) International Publication Date 27 September 2012 (27.09.2012)

(51) International Patent Classification: A61M 16/04 (2006.01)

(21) International Application Number:

PCT/IB2012/051364

(22) International Filing Date:

22 March 2012 (22.03.2012)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

1104835.2 22 March 2011 (22.03,2011) GB

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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,

HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48,2(h))
- (88) Date of publication of the international search report:

27 December 2012

(54) Title: LARYNGEAL MASK AIRWAY

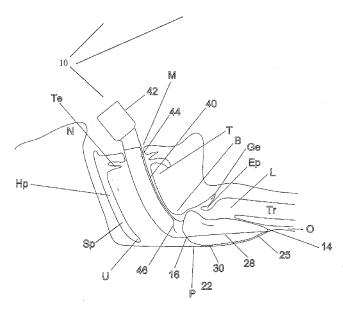


Fig.7

(57) Abstract: An airway device (10) is provided for sealing a patient's pharynx (P), the device comprising an elongate flexible chamber (12) of resilient material with a leading end (14) and a trailing end (16) and being bounded by top (18) and bottom (19) elongate surfaces. The top surface has raised ridge (20) across it to seal at the base (B) of the tongue (T) and the bottom surface is shaped to seal at the back of the patient's throat. An opening (26) is defined in the top surface and serves to place the chamber in communication with the laryngeal inlet (L) of the patient. A gutter (28) extends from the leading edge along the length of the bottom surface and forms a funnel (27) at the trailing end. Instruments passed along the outside of the stem are received in the funnel and directed along the gutter to the oesophagus (O) of the patient. A hollow stem (40) protrudes from the trailing end of the chamber for passing through the patient's mouth and has an attachment formation (42) with a 22 mm diameter, for attaching to external ventilation apparatus.



INTERNATIONAL SEARCH REPORT

International application No PCT/IB2012/051364

Relevant to claim No.

a. classification of subject matter INV. A61M16/04

ADD.

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) A61M

Category* Citation of document, with indication, where appropriate, of the relevant passages

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)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

	,				
Х	US 2008/257356 A1 (SWICK JOHN T 23 October 2008 (2008-10-23) figures 1-6	[US])	1-16		
X	US 2004/020491 A1 (FORTUNA ANIBA OLIVEIRA [BR]) 5 February 2004 (2004-02-05) figures 1,2,9-11	AL DE	1-16		
X	W0 2004/089453 A2 (AMBU AS [DK]; LASSE [DK]; HOFFMANN PEER [DK]) 21 October 2004 (2004-10-21) figure 9	PETERSEN	1-16		
Х	GB 2 364 644 A (MILLER DONALD MU	INRO [ZA])	1-16		
Υ	6 February 2002 (2002-02-06) figures 1-4		17-30		
X Furth	her deguments are listed in the continuation of Pay C	Y See natest family approx			
L^ Funt	her documents are listed in the continuation of Box C.	X See patent family annex.			
"A" docume	ategories of cited documents : ent defining the general state of the art which is not considered of particular relevance	"T" later document published after the inter date and not in conflict with the applica the principle or theory underlying the i	ation but cited to understand		
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cited to specia	ent which may throw doubts on priority claim(s) or which is o establish the publication date of another citation or other al reason (as specified) ent referring to an oral disclosure, use, exhibition or other	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			
	ent published prior to the international filing date but later than ority date claimed	"&" document member of the same patent family			
Date of the	actual completion of the international search	Date of mailing of the international search report			
2	5 October 2012	07/11/2012			
Name and n	mailing address of the ISA/	Authorized officer			
	European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Louarn, Arzhur			

INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2012/051364

C(Continua	tion). DOCUMENTS CONSIDERED TO BE RELEVANT	
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Х	EP 0 389 272 A2 (BRAIN ARCHIBALD IAN JEREMY [GB] BRAIN ARCHIBALD IAN JEREMY [GB]; GAINE) 26 September 1990 (1990-09-26) figure 11	1-16
Y	26 September 1990 (1990-09-26)	17-30

International application No. PCT/IB2012/051364

INTERNATIONAL SEARCH REPORT

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. X 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 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.:
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. X 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: 1-16

An airway device for sealing an unconscious patient's pharynx comprising an attachment formation.

2. claims: 17-30

An airway device for sealing an unconscious patient's pharynx comprising a surface being shaped to seal against the back of a patient throat gutter, the surface having a gutter forming a funnel for gastric tubes.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/IB2012/051364

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 2008257356	A1	23-10-2008	US WO	2008257356 2008131408		23-10-2008 30-10-2008
US 2004020491	A1	05-02-2004	NONE			
WO 2004089453	A2	21-10-2004	BR EP JP JP RU US WO	PI0409320 1613384 4865538 2006522623 2336910 2006201516 2004089453	A2 B2 A C2 A1	25-04-2006 11-01-2006 01-02-2012 05-10-2006 27-10-2008 14-09-2006 21-10-2004
GB 2364644	А	06-02-2002	AT AU BR CA CN EP GB JP NZ US WO ZA	363311 3137502 2002231375 0112526 2416590 1441685 1309370 2364644 2005502384 523685 2003172935 0232490 200300228	A B2 A A1 A A2 A A A1 A2	15-06-2007 29-04-2002 03-02-2005 01-07-2003 25-04-2002 10-09-2003 14-05-2003 06-02-2002 27-01-2005 24-09-2004 18-09-2003 25-04-2002 26-11-2003
EP 0389272	A2	26-09-1990	AT AU CA DE DK EP ES GB JP NZ US ZA	112970 630433 5203690 2012750 69013380 69013380 0389272 0389272 2065483 2229367 2283378 2931988 232989 4995388 9002154	B2 A A1 D1 T2 T3 A2 T3 A A B2 A	15-11-1994 29-10-1992 27-09-1990 22-09-1990 24-11-1994 23-02-1995 27-02-1995 26-09-1990 26-09-1990 20-11-1990 09-08-1999 25-09-1992 26-02-1991 27-02-1991
WO 2008001724	A1	03-01-2008	CN JP WO	101057994 4588789 2008001724	B2	24-10-2007 01-12-2010 03-01-2008