The owner(s) with percent interest listed above in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term of prior patent number(s)

9974914

as the term of said prior patent is presently shortened by any terminal disclaimer. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and the prior patent are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

In making the above disclaimer, the owner does not disclaim the terminal part of the term of any patent granted on the instant application that would extend to the expiration date of the full statutory term of the prior patent, "as the term of said prior patent is presently shortened by any terminal disclaimer," in the event that said prior patent later:

- expires for failure to pay a maintenance fee;
- is held unenforceable;
- is found invalid by a court of competent jurisdiction;
- is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321;
- has all claims canceled by a reexamination certificate;
- is reissued; or
- is in any manner terminated prior to the expiration of its full statutory term as presently shortened by any terminal disclaimer.
- Terminal disclaimer fee under 37 CFR 1.20(d) is included with Electronic Terminal Disclaimer request.

0	I certify, in accordance with 37 CFR 1.4(d)(4), that the terminal disclaimer fee under 37 CFR 1.20(d) required for this terminal disclaimer has already been paid in the above-identified application.				
Арр	licant claims the following fee st	atus:			
0	Small Entity				
0	Micro Entity				
•	Regular Undiscounted				
belie the l	ef are believed to be true; and fu ike so made are punishable by fi	nade herein of my own knowledge are true and that all statements made on information and rther that these statements were made with the knowledge that willful false statements and ne or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and y jeopardize the validity of the application or any patent issued thereon.			
ТН	IS PORTION MUST BE COMPLETE	D BY THE SIGNATORY OR SIGNATORIES			
l ce	ertify, in accordance with 37 CFR	1.4(d)(4) that I am:			
•	An attorney or agent registered this application	I to practice before the Patent and Trademark Office who is of record in			
	Registration Number 42611				
A sole inventor					
0	A joint inventor; I certify that I am authorized to sign this submission on behalf of all of the inventors as evidenced by the power of attorney in the application				
0	A joint inventor; all of whom are signing this request				
Signature		/Michael Guiliana/			
Name		Michael A. Guiliana			

^{*}Statement under 37 CFR 3.73(b) is required if terminal disclaimer is signed by the assignee (owner). Form PTO/SB/96 may be used for making this certification. See MPEP § 324.

Electronic Patent Application Fee Transmittal					
Application Number:	148	346226			
Filing Date:	04-	Sep-2015			
Title of Invention:		BREATHING ASSISTANCE APPARATUS			
First Named Inventor/Applicant Name:	Ala	stair Edwin McAule	у		
Filer:	Mic	chael A. Guiliana/Th	uyQuyen Nguye	en	
Attorney Docket Number:	FPI	HCR.112C2			
Filed as Large Entity					
Filing Fees for Utility under 35 USC 111(a)					
Description		Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:					
STATUTORY OR TERMINAL DISCLAIMER		1814	1	160	160
Pages:	'	•			
Claims:					
Miscellaneous-Filing:					
Petition:					
Patent-Appeals-and-Interference:					
Post-Allowance-and-Post-Issuance:					

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
	Tot	al in USD	(\$)	160

Doc Code: DISQ.E.FILE Document Description: Electronic Terminal Disclaimer – Approved
Application No.: 14846226
Filing Date: 04-Sep-2015
Applicant/Patent under Reexamination: McAuley
Electronic Terminal Disclaimer filed on September 10, 2018
This patent is subject to a terminal disclaimer
DISAPPROVED
Approved/Disapproved by: Electronic Terminal Disclaimer automatically approved by EFS-Web
U.S. Patent and Trademark Office

Electronic Acknowledgement Receipt		
EFS ID:	33668743	
Application Number:	14846226	
International Application Number:		
Confirmation Number:	8898	
Title of Invention:	BREATHING ASSISTANCE APPARATUS	
First Named Inventor/Applicant Name:	Alastair Edwin McAuley	
Customer Number:	20995	
Filer:	Michael A. Guiliana/ThuyQuyen Nguyen	
Filer Authorized By:	Michael A. Guiliana	
Attorney Docket Number:	FPHCR.112C2	
Receipt Date:	10-SEP-2018	
Filing Date:	04-SEP-2015	
Time Stamp:	13:40:51	
Application Type:	Utility under 35 USC 111(a)	

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$160
RAM confirmation Number	091018INTEFSW13404800
Deposit Account	111410
Authorized User	ThuyQuyen Nguyen

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

37 CFR 1.16 (National application filing, search, and examination fees)

37 CFR 1.17 (Patent application and reexamination processing fees)

File Listina:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
			33525		
1	Terminal Disclaimer-Filed (Electronic)	e Terminal-Disclaimer.pdf	66ced9eaf8ea6e03b4bf88d4ad22976d8ca 77c58	no	2
Warnings:				'	
Information:					
			30394		
2	Fee Worksheet (SB06)	fee-info.pdf	5eed96ab2c414eb3199a48c520183f49f208 cad6	no	2
Warnings:				'	
Information:					
		Total Files Size (in bytes)	: 6	3919	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NUMBER	PATENT NUMBER	GROUP ART UNIT	REQUEST ID
14/846 226	9333315	3778	67732

PAIR Correspondence Address/Fee Address Change

The following fields have been changed to Customer Number 10802 on 07/16/2018 via Private PAIR in view of the certification copied below that authorized the change.

• Maintenance Fee Address

The address for Customer Number 10802 is: 10802 Ipan Intellectual Property Associated Network GMBH Munchener Strasse 14 Munich, D-85540 GERMANY

I certify, in accordance with 37 CFR 1.4(d)(4) that I am:

An attorney or Agent of Record registered to practice before the Patent and Trademark Office who has been given power of attorney in this application

Signature:	/Robert J. Roby/
Name:	Robert J. Roby
Registration Number:	44304



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

 APPLICATION NO.
 ISSUE DATE
 PATENT NO.
 ATTORNEY DOCKET NO.
 CONFIRMATION NO.

 14/846,226
 05/10/2016
 9333315
 FPHCR.112C2
 8898

20995 7590 04/20/2016

KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment is 0 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site http://pair.uspto.gov for additional applicants):

Alastair Edwin McAuley, Dallas, TX; Fisher & Paykel Healthcare Limited, Auckland, NEW ZEALAND; Craig Robert Prentice, Auckland, NEW ZEALAND; Oliver Gleeson, Auckland, NEW ZEALAND;

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit <u>SelectUSA.gov</u>.

RMD IR 103 (Rev. 10/09) EXHIBIT 1004 - PAGE 9

	Application No.	Unknown
INFORMATION DISCLOSURE	Filing Date	Herewith
STATEMENT BY APPLICANT	First Named Inventor	Alastair Edwin McAuley
STATEMENT BY APPLICANT	Art Unit	Unknown
(Multiple sheets used when necessary)	Examiner	Unknown
SHEET 2 OF 5	Attorney Docket No.	FPHCR.112C2

				U.S. PATENT DOCUMENTS		
	kaminer nitials	Cite No.	Document Number Number - Kind Code (if known) Example: 1,234,567 B1	Publication Date MM-DD-YYYY	Name	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear
		29	5,065,756	11-19-1991	Rapoport	
Change(s	دا مصان	30	5,094,236	03-10-1992	Amad Tayebi	
to docum		31	5,113,857	05-19-1992	Dickerman et al.	
/J.G./_	10110,	32	5,148,802	09-22-1992	Sanders et al.	
4/11/20	16	33	5,245,995	09-21-1993	Sullivan et al.	
		34	5,269,296	12-14-1993	Landis	
		35	5,477,852	12-26-1995	Landis et al.	
		36	5,533,506	07-09-1996	Wood	
		37	5,551,419	09-03-1996	Froehlich et al.	
		38	5,595,174	01-21-19997	Gwaltney	
		39	5,657,752	08-19-1997	Landis et al.	
		40	5,752,510	05-19-1998	Goldstein	
		41	5,921,239	07-13-1999	McCall et al.	
		42	6,017,315	01-25-2000	Starr et al.	
		43	6,298,850	10-09-2001	Argraves	
		44	6,431,172	08-13-2002	Bordewick	
		45	6,435,181	08-20-2002	Jones, Jr. et al.	
		46	6,439,234	08-27-2002	Curti et al.	
		47	6,478,026	11-12-2002	Wood	
		48	6,561,188	08-13-2003	Ellis	
		49	6,561,191	05-13-2003	Kwok	
		50	6,581,594	06-24-2003	Drew, et al.	
		51	6,588,424	07-08-2003	Bardel	
		52	6,637,434	10-28-2003	Noble	
		53	6,644,315	11-11-2003	Ziaee	
		54	6,651,658	11-25-2003	Hill et al.	
		55	6,659,102	12-09-2003	Sico	
		56	6,662,803	12-16-2003	Gradon, et al.	

Examiner Signature /Annette Dixon/ (12/01/2015) Date Considered

^{*}Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

	Application No.	Unknown
INFORMATION DISCLOSURE	Filing Date	Herewith
STATEMENT BY APPLICANT	First Named Inventor	Alastair Edwin McAuley
STATEMENT BY AFFEIGANT	Art Unit	Unknown
(Multiple sheets used when necessary)	Examiner	Unknown
SHEET 3 OF 5	Attorney Docket No.	FPHCR.112C2

Examiner Initials	Cite No.	Document Number Number - Kind Code (if known) Example: 1,234,567 B1	Publication Date MM-DD-YYYY	Name	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear
	57	6,679,265	01-20-2004	Strickland et al.	Troiovaint i igailoo / tppodi
	58	6,851,425	02-08-2005	Jaffre et al.	
	59	6,892,729	05-17-2005	Smith et al.	
	60	7,004,165	02-28-2006	Salcido	
	61	7,096,864	08-29-2006	Mayer et al.	
	62	7,201,169	04-10-2007	Wilkie et al.	
	63	7,207,333	04-24-2007	Tohara	
	64	7,210,481	05-01-2007	Lovell et al.	
	65	7,353,827	04-08-2008	Geist	
	66	8,042,539	10-25-2011	Chandran, et al.	
	67	8,783,257	07-22-2014	McAuley et al.	
	68	2002/0046755	04-25-2002	Voss	
	69	2002/0053347	05-09-2002	Ziaee	
	70	2002/0059935	05-23-2002	Wood	
	71	2002/0096178	07-25-2002	Ziaee	
	72	2003/0005933	01-09-2003	Izuchukwu	
	73	2003/0079749	05-01-2003	Strickland et al.	
ge(s) appli	74	2003/0164170	09-02-2003	Resmed Drew et al.	
sets, appingument,	75	2003/0196659	10-23-2003	Gradon, et al.	
/	76	2003/0196664	10-23-2003	Jacobson	
2016	77	2003/0200970	10-30-2003	Stenzler et al.	
	78	2004/0226566	11-18-2004	Gunaratnam et al.	
	79	2005/0011524	01-20-2005	Thomlinson et al.	
	80	2005/0028822	02-10-2005	Sleeper et al.	
	81	2005/0205096	09-22-2005	Matula et al.	
	82	2007/0137653	06-21-2007	Wood	
	83	2012/0125339	05-24-2012	Ho et al.	
	84	D250,047	10-24-1978	Lewis, et al.	

Examiner Signature Date Considered /Annette Dixon/ (12/01/2015)

^{*}Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

appropriate. All further corresponding indicated unless corrected below maintenance fee notifications.	ondence including to on directed otherw	he Patent, advance of vise in Block 1, by (a	rders and notification of na) specifying a new corres	naintenance fees wi pondence address;	Il be mailed to the current and/or (b) indicating a sep	t correspondence address as parate "FEE ADDRESS" for	
CURRENT CORRESPONDENCE ADI	DRESS (Note: Use Block	l for any change of address)	Feet	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, make its own certificate of mailing or transmission.			
20995 7590 KNOBBE MARTEN 2040 MAIN STREET FOURTEENTH FLOO			I he State addr trans	reby certify that this	ficate of Mailing or Trans Fee(s) Transmittal is bein th sufficient postage for fir Stop ISSUE FEE address O (571) 273-2885, on the d	smission g deposited with the United st class mail in an envelope above, or being facsimile late indicated below.	
IRVINE, CA 92614	ж					(Depositor's name)	
						(Signature)	
						(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.	CONFIRMATION NO.	
14/846,226	09/04/2015		Alastair Edwin McAuley	<u> </u>	FPHCR.112C2	8898	
TITLE OF INVENTION: BREA		ICE APPARATUS	,				
APPLN. TYPE ENT	ITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE TOTAL FEE(S) DUE	E DATE DUE	
nonprovisional UNDI	SCOUNTED	\$960	\$0	\$0	\$960	07/05/2016	
EXAMINER		ART UNIT	CLASS-SUBCLASS				
DIXON, ANNETTE FRE	DRICKA	3778	128-207180				
 Change of correspondence add CFR 1.363). Change of correspondence Address form PTO/SB/122) a "Fee Address" indication (PTO/SB/47; Rev 03-02 or mo Number is required. 	address (or Change ttached.	of Correspondence	(1) The names of up to 3 registered patent attorneys or agents OR, alternatively, (2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to				
3. ASSIGNEE NAME AND RES	SIDENCE DATA T	O BE PRINTED ON	THE PATENT (print or typ	pe)			
PLEASE NOTE: Unless an a recordation as set forth in 37 (nssignee is identifie CFR 3.11. Completi	d below, no assignee on of this form is NO	data will appear on the pa T a substitute for filing an	atent. If an assigned assignment.	e is identified below, the o	document has been filed for	
(A) NAME OF ASSIGNEE	1		(B) RESIDENCE: (CITY	and STATE OR CO	DUNTRY)		
Fisher & Paykel I	Healthcare L	imited	Auckland, Nev	w Zealand			
Please check the appropriate assi	gnee category or cat	egories (will not be pr	rinted on the patent): \Box	Individual 💆 Cor	poration or other private gr	roup entity 🖵 Government	
4a. The following fee(s) are submitted: Issue Fee Publication Fee (No small entity discount permitted) Advance Order - # of Copies			b. Payment of Fee(s): (Plea	d. Form PTO-2038 i	s attached.	eshown above) eficiency, or credits any an extra copy of this form).	
5. Change in Entity Status (fror		*	NOTE: Absent a valid ce	rtification of Micro l	Entity Status (see forms PT	O/SB/15A and 15B), issue	
☐ Applicant asserting small entity status. See 37 CFR 1.27			fee payment in the micro entity amount will not be accepted at the risk of application abandonment NOTE: If the application was previously under micro entity status, checking this box will be taken				
to be a notification of loss of entitlement to micro entity status. NOTE: Checking this box will be taken to be a notification of loss of entitlement to small entity status, as applicable.					titlement to small or micro		
NOTE: This form must be signed	l in accordance with	37 CFR 1.31 and 1.3	• • • • • • • • • • • • • • • • • • • •		nd certifications.		
Authorized Signature _/Mic	chael Guiliar	 na/		Date Apri	l 7, 2016		

Page 2 of 3

42,611

Registration No.

Typed or printed name

Michael A. Guiliana

Electronic Patent Application Fee Transmittal							
Application Number:	148	346226					
Filing Date:	04-	Sep-2015					
Title of Invention:	BREATHING ASSISTANCE APPARATUS						
First Named Inventor/Applicant Name:	Alastair Edwin McAuley						
Filer:	Michael A. Guiliana						
Attorney Docket Number:	FPI	HCR.112C2					
Filed as Large Entity							
Filing Fees for Utility under 35 USC 111(a)							
Description		Fee Code	Quantity	Amount	Sub-Total in USD(\$)		
Basic Filing:							
Pages:							
Claims:							
Miscellaneous-Filing:							
Petition:							
Patent-Appeals-and-Interference:							
Post-Allowance-and-Post-Issuance:							
Utility Appl Issue Fee		1501	1	960	960		

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)	
Extension-of-Time:					
Miscellaneous:					
Total in USD (\$)					

Electronic Acknowledgement Receipt				
EFS ID:	25431702			
Application Number:	14846226			
International Application Number:				
Confirmation Number:	8898			
Title of Invention:	BREATHING ASSISTANCE APPARATUS			
First Named Inventor/Applicant Name:	Alastair Edwin McAuley			
Customer Number:	20995			
Filer:	Michael A. Guiliana/Sandra Autry			
Filer Authorized By:	Michael A. Guiliana			
Attorney Docket Number:	FPHCR.112C2			
Receipt Date:	07-APR-2016			
Filing Date:	04-SEP-2015			
Time Stamp:	18:49:37			
Application Type:	Utility under 35 USC 111(a)			

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$960
RAM confirmation Number	5077
Deposit Account	111410
Authorized User	KNOBBE MARTENS OLSON AND BEAR

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 CFR 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 CFR 1.17 (Patent application and reexamination processing fees)

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Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.
1	1 Issue Fee Payment (PTO-85B) FPHCR112C2_Issue_mittal.pdf		83140	no	1
·			ef4079c30556f6420514d8030774cb9ada8e bd0c		
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30258	no	2
2	ree worksneet (3000)	ree-ino.pui	7ac2e6b6246f6cb31815221eec15538a975 e6481	110	
Warnings:					
Information:					
		Total Files Size (in bytes):	11	3398	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

NOTICE OF ALLOWANCE AND FEE(S) DUE

KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614

EXAMINER

DIXON, ANNETTE FREDRICKA

ART UNIT PAPER NUMBER

3778

DATE MAILED: 04/05/2016

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/846,226	09/04/2015	Alastair Edwin McAuley	FPHCR.112C2	8898

TITLE OF INVENTION: BREATHING ASSISTANCE APPARATUS

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$960	\$0	\$0	\$960	07/05/2016

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN <u>THREE MONTHS</u> FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. <u>THIS STATUTORY PERIOD CANNOT BE EXTENDED.</u> SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

Page 1 of 3

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450

Alexandria, Virginia 22313-1450 (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

or <u>Fax</u>

Note: A certificate of mailing can only be used for domestic mailings of the

Authorized Signature Typed or printed name

CURRENT CORRESPONI	DENCE ADDRESS (Note: Use Bl	ock 1 for any change of address)	Fee(s) Transmittal. This rs. Each additional	carrificate cannot be used for paper, such as an assignment of mailing or transmission.	or any other accompanying	
20995 KNOBBE MA 2040 MAIN ST FOURTEENTH	ARTENS OLSON (REET	% BEAR LLP	I her State addr trans	Certify that this es Postal Service wiessed to the Mail emitted to the USPT	ificate of Mailing or Transts Fee(s) Transmittal is being th sufficient postage for firs Stop ISSUE FEE address O (571) 273-2885, on the da	mission deposited with the United t class mail in an envelope above, or being facsimile the indicated below.	
IRVINE, CA 92						(Depositor's name)	
			_			(Signature)	
						(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	T	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
14/846,226	09/04/2015	•	Alastair Edwin McAuley	<u>.</u>	FPHCR.112C2	8898	
TITLE OF INVENTION	N: BREATHING ASSIST	CANCE APPARATUS					
APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	UNDISCOUNTED	\$960	\$0	\$0	\$960	07/05/2016	
EVAN	MINER	ART UNIT	CLASS-SUBCLASS				
	ITE FREDRICKA	3778	128-207180				
 Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. 			2. For printing on the patent front page, list (1) The names of up to 3 registered patent attorneys or agents OR, alternatively, (2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.				
3. ASSIGNEE NAME A	AND RESIDENCE DATA	A TO BE PRINTED ON	■ ΓHE PATENT (print or typ	e)			
PLEASE NOTE: Unrecordation as set for (A) NAME OF ASS		ified below, no assignee pletion of this form is NO	data will appear on the pa T a substitute for filing an a (B) RESIDENCE: (CITY	-	e is identified below, the do	ocument has been filed for	
Please check the approp	oriate assignee category or	categories (will not be pr	rinted on the patent):	Individual 🗖 Con	poration or other private gro	oup entity Government	
4a. The following fee(s) are submitted: ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) ☐ A check is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached. ☐ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number (enclose an extra copy of this form).				
5 Ch	4 (6) 11 1	1.1.				_	
	atus (from status indicated ing micro entity status. Se		NOTE: Absent a valid cer fee payment in the micro	tification of Micro entity amount will r	Entity Status (see forms PTC not be accepted at the risk of	D/SB/15A and 15B), issue application abandonment.	
Applicant asserting	ng small entity status. See	37 CFR 1.27	NOTE: If the application	was previously und	er micro entity status, checki nicro entity status.	ing this box will be taken	
Applicant changi	ng to regular undiscounte	d fee status.	NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.				
NOTE: This form must	be signed in accordance v	with 37 CFR 1.31 and 1.33	3. See 37 CFR 1.4 for signa	ture requirements a	nd certifications.		
Authorized Signature	e			Date			

Page 2 of 3

Registration No.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/846,226	09/04/2015	Alastair Edwin McAuley	FPHCR.112C2	8898
20995 75	90 04/05/2016	EXAMINER		
	TENS OLSON & BE	DIXON, ANNETTE FREDRICKA		
2040 MAIN STRE FOURTEENTH FI		ART UNIT PAPER NUMBER		
IRVINE, CA 9261		3778		

DATE MAILED: 04/05/2016

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- 1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

	Application No. 14/846,226	Applicant(s) MCAULEY E	
Notice of Allowability	Examiner ANNETTE DIXON	Art Unit 3778	AIA (First Inventor to File) Status No

The MAILING DATE of this communication appears on the All claims being allowable, PROSECUTION ON THE MERITS IS (OR REM herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other a NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. Tof the Office or upon petition by the applicant. See 37 CFR 1.313 and MPE	IAINS) CLOSED in this application. If not included appropriate communication will be mailed in due course. THIS his application is subject to withdrawal from issue at the initiative
1. A This communication is responsive to <u>supplemental amendment 3/9/10</u>	_
A declaration(s)/affidavit(s) under 37 CFR 1.130(b) was/were filed	d on
2. An election was made by the applicant in response to a restriction recrequirement and election have been incorporated into this action.	quirement set forth during the interview on; the restriction
3. The allowed claim(s) is/are <u>1-19</u> . As a result of the allowed claim(s), y Highway program at a participating intellectual property office for the http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inq	corresponding application. For more information, please see
4. 🛮 Acknowledgment is made of a claim for foreign priority under 35 U.S.	C. § 119(a)-(d) or (f).
Certified copies:	
a) ☑ All b) ☐ Some *c) ☐ None of the:	
 Certified copies of the priority documents have been rec 	eived.
2. 🛛 Certified copies of the priority documents have been rec	eived in Application No. 10/598,026.
Copies of the certified copies of the priority documents h	nave been received in this national stage application from the
International Bureau (PCT Rule 17.2(a)).	
* Certified copies not received:	
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this connoted below. Failure to timely comply will result in ABANDONMENT of the THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	
5. CORRECTED DRAWINGS (as "replacement sheets") must be subm	itted.
including changes required by the attached Examiner's Amenda Paper No./Mail Date	nent / Comment or in the Office action of
Identifying indicia such as the application number (see 37 CFR 1.84(c)) sho each sheet. Replacement sheet(s) should be labeled as such in the header	
 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGIC attached Examiner's comment regarding REQUIREMENT FOR THE D 	
Attachment(s)	
1. Notice of References Cited (PTO-892)	5. Examiner's Amendment/Comment
2. ☑ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date <u>3/9/16</u>	6. Examiner's Statement of Reasons for Allowance
3. Examiner's Comment Regarding Requirement for Deposit	7. Other
of Biological Material	
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date	
/ANNETTE DIXON/	
Primary Examiner, Art Unit 3778	

U.S. Patent and Trademark Office PTOL-37 (Rev. 08-13) 20160329

Notice of Allowability

Part of Paper No./Mail Date

	Application No.	14/846,226
INFORMATION DISCLOSURE	Filing Date	September 4, 2015
STATEMENT BY APPLICANT	First Named Inventor	Alastair Edwin McAuley
STATEMENT BY APPLICANT	Art Unit	3778
(Multiple sheets used when necessary)	Examiner	Annette Fredricka Dixon
SHEET 1 OF 6	Attorney Docket No.	FPHCR.112C2

			U.S. PATENT	DOCUMENTS	
Examiner Initials	Cite No.	Document Number Number - Kind Code (if known) Example: 1,234,567 B1	Publication Date MM-DD-YYYY	Name	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear
	1	2,693,800	11-09-1954	Caldwell	
	2	4,971,051	11-01-1990	Toffolon	
	3	5,042,478	08-27-1991	Kopala et al.	
	4	5,231,979	08-03-1993	Rose et al.	
	5	5,601,078	02-01-1997	Schaller et al.	
	6	5,724,965	03-10-1998	Handke et al.	
	7	5,884,624	03-23-1999	Barnett et al.	
	8	6,019,101	02-01-2000	Cotner et al.	
	9	6,050,260	04-18-2000	Daniell et al.	
	10	6,119,694	09-19-2000	Correa et al.	
	11	6,192,886	02-01-2001	Rudolph	
	12	6,347,631	02-19-2002	Hansen et al.	
	13	6,418,928	07-16-2002	Bordewick et al.	
	14	6,491,034	12-01-2002	Gunaratnam et al.	
	15	6,581,601	06-01-2003	Ziaee	
	16	6,631,718	10-14-2003	Lovell	
	17	6,679,257	01-20-2004	Robertson et al.	
	18	6,907,882	06-21-2005	Ging et al.	
	19	6,951,218	10-04-2005	Gradon et al.	
	20	7,219,669	05-22-2007	Lovell et al.	
	21	7,318,437	01-15-2008	Gunaratnam et al.	
	22	7,896,003	03-01-2011	Matula et al.	
	23	8,443,807	05-21-2013	McAuley et al.	
	24	8,479,741	07-09-2013	McAuley et al.	
	25	2003/0172936	09-18-2003	Wilkie et al.	
	26	2003/196656 A1	10-23-2003	Moore	
	27	2004/0067333	04-08-2004	Amarasinghe	
	28	2004/0211427	10-01-2004	Jones et al.	
	29	2005/0076913	04-14-2005	Ho et al.	

Examiner Signature	/Annette Dixon/ (03/29/2016)	Date Considered
	; : :::: + : : : : : : : : : : : : : : :	

^{*}Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

T¹ - Place a check mark in this area when an English language Translation is attached.

	Application No.	14/846,226
INFORMATION DISCLOSURE	Filing Date	September 4, 2015
STATEMENT BY APPLICANT	First Named Inventor	Alastair Edwin McAuley
STATEMENT BY AFFEIGANT	Art Unit	3778
(Multiple sheets used when necessary)	Examiner	Annette Fredricka Dixon
SHEET 2 OF 6	Attorney Docket No.	FPHCR.112C2

	I	Document Number	U.S. PATENT Publication	<u> </u>	Pages, Columns, Lines Where
Examiner Initials	Cite No.	Number - Kind Code (if known) Example: 1,234,567 B1	Date MM-DD-YYYY	Name	Relevant Figures Appear
	30	2005/0150497 A1	07-14-2005	Eifler et al	
	31	2005/0235999	10-27-2005	Wood et al.	
	32	2006/0060200	03-01-2006	Ho et al.	
	33	2006/0107958	05-01-2006	Sleeper	
	34	2006/0137690	06-01-2006	Gunaratnam et al.	
	35	2006/0174887	08-01-2006	Chandran et al.	
	36	2006/0196511	09-07-2006	Lau et al.	
	37	2006/0237018	10-26-2006	McAuley et al.	
	38	2007/0089749	04-26-2007	Ho et al.	
	39	2007/0125385	06-07-2007	Ho et al.	
	40	2007/0125387	06-07-2007	Zollinger et al.	
	41	2007/0295335	12-01-2007	Nashed	
	42	2007/163600 A1	07-19-2007	Hoffman	
	43	2008/0041388	02-21-2008	McAuley et al.	
	44	2008/0047560	02-01-2008	Veliss et al.	
	45	2008/0060648	03-13-2008	Thornton et al.	
	46	2008/0060657	03-13-2008	McAuley et al.	
	47	2008/0099024 A1	05-01-2008	Gunaratnam et al.	
	48	2008/0196728 A1	08-21-2008	Но	
	49	2008/0264422 A1	10-30-2008	Fishman	
	50	2009/0044808	02-19-2009	Guney et al.	
	51	2009/0120442 A1	05-14-2009	Но	
	52	2010/0307502	12-09-2010	Rummery et al.	
	53	2010/0313891	12-16-2010	Veliss et al.	
	54	2011/0308520	12-22-2011	McAuley et al.	
	55	2012/0132209	05-01-2012	Rummery	
	56	2015/0013678	01-01-2015	McAuley	
	57	2015/0297855	10-22-2015	McAuley et al.	
	58	2016/0038705	02-11-2016	McAuley et al.	

Examiner Signature	/Annette Dixon/ (03/29/2016)	Date Considered
	; : :::: + : : : : : : : : : : : : : : :	

^{*}Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

	Application No.	14/846,226
INFORMATION DISCLOSURE	Filing Date	September 4, 2015
STATEMENT BY APPLICANT	First Named Inventor	Alastair Edwin McAuley
STATEMENT BY ALL LICANT	Art Unit	3778
(Multiple sheets used when necessary)	Examiner	Annette Fredricka Dixon
SHEET 3 OF 6	Attorney Docket No.	FPHCR.112C2

	U.S. PATENT DOCUMENTS					
Examiner Initials	Cite No.	Document Number Number - Kind Code (if known) Example: 1,234,567 B1	Publication Date MM-DD-YYYY	Name	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	
	59	2016/0038706	02-11-2016	McAuley et al.		
	60	2016/0038707	02-11-2016	Allan et al.		

			FOREIGN PATE	ENT DOCUMENTS		
Examiner Initials	Cite No.	Foreign Patent Document Country Code-Number-Kind Code Example: JP 1234567 A1	Publication Date MM-DD-YYYY	Name	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	T¹
	61	CN1784250	06/07/2006	Resmed Ltd.		
	62	CN 1988930 A	06/27/2007	Resmed Ltd.		√- Abs
	63	CN 1901961 A	01/24/2007	Resmed Ltd.		√- Abs
	64	CN 101541380	09/23/2009	RIC Investments LLC		√- Abs
	65	CN 101214402	07/09/2008	Resmed Ltd.		√- Abs
	66	EP 0747078	12/11/1996	Respironics, Inc.		
	67	EP 2 130 563 A1	12/09/2009	Resmed Limited		
	68	FR2658725	08/30/1991	Barthou		
	69	FR2749176	12/05/1997	Midi Oxygene		
	70	JP H09-010311	01/14/1997	Respironics Inc.		√- Abs
	71	JP 2005-529687	10/06/2005	MAP Medizin Technologie Gmbh		√- Abs
	72	JP 2007-516750	06/28/2007	Resmed Ltd.		√- Abs
	73	JP 2007-527271	09/27/2007	Viasys Healthcare Inc.		√- Abs
	74	WO98/018514	05/07/1998	Sleepnet, Corp.		
	75	WO99/058181	11/18/1999	Goldstein		
	76	WO 99/04842 A1	02/04/1999	Respironics Georgia Inc		
	77	WO 2000/069497	11/23/2000	Mallinckrodt Inc.		
	78	WO 2000/74758	12/14/2000	Sleep-Net Corporation		
	79	WO 01/97892A1	12/27/2001	Australian Centre for Advanced Medical Technology LTD		
	80	WO 2004/041341	05/21/2004	Resmed Ltd.		
	81	WO 2004/073778	09/02/2004	Resmed Ltd.		
	82	WO 2007/022562 A1	03/01/2007	Compumedics Limited		

Examiner Signature	/Annette Dixon/ (03/29/2016)	Date Considered	

^{*}Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

	Application No.	14/846,226
INFORMATION DISCLOSURE	Filing Date	September 4, 2015
STATEMENT BY APPLICANT	First Named Inventor	Alastair Edwin McAuley
STATEMENT BY ALL LICANT	Art Unit	3778
(Multiple sheets used when necessary)	Examiner	Annette Fredricka Dixon
SHEET 4 OF 6	Attorney Docket No.	FPHCR.112C2

			FOREIGN PATE	ENT DOCUMENTS		
Examiner Initials	Cite No.	Foreign Patent Document Country Code-Number-Kind Code Example: JP 1234567 A1	Publication Date MM-DD-YYYY	Name	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	T ¹
	83	WO 2007/041786	04/19/2007	Resmed Ltd.		
	84	WO 2007/147088 A2	12/21/2007	Ric Investments LLC		
	85	WO 2008/007985 A1	01/17/2008	Fisher & Paykel Healthcare Limited		
	86	WO 2008/070929 A1	06/19/2008	Resmed Ltd.		
	87	WO 2008/106716 A1	09/12/2008	Resmed Ltd		
	88	WO2008/148086	12/04/2008	Viasys Mfg Inc.		
	89	WO 2009/059353 A1	05/14/2009	Resmed Ltd.		
	90	WO 2009/052560A1	04/30/2009	Resmed Ltd.		
	91	WO 2009/092057 A1	07/23/2009	Menlo Life, Inc.		
	92	WO 2009/139647 A1	11/19/2009	Fisher & Paykel Healthcare Limited		

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ¹
	93	International Preliminary Report on Patentability (IPRP), International Application No. PCT/NZ2009/000219, mailed April 12, 2011, 9 pages.	
	94	International Search Report, International Application No. PCT/NZ2009/000219, mailed February 2, 2010, 3 pages.	
	95	English Translation of Chinese Examination Report; Application No. 2007800266164; 5 pages.	
	96	English Translation of First Office Action for Chinese Application No. 201210080441.8 dated March 24, 2014, in 4 pages.	
	97	Examination Report; Australian Application No. 2007273324; dated May 22, 2012; 3 pages.	
	98	International Search Report for International Application No. PCT/NZ2007/000185, dated October 31, 2007, in 3 pages.	
	99	Second Chinese Office Action for Chinese Patent Application No. 201210080441.8 dated December 1, 2014 in 11 pages (with English translation).	
	100	Australian Examination Report for Patent Application No. 2012265597 dated December 19, 2013, in 5 pages.	
	101	Canadian Examination Report for Application No. 2655839 dated October 4, 2013, in 2 pages.	

Examiner Signature	/Annette Dixon/ (03/29/2016)	Date Considered
	,	

^{*}Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

	Application No.	14/846,226
INFORMATION DISCLOSURE	Filing Date	September 4, 2015
STATEMENT BY APPLICANT	First Named Inventor	Alastair Edwin McAuley
STATEMENT BY AFFEIGANT	Art Unit	3778
(Multiple sheets used when necessary)	Examiner	Annette Fredricka Dixon
SHEET 5 OF 6	Attorney Docket No.	FPHCR.112C2

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ¹
	102	English Translation of Chinese Examination Report; Chinese Application No. 2007800266164; 5 pages.	
	103	International Search Report; PCT/NZ2009/000072; dated July 28, 2009; 3 pages.	
	104	UK Search and Examination Report; March 14, 2013; Application No. GB1210075.6; 2 pages.	
	105	UK Examination Report; dated May 9, 2013; Application No. GB1119385.1; 4 pages.	
	106	Australian Examination Report; dated March 4, 2014; Application No. 2010246985; 5 pages.	
	107	English Translation of JP Examination Report; dated February 10, 2014; Application No. 2012-510418; 4 pages.	
	108	Chinese Examination Report; dated March 27, 2014; Chinese Application No. 201080028029.0; 16 pages.	
	109	GB Combined Search and Examination Report; dated May 7, 2014; Application No. GB1406402.6; 6 pages.	
	110	GB Combined Search and Examination Report; dated May 7, 2014; Application No. GB1406401.8; 4 pages.	
	111	JP Examination Report, Application No. 2012-538784; 3 pages.	
	112	Australian Examination Report; dated August 14, 2015; Application No. 2015202814; 8 pages.	
	113	Chinese Examination Report; dated July 17, 2015; Application No. 201080061122.1; 10 pages.	
	114	Chinese Examination Report; dated September 14, 2015; Application No. 201080028029.0; 3 pages.	
	115	European Extended Search Report; dated September 4, 2015; Application No. 10830251.4; 7 pages.	
	116	European Extended Search Report; dated September 8, 2015; Application No. 10774623.2; 7 pages.	
	117	Japanese Examination Report; dated July 22, 2015; Application No. 2015-098324; 8 pages.	
	118	Japanese Examination Report; dated August 5, 2015; Application No. 2012-538784; 8 pages.	
	119	Australian Examination Report; dated January 9, 2015; Application No. 2010241390; 4 pages.	
	120	English Translation of Chinese Examination Report; dated September 3, 2014; Application No. 201080061122.1; 9 pages.	
		201000001122.1, 9 pages.	

Examiner Signature	/Annette Dixon/ (03/29/2016)	Date Considered
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	Application No.	14/846,226
INFORMATION DISCLOSURE	Filing Date	September 4, 2015
STATEMENT BY APPLICANT	First Named Inventor	Alastair Edwin McAuley
STATEMENT OF APPLICANT	Art Unit	3778
(Multiple sheets used when necessary)	Examiner	Annette Fredricka Dixon
SHEET 6 OF 6	Attorney Docket No.	FPHCR.112C2

	NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ¹	
	121	Second Chinese Office Action; dated January 19, 2015; Application No. 201080028029.0; 16 pages.		
	122	EPO Search Report; dated April 2, 2014; Application No. 09819444.2; 8 pages.		

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Examiner Signatur	e /Annette Dixon/ (03/29/2016)	Date Considered	

^{*}Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Issue Classification | 14846226



Application/Control No.	Applicant(s)/Patent Under Reexamination
14846226	MCAULEY ET AL.

Examiner Art Unit

ANNETTE DIXON 3778

CPC				
Symbol			Туре	Version
A61M	16	7 0666	F	2013-01-01
A61M	16	7 0683	I	2013-01-01
A61M	16	16	I	2013-01-01
A61M	16	<i>i</i> 0825	I	2014-02-04
A61M	16	<i>i</i> 0069	I	2014-02-04
A61M	16	109	I	2014-02-04
A61M	16	0875	I	2013-01-01
A61M	16	0616	I	2014-02-04
A61M	16	<i>i</i> 0816	I	2013-01-01
A61M	2205	<i>f</i> 0216	A	2013-01-01
A61M	16	1 0057	1	2013-01-01
A61M	16	<i>i</i> 08		2013-01-01

CPC Combination Sets									
Symbol	Туре	Set	Ranking	Version					

NONE	Total Claims Allowed:			
(Assistant Examiner)	(Date)	19		
/ANNETTE DIXON/ Primary Examiner.Art Unit 3778	03/29/2016	O.G. Print Claim(s)	O.G. Print Figure	
(Primary Examiner)	(Date)	1	2	

U.S. Patent and Trademark Office Part of Paper No. 20160329

Issue Classification

Application/Control No.	Applicant(s)/Patent Under Reexamination
14846226	MCAULEY ET AL.
Examiner	Art Unit
ANNETTE DIXON	3778

US ORIGINAL CLASSIFICATION						INTERNATIONAL CLASSIFICATION					ATION			
	CLASS SUBCLASS				;	CLAIMED					NON-CLAIMED			
128			207.18			Α	6	1	М	16 / 06 (2006.01.01)				
	С	ROSS REF	ERENCE	(S)										
CLASS	SU	BCLASS (ON	IE SUBCLAS	SS PER BLC	OCK)									
128	207.13	207.11	206.21	205.25	200.24									
128	204.21	204.18												
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NE Total Claims A			
(Assistant Examiner)	(Date)	1	9
/ANNETTE DIXON/ Primary Examiner.Art Unit 3778	03/29/2016	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	2

U.S. Patent and Trademark Office Part of Paper No. 20160329

Issue Classification

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	Application/Control No.	Applicant(s)/Patent Under Reexamination
)	14846226	MCAULEY ET AL.
	Examiner	Art Unit
	ANNETTE DIXON	3778

\boxtimes	Claims re	numbere	ed in the sa	ame orde	r as prese	ented by a	applicant		СР	A [] T.D.		R.1.4	47	
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
1	1	17	17												
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16	16														

NE Total Claims A			
(Assistant Examiner)	(Date)	1	9
/ANNETTE DIXON/ Primary Examiner.Art Unit 3778	03/29/2016	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	2

U.S. Patent and Trademark Office Part of Paper No. 20160329

Search Notes

Application/Control No.	Applicant(s)/Patent Under Reexamination
14846226	MCAULEY ET AL.
Examiner	Art Unit
ANNETTE DIXON	3778

CPC- SEARCHED								
Symbol	Date	Examiner						
A61M15/08; A61M16/06; A61M16/0616; A61M16/0633; A61M16/0666; A61M16/0683; A61M16/0825; A61M16/208; A61M2210/0618; A61M2240/00; A62B18/00; A62B18/02; A62B18/08; A62B18/084; A62B35/00	12/1/15	afd						
Updated Above Search	3/29/16	afd						

CPC COMBINATION SETS - SEARCHED					
Symbol	Date	Examiner			

US CLASSIFICATION SEARCHED						
Class	Subclass	Date	Examiner			

SEARCH NOTES		
Search Notes	Date	Examiner
Inventor Name Search	12/1/15	afd

INTERFERENCE SEARCH					
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner		
SAME AS ABOVE	See search history print out including PG-PUB database search	3/29/16	afd		

Part of Paper No.: 20160329RMD U.S. Patent and Trademark Office

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	3694	((128/207.18) or (128/206.21) or (128/207.13) or (128/206.11) or (128/206.18) or (128/203.22)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	OFF	2016/03/29 21:02
L2	12144	((128/200.24) or (128/200.26) or (128/203.12) or (128/203.15) or (128/203.16) or (128/203.17) or (128/205.25) or (128/206.21)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	OFF	2016/03/29 21:02
L3	3694	((128/207.18) or (128/206.21) or (128/207.13) or (128/206.11) or (128/206.18) or (128/203.22)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	OFF	2016/03/29 21:02
L4	12144	((128/200.24) or (128/200.26) or (128/203.12) or (128/203.15) or (128/203.16) or (128/203.17) or (128/205.25) or (128/206.21)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	OFF	2016/03/29 21:02
L5	3694	((128/207.18) or (128/206.21) or (128/207.13) or (128/206.11) or (128/206.18) or (128/203.22)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2016/03/29 21:02
L6	12144	((128/200.24) or (128/200.26) or (128/203.12) or (128/203.15) or (128/203.16) or (128/203.17) or (128/205.25) or (128/206.21)).OCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB		OFF	2016/03/29 21:02
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		128/DIG.26; 2/454; 285/101; 285/106; 285/11; 285/111; 285/112; 285/113; 285/114; 285/121.7; 285/124.1; 285/124.4; 285/127.1; 285/124.1; 285/133.21; 285/14; 285/144.1; 285/145.3; 285/146.1; 285/147.1; 285/148.2; 285/15; 285/181; 285/190; 285/223; 285/226; 285/254; 285/261; 285/263; 285/264; 285/265; 285/266; 285/267; 285/269; 285/270; 285/271; 285/276; 285/281; 285/288.11; 285/288.5; 285/288.6; 285/29; 285/299; 285/302; 285/305; 285/312; 285/316; 285/317; 285/321; 285/322; 285/328; 285/330; 285/331; 285/332.2; 285/333; 285/336; 285/347; 285/348; 285/349; 285/351; 285/358; 285/359; 285/363; 285/368; 285/370; 285/374; 285/375; 285/383; 285/47; 285/91; 285/919; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/94; 285/95; 285/98; 600/532; 600/543; 604/94.01; 606/192; D24/110.4; D24/164).ccls.				
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L15	244	14 and ((headgear harness strap belt) and (lateral laterally) and (nose nostril nasal nare cannulae cannula)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2016/03/29 21:06
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S3	61680	(((nasal nose nare) with (cannula prong)) cannula)	US-PGPUB; USPAT; USOCR	OR	ON	2011/08/09 15:16
S4	4158	((((nasal nose nare) with (cannula prong)) cannula) and "128".clas.	US-PGPUB; USPAT; USOCR	OR	ON	2011/08/09 15:16
S5	2375	((((nasal nose nare) with (cannula prong)) cannula) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2011/08/09 15:16
S6	12	("20100252044" "6626177" "6581601" "20070074724" "20030200970" "7578294" "7874293" "20040065330" "5193532" "20050011524" "4915105" "4782832").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2011/08/09 15:41
S7	2453	angled with (prong cannula)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2011/08/10 09:30
S8	135	S7 and "128".clas.	US-PGPUB;	OR	ON	2011/08/10

			USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB			09:30
S9	71	S7 and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2011/08/10 09:30
S10	38	angled with (prong pillow cannula) with (nose nasal nare)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB		ON	2011/08/10 09:31
S11	3	S10 and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB		ON	2011/08/10 09:31
S12	45	offset with (prong pillow cannula) with (nose nasal nare)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB		ON	2011/08/10 09:51
S13	2	S12 and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB		ON	2011/08/10 09:51
S14	4863	(prong pillow cannula) with (nose nasal nare)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB		ON	2011/08/10 09:54
S15	809	S14 and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB		ON	2011/08/10 09:54
S16	3188	(cannula ((prong pillow cannula) with (nose nasal nare))) same (replacable removable)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB		ON	2011/08/10 12:12
S17	150	S16 and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB		ON	2011/08/10 12:12
S18	984	(((prong pillow cannula) with (nose	US-PGPUB;	OR	ON	2011/08/10

		nasal nare))) and (replacable removable interchangable)	USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB			12:15
S19	125	S18 and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2011/08/10 12:15
S20	4276	(((prong cannula) with (nose nasal nare)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2011/08/10 12:17
S21	720	\$20 and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2011/08/10 12:17
S22	108	("0443191" "0718785" "0838434" "1192186" "1221246" "1270404" "1443820" "1610793" "2100374" "2702089" "2792000" "3731678" "3902486").PN. OR ("4915105").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2011/08/10 12:27
S23	2252	(mcualey prentice gleeson).in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2011/08/10 16:03
S24	18	(mcualey prentice gleeson).in. near (alastair craig oliver)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/08/10 16:03
\$25	2	(((((prong cannula) and (nose nasal nare)))).clm. and S24	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2011/08/10 16:04
S26	2312	((128/207.18) or (128/206.21) or (128/207.13) or (128/206.11) or (128/206.18) or (128/203.22)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	OFF	2011/08/10 16:06
S27	625	((((prong cannula) and (nose nasal nare)))) and S26	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2011/08/10 16:06
S28	6966	((128/200.24) or (128/200.26) or	US-PGPUB;	OR	OFF	2011/08/10

		(128/203.12) or (128/203.15) or (128/203.16) or (128/203.17) or (128/205.25) or (128/206.21)).CCLS.	USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB			16:08
S29	1022	(((((prong cannula) and (nose nasal nare)))) and (\$26 \$28)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2011/08/10 16:09
S30	5446	(cannula ((nose nasal nare nostril) with (plug prong pillow))) and "128".clas.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/11 14:01
S31	2094	(cannula ((nose nasal nare nostril) with (plug prong pillow))) and "128".clas. and (\$PAP (positive with pressure))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/11 14:02
S32	8	tiep.in. and "128".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/11 14:03
S33	36	("2535938" "2677371" "3794021" "3973564" "4054133" "4106505" "4120300" "4256101").PN. OR ("4535767").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2013/04/11 14:04
S34	10	(US-20110009763-\$ or US- 20080142019-\$ or US-20070175473-\$ or US-20070107737-\$ or US- 20050284484-\$ or US-20040134494- \$).did. or (US-8333194-\$ or US- 7225807-\$ or US-5477852-\$ or US- 5269296-\$).did.	US-PGPUB; USPAT	OR	ON	2013/04/11 14:46
S35	4	S34 and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/11 14:46
S36	150	("2793326" "2931358" "3481339" "3516407" "3640282" "3707151" "3766924" "3794036" "3850176" "3856051" "3903893" "4056104" "4090518" "4106505" "4156426" "4178937" "4235239" "4273124" "4422456" "4465067" "4538606" "4709308" "4753233" "4782832" "4818320" "4836200" "4915105" "5042478").PN. OR ("5269296").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2013/04/11 14:47
S37	218	(wood landis).in. and "128".clas.	US-PGPUB; USPAT; USOCR	OR	ON	2013/04/11 14:53

S38	70	S37 and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/11 14:54
S39	2	("6439234").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	OFF	2013/04/11 14:56
S40	2	("6478026").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	OFF	2013/04/11 14:59
S41	2	("6679265").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	OFF	2013/04/11 15:00
S42	2	("20030079749").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	OFF	2013/04/12 09:10
S43	0	(humidifer with (\$PAP)) and "128".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/12 09:31
S44	0	(humidifer same (\$PAP)) and "128".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/12 09:31
S45	1	(humidifer and (\$PAP)) and "128".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/12 09:31
S46	0	(humidifer and (\$PAP)) and "128".clas. and @ad< = "20040223"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2013/04/12 09:31

		1	IBM_TDB			
S47	14	(humidifer and (\$PAP (positive with pressure) blower fan turbine impeller generator generating compressor pump)) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/12 09:32
S48	0	(option\$ with humidifer with (\$PAP (positive with pressure) blower fan turbine impeller generator generating compressor pump)) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/12 09:32
S49	0	(option\$ same humidifer same (\$PAP (positive with pressure) blower fan turbine impeller generator generating compressor pump)) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/12 09:33
S50	733	((humidify humidifier humidifying) and (\$PAP (positive with pressure) blower fan turbine impeller generator generating compressor pump)) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/12 09:34
S51	11	(option\$ with (humidify humidifier humidifying) with (\$PAP (positive with pressure) blower fan turbine impeller generator generating compressor pump)) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/12 09:34
S52	45	matula.in. and "128".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/12 09:38
S53	2	S52 and @ad<="20040223"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/12 09:38
S54	309	(ball with socket) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/12 09:39
S55	109	(ball with socket) and "128".clas. and @ad<="20040223" and (cannula cannulae (nose nasal nare nostril))	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2013/04/12 09:40

			EPO; JPO; DERWENT IBM_TDB			
S56	1267	(oval ellip\$) and "128".clas. and @ad<="20040223" and (cannula cannulae (nose nasal nare nostril))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/12 09:57
S57	350	"128".clas. and @ad<="20040223" and ((cannula cannulae (nose nasal nare nostril)) same (oval ellip\$))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/12 09:58
S58	745	"128".clas. and @ad<="20040223" and ((strap headgear harness) with (tube hose))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/12 10:28
S59	21	(mcualey prentice gleeson).in. near (alastair craig oliver)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/12 10:59
S60	4	S59 and (aperture hole opening vent).clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/12 10:59
S61	4	S59 and (aperture hole opening vent).clm. and (cannula cannulae nasal nostril nose nare).clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/12 11:00
S62	1	S59 and (aperture hole opening vent).clm. and (cannula cannulae nasal nostril nose nare).clm. and flange.clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/12 11:00
S63	2817	((128/207.18) or (128/206.21) or (128/207.13) or (128/206.11) or (128/206.18) or (128/203.22)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	OFF	2013/09/10 12:49
S64	9019	((128/200.24) or (128/200.26) or (128/203.12) or (128/203.15) or (128/203.16) or (128/203.17) or (128/205.25) or (128/206.21)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2013/09/10 12:49

S65	10479	S63 S64	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/09/10 12:49
S66	2253	(nose nostril nasal nare cannula) and S65 and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 12:49
S67	7697	(nose nostril nasal nare cannula) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 13:08
S68	1783	(nose nostril nasal nare cannula) and (ball joint socket) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 13:08
S69	1378	S68 not S66	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 13:08
S70	4234	(nose nostril nasal nare cannula) and (ball joint socket) and "128".clas.	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 13:18
S71	2451	S70 not (S66 S68)	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 13:18
S72	48	matula.in. and "128".clas.	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 14:08
S73	62	hoffman.in. and "128".clas.	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 14:08
S74	247	RIC.as. and "128".clas.	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 14:10
S75	2	("2003180088").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	OFF	2013/09/10 14:13
S76	2	("20030180088").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	OFF	2013/09/10 14:13
S77	9	(("20030180088") or ("1695263") or ("7178525")).PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2013/09/10 14:14
S78	12	(("20030180088") or ("1695263") or ("7178525") or ("20030200970")).PN.	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2013/09/10 14:16

			EPO; JPO; DERWENT IBM_TDB			, , , , , , , , , , , , , , , , , , , ,
S79	112	((nose nostril nasal nare cannula) with (vent venting)) and S65 and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 14:31
S80	2	((nose nostril nasal nare cannula) with (ball with socket)) and S65 and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 14:34
S81	1	((vent venting) with (ball with socket)) and S65 and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 14:35
S82	2	((vent venting) same (ball with socket)) and S65 and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 14:36
S83	5	ziaee.in. and S65 and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 14:46
S84	1660	((tube conduit hose) with (strap headgear)) and "128".clas.	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:05
S85	748	((tube conduit hose) with (strap headgear)) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:05
S86	19794	((tube tubular conduit hose) adj\$3 (strap headgear)) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:06
S87	21443	((tube tubular conduit hose) near\$3 (strap headgear)) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:06
S88	20782	((tube conduit hose) near\$3 (strap headgear)) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:06
S89	20782	((tube conduit hose) near\$3 (strap headgear)) and "128".clas. and @ad<= "20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:06
S90	18892	((tube conduit hose) adj\$3 (strap headgear)) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:06
S91	748	((tube conduit hose) with (strap headgear)) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:06
S92	1	((tube conduit hose) with (strap headgear) with textile) and "128".clas. and @ad<= "20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:08
S93	574	((tube conduit hose tubular) with (strap headgear)).detd. and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:09
S94	16	((tube conduit hose tubular) with (strap headgear) with (textile fabric)).detd. and "128".clas. and @ad<= "20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:11
S95	17	((tube conduit hose tubular) with (strap headgear harness) with (textile fabric)).detd. and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:11
S96	622	((tube conduit hose tubular) with (strap	US-PGPUB;	OR	ON	2013/09/10

	headgear harness)).detd. and "128".clas. and @ad<="20040223"	USPAT; USOCR			16:13
605	S96 not S95	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:13
76	(thickness with (nasal nostril nare nose) with (prong pillow))	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:30
6	(thickness with (nasal nostril nare nose) with (prong pillow)) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:30
23	(mcualey prentice gleeson).in. near (alastair craig oliver)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/09/10 16:45
1	S100 and (aperture hole opening vent venting).clm. and (cannula cannulae nasal nostril nose nare).clm. and flange.clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/09/10 16:45
1	S100 and (aperture hole opening vent venting leak leaking leakage).clm. and (cannula cannulae nasal nostril nose nare).clm. and flange.clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/09/10 16:45
6	S100 and (aperture hole opening vent venting leak leaking leakage).clm. and (cannula cannulae nasal nostril nose nare).clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/09/10 16:46
6	S100 and (aperture hole opening vent venting leak leaking leakage).clm. and (cannula cannulae nasal nostril nose nare).clm. and (ball and socket)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/09/10 16:46
2	S100 and (aperture hole opening vent venting leak leaking leakage).clm. and (cannula cannulae nasal nostril nose nare).clm. and (ball and socket).clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/09/10 16:46
2202	((ball socket) with (joint connector connection) with (leak leakage leaking))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2014/02/28 08:48
3083	((128/207.18) or (128/206.21) or (128/207.13) or (128/206.11) or (128/206.18) or (128/203.22)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	OFF	2014/02/28 08:52
	76 6 23 1 6 6 2 2202	"128".das. and @ad<="20040223" S96 not S95	"128" clas. and @ad< = "20040223" USOCR US-PGPUB; USPAT; USOCR US-PGPUB; USPAT; USOCR US-PGPUB; With (prong pillow) US-PGPUB; USPAT; USOCR US-PGPUB; With (prong pillow) and "128" clas. and @ad< = "20040223" US-PGPUB; USPAT; USOCR US-PGPUB; USPAT; USOCR US-PGPUB; USPAT; USOCR US-PGPUB; USPAT; USOCR; EPC; JPC; DERWENT IBM TDB US-PGPUB; USPAT; USOCR; EPC; JPC; DERWENT IBM TDB US-PGPUB; US-PGPUB	"128" das. and @ad<="20040223" USCOR	"128" clas. and @ad<= "20040223" USCOR

		(128/203.12) or (128/203.15) or (128/203.16) or (128/203.17) or (128/205.25) or (128/206.21)).OCLS.	USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB			08:52
S109	3083	((128/207.18) or (128/206.21) or (128/207.13) or (128/206.11) or (128/206.18) or (128/203.22)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/02/28 08:52
S110	9990	((128/200.24) or (128/200.26) or (128/203.12) or (128/203.15) or (128/203.16) or (128/203.17) or (128/205.25) or (128/206.21)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	OFF	2014/02/28 08:52
S111	11515	S109 S110	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/28 08:52
S112	19	((ball socket) with (joint connector connection) with (leak leakage leaking)) and (S107 S108 S111)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2014/02/28 08:52
S113	11	((ball socket) with (joint connector connection) with (leak leakage leaking) with (channel passage passageway)) and (S107 S108 S111)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2014/02/28 08:54
S114	11	((ball socket) with (joint connector connection) with (leak leakage leaky leaking) with (channel passage passageway)) and (S107 S108 S111)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/28 08:58
S115	210	((ball socket) with (joint connector connection) with (leak leakage leaky leaking) with (channel passage passageway))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB		ON	2014/02/28 08:59
S116	19	S115 AND ((A61M16/06 OR A61M16/0683 OR A61M16/08 OR A61M2016/0825 OR A61M2016/0611 OR A61M2016/0616 OR A61M2016/0638 OR A61M2016/0633 OR A61M1/1698 OR A61M2001/1006 OR A61M2205/42 OR A61M3/0258 OR A61M2039/1027 OR A61M3/0258 OR A61M39/10 OR A61M39/1011 OR A61M39/105 OR A61M3/0254).CPC. OR (128/205.25 OR 128/206.24 OR 128/206.27 OR 128/207.11 OR	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/28 09:00

		128/206.18 OR 128/206.23 OR 128/206.21 OR 128/204.18 OR 128/207.18 OR 128/200.22 OR 128/201.12 OR 128/201.13 OR 128/201.14 OR 128/205.27 OR 128/205.28 OR 128/206.11 OR 128/206.12 OR 128/206.22 OR 128/207.12 OR 128/207.16 OR 128/912).CCLS.)				
S117	2	S116 and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2014/02/28 09:00
S118	3777	(((ball socket) adj (joint connector connection)) with ((leak leakage leaky leaking) (channel passage passageway)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2014/02/28 09:10
S119	29	(((ball socket) adj (joint connector connection)) with ((leak leakage leaky leaking) with (channel passage passageway)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/28 09:13
S120	44	(((ball socket) adj (joint connector connection)) with ((leak leakage leaky leaking) same (channel passage passageway)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/28 09:13
S121	24	(S119 S120) and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB		ON	2014/02/28 09:13
S122	93	(((ball socket) with (joint connector connection)) with ((leak leakage leaky leaking) same (channel passage passageway))) and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/28 09:23
S123	69	S122 not (S119 S120 S121)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/28 09:23
S124	257	(((ball socket) with (joint connector connection)) with ((leak leakage leaky leaking) same (channel passage passageway)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2014/02/28 09:24
S125	83	S124 AND ((A61M16/06 OR A61M16/0683 OR A61M16/08 OR A61M2016/0825 OR A61M2016/0611 OR A61M2016/0616 OR	US-PGPUB; USPAT; USOCR; EPO; JPO;		ON	2014/02/28 09:25

A61M2016/0638 OR A61M2016/0633 OR A61M1/1698 OR A61M2001/1006 OR A61M2205/42 OR A61M3/0258 OR A61M2039/1027 OR A61M39/1011 OR A61M39/105 OR A61M39/1011 OR A61M39/105 OR A61M3/0254 OR F16L37/23 OR F16L1/15 OR F16L27/04 OR F16L37/413 OR F16L27/047 OR F16L27/053 OR F16L27/06 OR F16L37/40 OR F16L11/18 OR F16L37/40 OR F16L11/18 OR F16L37/30 OR F16L13/10 OR F16L37/30 OR F16L37/32 OR F16L37/30 OR F16L37/32 OR F16L37/34 OR F16L37/36 OR F16L41/021 OR F16L37/36 OR F16L41/021 OR F16L59/185 OR F16L11/22 OR F16L11/133 OR F16L11/22 OR F16L11/103 OR F16L27/0804 OR F16L27/073 OR F16L27/0804 OR F16L27/073 OR F16L27/0828 OR F16L27/0824 OR F16L27/0828 OR F16L27/0857 OR F16L37/38 OR F16L37/127 OR F16L37/38 OR F16L37/44 OR	DERWENT; IBM_TDB	
128/201.14 OR 128/205.27 OR 128/205.28 OR 128/206.11 OR 128/206.12 OR 128/206.22 OR 128/207.12 OR 128/207.16 OR 128/912 OR 285/261 OR 285/146.1 OR 285/106 OR 285/190 OR 285/271 OR 285/330 OR 285/332.2 OR 285/333 OR 285/349 OR 285/94 OR 285/101 OR 285/111 OR 285/133.21 OR 285/226 OR 285/265 OR 285/269 OR 285/270 OR 285/265 OR 285/281 OR 285/347 OR 285/351 OR 285/370 OR 285/374 OR 285/351 OR 285/8 OR 285/91 OR 285/918 OR 285/98 OR 285/11 OR 285/112 OR 285/113 OR 285/11 OR 285/112 OR 285/113 OR 285/11 OR 285/112 OR 285/113 OR 285/114 OR 285/127.1 OR 285/124.1 OR 285/124.4 OR 285/127.1 OR 285/145.3 OR 285/147.1 OR 285/148.2 OR 285/15 OR 285/144.1 OR 285/223 OR 285/254 OR 285/263 OR 285/264 OR 285/266 OR 285/267 OR 285/288.6 OR 285/29 OR 285/299 OR 285/302 OR 285/305 OR 285/312 OR 285/316 OR 285/317 OR 285/311 OR 285/316 OR 285/317 OR 285/311 OR 285/316 OR 285/317 OR 285/311 OR 285/316 OR 285/317		

		OR 285/331 OR 285/336 OR 285/343 OR 285/348 OR 285/358 OR 285/359 OR 285/363 OR 285/368 OR 285/375 OR 285/383 OR 285/419 OR 285/422 OR 285/423 OR 285/47 OR 285/55 OR 285/88 OR 285/904 OR 285/910 OR 285/914 OR 285/917 OR 285/919 OR 285/95).OCLS.)				
S126	93	S124 and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/28 09:25
S127	484	(((ball socket) with (joint connector connection)) with ((vent venting vented leak leakage leaky leaking) same (channel passage passageway)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2014/02/28 09:26
S128	179	S127 and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/28 09:26
S129	86	S128 not (S119 S120 S121 S125 S126)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/28 09:27
S130	94	S127 AND ((A61M16/06 OR A61M16/0683 OR A61M16/08 OR A61M2016/0825 OR A61M2016/0611 OR A61M2016/0638 OR A61M2016/0633 OR A61M2016/0638 OR A61M2001/1006 OR A61M205/42 OR A61M300258 OR A61M2039/1027 OR A61M39/1011 OR A61M39/10 OR A61M39/10 OR A61M39/10 OR A61M39/10 OR A61M39/10 OR A61M39/1011 OR A61M39/105 OR A61M30254 OR F16L37/23 OR F16L1/15 OR F16L27/04 OR F16L37/413 OR F16L27/047 OR F16L37/40 OR F16L11/18 OR F16L37/40 OR F16L11/18 OR F16L37/30 OR F16L13/10 OR F16L37/30 OR F16L37/32 OR F16L37/34 OR F16L37/36 OR F16L37/34 OR F16L37/36 OR F16L41/021 OR F16L59/185 OR F16L11/22 OR F16L15/001 OR F16L19/02 OR F16L15/001 OR F16L19/02 OR F16L19/04 OR F16L1/26 OR F16L2201/30 OR F16L23/167 OR F16L27/0828 OR F16L27/073 OR F16L27/0828 OR F16L27/073 OR F16L27/0828 OR F16L27/0857 OR F16L27/10828 OR F16L27/12 OR F16L37/38 OR F16L37/12 OR F16L37/38 OR F16L37/44 OR F16L37/38 OR F16L37/565 OR			ON	2014/02/28

		F16L39/00 OR F16L39/005 OR F16L39/06 OR F16L41/04 OR F16L47/03 OR F16L47/32 OR F16L51/025 OR F16L55/1683 OR F16L55/17 OR F16L59/22). CPC. OR (128/205.25 OR 128/206.24 OR 128/206.27 OR 128/207.11 OR 128/207.13 OR 128/201.19 OR 128/206.18 OR 128/204.18 OR 128/207.18 OR 128/201.13 OR 128/207.18 OR 128/201.13 OR 128/201.12 OR 128/201.13 OR 128/201.14 OR 128/205.27 OR 128/201.14 OR 128/205.27 OR 128/201.14 OR 128/206.21 OR 128/201.14 OR 128/206.21 OR 128/201.14 OR 128/206.22 OR 128/207.12 OR 128/206.11 OR 128/206.12 OR 128/207.16 OR 128/207.12 OR 128/207.16 OR 128/912 OR 285/261 OR 285/146.1 OR 285/106 OR 285/190 OR 285/271 OR 285/330 OR 285/332.2 OR 285/333 OR 285/349 OR 285/332.2 OR 285/333 OR 285/349 OR 285/33.21 OR 285/374 OR 285/265 OR 285/269 OR 285/270 OR 285/265 OR 285/269 OR 285/374 OR 285/276 OR 285/370 OR 285/374 OR 285/351 OR 285/370 OR 285/374 OR 285/110 OR 285/13 OR 285/31 OR 285/110 OR 285/110 OR 285/111 OR 285/113 OR 285/111 OR 285/112 OR 285/113 OR 285/114 OR 285/110 OR 285/113 OR 285/114 OR 285/127.1 OR 285/145.3 OR 285/127.1 OR 285/124.1 OR 285/124.4 OR 285/127.1 OR 285/145.3 OR 285/127.1 OR 285/124.1 OR 285/124.4 OR 285/127.1 OR 285/124.1 OR 285/124.4 OR 285/127.1 OR 285/124.1 OR 285/124.4 OR 285/127.1 OR 285/130 OR 285/124.4 OR 285/127.1 OR 285/130 OR 285/130 OR 285/263 OR 285/223 OR 285/254 OR 285/263 OR 285/280.6 OR 285/254 OR 285/269 OR 285/280.6 OR 285/250 OR 285/269 OR 285/380.0 OR 285/250 OR 285/269 OR 285/380.0 OR 285/305 OR 285/331 OR 285/336 OR 285/305 OR 285/331 OR 285/336 OR 285/359 OR 285/331 OR 285/336 OR 285/359 OR 285/333 OR 285/360 OR 285/359 OR 285/333 OR 285/360 OR 285/359 OR 285/333 OR 285/350 OR 285/359 OR 285/333 OR 285/360 OR 285/359 OR 285/333 OR 285/350 OR 285/359 OR 285/348 OR 285/350 OR 285/359 OR 285/363 OR 285/360 OR 285/359 OR 285/363 OR 285/350 OR 285/359 OR 285/363 OR 285/910 OR 285/95).OCLS.)				
S131	32	S130 and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/28 09:38
S132	12	(((ball socket) with (joint connector connection)) with ((vent venting vented leak leakage leaky leaking) same (channel passage passageway))) and ((A61M2016/0825).CPC.)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/28 10:43
S133	45	(((ball socket) and (joint connector connection)) and ((vent venting vented leak leakage leaky leaking) and (channel passage passageway))) and ((A61M2016/0825).CPC.)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2014/02/28 10:43

			IBM_TDB			
S134	3	S133 and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2014/02/28 10:44
S135	32	("2366067" "3431370" "3548827" "4004586" "4056116" "4084843" "4146254" "4676241" "4686977" "4773680" "4778447").PN. OR ("4875718").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2014/02/28 10:44
S136	77424	(128/200.14; 128/200.22; 128/200.24; 128/200.26; 128/201.12; 128/201.13; 128/201.14; 128/201.19; 128/201.22; 128/202.27; 128/203.15; 128/203.15; 128/203.16; 128/203.17; 128/203.22; 128/203.25; 128/203.26; 128/204.12; 128/204.23; 128/205.24; 128/204.18; 128/205.27; 128/205.25; 128/205.27; 128/205.26; 128/206.11; 128/206.12; 128/206.13; 128/206.13; 128/206.23; 128/206.24; 128/206.26; 128/206.23; 128/206.24; 128/206.26; 128/206.27; 128/207.14; 128/207.15; 128/207.13; 128/207.14; 128/207.15; 128/207.16; 128/207.17; 128/207.18; 128/207.16; 128/207.17; 128/207.18; 128/207.16; 128/207.17; 128/207.18; 128/912; 128/DIG.26; 2/454; 285/101; 285/106; 285/11; 285/121.7; 285/124.1; 285/124.4; 285/127.1; 285/124.1; 285/146.1; 285/147.1; 285/148.2; 285/15; 285/264; 285/266; 285/267; 285/269; 285/265; 285/266; 285/267; 285/269; 285/270; 285/271; 285/302; 285/303; 285/303; 285/303; 285/331; 285/332.2; 285/302; 285/305; 285/305; 285/312; 285/332.2; 285/333; 285/336; 285/347; 285/331; 285/332.2; 285/333; 285/336; 285/347; 285/348; 285/349; 285/349; 285/347; 285/349; 285/349; 285/347; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/349; 285/94; 285/91; 285/919; 285/94; 285/91; 285/919; 285/94; 285/95; 285/98; 600/542; 600/543; 604/94.01; 606/192; D24/110.4; D24/164).ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/14 16:14
S137	35	(US-20040134494-\$ or US-20050284484-\$ or US-20070107737-\$ or US-20110009763-\$ or US-20080142019-\$ or US-20070175473-\$ or US-20020059935-\$ or US-20030200970-\$).did. or (US-7225807-\$ or US-5269296-\$ or US-5477852-\$ or US-8333194-\$ or US-7059328-\$ or US-7047974-\$ or US-7000613-\$ or US-	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2015/09/14 16:14

	6997177-\$ or US-6994089-\$ or US-6863069-\$ or US-6807967-\$ or US-6595215-\$ or US-4915105-\$ or US-7096864-\$ or US-5921239-\$ or US-5259376-\$ or US-5054482-\$ or US-6986353-\$ or US-6588424-\$ or US-5957132-\$ or US-5941245-\$ or US-5771886-\$ or US-4915106-\$ or US-4437462-\$).did. or (DE-2209244-\$).did.				
S138 78421	(A61B5/0205; A61B5/08; A61B5/083; A61B5/0836; A61B5/087; A61B5/097; A61B5/087; A61B5/097; A61B5/14551; A61B5/4806; A61B5/4818; A61B5/6819; A61J1/1418; A61J11/0005; A61M11/005; A61M11/00; A61M11/005; A61M15/0033; A61M15/003; A61M15/003; A61M15/003; A61M15/003; A61M15/003; A61M16/00; A61M16/00; A61M16/003; A61M16/0057; A61M16/0066; A61M16/044; A61M16/0465; A61M16/0493; A61M16/0497; A61M16/0493; A61M16/0497; A61M16/0633; A61M16/0672; A61M16/0633; A61M16/0672; A61M16/0685; A61M16/0858; A61M16/085; A61M16/085; A61M16/085; A61M16/085; A61M16/085; A61M16/085; A61M16/087; A61M16/107; A61M10/107; A61M10/107; A61M2005/308; A61M2005/308; A61M2005/308; A61M2005/308; A61M2205/308; A61M2230/43; A	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2015/09/14

		B64D2231/025; F16L1/15; F16L1/26; F16L11/133; F16L11/18; F16L11/22; F16L13/02; F16L13/10; F16L15/001; F16L19/02; F16L19/04; F16L2201/30; F16L23/00; F16L23/167; F16L27/04; F16L27/047; F16L27/053; F16L27/06; F16L27/067; F16L27/073; F16L27/0804; F16L27/0824; F16L27/0828; F16L27/0857; F16L27/0861; F16L27/1004; F16L27/12; F16L33/22; F16L37/127; F16L37/32; F16L37/34; F16L37/36; F16L37/38; F16L37/34; F16L37/36; F16L37/38; F16L37/56; F16L37/56; F16L37/56; F16L37/56; F16L37/56; F16L37/56; F16L37/56; F16L41/021; F16L41/04; F16L47/03; F16L47/32; F16L59/185; F16L55/1683; F16L55/17; F16L59/185; F16L59/21; F16L59/22; Y10S128/26; Y10S128/912).cpc.				
S139	1923	(S136 S138) and (swivel\$ (ball with socket) (ball adj joint) (socket adj joint)) and (nose nostril nasal nare cannulae cannula)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/14 16:17
S140	512	S139 and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/14 16:18
S141	1354	("0443191" "0628111" "0718785" "0781516" "0812706" "0835075" "0838434" "1081745" "1125542" "1139177" "1158780" "1176886" "1192186" "1203079" "1206045" "1221246" "1270404" "1288647" "1443820" "1610793" "1632449" "1653572" "1818028" "1835757" "1837591" "1926027" "20020046755" "20020112730" "20020124849" "20030111081" "20030189492" "20040035431" "20050051176" "20050051176" "20050051176" "20050051178" "2056753" "2185997" "2241535" "2245969" "2248477" "2254854" "2259817" "2287939" "2317608" "2378468" "2473518" "2477706" "2493326" "2502734" "2578621" "2793326" "2502734" "2578621" "2793326" "2810385" "2820651" "2868199" "2872923" "2931356" "2931358" "2931356" "3040741" "3056402" "3066674" "3182659" "3189027" "3193624" "3193624" "3193624" "3193624" "3193624" "3193624" "3193624" "3193624" "3193624" "3193624" "3193624" "3299755" "3234939" "3238943"	US-PGPUB; USPAT; USOCR	OR	O	2015/09/14 17:04

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"3363833"	"3481339"	"3516407"	
"3556122"	"3566862"	"3568678"	
"3580051"	"3599636"	"3608574"	
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"3640282"	"3659612"	"3670726"	
"3672384"	"3680556"	"3682171"	
"3683907"	"3690317"	"3693624"	
		"3720235"	
"3700000"	"3707151"		
"3731678"	"3739774"	"3762407"	
"3766924"	"3792702"	"3794036"	
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"3877425"	"3902486"	"3903893"	
"3905361"	"3958275"	"3978854"	
"4033353"	"4051205"	"4056104"	
"4064882"	"4077404"	"4090518"	
"4106505"	"4146034"	"4151843"	
		l I	
"4152017"	"4156426"	"4157090"	
"4166467"	"4167185"	"4172455"	
"4178937"	"4216769"	"4219020"	
"4226234"	"4230097"	"4233972"	
"4235229"	"4235239"	"4237080"	
"4245632"	"4258710"	"4266540"	
"4267845"	"4273124"	"4274406"	
"4276877"	"4304229"	"4312359"	
"4328797"	"4336798"	"4347205"	
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"4367735"	"4367816"	"4402316"	
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"4406283"	"4412537"	"4414973"	
"4422456"	"4437462"	"4454881"	
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"4546491"	"4549542"	"4558710"	
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"4587967"	"4595003"	"4601465"	
"4602644"	"4616646"	"4616647"	
"4617637"	"4621632"	"4622964" I	
"4622965"	"4625721"	"4648394"	
"4649912"	"4655213"	"4657010"	
"4660555"	"4664108"	"4665570"	
"4671271"	"4674492"	"4676236"	
i	"4677975"		
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"4799477"	"4807617"	"4808160"	
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"4905683"	"4907584"	"4910806"	
"4915105"	"4915106"	"4919128"	
"4938210"	"4938212"	"4941469"	
"4944310"			
	"4971051"	"4974586"	
"4986269"	"4987895"	"4989596"	
"4989599"	"4996983"	"5000173"	
"5005568"	"5005571"	"5018519"	
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"5133347"	"5137017"	"5139510"	***************************************
"5140980"	"5140982"	"5148802"	
"5159938"	"5161525"	"5178138"	***************************************
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"5279286"	"5279289"	"5280784"	
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"5419318" "5429683"	"5425359" "5431156"	"5429126" "5431158"	***************************************
"5437267"	5431136 "5438979"	"5438981"	***************************************
"5441046"	"5443061"	"5477852"	***************************************
"5479920"	"5488948"	"5492116"	***************************************
"5501214"	"5503147"	"5509404"	***************************************
"5509409" "5526806"	"5517986"	"5522382"	***************************************
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"5542128"	"5546936"	"5549103"	***************************************
"5558084"	"5558089"	"5560354"	***************************************
"5564415"	"5570682"	"5570689"	***************************************
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"5645049"	"5647355"	"5647357"	***************************************
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"5655527"	"5657493"	"5657752"	***************************************
"5662101"	"5664566"	"5666946" "5687715"	***************************************
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S142	630	S141 and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2015/09/14 17:04
S143	522	S142 not S140	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/14 17:04
S144	1	(US-6192886-\$).did.	USPAT	OR	ON	2015/09/15 10:19
S145	О	S144 and (elbow with plastic)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2015/09/15 10:19
S146	0	S144 and (elbow same plastic)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2015/09/15 10:19
S147	O	S144 and (elbow same material)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2015/09/15 10:19
S148	77426	(128/200.14; 128/200.22; 128/200.24; 128/200.26; 128/201.12; 128/201.13; 128/201.14; 128/201.19; 128/201.22; 128/202.27; 128/203.15; 128/203.16; 128/203.17; 128/203.22; 128/203.25; 128/203.26; 128/204.12; 128/204.18; 128/204.23; 128/205.24; 128/205.25; 128/205.27; 128/205.25; 128/206.11; 128/206.12; 128/206.13; 128/206.18; 128/206.21; 128/206.26; 128/206.23; 128/206.24; 128/206.26;	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2015/09/15 11:15

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S149	78471	(A61B5/0205; A61B5/08; A61B5/083; A61B5/0836; A61B5/087; A61B5/097; A61B5/14551; A61B5/4806; A61B5/4818; A61B5/6819; A61J1/1418; A61J11/0005; A61J17/006; A61M1/1698; A61M15/00; A61M15/0033; A61M15/00; A61M15/0033; A61M15/0065; A61M15/0085; A61M15/0085; A61M15/008; A61M16/000; A61M16/0003; A61M16/0057; A61M16/0066; A61M16/049; A61M16/0493; A61M16/0497; A61M16/0493; A61M16/0497; A61M16/0666; A61M16/0672; A61M16/0672; A61M16/0683; A61M16/085; A61M16/085; A61M16/085; A61M16/085; A61M16/085; A61M16/085; A61M16/0875; A61M16/0875; A61M16/0875; A61M16/0875; A61M16/0875; A61M16/107; A61M16/1045; A61M16/107; A61M16/1045; A61M16/107; A61M16/1045; A61M16/107; A61M16/1075; A61M16/109; A61M16/1075; A61M16/1075; A61M16/109; A61M16/1075; A61M16/1075; A61M16/109; A61M16/1075; A61M16/1095; A61M16/1095; A61M16/1095; A61M16/1095; A61M16/1095; A61M16/1095; A61M2016/0024; A61M2016/0039; A61M2016/0633; A61M2016/0638; A61M2016/06325; A61M2016/0638; A61M2016/0825; A61M2016/0638; A61M2016/0825; A61M2016/0638; A61M2016/0825; A61M2016/00325;	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2015/09/15

		A61M2016/103; A61M2039/1027; A61M2202/0208; A61M2205/07; A61M2205/071; A61M2205/18; A61M2205/3331; A61M2205/3368; A61M2205/3379; A61M2205/3606; A61M2205/3653; A61M2205/502; A61M2205/50; A61M2205/8225; A61M2205/825; A61M2205/825; A61M2205/825; A61M2205/825; A61M2200/08; A61M2230/05; A61M2230/42; A61M2230/05; A61M2230/43; A61M39/10; A61M39/101; A61M39/105; A62B17/00; A62B17/04; A62B18/00; A62B18/02; A62B18/08; A62B18/08; A62B18/08; A62B18/08; A62B18/08; F16L11/15; F16L1/26; F16L11/133; F16L11/18; F16L11/22; F16L13/02; F16L13/10; F16L15/001; F16L23/00; F16L23/167; F16L27/04; F16L27/047; F16L23/167; F16L27/04; F16L27/047; F16L27/073; F16L27/0804; F16L27/073; F16L27/0861; F16L27/0857; F16L37/23; F16L37/32; F16L37/34; F16L37/36; F16L37/32; F16L37/36; F16L37/36; F16L37/44; F16L37/36; F16L37/44; F16L37/56; F16L37/36; F16L37/44; F16L37/56; F16L37/56; F16L37/36; F16L37/44; F16L37/56; F16L37/36; F16L37/44; F16L37/56; F16L37/36; F16L37/36; F16L37/44; F16L37/56; F16L39/00; F16L55/168; F16L55/17; F16L59/18; F16L59/12; F16L59/12; F16L59/12; F16L59/12; F16L59/22; Y10S128/26; Y10S128/912).cpc.				
S150	1925	(S148 S149) and (swivel\$ (ball with socket) (ball adj joint) (socket adj joint)) and (nose nostril nasal nare cannulae cannula)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/15 11:15
S151	1821	S150 and @ad<="20150702"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/15 11:15
S152	512	S150 and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/15 11:16
S153	1309	S151 not S152	US-PGPUB; USPAT; USOCR; EPO; JPO;		ON	2015/09/15 11:16

			DERWENT IBM_TDB			
S154	154	(mcauley.in. near alastair) (prentice.in. near craig) (gleeson.in. near oliver)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/15 11:38
S155	13	S154 and ((swivel\$ (ball with socket) (ball adj joint) (socket adj joint)) and (nose nostril nasal nare cannulae cannula)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/15 11:38
S156	265	["2738788" "20030164170" "20120125339" "0472238" "5657752" "5921239" "6892729" "0770013" "D520140" "D686313" "20050011524" "2843121" "2859748" "20020046755" "20020059935" "20030079749" "20040226566" "5752510" "6637434" "7207333" "7353827" "0751091" "6192886" "2359506" "2388604" "20030200970" "3850171" "4753233" "5016625" "5148802" "5477852" "6435181" "6439234" "6478026" "6588424" "6659102" "7096864" "8042539" "D293613" "D310431" "D355484" "D455891" "20150013678" "20050028822" "20050205096" "0301111" "4201205" "4856508" "5245995" "5269296" "5533506" "5595174" "6561191" "6662803" "D340317" "D526094" "2296150" "20020053347" "4354488" "4367735" "5113857" "6298850" "D320677" "D354128" "8783257" "20030196659" "20030196664" "4090510" "4266540" "4986269" "5065756" "5551419" "6651658" "7004165" "7210481" "0718470" "D321419" "D440302" "200300200970" "20120132209" "6561191" "2508050" "20020096178" "20030005933" "20050011524" "20070137653" "3490452" "4915105" "0577926" "66851425" "D250047" "D250131" "0378610" "20060124131" "1635545" "4782832" "4941467" "5094236" "6431172" "6561188" "6679265" "7201169" "D05252322").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/12/01 10:25
S157	433	((headgear strap harness belt) with cheek) and "128".clas.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT;	OR	ON	2015/12/01 10:52

S158	709	((headgear strap harness belt) with tube) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2015/12/01 11:07
S159	31	((headgear strap harness belt) adj tube) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2015/12/01 11:08
S160	164	((headgear strap harness belt) with tubular) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2015/12/01 11:09
S161	13	(("4437462") or ("7201169") or ("20030200970")).PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/12/01 12:05
S162	31369	(A61M15/08; A61M16/06; A61M16/0616; A61M16/0633; A61M16/0666; A61M16/0683; A61M16/0825; A61M16/208; A61M2210/0618; A61M2240/00; A62B18/00; A62B18/02; A62B18/08; A62B18/084; A62B35/00).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB		ON	2015/12/01 12:06
S163	161	(mcauley.in. near alastair) (prentice.in. near craig) (gleeson.in. near oliver)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2015/12/01 12:14
S164	4	S163 and ((headgear harness strap belt) and (lateral laterally) and (nose nostril nasal nare cannulae cannula)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/12/01 12:14

3/29/2016 9:37:40 PM

C:\ Users\ adixon2\ Documents\ EAST\ Workspaces\ 14846226.wsp

Docket No.: FPHCR.112C2 March 9, 2016
Page 1 of 1

Please Direct All Correspondence to Customer Number 20995

EFS WEB CONTINUING IDS COVER LETTER

Inventor : Alastair Edwin McAuley

App. No. : 14/846,226

Filed : September 4, 2015

For : BREATHING ASSISTANCE

APPARATUS

Examiner : Dixon, Annette Fredricka

Art Unit : 3778

Conf No. : 8898

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Submitted herewith are references numbered 93 to 122 listed on the PTO/SB/08 or equivalent filed under EFS ID 25150041.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: March 9, 2016 By:/Michael Guiliana/

Michael A. Guiliana Registration No. 42,611 Attorney of Record Customer No. 20995 (949) 760-0404

22871964

Electronic Acknowledgement Receipt				
EFS ID:	25150223			
Application Number:	14846226			
International Application Number:				
Confirmation Number:	8898			
Title of Invention:	BREATHING ASSISTANCE APPARATUS			
First Named Inventor/Applicant Name:	Alastair Edwin McAuley			
Customer Number:	20995			
Filer:	Michael A. Guiliana/Heather OBrien			
Filer Authorized By:	Michael A. Guiliana			
Attorney Docket Number:	FPHCR.112C2			
Receipt Date:	09-MAR-2016			
Filing Date:	04-SEP-2015			
Time Stamp:	18:50:06			
Application Type:	Utility under 35 USC 111(a)			

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Non Patent Literature	NPL93_PCTNZ2009-000219_IP	1073999	no	9
·		RP-20110412-9pgs.pdf	ba3ea91e147169e7af24fdb757eb3000726f cd7f		,

Warnings:

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3	Non Patent Literature	NPL95_CN2007800266164- ExamReportEngTrans-5pgs.pdi	812008	no	5
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6	Non Patent Literature	NPL98_PCTNZ2007000185_ISR	317225	no	3
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9	Non Patent Literature	NPL101_CA2655839_ExamRep	371665	no	2
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10	Non Patent Literature	NPL102_CN2007800266164_Ex	811997	no	5
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16	Nam Datamat Litaryatura	NPL108_CN2010800280290_Ex	3194780	no	16
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19	Non Potent Literature	NPL111_JP2012538784-	328921	no	2
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21	Non Patent Literature	NPL113_CN2010800611221_ExamReport-20150717-10pgs.pdi	fi i	no	10
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		Total Files Size (in bytes)	26	164319	

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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

	Application No.	14/846,226
INFORMATION DISCLOSURE	Filing Date	September 4, 2015
STATEMENT BY APPLICANT	First Named Inventor	Alastair Edwin McAuley
STATEMENT BY APPLICANT	Art Unit	3778
(Multiple sheets used when necessary)	Examiner	Annette Fredricka Dixon
SHEET 1 OF 6	Attorney Docket No.	FPHCR.112C2

			U.S. PATENT	DOCUMENTS	
Examiner Initials	Cite No.	Document Number Number - Kind Code (if known) Example: 1,234,567 B1	Publication Date MM-DD-YYYY	Name	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear
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Examiner Signature Date Considered

^{*}Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

T¹ - Place a check mark in this area when an English language Translation is attached.

	Application No.	14/846,226
INFORMATION DISCLOSURE	Filing Date	September 4, 2015
STATEMENT BY APPLICANT	First Named Inventor	Alastair Edwin McAuley
	Art Unit	3778
(Multiple sheets used when necessary)	Examiner	Annette Fredricka Dixon
SHEET 2 OF 6	Attorney Docket No.	FPHCR.112C2

	U.S. PATENT DOCUMENTS					
Examiner Initials	Cite No.	Document Number Number - Kind Code (if known) Example: 1,234,567 B1	Publication Date MM-DD-YYYY	Name	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	
	30	2005/0150497 A1	07-14-2005	Eifler et al		
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	Application No.	14/846,226
INFORMATION DISCLOSURE	Filing Date	September 4, 2015
STATEMENT BY APPLICANT	First Named Inventor	Alastair Edwin McAuley
	Art Unit	3778
(Multiple sheets used when necessary)	Examiner	Annette Fredricka Dixon
SHEET 3 OF 6	Attorney Docket No.	FPHCR.112C2

	U.S. PATENT DOCUMENTS					
Examiner Cite No.		Document Number Number - Kind Code (if known) Example: 1,234,567 B1	Publication Date MM-DD-YYYY	Pages, Columns, Lin Name Relevant Passa Relevant Figures		
	59	2016/0038706	02-11-2016	McAuley et al.		
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Examiner Initials	Cite No.	Foreign Patent Document Country Code-Number-Kind Code Example: JP 1234567 A1	Publication Date MM-DD-YYYY	Name	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	T ¹
	61	CN1784250	06/07/2006	Resmed Ltd.		
	62	CN 1988930 A	06/27/2007	Resmed Ltd.		√- Abs
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	82	WO 2007/022562 A1	03/01/2007	Compumedics Limited		

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	Application No.	14/846,226
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STATEMENT BY ALL LICANT	Art Unit	3778
(Multiple sheets used when necessary)	Examiner	Annette Fredricka Dixon
SHEET 4 OF 6	Attorney Docket No.	FPHCR.112C2

			FOREIGN PATE	ENT DOCUMENTS		
Examiner Initials	Cite No.	Foreign Patent Document Country Code-Number-Kind Code Example: JP 1234567 A1	Publication Date MM-DD-YYYY	Name	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	T ¹
	83	WO 2007/041786	04/19/2007	Resmed Ltd.		
	84	WO 2007/147088 A2	12/21/2007	Ric Investments LLC		
	85	WO 2008/007985 A1	01/17/2008	Fisher & Paykel Healthcare Limited		
	86	WO 2008/070929 A1	06/19/2008	Resmed Ltd.		
	87	WO 2008/106716 A1	09/12/2008	Resmed Ltd		
	88	WO2008/148086	12/04/2008	Viasys Mfg Inc.		
	89	WO 2009/059353 A1	05/14/2009	Resmed Ltd.		
	90	WO 2009/052560A1	04/30/2009	Resmed Ltd.		
	91	WO 2009/092057 A1	07/23/2009	Menlo Life, Inc.		
	92	WO 2009/139647 A1	11/19/2009	Fisher & Paykel Healthcare Limited		

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ¹
	93	International Preliminary Report on Patentability (IPRP), International Application No. PCT/NZ2009/000219, mailed April 12, 2011, 9 pages.	
	94	International Search Report, International Application No. PCT/NZ2009/000219, mailed February 2, 2010, 3 pages.	
	95	English Translation of Chinese Examination Report; Application No. 2007800266164; 5 pages.	
	96	English Translation of First Office Action for Chinese Application No. 201210080441.8 dated March 24, 2014, in 4 pages.	
	97	Examination Report; Australian Application No. 2007273324; dated May 22, 2012; 3 pages.	
	98	International Search Report for International Application No. PCT/NZ2007/000185, dated October 31, 2007, in 3 pages.	
	99	Second Chinese Office Action for Chinese Patent Application No. 201210080441.8 dated December 1, 2014 in 11 pages (with English translation).	
	100	Australian Examination Report for Patent Application No. 2012265597 dated December 19, 2013, in 5 pages.	
	101	Canadian Examination Report for Application No. 2655839 dated October 4, 2013, in 2 pages.	

Examiner Signature	Date Considered
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^{*}Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

	Application No.	14/846,226
INFORMATION DISCLOSURE	Filing Date	September 4, 2015
STATEMENT BY APPLICANT	First Named Inventor	Alastair Edwin McAuley
	Art Unit	3778
(Multiple sheets used when necessary)	Examiner	Annette Fredricka Dixon
SHEET 5 OF 6	Attorney Docket No.	FPHCR.112C2

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ¹
	102	English Translation of Chinese Examination Report; Chinese Application No. 2007800266164; 5 pages.	
	103	International Search Report; PCT/NZ2009/000072; dated July 28, 2009; 3 pages.	
	104	UK Search and Examination Report; March 14, 2013; Application No. GB1210075.6; 2 pages.	
	105	UK Examination Report; dated May 9, 2013; Application No. GB1119385.1; 4 pages.	
	106	Australian Examination Report; dated March 4, 2014; Application No. 2010246985; 5 pages.	
	107	English Translation of JP Examination Report; dated February 10, 2014; Application No. 2012-510418; 4 pages.	
	108	Chinese Examination Report; dated March 27, 2014; Chinese Application No. 201080028029.0; 16 pages.	
	109	GB Combined Search and Examination Report; dated May 7, 2014; Application No. GB1406402.6; 6 pages.	
	110	GB Combined Search and Examination Report; dated May 7, 2014; Application No. GB1406401.8; 4 pages.	
	111	JP Examination Report, Application No. 2012-538784; 3 pages.	
	112	Australian Examination Report; dated August 14, 2015; Application No. 2015202814; 8 pages.	
	113	Chinese Examination Report; dated July 17, 2015; Application No. 201080061122.1; 10 pages.	
	114	Chinese Examination Report; dated September 14, 2015; Application No. 201080028029.0; 3 pages.	
	115	European Extended Search Report; dated September 4, 2015; Application No. 10830251.4; 7 pages.	
	116	European Extended Search Report; dated September 8, 2015; Application No. 10774623.2; 7 pages.	
	117	Japanese Examination Report; dated July 22, 2015; Application No. 2015-098324; 8 pages.	
	118	Japanese Examination Report; dated August 5, 2015; Application No. 2012-538784; 8 pages.	
	119	Australian Examination Report; dated January 9, 2015; Application No. 2010241390; 4 pages.	
	120	English Translation of Chinese Examination Report; dated September 3, 2014; Application No. 201080061122.1; 9 pages.	

Examiner Signature	Date Considered
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^{*}Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

	Application No.	14/846,226
INFORMATION DISCLOSURE	Filing Date	September 4, 2015
STATEMENT BY APPLICANT	First Named Inventor	Alastair Edwin McAuley
STATEMENT BY ALL LICANT	Art Unit	3778
(Multiple sheets used when necessary)	Examiner	Annette Fredricka Dixon
SHEET 6 OF 6	Attorney Docket No.	FPHCR.112C2

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ¹
	121	Second Chinese Office Action; dated January 19, 2015; Application No. 201080028029.0; 16 pages.	
	122	EPO Search Report; dated April 2, 2014; Application No. 09819444.2; 8 pages.	

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Examiner Signature Date Considered

^{*}Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Electronic Acknowledgement Receipt			
EFS ID:	25150041		
Application Number:	14846226		
International Application Number:			
Confirmation Number:	8898		
Title of Invention:	BREATHING ASSISTANCE APPARATUS		
First Named Inventor/Applicant Name:	Alastair Edwin McAuley		
Customer Number:	20995		
Filer:	Michael A. Guiliana/Heather OBrien		
Filer Authorized By:	Michael A. Guiliana		
Attorney Docket Number:	FPHCR.112C2		
Receipt Date:	09-MAR-2016		
Filing Date:	04-SEP-2015		
Time Stamp:	18:48:05		
Application Type:	Utility under 35 USC 111(a)		

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
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22	Foreign Reference	FP82_WO2007-022562.pdf	3799513	no	29
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This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Docket No.: FPHCR.112C2 Customer No. 20995

INFORMATION DISCLOSURE STATEMENT

Inventor : Alastair Edwin McAuley

App. No. : 14/846,226

Filed : September 4, 2015

For : BREATHING ASSISTANCE

APPARATUS

Examiner : Annette Fredricka Dixon

Art Unit : 3778

Conf. No. : 8898

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

References and Listing

Pursuant to 37 CFR 1.56, an Information Disclosure Statement listing references is provided herewith. Copies of any listed foreign and non-patent literature references are being submitted. Any foreign references may also include English abstract(s) and/or machine translation(s), but no representation is made as to their accuracy.

If the Examiner would like additional information regarding these references or if anything is unclear, the Examiner is invited to contact the undersigned for assistance.

No Disclaimers

To the extent that anything in the Information Disclosure Statement or the listed references could be construed as a disclaimer of any subject matter supported by the present application, Applicant hereby rescinds and retracts such disclaimer.

Timing of Disclosure

This Information Disclosure Statement is being filed before the receipt of a First Office Action on the merits, and presumably no fee is required. If a First Office Action on the merits was mailed before the mailing date of this Statement, the Commissioner is authorized to charge the fee set forth in 37 CFR 1.17(p) to Deposit Account No. 11-1410.

Filing Date: September 4, 2015

The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment, to Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: March 9, 2016 By:/Michael Guiliana/

Michael A. Guiliana Registration No. 42,611 Attorney of Record Customer No. 20995 (949) 760-0404

22854533

Docket No.: FPHCR.112C2 March 9, 2016 Page 1 of 17

Please Direct All Correspondence to Customer Number 20995

SUMMARY OF INTERVIEW

Inventor : Alastair Edwin McAuley

App. No : 14/846,226

Filed : September 4, 2015

For : BREATHING ASSISTANCE

APPARATUS

Examiner : Dixon, Annette Fredricka

Art Unit : 3778

Conf No. : 8898

CERTIFICATE OF EFS WEB TRANSMISSION

I hereby certify that this correspondence, and any other attachment noted on the automated Acknowledgement Receipt, is being transmitted from within the Pacific Time zone to the Commissioner for Patents via the EFS Web server on:

> March 9, 2016 (Date)

/Michael Guiliana/

Michael A. Guiliana, Reg. No. 42,611

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Dear Sir:

Pursuant to the Interview Summary of February 4, 2016, Applicant submits this Summary of Interview for recording in the official file.

Attendees, Date and Type of Interview

The interview was conducted via phone and attended by the Examiner Annette Dixon and Applicants' representatives Michael A. Guiliana (Reg. No. 42,611) and Xiaoyan Wang.

Exhibits and/or Demonstrations

A figure (see attached) solely for illustration in the interview and not intended as proposed amendment to the drawings was provided.

Identification of Claims Discussed

Claims 1, 6, and 17

<u>Identification of Cited/Disclosed Art Discussed</u>

U.S. Published Application No. 20030200970 (Stenzler); U.S. Pat. No. 7201169 (Wilkie); U.S. Pat. No. 4437462 (Piljay)

Application No.:

14/846,226

Filing Date:

September 4, 2015

Proposed Amendments

Applicants proposed amendments consistent with the attached proposed amendments.

Principal Arguments and Other Matters

The Examiner and Applicants' representatives discussed the proposed amendments and

further proposal of amendments. Applicants clarified the instant invention from the cited prior

art using arguments in the attached interview agenda. Applicants also clarified the instant

invention using the attached illustrating figure, which shows that the head gear extensions in the

instant invention are spaced away from a user in use such that the mask assembly is able to roll in

the directions indicated by the arrows in the illustrating figure.

Results of Interview

The Examiner indicated that the further proposal of amendments would overcome the

cited prior art; however, further search and consideration would be required. Applicants'

representatives elected to waive the first action interview office action in view of the proposed

claim amendments of January 4, 2016 and in view of submitting the attached supplemental

amendments incorporating the further proposals as discussed in the interview.

Please charge any additional fees, including any fees for additional extension of time, or

credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: March 9, 2016

By: /Michael Guiliana/

Michael A. Guiliana

Registration No. 42,611

Attorney of Record

Customer No. 20995

(949) 760-0404

-2-

EXHIBIT 1004 - PAGE 85

Filing Date: September 4, 2015

*** PLEASE DO NOT ENTER INTO FILE (FOR DISCUSSION PURPOSES ONLY)***

DRAFT INTERVIEW AGENDA

U.S. Application No.: 14/846,226 (FPHCR.112C2)

Date/Time: Thursday, February 04, 2016; 1:30 PM Eastern

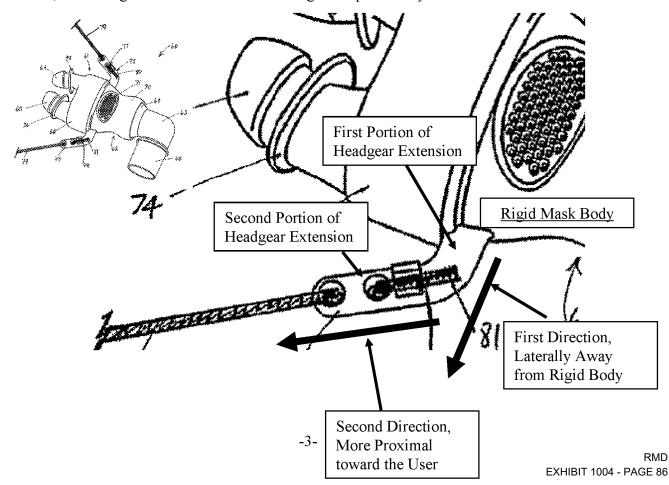
Attendees: Examiner Annette Dixon, Michael A. Guiliana (Reg. No. 42,611),

Xiaoyan Wang

I. Summary of Issues for Discussion

The claims of the present application cover the non-limiting embodiment of Figures 9-11. As recited in claims 1, 6, and 17, the mask assembly includes a rigid mask body and head gear extensions (one labeled below). The head gear extensions include a distal end **connected** to the rigid mask body and proximal ends disposed proximally toward the user (in use).

The head gear extensions also **extend** *from* **the rigid mask body** first along a lateral direction, then along a second direction extending more proximally toward the user.



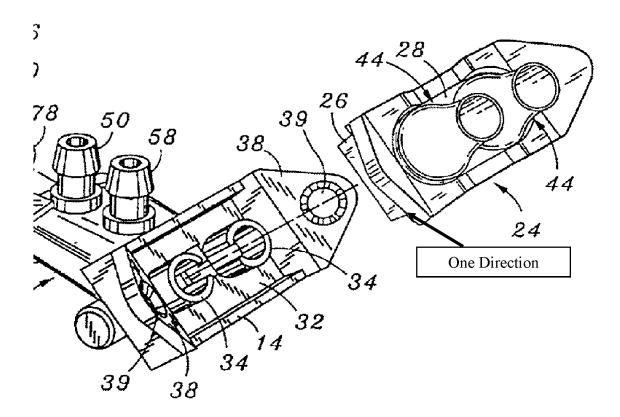
Filing Date: September 4, 2015

None of the cited references show this structure.

II. Discussion of cited prior art references:

<u>Stenzler et al Does not Teach Head Gear Extensions Extending from Rigid Mask Body</u> <u>Along Two Different Directions</u>

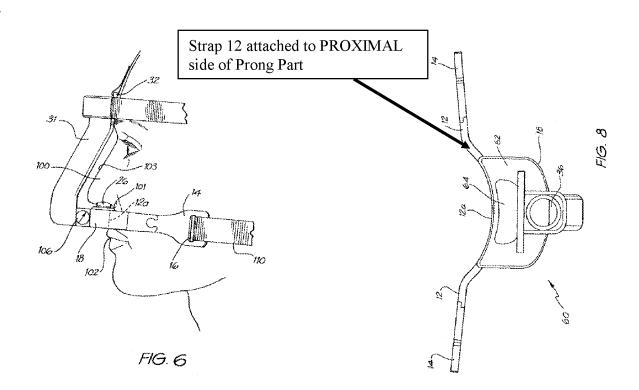
Stenzler Shows triangular flanges extending from a nose piece member 24 along ONE DIRECTION. The flanges do not extend along a first lateral direction then along a second direction more proximal toward a user.



Filing Date: September 4, 2015

Wilkie et al Does not Teach Head Gear Extensions Extending from Rigid Mask Body on the Distal side of the Prong Part and Along the Two Different Recited Directions

Wilkie shows a mask having a prong part with a strap attached to the proximal side of the prong part and configured to press against the user's upper lip.

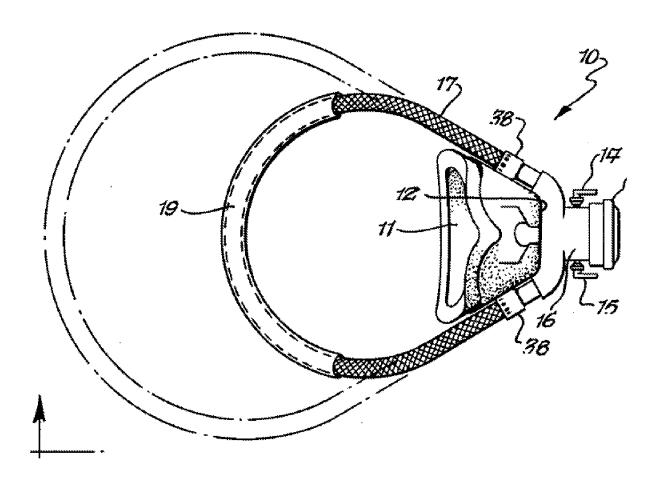


mask. The strap is made from a flexible elastomeric material such as silastic and is shaped so that the central area 12a of the strap is curved to generally conform to the shape of the area of a human face between a human's mouth and the base of their nose (see FIG. 2). Note that hereinafter the human is referred to as a patient. On the opposite side of the central area of the strap 12a which contacts a patient's face, there is a manifold or chamber 18. The manifold is also made from the same flexible elastomeric material as the strap. The

Filing Date: September 4, 2015

<u>Piljay Does not Teach Head Gear Extensions Extending from Rigid Mask Body Laterally,</u> Beyond Outer Periphery of Seal Body

Piljay shows a mask having a cup-shaped face member 11, a housing 126, and a headstrap 17, but no headgear extensions extending from a rigid mask body and along two directions, including laterally away from the rigid mask body beyond an outer periphery of the cup-shaped face member.



Filing Date: September 4, 2015

*** PLEASE DO NOT ENTER INTO FILE (FOR DISCUSSION PURPOSES ONLY)***

DRAFT INTERVIEW AGENDA (Suppl.)

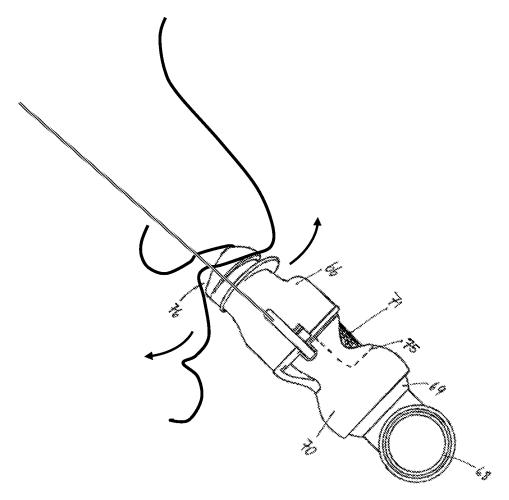
U.S. Application No.: 14/846,226 (FPHCR.112C2)

Date/Time: Thursday, February 04, 2016; 1:30 PM Eastern

Attendees: Examiner Annette Dixon, Michael A. Guiliana (Reg. No. 42,611),

Xiaoyan Wang

The following figure is submitted only for illustration in the interview and not intended as proposed amendment to the drawings:



Filing Date: September 4, 2015

Proposed Amendments

1. (Proposed) A mask assembly for delivering positive airway pressure to a user, the mask comprising:

a rigid mask body comprising a central portion, an outer surface having at least a curved portion and a mask body periphery, the mask body periphery comprising a left peripheral side and a right peripheral side;

a prong part comprising a hollow body removably sealed to the rigid mask body defining an enclosed space, a prong part periphery extending along a periphery of the hollow body, and first and second nasal prongs extending from the hollow body, the periphery of the prong part removably sealed to the mask body periphery in use, the prong part being formed as a single piece and being more flexible than the rigid mask body;

an inspiratory conduit connected to the rigid mask body configured to deliver pressurized gases into the enclosed space defined by the rigid mask body and the prong part for inhalation by a user in use;

a headgear arrangement configured to maintain the prong part in a position with the first and second prongs against a user's nares in use, the headgear arrangement comprising first and second headgear extensions and a headgear strap;

the first headgear extension having a distal end connected to the left peripheral side of the rigid mask body on a distal side of the prong part, and a proximal end disposed proximally toward a left side of a user's face in use, the first headgear extension comprising a first portion and a second portion, the first portion of the first headgear extension comprising the distal end of the first headgear extension and extending at least along a first lateral direction extending laterally away from the left peripheral side of the rigid mask body and beyond an outer periphery of the prong part, the second portion of the first headgear extension extending from the first portion, along a second direction extending more proximally toward the user than the first direction in use;

the second headgear extension having a distal end connected to the right peripheral side of the rigid mask body on the distal side of the prong part, and a proximal end disposed proximally toward a right side of a user's face in use, the second headgear extension comprising a first portion and a second portion, the first portion of the second

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headgear extension comprising the distal end of the second headgear extension and extending at least along a third lateral direction extending laterally away from the rigid mask body and beyond the outer periphery of the prong part, the second portion of the second headgear extension extending from the first portion, along a fourth direction extending more proximally toward the user than the third direction in use;

the headgear strap comprising a flexible tube having first and second ends, the first end connected to the first headgear extension at a first location between the distal end and the proximal ends of the first headgear extension and a second end connected to the second headgear extension at a second location disposed between the proximal and distal ends of the second headgear extension; and

at least a first bias flow vent disposed on the curved portion of the outer surface of the rigid mask body, the first bias flow vent being configured to vent a gas from the enclosed space between the rigid mask body and the prong part, to an outside of the rigid mask body during use.

- 2. The mask assembly of Claim 1, wherein the first bias flow vent comprises a flow vent outer surface, the flow vent outer surface being recessed inwardly from the curved portion of the outer surface of the rigid mask body.
- 3. The mask assembly of Claim 1, additionally comprising a conduit connection disposed on the rigid mask body and connecting the inspiratory conduit to the rigid mask body, the first bias flow vent comprising a plurality of apertures arranged symmetrically on left and right sides of the conduit connection.
- 4. The mask assembly of Claim 1, wherein the rigid mask body is configured to direct gases entering the rigid mask body from the conduit away from the bias flow vent.
- 5. The mask assembly of Claim 4, wherein the rigid mask body is configured to direct gases entering the rigid mask body from the prong part toward the bias flow vent.
- 6. (Proposed) A mask assembly for delivering positive airway pressure to a user, the mask comprising:

a rigid mask body comprising a central portion, an outer surface having at least a curved portion;

an inspiratory conduit connected to the rigid mask body;

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a prong part comprising a hollow body and first and second nasal prongs

extending from the hollow body, the hollow body removably connected to the mask body;

a first headgear extension having a distal end connected to the rigid mask body on

a distal side of the prong part, and a proximal end disposed proximally toward a user in

use, the first headgear extension comprising a first portion and a second portion, the first

portion of the first headgear extension comprising the distal end of the first headgear

extension and extending at least along a first lateral direction extending laterally away

from the rigid mask body and beyond an outer periphery of the prong part, the second

portion of the first headgear extension extending from the first portion, along a second

direction extending more proximally toward the user than the first direction in use;

a second headgear extension having a distal end connected to the rigid mask body

on the distal side of the prong part, and a proximal end disposed proximally toward a user

in use, the second headgear extension comprising a first portion and a second portion, the

first portion of the second headgear extension comprising the distal end of the second

headgear extension and extending at least along a third lateral direction extending

laterally away from the rigid mask body and beyond the outer periphery of the prong part,

the second portion of the second headgear extension along a fourth direction more

proximally toward the user than the third direction in use; and

a headgear strap connected to the first headgear extension at a first location

between the distal end and the proximal ends of the first headgear extension and

connected to the second headgear extension at a second location disposed between the

proximal and distal ends of the second headgear extension.

7. The mask assembly of Claim 6, wherein the first portion of the first headgear

extension is shorter than the second portion of the first headgear extension and the first portion

of the second headgear extension is shorter than the second portion of the second headgear

extension.

8. The mask assembly of Claim 6, wherein the headgear strap comprises a flexible tube

and is connected to the second portion of the first headgear extension and the second portion of

the second headgear extension.

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9. The mask assembly of Claim 6, wherein the first portion of the first headgear

extension and the first portion of the second headgear extension extend laterally outward

distally of a sealing location between the prong part and the mask body and the second portion

of the first headgear extension and the second portion of the second headgear extension

terminate proximally of the sealing location between the prong part and the mask body.

10. The mask assembly of Claim 6, wherein the headstrap comprises first and second

ends, the first end extending along first and second opposite sides of the second portion of the

first headgear extension at the connection to the first headgear extension, the second end

extending along first and second opposite sides of the second portion of the second headgear

extension at the connection to the second headgear extension.

11. The mask assembly of Claim 6, wherein the second portion of the first headgear

extension and the second portion of the second headgear extension terminate proximally of a

mating region between the hollow body of the prong portion and the rigid mask body.

12. The mask assembly of Claim 6, wherein the hollow body of the prong portion and

the rigid mask body overlap each other in a mating region.

13. The mask assembly of Claim 12, wherein the hollow body, the first prong and the

second prong are integrally formed in a monolithic component.

14. The mask assembly of Claim 12, wherein the first prong and the second prong are

angled toward each other in the proximal direction.

15. The mask assembly of Claim 6, wherein the rigid mask body comprises a recessed

curved portion of the curved outer which is recessed inwardly into the rigid mask body relative

to a surrounding portion of the curved outer surface, the recessed curved portion comprising a

plurality of apertures defining a bias flow outlet vent.

16. The mask assembly of Claim 6, wherein the rigid mask body is configured to direct

gases entering the rigid mask body from the conduit away from the bias flow vent, and to direct

gases entering the rigid mask body from the prong part toward the bias flow vent.

17. (Proposed) A mask assembly for delivering positive airway pressure to a user, the

mask comprising:

a rigid mask body;

an inspiratory conduit connected to the rigid mask body;

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a prong part comprising a hollow body and first and second nasal prongs

extending from the hollow body, the hollow body removably connected to the mask body;

a first headgear extension having a distal end connected to the rigid mask body on

a distal side of the prong part and a proximal end disposed proximally toward a user in

use, the first headgear extension extending from the rigid mask body, at least along a first

lateral direction extending laterally away from the rigid mask body and beyond an outer

periphery of the prong part and along a second direction extending more proximally

toward the user than the first direction in use; and

a second headgear extension having a distal end connected to the rigid mask body

on the distal side of the prong part and a proximal end disposed proximally toward a user

in use, the second headgear extension extending from the rigid mask body at least along a

third lateral direction extending laterally away from the rigid mask body and beyond the

outer periphery of the prong part and[[, the second portion of the second headgear

extension]] along a fourth direction more proximally toward the user than the third

direction in use.

18. The mask assembly of Claim 17 additionally comprising a headgear strap connected

to the first headgear extension at a first location between the distal end and the proximal ends of

the first headgear extension and connected to the second headgear extension at a second

location disposed between the proximal and distal ends of the second headgear extension.

19. The mask assembly of Claim 18, wherein the headgear strap comprises a flexible

tube engaged with the first and second headgear extensions.

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Supplemental Amendments

1. (Currently Amended) A mask assembly for delivering positive airway pressure to a user, the mask comprising:

a rigid mask body comprising a central portion, an outer surface having at least a curved portion and a mask body periphery, the mask body periphery comprising a left peripheral side and a right peripheral side;

a prong part comprising a hollow body removably sealed to the rigid mask body defining an enclosed space, a prong part periphery extending along a periphery of the hollow body, and first and second nasal prongs extending from the hollow body, the periphery of the prong part removably sealed to the mask body periphery in use, the prong part being formed as a single piece and being more flexible than the rigid mask body;

an inspiratory conduit connected to the rigid mask body configured to deliver pressurized gases into the enclosed space defined by the rigid mask body and the prong part for inhalation by a user in use;

a headgear arrangement configured to maintain the prong part in a position with the first and second prongs against a user's nares in use, the headgear arrangement comprising first and second headgear extensions and a headgear strap;

the first headgear extension having a distal end connected to the left peripheral side of the rigid mask body on a distal side of the prong part at a location spaced from a user in use, and a proximal end disposed proximally toward a left side of a user's face in use, the first headgear extension comprising a first portion and a second portion, the first portion of the first headgear extension comprising the distal end of the first headgear extension and extending at least along a first lateral direction extending laterally away from the left peripheral side of the rigid mask body and beyond an outer periphery of the prong part, the second portion of the first headgear extension extending from the first portion, along a second direction extending more proximally toward the user than the first direction in use;

the second headgear extension having a distal end connected to the right peripheral side of the rigid mask body on the distal side of the prong part at a location spaced from a user in use, and a proximal end disposed proximally toward a right side of

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a user's face in use, the second headgear extension comprising a first portion and a second portion, the first portion of the second headgear extension comprising the distal end of the second headgear extension and extending at least along a third lateral direction extending laterally away from the rigid mask body and beyond the outer periphery of the prong part, the second portion of the second headgear extension extending from the first portion, along a fourth direction extending more proximally toward the user than the third direction in use:

the headgear strap comprising a flexible tube having first and second ends, the first end connected to the first headgear extension at a first location between the distal end and the proximal ends of the first headgear extension and a second end connected to the second headgear extension at a second location disposed between the proximal and distal ends of the second headgear extension; and

at least a first bias flow vent disposed on the curved portion of the outer surface of the rigid mask body, the first bias flow vent being configured to vent a gas from the enclosed space between the rigid mask body and the prong part, to an outside of the rigid mask body during use.

- 2. The mask assembly of Claim 1, wherein the first bias flow vent comprises a flow vent outer surface, the flow vent outer surface being recessed inwardly from the curved portion of the outer surface of the rigid mask body.
- 3. The mask assembly of Claim 1, additionally comprising a conduit connection disposed on the rigid mask body and connecting the inspiratory conduit to the rigid mask body, the first bias flow vent comprising a plurality of apertures arranged symmetrically on left and right sides of the conduit connection.
- 4. The mask assembly of Claim 1, wherein the rigid mask body is configured to direct gases entering the rigid mask body from the conduit away from the bias flow vent.
- 5. The mask assembly of Claim 4, wherein the rigid mask body is configured to direct gases entering the rigid mask body from the prong part toward the bias flow vent.
- 6. A mask assembly for delivering positive airway pressure to a user, the mask comprising:

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a rigid mask body comprising a central portion, an outer surface having at least a

curved portion;

an inspiratory conduit connected to the rigid mask body;

a prong part comprising a hollow body and first and second nasal prongs

extending from the hollow body, the hollow body removably connected to the mask body;

a first headgear extension having a distal end connected to the rigid mask body on

a distal side of the prong part at a location spaced from a user in use, and a proximal end

disposed proximally toward a user in use, the first headgear extension comprising a first

portion and a second portion, the first portion of the first headgear extension comprising

the distal end of the first headgear extension and extending at least along a first lateral

direction extending laterally away from the rigid mask body and beyond an outer

periphery of the prong part, the second portion of the first headgear extension extending

from the first portion, along a second direction extending more proximally toward the

user than the first direction in use;

a second headgear extension having a distal end connected to the rigid mask body

on the distal side of the prong part at a location spaced from a user in use, and a proximal

end disposed proximally toward a user in use, the second headgear extension comprising

a first portion and a second portion, the first portion of the second headgear extension

comprising the distal end of the second headgear extension and extending at least along a

third lateral direction extending laterally away from the rigid mask body and beyond the

outer periphery of the prong part, the second portion of the second headgear extension

along a fourth direction more proximally toward the user than the third direction in use;

and

a headgear strap connected to the first headgear extension at a first location

between the distal end and the proximal ends of the first headgear extension and

connected to the second headgear extension at a second location disposed between the

proximal and distal ends of the second headgear extension.

7. The mask assembly of Claim 6, wherein the first portion of the first headgear

extension is shorter than the second portion of the first headgear extension and the first portion

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of the second headgear extension is shorter than the second portion of the second headgear extension.

8. The mask assembly of Claim 6, wherein the headgear strap comprises a flexible tube and is connected to the second portion of the first headgear extension and the second portion of

the second headgear extension.

9. The mask assembly of Claim 6, wherein the first portion of the first headgear

extension and the first portion of the second headgear extension extend laterally outward

distally of a sealing location between the prong part and the mask body and the second portion

of the first headgear extension and the second portion of the second headgear extension

terminate proximally of the sealing location between the prong part and the mask body.

10. The mask assembly of Claim 6, wherein the headstrap comprises first and second

ends, the first end extending along first and second opposite sides of the second portion of the

first headgear extension at the connection to the first headgear extension, the second end

extending along first and second opposite sides of the second portion of the second headgear

extension at the connection to the second headgear extension.

11. The mask assembly of Claim 6, wherein the second portion of the first headgear

extension and the second portion of the second headgear extension terminate proximally of a

mating region between the hollow body of the prong portion and the rigid mask body.

12. The mask assembly of Claim 6, wherein the hollow body of the prong portion and

the rigid mask body overlap each other in a mating region.

13. The mask assembly of Claim 12, wherein the hollow body, the first prong and the

second prong are integrally formed in a monolithic component.

14. The mask assembly of Claim12, wherein the first prong and the second prong are

angled toward each other in the proximal direction.

15. The mask assembly of Claim 6, wherein the rigid mask body comprises a recessed

curved portion of the curved outer which is recessed inwardly into the rigid mask body relative

to a surrounding portion of the curved outer surface, the recessed curved portion comprising a

plurality of apertures defining a bias flow outlet vent.

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16. The mask assembly of Claim 6, wherein the rigid mask body is configured to direct

gases entering the rigid mask body from the conduit away from the bias flow vent, and to direct

gases entering the rigid mask body from the prong part toward the bias flow vent.

17. A mask assembly for delivering positive airway pressure to a user, the mask

comprising:

a rigid mask body;

an inspiratory conduit connected to the rigid mask body;

a prong part comprising a hollow body and first and second nasal prongs

extending from the hollow body, the hollow body removably connected to the mask body;

a first headgear extension having a distal end connected to the rigid mask body on

a distal side of the prong part at a location spaced from a user in use, and a proximal end

disposed proximally toward a user in use, the first headgear extension extending from the

rigid mask body, at least along a first lateral direction extending laterally away from the

rigid mask body and beyond an outer periphery of the prong part and along a second

direction extending more proximally toward the user than the first direction in use; and

a second headgear extension having a distal end connected to the rigid mask body

on the distal side of the prong part at a location spaced from a user in use, and a proximal

end disposed proximally toward a user in use, the second headgear extension extending

from the rigid mask body at least along a third lateral direction extending laterally away

from the rigid mask body and beyond the outer periphery of the prong part and[[, the

second portion of the second headgear extension]] along a fourth direction more

proximally toward the user than the third direction in use.

18. The mask assembly of Claim 17 additionally comprising a headgear strap connected

to the first headgear extension at a first location between the distal end and the proximal ends of

the first headgear extension and connected to the second headgear extension at a second

location disposed between the proximal and distal ends of the second headgear extension.

19. The mask assembly of Claim 18, wherein the headgear strap comprises a flexible

tube engaged with the first and second headgear extensions.

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Electronic Acknowledgement Receipt				
EFS ID:	25153302			
Application Number:	14846226			
International Application Number:				
Confirmation Number:	8898			
Title of Invention:	BREATHING ASSISTANCE APPARATUS			
First Named Inventor/Applicant Name:	Alastair Edwin McAuley			
Customer Number:	20995			
Filer:	Michael A. Guiliana/Anthony Bonilla			
Filer Authorized By:	Michael A. Guiliana			
Attorney Docket Number:	FPHCR.112C2			
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Time Stamp:	19:32:28			
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Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Applicant summary of interview with	FPHCR112C2_Interview_Summ	568086		17
'	examiner	ary.pdf	d1fe826cad5139ada067d93c8a3e5b42e29 67f17		

Warnings:

Information:

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/846,226	09/04/2015 Alastair Edwin McAuley		FPHCR.112C2	8898
20995 759 KNOBBE MAR T	90 02/09/2016 FENS OLSON & BE	=	EXAM	INER
2040 MAIN STRI FOURTEENTH F	EET		DIXON, ANNET	TE FREDRICKA
IRVINE, CA 926	14		ART UNIT	PAPER NUMBER
			3778	
			NOTIFICATION DATE	DELIVERY MODE
			02/09/2016	FI ECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jayna.cartee@knobbe.com efiling@knobbe.com

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Applicant-limitated interview Summary	Examiner	Art Unit	
	ANNETTE DIXON	3778	
All participants (applicant, applicant's representative, PTO p	ersonnel):		
(1) <u>ANNETTE DIXON, PTO personnel</u> .	(3) Sabrina Wang, Applicar	nt's representativ	<u>⁄e</u> .
(2) Michael Guilana, Applicant's representative.	(4)		
Date of Interview: 04 February 2016.			
Type: 🛛 Telephonic 🔲 Video Conference 🔲 Personal [copy given to: 🔲 applicant 📗	applicant's representative]		
Exhibit shown or demonstration conducted: Yes If Yes, brief description:] No.		
Issues Discussed 101 112 1102 103 Other (For each of the checked box(es) above, please describe below the issue and detailed			
Claim(s) discussed: <u>1,6 and 17</u> .			
Identification of prior art discussed: <u>Stenzler, Wilkie, Piljay</u> .			
Substance of Interview (For each issue discussed, provide a detailed description and indicate if agreement wreference or a portion thereof, claim interpretation, proposed amendments, argumen		entification or clarifica	tion of a
Applicant submitted proposed claim amendments on Januar February 4, 2016, further proposed claim amendments were the prior art made of record. In particular the recitation of the the edge of the rigid mask body spaced from the user in use Primary Examiner indicated this further clarification would over search and consideration would be required prior to an indicate to waive the first action interview office action in view of the pentered and in view of submitting supplemental amendments interview.	discussed to further distinguis a first head gear extension extending laterally beyond ercome the prior art made of reation of allowable subject matter proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendments of the proposed claim amendment of the proposed claim amendment of the proposed claim amendment of the proposed claim amendment of the proposed claim amendment of the proposed claim amendment of the proposed claim amendment of the proposed claim amendment of the proposed claim amendment of the proposed claim amendment of the proposed claim amendment of the proposed claim amendment of the proposed claim amendment of the proposed claim amendment of the proposed claim amendment of the proposed claim amendment of the proposed claim amendment of the proposed claim amendment of the proposed claim amendment of the proposed claim amendment of the proposed claim amendment of the proposed claim amendment of the proposed claim amendment of the proposed claim amendment of the prop	h the instant invending laterally a d the seal/nasal ecord: however, er. Attorney Guil f January 4, 201	ention from way from orongs. further ana elected 6 to be
Applicant recordation instructions: The formal written reply to the last Offsection 713.04). If a reply to the last Office action has already been filed, application and this interview date, or the mailing date of this interview summinterview Examiner recordation instructions: Examiners must summarize the substitudes and interview should include the items listed in MPEP 713.04 for general thrust of each argument or issue discussed, a general indication of a general results or outcome of the interview, to include an indication as to wh	olicant is given a non-extendable perionary form, whichever is later, to file a same form, whichever is later, to file a same form, whichever is later, to file a same form, which will be an an arrow of record. A contract of any other pertinent matters discussed	od of the longer of or statement of the sub nplete and proper re luding the identificat regarding patentabil	ne month or stance of the cordation of the ity and the
/ANNETTE DIXON/ Primary Examiner, Art Unit 3778			
U.C. Detaut and Trademark Office			

Application No.

14/846,226

U.S. Patent and Trademark Office PTOL-413 (Rev. 8/11/2010)

Applicant(s)

MCAULEY ET AL.

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner.
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
 - (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.



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> Steven P. Ruden, Ph.D. Steven.Ruden@knobbe.com

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TO:

Examiner Annette Dixon

USPTO FACSIMILE No.:

(571) 273-3392

USPTO REFERENCE:

Inventor:

Alastair Edwin McAuley, et al.

Serial No.:

14/846,226

Filed:

September 4, 2015

Title:

BREATHING ASSISTANCE APPARATUS

ATTORNEY:

Michael A. Guiliana

PHONE No.:

(949) 721-6384

ATTORNEY DOCKET No.:

FPHCR.112C2

TOTAL PAGES:

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February 3, 2016

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22603644

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DRAFT INTERVIEW AGENDA

U.S. Application No.: 14,846,226 (FPHCR.112C2)

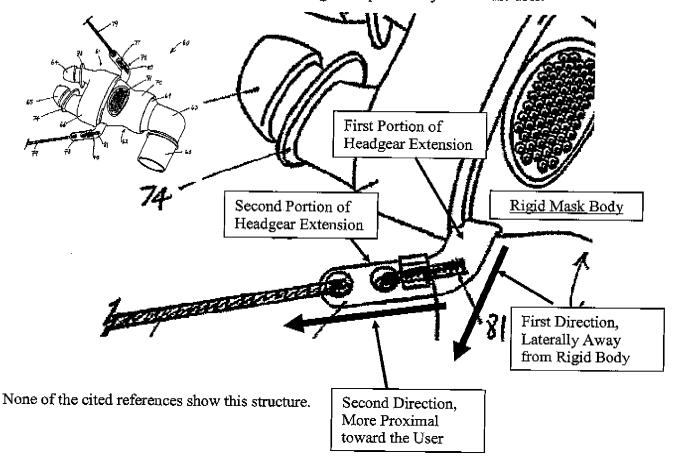
Date/Time: Thursday, February 04, 2016; 1 PM Eastern

Attendees: Examiner Annette Dixon, Michael A. Guiliana (Reg. No. 42,611), Xiaoyan Wang

Summary of Issues for Discussion

The claims of the present application cover the non-limiting embodiment of Figures 9-11. As recited in claims 1, 6, and 17, the mask assembly includes a rigid mask body and head gear extensions (one labeled below). The head gear extensions include a distal end **connected** to the rigid mask body and proximal ends disposed proximally toward the user (in use).

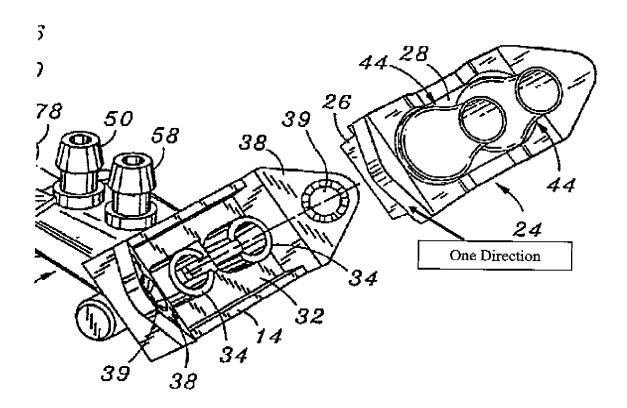
The head gear extensions also extend from the rigid mask body first along a lateral direction, then along a second direction extending more proximally toward the user.



II. Discussion of cited prior art references:

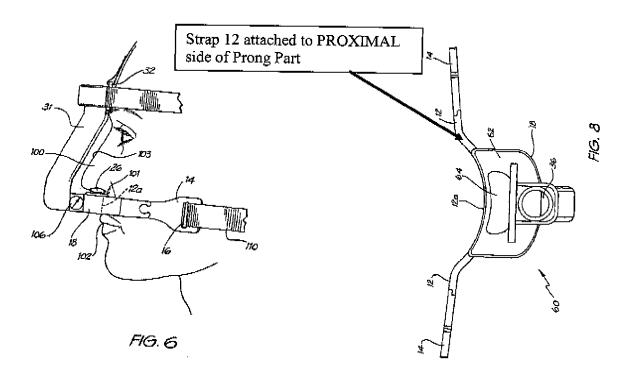
Stenzler et al Does not Teach Head Gear Extensions Extending from Rigid Mask Body Along Two Different Directions

Stenzler Shows triangular flanges extending from a nose piece member 24 along ONE DIRECTION. The flanges do not extend along a first lateral direction then along a second direction more proximal toward a user.



Wilkie et al Does not Teach Head Gear Extensions Extending from Rigid Mask Body on the Distal side of the Prong Part and Along the Two Different Recited Directions

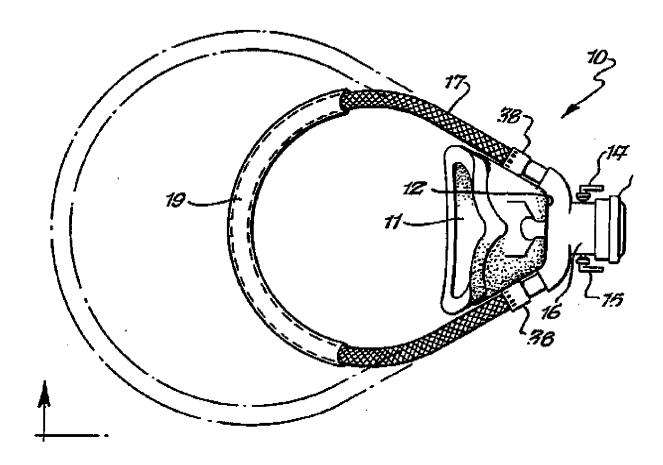
Wilkie shows a mask having a prong part with a strap attached to the proximal side of the prong part and configured to press against the user's upper lip.



mask. The strap is made from a flexible elastomeric material such as silastic and is shaped so that the central area 12a of the strap is curved to generally conform to the shape of the area of a human face between a human's mouth and the base of their nose (see FIG. 2). Note that hereinafter the human is referred to as a patient. On the opposite side of the central area of the strap 12a which contacts a patient's face, there is a manifold or chamber 18. The manifold is also made from the same flexible elastomeric material as the strap. The

Piljay Does not Teach Head Gear Extensions Extending from Rigid Mask Body Laterally. Beyond Outer Periphery of Seal Body

Piljay shows a mask having a cup-shaped face member 11, a housing 126, and a headstrap 17, but no headgear extensions extending from a rigid mask body and along two directions, including laterally away from the rigid mask body beyond an outer periphery of the cup-shaped face member.

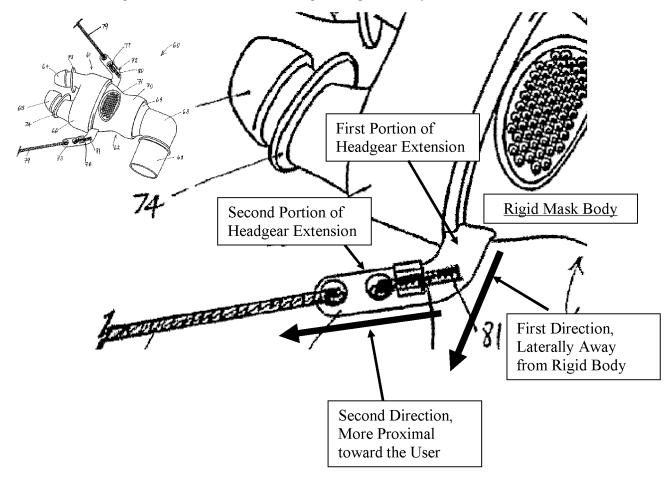


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Summary of Issues for Discussion

The claims of the present application cover the non-limiting embodiment of Figures 9-11. As recited in claims 1, 6, and 17, the mask assembly includes a rigid mask body and head gear extensions (one labeled below). The head gear extensions include a distal end **connected** to the rigid mask body and proximal ends disposed proximally toward the user (in use).

The head gear extensions also **extend** *from* **the rigid mask body** first along a lateral direction, then along a second direction extending more proximally toward the user.

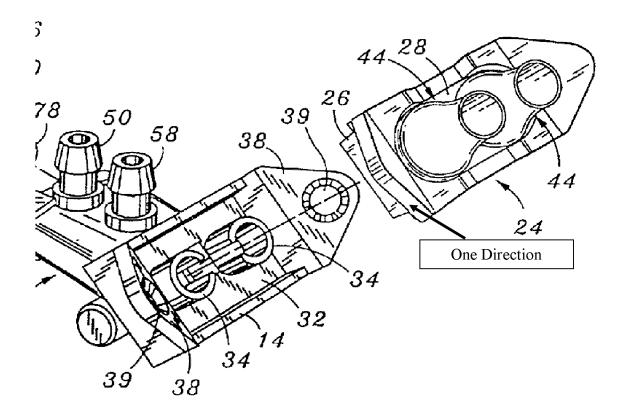


None of the cited references show this structure.

The cited prior art references are summarized below:

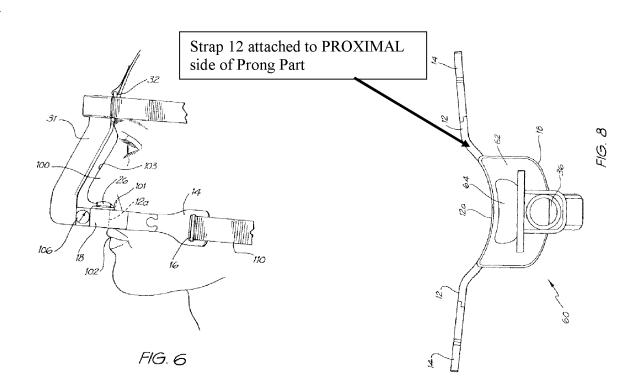
<u>Stenzler et al Does not Teach Head Gear Extensions Extending from Rigid Mask Body Along Two Different Directions</u>

Stenzler Shows triangular flanges extending from a nose piece member 24 along ONE DIRECTION. The flanges do not extend along a first lateral direction then along a second direction more proximal toward a user.



Wilkie et al Does not Teach Head Gear Extensions Extending from Rigid Mask Body on the Distal side of the Prong Part and Along the Two Different Recited Directions

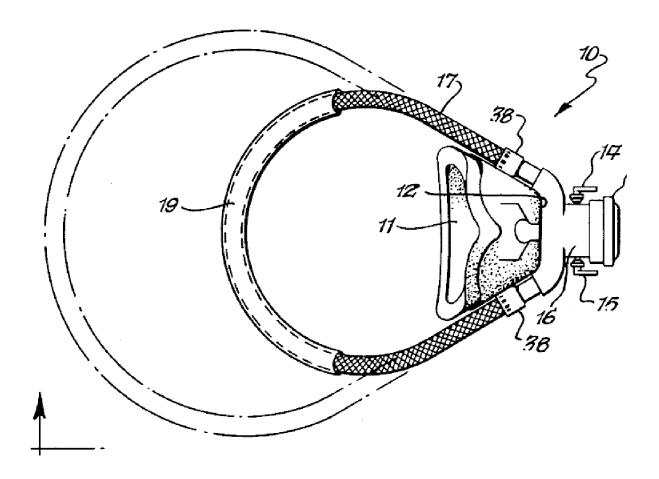
Wilkie shows a mask having a prong part with a strap attached to the proximal side of the prong part and configured to press against the user's upper lip.



mask. The strap is made from a flexible elastomeric material such as silastic and is shaped so that the central area 12a of the strap is curved to generally conform to the shape of the area of a human face between a human's mouth and the base of their nose (see FIG. 2). Note that hereinafter the human is referred to as a patient. On the opposite side of the central area of the strap 12a which contacts a patient's face, there is a manifold or chamber 18. The manifold is also made from the same flexible elastomeric material as the strap. The

<u>Piljay Does not Teach Head Gear Extensions Extending from Rigid Mask Body Laterally, Beyond Outer Periphery of Seal Body</u>

Piljay shows a mask having a cup-shaped face member 11, a housing 126, and a headstrap 17, but no headgear extensions extending from a rigid mask body and along two directions, including laterally away from the rigid mask body beyond an outer periphery of the cup-shaped face member.



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FPHCR.112C2

BREATHING ASSISTANCE APPARATUS

App. No.: 14/846,226

Filing Date: September 4, 2015

1. A mask assembly for delivering positive airway pressure to a user, the mask

comprising:

a rigid mask body comprising a central portion, an outer surface having at least a

curved portion and a mask body periphery, the mask body periphery comprising a left

peripheral side and a right peripheral side;

a prong part comprising a hollow body removably sealed to the rigid mask body

defining an enclosed space, a prong part periphery extending along a periphery of the

hollow body, and first and second nasal prongs extending from the hollow body, the

periphery of the prong part removably sealed to the mask body periphery in use, the

prong part being formed as a single piece and being more flexible than the rigid mask

body;

an inspiratory conduit connected to the rigid mask body configured to deliver

pressurized gases into the enclosed space defined by the rigid mask body and the prong

part for inhalation by a user in use;

a headgear arrangement configured to maintain the prong part in a position with

the first and second prongs against a user's nares in use, the headgear arrangement

comprising first and second headgear extensions and a headgear strap;

the first headgear extension having a distal end connected to the left peripheral

side of the rigid mask body on a distal side of the prong part, and a proximal end

disposed proximally toward a left side of a user's face in use, the first headgear extension

comprising a first portion and a second portion, the first portion of the first headgear

extension comprising the distal end of the first headgear extension and extending at least

along a first lateral direction extending laterally away from the left peripheral side of the

rigid mask body and beyond an outer periphery of the prong part, the second portion of

mask body and beyond an outer periphery of the prong part, the second portion of

the first headgear extension extending from the first portion, along a second direction

extending more proximally toward the user than the first direction in use;

the second headgear extension having a distal end connected to the right

peripheral side of the rigid mask body on the distal side of the prong part, and a proximal

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App. No.: 14/846,226

Filing Date: September 4, 2015

end disposed proximally toward a right side of a user's face in use, the second headgear extension comprising a first portion and a second portion, the first portion of the second headgear extension comprising the distal end of the second headgear extension and extending at least along a third lateral direction extending laterally away from the rigid mask body and beyond the outer periphery of the prong part, the second portion of the second headgear extension extending from the first portion, along a fourth direction extending more proximally toward the user than the third direction in use;

the headgear strap comprising a flexible tube having first and second ends, the first end connected to the first headgear extension at a first location between the distal end and the proximal ends of the first headgear extension and a second end connected to the second headgear extension at a second location disposed between the proximal and distal ends of the second headgear extension; and

at least a first bias flow vent disposed on the curved portion of the outer surface of the rigid mask body, the first bias flow vent being configured to vent a gas from the enclosed space between the rigid mask body and the prong part, to an outside of the rigid mask body during use.

- 2. The mask assembly of Claim 1, wherein the first bias flow vent comprises a flow vent outer surface, the flow vent outer surface being recessed inwardly from the curved portion of the outer surface of the rigid mask body.
- 3. The mask assembly of Claim 1, additionally comprising a conduit connection disposed on the rigid mask body and connecting the inspiratory conduit to the rigid mask body, the first bias flow vent comprising a plurality of apertures arranged symmetrically on left and right sides of the conduit connection.
- 4. The mask assembly of Claim 1, wherein the rigid mask body is configured to direct gases entering the rigid mask body from the conduit away from the bias flow vent.
- 5. The mask assembly of Claim 4, wherein the rigid mask body is configured to direct gases entering the rigid mask body from the prong part toward the bias flow vent.

App. No.: 14/846,226

FPHCR.112C2

Filing Date: September 4, 2015

6. A mask assembly for delivering positive airway pressure to a user, the mask comprising:

a rigid mask body comprising a central portion, an outer surface having at least a curved portion;

an inspiratory conduit connected to the rigid mask body;

a prong part comprising a hollow body and first and second nasal prongs extending from the hollow body, the hollow body removably connected to the mask body;

a first headgear extension having a distal end connected to the rigid mask body on a distal side of the prong part, and a proximal end disposed proximally toward a user in use, the first headgear extension comprising a first portion and a second portion, the first portion of the first headgear extension comprising the distal end of the first headgear extension and extending at least along a first lateral direction extending laterally away from the rigid mask body and beyond an outer periphery of the prong part, the second portion of the first headgear extension extending from the first portion, along a second direction extending more proximally toward the user than the first direction in use;

a second headgear extension having a distal end connected to the rigid mask body on the distal side of the prong part, and a proximal end disposed proximally toward a user in use, the second headgear extension comprising a first portion and a second portion, the first portion of the second headgear extension comprising the distal end of the second headgear extension and extending at least along a third lateral direction extending laterally away from the rigid mask body and beyond the outer periphery of the prong part, the second portion of the second headgear extension along a fourth direction more proximally toward the user than the third direction in use; and

a headgear strap connected to the first headgear extension at a first location between the distal end and the proximal ends of the first headgear extension and connected to the second headgear extension at a second location disposed between the proximal and distal ends of the second headgear extension.

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App. No.: 14/846,226

Filing Date: September 4, 2015

7. The mask assembly of Claim 6, wherein the first portion of the first headgear

extension is shorter than the second portion of the first headgear extension and the first portion

of the second headgear extension is shorter than the second portion of the second headgear

extension.

8. The mask assembly of Claim 6, wherein the headgear strap comprises a flexible tube

and is connected to the second portion of the first headgear extension and the second portion of

the second headgear extension.

9. The mask assembly of Claim 6, wherein the first portion of the first headgear

extension and the first portion of the second headgear extension extend laterally outward

distally of a sealing location between the prong part and the mask body and the second portion

of the first headgear extension and the second portion of the second headgear extension

terminate proximally of the sealing location between the prong part and the mask body.

10. The mask assembly of Claim 6, wherein the headstrap comprises first and second

ends, the first end extending along first and second opposite sides of the second portion of the

first headgear extension at the connection to the first headgear extension, the second end

extending along first and second opposite sides of the second portion of the second headgear

extension at the connection to the second headgear extension.

11. The mask assembly of Claim 6, wherein the second portion of the first headgear

extension and the second portion of the second headgear extension terminate proximally of a

mating region between the hollow body of the prong portion and the rigid mask body.

12. The mask assembly of Claim 6, wherein the hollow body of the prong portion and

the rigid mask body overlap each other in a mating region.

13. The mask assembly of Claim 12, wherein the hollow body, the first prong and the

second prong are integrally formed in a monolithic component.

14. The mask assembly of Claim12, wherein the first prong and the second prong are

angled toward each other in the proximal direction.

15. The mask assembly of Claim 6, wherein the rigid mask body comprises a recessed

curved portion of the curved outer which is recessed inwardly into the rigid mask body relative

FPHCR.112C2

App. No.: 14/846,226

Filing Date: September 4, 2015

to a surrounding portion of the curved outer surface, the recessed curved portion comprising a plurality of apertures defining a bias flow outlet vent.

16. The mask assembly of Claim 6, wherein the rigid mask body is configured to direct gases entering the rigid mask body from the conduit away from the bias flow vent, and to direct gases entering the rigid mask body from the prong part toward the bias flow vent.

17. A mask assembly for delivering positive airway pressure to a user, the mask comprising:

a rigid mask body;

an inspiratory conduit connected to the rigid mask body;

a prong part comprising a hollow body and first and second nasal prongs extending from the hollow body, the hollow body removably connected to the mask body;

a first headgear extension having a distal end connected to the rigid mask body on a distal side of the prong part and a proximal end disposed proximally toward a user in use, the first headgear extension extending from the rigid mask body, at least along a first lateral direction extending laterally away from the rigid mask body and beyond an outer periphery of the prong part and along a second direction extending more proximally toward the user than the first direction in use; and

a second headgear extension having a distal end connected to the rigid mask body on the distal side of the prong part and a proximal end disposed proximally toward a user in use, the second headgear extension extending from the rigid mask body at least along a third lateral direction extending laterally away from the rigid mask body and beyond the outer periphery of the prong part and[[, the second portion of the second headgear extension]] along a fourth direction more proximally toward the user than the third direction in use.

18. The mask assembly of Claim 17 additionally comprising a headgear strap connected to the first headgear extension at a first location between the distal end and the proximal ends of

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BREATHING ASSISTANCE APPARATUS

App. No.: 14/846,226

Filing Date: September 4, 2015

the first headgear extension and connected to the second headgear extension at a second location disposed between the proximal and distal ends of the second headgear extension.

19. The mask assembly of Claim 18, wherein the headgear strap comprises a flexible tube engaged with the first and second headgear extensions.

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Examiner Annette Dixon

USPTO FACSIMILE NO.:

(571) 273-3392

USPTO REFERENCE:

Inventor:

Alastair Edwin McAuley, et al.

Serial No.:

14/846,226

Filed:

September 4, 2015

Title:

BREATHING ASSISTANCE APPARATUS

ATTORNEY:

Michael A. Guiliana

PHONE No.:

(949) 721-6384

ATTORNEY DOCKET No.:

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2002

DRAFT INTERVIEW AGENDA (Suppl.)

U.S. Application No.: 14/846,226 (FPHCR.112C2)

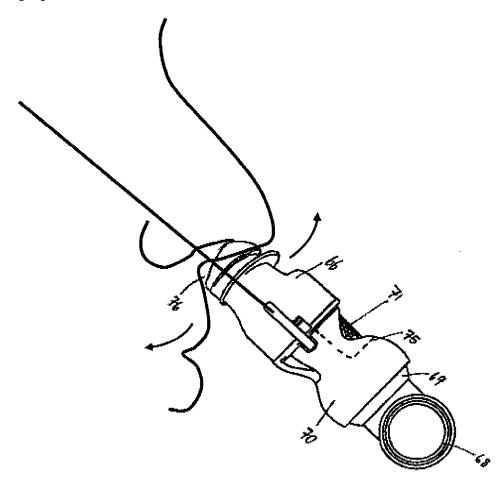
Date/Time: Thursday, February 04, 2016; 1:30 PM Eastern

Attendees: Examiner Annette Dixon, Michael A. Guiliana (Reg. No. 42,611),

Xiaoyan Wang

02/03/2016 17:53 FAX

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USPTO FACSIMILE NO.:

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Serial No.:

14/846,226

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September 4, 2015

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BREATHING ASSISTANCE APPARATUS

ATTORNEY

Michael A. Guiliana

PHONE No.:

(949) 721-6384

ATTORNEY DOCKET No .:

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BREATHING ASSISTANCE APPARATUS

App. No.:

14/846,226

Filing Date: September 4, 2015

Claims for Interview Request

1. (Currently Amended) A mask assembly for delivering positive airway pressure to a user, the mask comprising:

a rigid mask body comprising a central portion, an outer surface having at least a curved portion and a mask body periphery, the mask body periphery comprising a left peripheral side and a right peripheral side;

a prong part comprising a hollow body removably sealed to the rigid mask body defining an enclosed space, a prong part periphery extending along a periphery of the hollow body, and first and second nasal prongs extending from the hollow body, the periphery of the prong part removably sealed to the mask body periphery in use, the prong part being formed as a single piece and being more flexible than the rigid mask body;

an inspiratory conduit connected to the rigid mask body configured to deliver pressurized gases into the enclosed space defined by the rigid mask body and the prong part for inhalation by a user in use;

a headgear arrangement configured to maintain the prong part in a position with the first and second prongs against a user's nares in use, the headgear arrangement comprising first and second headgear extensions and a headgear strap;

the first headgear extension having a distal end connected to the left peripheral side of the rigid mask body on a distal side of the prong part at a location spaced from a user in use, and a proximal end disposed proximally toward a left side of a user's face in use, the first headgear extension comprising a first portion and a second portion, the first portion of the first headgear extension comprising the distal end of the first headgear extension and extending at least along a first lateral direction extending laterally away from the left peripheral side of the rigid mask body and beyond an outer periphery of the prong part, the second portion of the first headgear extension extending from the first portion, along a second direction extending more proximally toward the user than the first direction in use;

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14/846,226

App. No.: September 4, 2015 Filing Date:

Claims for Interview Request

BREATHING ASSISTANCE APPARATUS

the second headgear extension having a distal end connected to the right peripheral side of the rigid mask body on the distal side of the prong part at a location spaced from a user in use, and a proximal end disposed proximally toward a right side of a user's face in use, the second headgear extension comprising a first portion and a second portion, the first portion of the second headgear extension comprising the distal end of the second headgear extension and extending at least along a third lateral direction extending laterally away from the rigid mask body and beyond the outer periphery of the prong part, the second portion of the second headgear extension extending from the first portion, along a fourth direction extending more proximally toward the user than the third direction in use:

the headgear strap comprising a flexible tube having first and second ends, the first end connected to the first headgear extension at a first location between the distal end and the proximal ends of the first headgear extension and a second end connected to the second headgear extension at a second location disposed between the proximal and distal ends of the second headgear extension; and

at least a first bias flow vent disposed on the curved portion of the outer surface of the rigid mask body, the first bias flow vent being configured to vent a gas from the enclosed space between the rigid mask body and the prong part, to an outside of the rigid mask body during use.

- 2. The mask assembly of Claim 1, wherein the first bias flow vent comprises a flow vent outer surface, the flow vent outer surface being recessed inwardly from the curved portion of the outer surface of the rigid mask body.
- 3. The mask assembly of Claim 1, additionally comprising a conduit connection disposed on the rigid mask body and connecting the inspiratory conduit to the rigid mask body, the first bias flow vent comprising a plurality of apertures arranged symmetrically on left and right sides of the conduit connection.
- 4. The mask assembly of Claim 1, wherein the rigid mask body is configured to direct gases entering the rigid mask body from the conduit away from the bias flow vent.

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BREATHING ASSISTANCE APPARATUS

App. No.:

14/846,226

Filing Date: September 4, 2015

Claims for Interview Request

5. The mask assembly of Claim 4, wherein the rigid mask body is configured to direct gases entering the rigid mask body from the prong part toward the bias flow vent.

6. A mask assembly for delivering positive airway pressure to a user, the mask comprising:

a rigid mask body comprising a central portion, an outer surface having at least a curved portion;

an inspiratory conduit connected to the rigid mask body;

a prong part comprising a hollow body and first and second nasal prongs extending from the hollow body, the hollow body removably connected to the mask body;

a first headgear extension having a distal end connected to the rigid mask body on a distal side of the prong part at a location spaced from a user in use, and a proximal end disposed proximally toward a user in use, the first headgear extension comprising a first portion and a second portion, the first portion of the first headgear extension comprising the distal end of the first headgear extension and extending at least along a first lateral direction extending laterally away from the rigid mask body and beyond an outer periphery of the prong part, the second portion of the first headgear extension extending from the first portion, along a second direction extending more proximally toward the user than the first direction in use;

a second headgear extension having a distal end connected to the rigid mask body on the distal side of the prong part at a location spaced from a user in use, and a proximal end disposed proximally toward a user in use, the second headgear extension comprising a first portion and a second portion, the first portion of the second headgear extension comprising the distal end of the second headgear extension and extending at least along a third lateral direction extending laterally away from the rigid mask body and beyond the outer periphery of the prong part, the second portion of the second headgear extension along a fourth direction more proximally toward the user than the third direction in use; and

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BREATHING ASSISTANCE APPARATUS

App. No.: 14/846,226

Filing Date: September 4, 2015

Claims for Interview Request

a headgear strap connected to the first headgear extension at a first location between the distal end and the proximal ends of the first headgear extension and connected to the second headgear extension at a second location disposed between the proximal and distal ends of the second headgear extension.

- 7. The mask assembly of Claim 6, wherein the first portion of the first headgear extension is shorter than the second portion of the first headgear extension and the first portion of the second headgear extension is shorter than the second portion of the second headgear extension.
- 8. The mask assembly of Claim 6, wherein the headgear strap comprises a flexible tube and is connected to the second portion of the first headgear extension and the second portion of the second headgear extension.
- 9. The mask assembly of Claim 6, wherein the first portion of the first headgear extension and the first portion of the second headgear extension extend laterally outward distally of a sealing location between the prong part and the mask body and the second portion of the first headgear extension and the second portion of the second headgear extension terminate proximally of the sealing location between the prong part and the mask body.
- 10. The mask assembly of Claim 6, wherein the headstrap comprises first and second ends, the first end extending along first and second opposite sides of the second portion of the first headgear extension at the connection to the first headgear extension, the second end extending along first and second opposite sides of the second portion of the second headgear extension at the connection to the second headgear extension.
- 11. The mask assembly of Claim 6, wherein the second portion of the first headgear extension and the second portion of the second headgear extension terminate proximally of a mating region between the hollow body of the prong portion and the rigid mask body.
- 12. The mask assembly of Claim 6, wherein the hollow body of the prong portion and the rigid mask body overlap each other in a mating region.
- 13. The mask assembly of Claim 12, wherein the hollow body, the first prong and the second prong are integrally formed in a monolithic component.

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BREATHING ASSISTANCE APPARATUS

App. No.:

14/846,226

Filing Date: September 4, 2015

Claims for Interview Request

14. The mask assembly of Claim12, wherein the first prong and the second prong are angled toward each other in the proximal direction.

15. The mask assembly of Claim 6, wherein the rigid mask body comprises a recessed curved portion of the curved outer which is recessed inwardly into the rigid mask body relative to a surrounding portion of the curved outer surface, the recessed curved portion comprising a plurality of apertures defining a bias flow outlet vent.

- 16. The mask assembly of Claim 6, wherein the rigid mask body is configured to direct gases entering the rigid mask body from the conduit away from the bias flow vent, and to direct gases entering the rigid mask body from the prong part toward the bias flow vent.
- 17. A mask assembly for delivering positive airway pressure to a user, the mask comprising:
 - a rigid mask body;
 - an inspiratory conduit connected to the rigid mask body;
 - a prong part comprising a hollow body and first and second nasal prongs extending from the hollow body, the hollow body removably connected to the mask body;
 - a first headgear extension having a distal end connected to the rigid mask body on a distal side of the prong part at a location spaced from a user in use, and a proximal end disposed proximally toward a user in use, the first headgear extension extending from the rigid mask body, at least along a first lateral direction extending laterally away from the rigid mask body and beyond an outer periphery of the prong part and along a second direction extending more proximally toward the user than the first direction in use; and
 - a second headgear extension having a distal end connected to the rigid mask body on the distal side of the prong part at a location spaced from a user in use, and a proximal end disposed proximally toward a user in use, the second headgear extension extending from the rigid mask body at least along a third lateral direction extending laterally away from the rigid mask body and beyond the outer periphery of the prong part and [[, the

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Claims for Interview Request

second portion of the second headgear extension]] along a fourth direction more proximally toward the user than the third direction in use.

- 18. The mask assembly of Claim 17 additionally comprising a headgear strap connected to the first headgear extension at a first location between the distal end and the proximal ends of the first headgear extension and connected to the second headgear extension at a second location disposed between the proximal and distal ends of the second headgear extension.
- 19. The mask assembly of Claim 18, wherein the headgear strap comprises a flexible tube engaged with the first and second headgear extensions.

22625854 020416 Doc Code: M865 or FAI.REQ.INTV

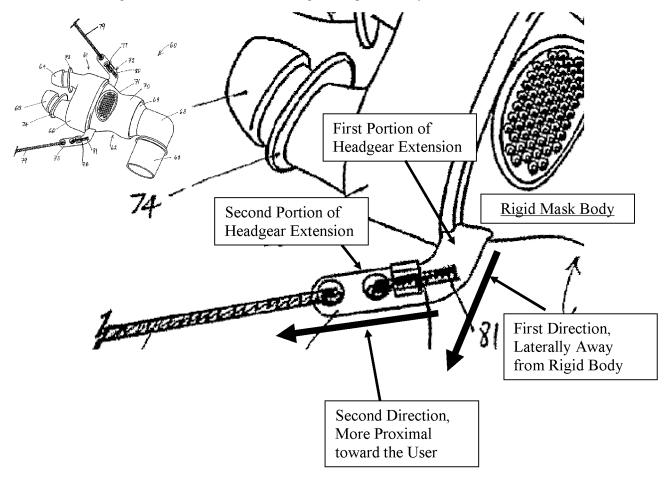
Applicant Initiated Interview Request Form					
Application No.: 14/846226		First Named Applicant: Alastair Edwin McAuley			
Examiner: Annette Fredricka Dixon		Art Unit: 3778	Art Unit: 3778 Status of Application: Pending		
Tentative Participants: (1) Michael A. Guiliana, Esq.		_ (2)			
(3)		_ (4)			
Proposed Date of Interview: 1/13/2		/2016	Proposed Time: 2:00 PM EST (AM/PM		ST (AM/PM)
Type of Interview F (1) [≠] Telephonic	Requested: (2) [] Perso	nal (3) [] Video	Conference		
Exhibit To Be Show If yes, provide brief			[] NO		_
		Issues To Be Disc	cussed		
Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
₍₁₎ 103	1-2, 4, 5, 8, 19	Stenzler	1.1	[]	[]
(2)_103	6-7, 9-18	Stenzler & Wilkie		[]	[]
(3)_103	3	Chandran & Thomlinson	[]	[]	LJ
(4) <u>101, 112(2)</u>	1-19		[]	1.1	[]
[/] Continuation She Brief Description of		Proposed Amend	lment or Argume		
Brief Description of	Arguments to t	Je r resenteu:			
An interview was co	onducted on the	above-identified applic	cation on		
If this form is signed or she is authorized to 1.34. This is not a powhich is incorporated read the Instruction Substance of this inter-	by a registered proconduct an interverse of attorney to by reference. By Sheet. After the inview (37 CFR 1.1	d and filed by applicant in actitioner not of record, to view on behalf of the print any above named practity signing this form, applicant applicant erview is conducted, application (application) as soon as possible to a written record of this in actition of this in a sound applicant applicant applicant applicant applicant applicant applicant applicant applicant applicant applicant applicant applicant in applicant in action applicant in applic	the Office will acc ncipal (37 CFR 1. tioner. See the In tant or practition plicant is advised to This application	ept this as an in 32(a)(3)) pursus struction Sheet er is certifying to file a statement.	ndication that he ant to 37 CFR for this form, hat he or she has ent of the
/Michael Gui	liana/				
Applicant/Applica	•	ive Signature	Exam	iner/SPE Signa	ature
Michael A. Gu					
Typed/Printed Name	e of Applicant or	Representative			
42611 Registration	n Number, if app	licable			

This collection of information is required by 37 CFR 1.133. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 24 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Summary of Issues for Discussion

The claims of the present application cover the non-limiting embodiment of Figures 9-11. As recited in claims 1, 6, and 17, the mask assembly includes a rigid mask body and head gear extensions (one labeled below). The head gear extensions include a distal end **connected** to the rigid mask body and proximal ends disposed proximally toward the user (in use).

The head gear extensions also **extend** *from* **the rigid mask body** first along a lateral direction, then along a second direction extending more proximally toward the user.

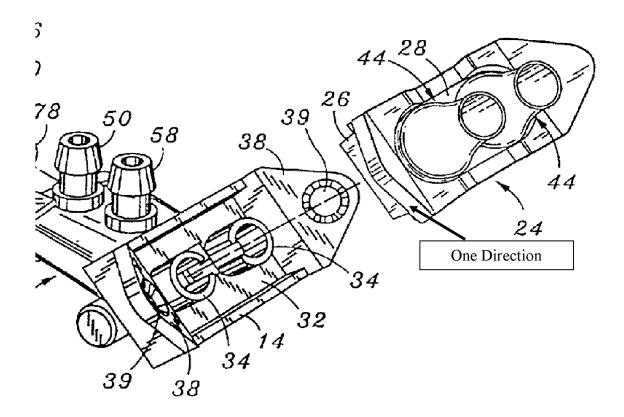


None of the cited references show this structure.

The cited prior art references are summarized below:

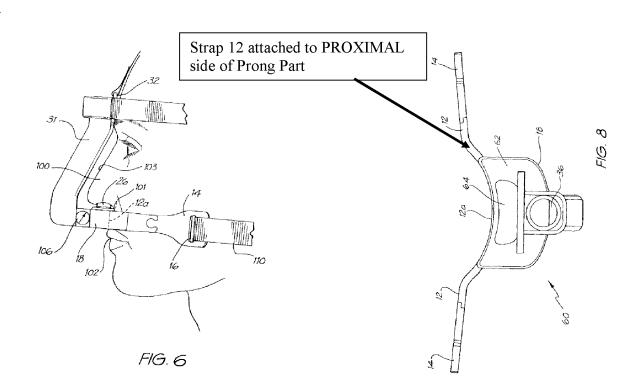
<u>Stenzler et al Does not Teach Head Gear Extensions Extending from Rigid Mask Body Along Two Different Directions</u>

Stenzler Shows triangular flanges extending from a nose piece member 24 along ONE DIRECTION. The flanges do not extend along a first lateral direction then along a second direction more proximal toward a user.



Wilkie et al Does not Teach Head Gear Extensions Extending from Rigid Mask Body on the Distal side of the Prong Part and Along the Two Different Recited Directions

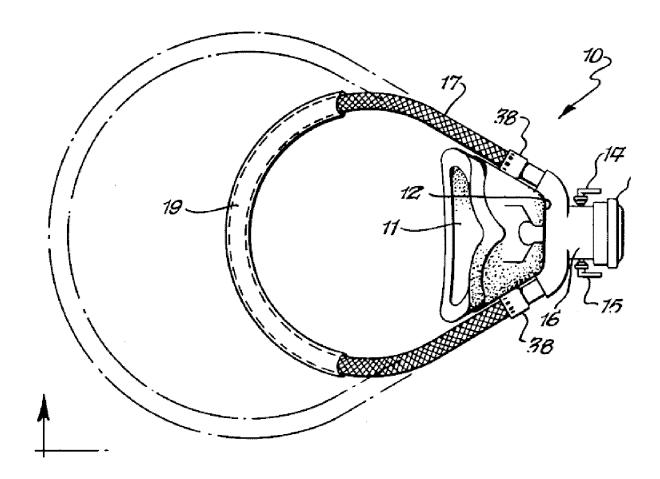
Wilkie shows a mask having a prong part with a strap attached to the proximal side of the prong part and configured to press against the user's upper lip.



mask. The strap is made from a flexible elastomeric material such as silastic and is shaped so that the central area 12a of the strap is curved to generally conform to the shape of the area of a human face between a human's mouth and the base of their nose (see FIG. 2). Note that hereinafter the human is referred to as a patient. On the opposite side of the central area of the strap 12a which contacts a patient's face, there is a manifold or chamber 18. The manifold is also made from the same flexible elastomeric material as the strap. The

<u>Piljay Does not Teach Head Gear Extensions Extending from Rigid Mask Body Laterally, Beyond Outer Periphery of Seal Body</u>

Piljay shows a mask having a cup-shaped face member 11, a housing 126, and a headstrap 17, but no headgear extensions extending from a rigid mask body and along two directions, including laterally away from the rigid mask body beyond an outer periphery of the cup-shaped face member.



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1. A mask assembly for delivering positive airway pressure to a user, the mask comprising:

a rigid mask body comprising a central portion, an outer surface having at least a curved portion and a mask body periphery, the mask body periphery comprising a left peripheral side and a right peripheral side;

a prong part comprising a hollow body removably sealed to the rigid mask body defining an enclosed space, a prong part periphery extending along a periphery of the hollow body, and first and second nasal prongs extending from the hollow body, the periphery of the prong part removably sealed to the mask body periphery in use, the prong part being formed as a single piece and being more flexible than the rigid mask body;

an inspiratory conduit connected to the rigid mask body configured to deliver pressurized gases into the enclosed space defined by the rigid mask body and the prong part for inhalation by a user in use;

a headgear arrangement configured to maintain the prong part in a position with the first and second prongs against a user's nares in use, the headgear arrangement comprising first and second headgear extensions and a headgear strap;

the first headgear extension having a distal end connected to the left peripheral side of the rigid mask body on a distal side of the prong part, and a proximal end disposed proximally toward a left side of a user's face in use, the first headgear extension comprising a first portion and a second portion, the first portion of the first headgear extension comprising the distal end of the first headgear extension and extending at least along a first lateral direction extending laterally away from the left peripheral side of the rigid mask body and beyond an outer periphery of the prong part, the second portion of the first headgear extension extending from the first portion, along a second direction extending more proximally toward the user than the first direction in use;

the second headgear extension having a distal end connected to the right peripheral side of the rigid mask body on the distal side of the prong part, and a proximal

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Filing Date: September 4, 2015

end disposed proximally toward a right side of a user's face in use, the second headgear extension comprising a first portion and a second portion, the first portion of the second headgear extension comprising the distal end of the second headgear extension and extending at least along a third lateral direction extending laterally away from the rigid mask body and beyond the outer periphery of the prong part, the second portion of the second headgear extension extending from the first portion, along a fourth direction extending more proximally toward the user than the third direction in use;

the headgear strap comprising a flexible tube having first and second ends, the first end connected to the first headgear extension at a first location between the distal end and the proximal ends of the first headgear extension and a second end connected to the second headgear extension at a second location disposed between the proximal and distal ends of the second headgear extension; and

at least a first bias flow vent disposed on the curved portion of the outer surface of the rigid mask body, the first bias flow vent being configured to vent a gas from the enclosed space between the rigid mask body and the prong part, to an outside of the rigid mask body during use.

- 2. The mask assembly of Claim 1, wherein the first bias flow vent comprises a flow vent outer surface, the flow vent outer surface being recessed inwardly from the curved portion of the outer surface of the rigid mask body.
- 3. The mask assembly of Claim 1, additionally comprising a conduit connection disposed on the rigid mask body and connecting the inspiratory conduit to the rigid mask body, the first bias flow vent comprising a plurality of apertures arranged symmetrically on left and right sides of the conduit connection.
- 4. The mask assembly of Claim 1, wherein the rigid mask body is configured to direct gases entering the rigid mask body from the conduit away from the bias flow vent.
- 5. The mask assembly of Claim 4, wherein the rigid mask body is configured to direct gases entering the rigid mask body from the prong part toward the bias flow vent.

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6. A mask assembly for delivering positive airway pressure to a user, the mask comprising:

a rigid mask body comprising a central portion, an outer surface having at least a curved portion;

an inspiratory conduit connected to the rigid mask body;

a prong part comprising a hollow body and first and second nasal prongs extending from the hollow body, the hollow body removably connected to the mask body;

a first headgear extension having a distal end connected to the rigid mask body on a distal side of the prong part, and a proximal end disposed proximally toward a user in use, the first headgear extension comprising a first portion and a second portion, the first portion of the first headgear extension comprising the distal end of the first headgear extension and extending at least along a first lateral direction extending laterally away from the rigid mask body and beyond an outer periphery of the prong part, the second portion of the first headgear extension extending from the first portion, along a second direction extending more proximally toward the user than the first direction in use;

a second headgear extension having a distal end connected to the rigid mask body on the distal side of the prong part, and a proximal end disposed proximally toward a user in use, the second headgear extension comprising a first portion and a second portion, the first portion of the second headgear extension comprising the distal end of the second headgear extension and extending at least along a third lateral direction extending laterally away from the rigid mask body and beyond the outer periphery of the prong part, the second portion of the second headgear extension along a fourth direction more proximally toward the user than the third direction in use; and

a headgear strap connected to the first headgear extension at a first location between the distal end and the proximal ends of the first headgear extension and connected to the second headgear extension at a second location disposed between the proximal and distal ends of the second headgear extension.

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7. The mask assembly of Claim 6, wherein the first portion of the first headgear

extension is shorter than the second portion of the first headgear extension and the first portion

of the second headgear extension is shorter than the second portion of the second headgear

extension.

8. The mask assembly of Claim 6, wherein the headgear strap comprises a flexible tube

and is connected to the second portion of the first headgear extension and the second portion of

the second headgear extension.

9. The mask assembly of Claim 6, wherein the first portion of the first headgear

extension and the first portion of the second headgear extension extend laterally outward

distally of a sealing location between the prong part and the mask body and the second portion

of the first headgear extension and the second portion of the second headgear extension

terminate proximally of the sealing location between the prong part and the mask body.

10. The mask assembly of Claim 6, wherein the headstrap comprises first and second

ends, the first end extending along first and second opposite sides of the second portion of the

first headgear extension at the connection to the first headgear extension, the second end

extending along first and second opposite sides of the second portion of the second headgear

extension at the connection to the second headgear extension.

11. The mask assembly of Claim 6, wherein the second portion of the first headgear

extension and the second portion of the second headgear extension terminate proximally of a

mating region between the hollow body of the prong portion and the rigid mask body.

12. The mask assembly of Claim 6, wherein the hollow body of the prong portion and

the rigid mask body overlap each other in a mating region.

13. The mask assembly of Claim 12, wherein the hollow body, the first prong and the

second prong are integrally formed in a monolithic component.

14. The mask assembly of Claim12, wherein the first prong and the second prong are

angled toward each other in the proximal direction.

15. The mask assembly of Claim 6, wherein the rigid mask body comprises a recessed

curved portion of the curved outer which is recessed inwardly into the rigid mask body relative

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to a surrounding portion of the curved outer surface, the recessed curved portion comprising a plurality of apertures defining a bias flow outlet vent.

16. The mask assembly of Claim 6, wherein the rigid mask body is configured to direct gases entering the rigid mask body from the conduit away from the bias flow vent, and to direct gases entering the rigid mask body from the prong part toward the bias flow vent.

17. A mask assembly for delivering positive airway pressure to a user, the mask comprising:

a rigid mask body;

an inspiratory conduit connected to the rigid mask body;

a prong part comprising a hollow body and first and second nasal prongs extending from the hollow body, the hollow body removably connected to the mask body;

a first headgear extension having a distal end connected to the rigid mask body on a distal side of the prong part and a proximal end disposed proximally toward a user in use, the first headgear extension extending from the rigid mask body, at least along a first lateral direction extending laterally away from the rigid mask body and beyond an outer periphery of the prong part and along a second direction extending more proximally toward the user than the first direction in use; and

a second headgear extension having a distal end connected to the rigid mask body on the distal side of the prong part and a proximal end disposed proximally toward a user in use, the second headgear extension extending from the rigid mask body at least along a third lateral direction extending laterally away from the rigid mask body and beyond the outer periphery of the prong part and[[, the second portion of the second headgear extension]] along a fourth direction more proximally toward the user than the third direction in use.

18. The mask assembly of Claim 17 additionally comprising a headgear strap connected to the first headgear extension at a first location between the distal end and the proximal ends of

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the first headgear extension and connected to the second headgear extension at a second location disposed between the proximal and distal ends of the second headgear extension.

19. The mask assembly of Claim 18, wherein the headgear strap comprises a flexible tube engaged with the first and second headgear extensions.

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Electronic Acknowledgement Receipt		
EFS ID:	24521356	
Application Number:	14846226	
International Application Number:		
Confirmation Number:	8898	
Title of Invention:	BREATHING ASSISTANCE APPARATUS	
First Named Inventor/Applicant Name:	Alastair Edwin McAuley	
Customer Number:	20995	
Filer:	Michael A. Guiliana/ThuyQuyen Nguyen	
Filer Authorized By:	Michael A. Guiliana	
Attorney Docket Number:	FPHCR.112C2	
Receipt Date:	04-JAN-2016	
Filing Date:	04-SEP-2015	
Time Stamp:	19:24:18	
Application Type:	Utility under 35 USC 111(a)	

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	First Action Interview - Schedule Interview request	FPHCR112C2_Interview_Reque st.pdf	522926	. no	11
,			bf24bf39f80cf4ea7495e1154c958941ee78a d9b		

Warnings:

Information:

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.



United States Patent and Trademark Office

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APPLICATION NUMBER

FILING OR 371(C) DATE

FIRST NAMED APPLICANT

ATTY. DOCKET NO./TITLE FPHCR.112C2

14/846,226

09/04/2015

Alastair Edwin McAuley

CONFIRMATION NO. 8898

PUBLICATION NOTICE

20995 KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR **IRVINE, CA 92614**

Title:BREATHING ASSISTANCE APPARATUS

Publication No.US-2015-0374946-A1

Publication Date: 12/31/2015

NOTICE OF PUBLICATION OF APPLICATION

The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seg. The patent application publication number and publication date are set forth above.

The publication may be accessed through the USPTO's publically available Searchable Databases via the Internet at www.uspto.gov. The direct link to access the publication is currently http://www.uspto.gov/patft/.

The publication process established by the Office does not provide for mailing a copy of the publication to applicant. A copy of the publication may be obtained from the Office upon payment of the appropriate fee set forth in 37 CFR 1.19(a)(1). Orders for copies of patent application publications are handled by the USPTO's Office of Public Records. The Office of Public Records can be reached by telephone at (703) 308-9726 or (800) 972-6382. by facsimile at (703) 305-8759, by mail addressed to the United States Patent and Trademark Office, Office of Public Records, Alexandria, VA 22313-1450 or via the Internet.

In addition, information on the status of the application, including the mailing date of Office actions and the dates of receipt of correspondence filed in the Office, may also be accessed via the Internet through the Patent Electronic Business Center at www.uspto.gov using the public side of the Patent Application Information and Retrieval (PAIR) system. The direct link to access this status information is currently http://pair.uspto.gov/. Prior to publication, such status information is confidential and may only be obtained by applicant using the private side of PAIR.

Further assistance in electronically accessing the publication, or about PAIR, is available by calling the Patent Electronic Business Center at 1-866-217-9197.

Office of Data Managment, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
14/846,226	09/04/2015	Alastair Edwin McAuley	FPHCR.112C2	8898	
20995 7590 12/04/2015 KNOBBE MARTENS OLSON & BEAR LLP			EXAMINER		
2040 MAIN ST FOURTEENTH	REET		DIXON, ANNETTE FREDRICKA		
IRVINE, CA 92	2614		ART UNIT PAPER NUMBER		
			3778		
			NOTIFICATION DATE	DELIVERY MODE	
			12/04/2015	ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jayna.cartee@knobbe.com efiling@knobbe.com

Notice of References Cited Application/Control No. 14/846,226 Examiner ANNETTE DIXON Applicant(s)/Patent Under Reexamination MCAULEY ET AL. Page 1 of 1

U.S. PATENT DOCUMENTS

		Document Number	Date	I		
*		Country Code-Number-Kind Code	MM-YYYY	Name	CPC Classification	US Classification
*	Α	US-2003/0200970 A1	10-2003	Stenzler, Alex	A61M16/0666	128/207.18
*	В	US-7,201,169 B2	04-2007	Wilkie; Paul	A61M16/06	128/207.13
*	U	US-4,437,462 A	03-1984	Piljay; Robert E.	A62B18/084	128/207.11
*	D	US-2006/0124131 A1	06-2006	Chandran; Sanjay	A61M16/06	128/206.28
*	Е	US-2005/0011524 A1	01-2005	Thomlinson, Marguerite	A61M16/0666	128/207.18
	F	US-				
	G	US-				
	Ι	US-				
		US-				
	J	US-				
	K	US-				
	┙	US-				
	М	US-				

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	Ν					
	0					
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NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)					
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*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

U.S. Patent and Trademark Office PTO-892 (Rev. 01-2001)

First Action Interview Pilot Program Pre-Interview Communication

Application No.	Applicant(s)	
14/846,226	MCAULEY E	T AL.
Examiner	Art Unit	AIA (First Inventor to File)
ANNETTE DIXON	3778	Status No

This time period for reply is extendable under 37 CFR 1.136(a) for only ONE additional MONTH.

This communication constitutes notice under 37 CFR 1.136(a)(1)(i).

Applicant must, within the time period for reply, file: (1) A letter requesting not to have a first action interview; (2) A reply under 37 CFR 1.111 waiving the first action interview and First Action Interview Office Action; or (3) An Applicant Initiated Interview Request Form (PTOL-

the filing of the request. A failure to respond to this commu the First Action Interview Office Action, the instant Pre-Inter subsequent Office action may be made final if appropriate.	osed amendment or arguments, and schedule the interview within 2 months from nication will be treated as a request not to have an interview. If applicant waives view Communication is deemed the first Office Action on the Merits. The next See MPEP 706.07(a).					
Status						
1) Responsive to communication(s) filed on $\underline{9}$						
A declaration(s)/affidavit(s) under 37 CFR	1.130(b) was/were filed on					
Disposition of Claims						
2) Claim(s) 1-19 is/are pending in the application	on.					
2a) Of the above claim(s) is/are with						
3) Claim(s) is/are allowed.						
4)⊠ Claim(s) <u>1-19</u> is/are rejected.						
5) Claim(s) is/are objected to.						
6) Claim(s) are subject to restriction and	d/or election requirement.					
Application Papers						
	la a v					
7) The specification is objected to by the Exam						
8) The drawing(s) filed on is/are: a) a						
	he drawing(s) be held in abeyance. See 37 CFR 1.85(a). rection is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
Priority under 35 U.S.C. § 119						
9) Acknowledgment is made of a claim for foreig	n priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☑ All b) ☐ Some * c) ☐ None of:	anta haya baan ragaiyad					
1. Certified copies of the priority docume						
	ents have been received in Application No. 10/598,026.					
application from the International Bur	riority documents have been received in this National Stage eau (PCT Rule 17.2(a)).					
*See the attached detailed Office action for a list of the						
	·					
Contact Information						
Examiner's Telephone Number: (571)272-3392						
Examiner's Typical Work Schedule: Monday thru Friday 0630 to 1500						
Supervisor's Name: Jackie Ho	Supervisor's Telephone Number: 571-272-4696					
Attachment(s)	3) Interview Summary (PTO-413)					
1) Notice of References Cited (PTO-892)	Paper No(s)/Mail Date					
 Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>9/4/15</u>. 	4) Other:					

U.S.Patent and Trademark Office

Part of Paper No./Mail Date 20151201

⁻The MAILING OR NOTIFICATION DATE of this communication appears on the cover sheet with the correspondence address -THE SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ONE MONTH OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING OR NOTIFICATION DATE OF THIS COMMUNICATION.

First Action Interview Pilot Program Pre-Interview Communication

Application No.	Applicant(s)		
14/846,226	MCAULEY ET AL.		
Examiner	Art Unit	AIA (First Inventor to File)	
ANNETTE DIXON	3778	Status No	

Notification of Rejection(s) and/or Objection(s)

#	Claim(s)	Reference(s) (if applicable)	Rejection Statutory Basis	Brief Explanation of Rejection	
1	1-19		101	Multiple references "towards a user" "toward aside of the user's face" raises the issue that Applicant is positively reciting a human being. Applicant can overcome this rejection by reciting "adapted/configured to" language	
2	1-19		112(2)	Multiple references to "first lateral direction" and a "third lateral direction"; however, there is no recitation of a "second lateral direction". It is unclear how there can be a "third lateral direction" without a "second lateral direction".	
3	1-2,4, 5, 8, 19	A, B, C	103	Ref A discloses a multibody mask assembly having prong part (24), rigid mask body (12) and inspiratory conduit (70), where headgear extends from the rigid mask body (12) via headgear arrangement (38) and includes a headgear attachment opening (39). Figs 1, 2.	
4	6-7, 9-18	A, B	103	See above modification of ref A in view of B.	
5	3	A,B,C, D or E	103	Both refs D and E teach multibody mask assemblies having vents with a series of holes symmetrically oriented on the main body. This would be an obvious modification to take the single vent and modify for multiple symmetrical vents on right and left sides.	

	Expanded Discussion/Commentary							
3		Yet, Ref A does not disclose the specific headgear arrangement, nor the construction of the headgear strap in a tubular arrangement. Ref B teaches a specific headgear arrangement using laterally extending arms in multiple parts (the combination of 12 and 14, Figure 1) to retain the device about the face of the user. Ref C teaches the construction of headgear straps (17) in tubular arrangements were known as a method of positioning the support device on the head of the user. These are obvious modifications to the Ref A by increasing headgear support.						
DATE: 12/1/15		/ANNETTE DIXON/ Primary Examiner, Art Unit 3778						

U.S. Patent and Trademark Office PTOL-413FP (Rev. 08-13)

First Action Interview Pilot Program - Pre-Interview Communication

Part of Paper No./Mail Date 20151201

Notice of References Cited Application/Control No. 14/846,226 Examiner ANNETTE DIXON Applicant(s)/Patent Under Reexamination MCAULEY ET AL. Page 1 of 1

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*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
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NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
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U.S. Patent and Trademark Office PTO-892 (Rev. 01-2001)

	Application No.	Unknown
INFORMATION DISCLOSURE	Filing Date	Herewith
STATEMENT BY APPLICANT	First Named Inventor	Alastair Edwin McAuley
STATEMENT BY APPLICANT	Art Unit	Unknown
(Multiple sheets used when necessary)	Examiner	Unknown
SHEET 1 OF 5	Attorney Docket No.	FPHCR.112C2

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Examiner Initials	Cite No.	Document Number Number - Kind Code (if known) Example: 1,234,567 B1	Publication Date MM-DD-YYYY	Name	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	
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Examiner Signature	/Annette Divon/ (12/01/2015)		Date Considered	,	

^{*}Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

	Application No.	Unknown
INFORMATION DISCLOSURE	Filing Date	Herewith
STATEMENT BY APPLICANT	First Named Inventor	Alastair Edwin McAuley
STATEMENT BY APPLICANT	Art Unit	Unknown
(Multiple sheets used when necessary)	Examiner	Unknown
SHEET 2 OF 5	Attorney Docket No.	FPHCR.112C2

	U.S. PATENT DOCUMENTS					
Examiner Initials	Cite No.	Document Number Number - Kind Code (if known) Example: 1,234,567 B1	Publication Date MM-DD-YYYY	Name	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	
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STATEMENT BY APPLICANT	First Named Inventor	Alastair Edwin McAuley
STATEMENT BY AFFLICANT	Art Unit	Unknown
(Multiple sheets used when necessary)	Examiner	Unknown
SHEET 3 OF 5	Attorney Docket No.	FPHCR.112C2

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Examiner Signature /Annette Dixon/ (12/01/2015) Date Considered

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	Application No.	Unknown
INFORMATION DISCLOSURE	Filing Date	Herewith
STATEMENT BY APPLICANT	First Named Inventor	Alastair Edwin McAuley
STATEMENT BY APPLICANT	Art Unit	Unknown
(Multiple sheets used when necessary)	Examiner	Unknown
SHEET 4 OF 5	Attorney Docket No.	FPHCR.112C2

			U.S. PATENT	DOCUMENTS	
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Examiner Signature /Annette Dixon/ (12/01/2015) Date Considered

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	Application No.	Unknown
INFORMATION DISCLOSURE	Filing Date	Herewith
STATEMENT BY APPLICANT	First Named Inventor	Alastair Edwin McAuley
STATEMENT BY AFFEIGANT	Art Unit	Unknown
(Multiple sheets used when necessary)	Examiner	Unknown
SHEET 5 OF 5	Attorney Docket No.	FPHCR.112C2

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Examiner Initials	Cite No.	Foreign Patent Document Country Code-Number-Kind Code Example: JP 1234567 A1	Publication Date MM-DD-YYYY	Name	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	T ¹		
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Examiner Signature	/Annette Dixon/ (12/01/2015)	Date Considered

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BIB DATA SHEET

CONFIRMATION NO. 8898

SERIAL NUM	BER	FILING O			CLASS	GR	OUP ART	UNIT	ATTO	RNEY DOCKET NO.
14/846,22	6	09/04/2			128		3778		F	PHCR.112C2
		RUL	E							
APPLICANTS Fisher & F		Healthcare Li	mited, Aud	ckland	, NEW ZEALAND);				
Craig Rob Oliver Gle	dwin Me bert Pre eeson, A	cAuley, Dalla ntice, Auckla Auckland, NE	nd, NEW Z W ZEALA	ND;	AND;					
** CONTINUING DATA **********************************/ad/ This application is a CON of 14/333,134 07/16/2014 which is a CON of 10/598,026 10/18/2007 PAT 8783257 which is a 371 of PCT/NZ05/00023 02/18/2005										
** FOREIGN APPLICATIONS ************************** /ad/ NEW ZEALAND 531332 02/23/2004 NEW ZEALAND 534606 08/06/2004										
** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** 09/18/2015										
Foreign Priority claime 35 USC 119(a-d) cond		Yes No	☐ Met af Allowa	ter	STATE OR COUNTRY		HEETS WINGS	TOT.		INDEPENDENT CLAIMS
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	Application/Control No.	Applicant(s)/Patent Under Reexamination
Index of Claims	14846226	MCAULEY ET AL.
	Examiner	Art Unit
	ANNETTE DIXON	3778

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☐ Claims	☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47										
CL	AIM					DATE					
Final	Original	12/01/2015									
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U.S. Patent and Trademark Office Part of Paper No.: 20151201

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	265	("2738788" "20030164170" "20120125339" "0472238" "5657752" "5921239" "6892729" "0770013" "D520140" "D686313" "20050011524" "2843121" "2859748" "20020046755" "20020059935" "20030079749" "20040226566" "5752510" "6637434" "7207333" "7353827" "0751091" "6192886" "2359506" "2388604" "20030200970" "3850171" "4753233" "5016625" "5148802" "5477852" "6435181" "6439234" "6478026" "6588424" "6659102" "7096864" "8042539" "D293613" "D310431" "D355484" "D455891" "20150013678" "20050028822" "20050205096" "0301111" "4201205" "4856508" "5245995" "5269296" "5533506" "5595174" "6561191" "6662803" "D340317" "D526094" "2296150" "20020053347" "4354488" "4367735" "5113857" "6298850" "D320677" "D354128" "8783257" "20030196659" "20030196664" "4090510" "4266540" "4986269" "5065756" "5551419" "6651658" "7004165" "7210481" "0718470" "D321419" "D440302" "20030200970" "20120132209" "6561191" "2508050" "20020096178" "20030005933" "20050011524" "20070137653" "3490452" "4915105" "0577926" "6017315" "6581594" "6644315" "6879265" "7201169" "D3252322").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/12/01
L2	433	((headgear strap harness belt) with cheek) and "128".clas.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/12/01 10:52
L3	709	((headgear strap harness belt) with tube) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO;	OR	ON	2015/12/01 11:07

			DERWENT IBM_TDB			
L4	31	((headgear strap harness belt) adj tube) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/12/01 11:08
L5	164	((headgear strap harness belt) with tubular) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/12/01 11:09
L6	13	(("4437462") or ("7201169") or ("20030200970")).PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/12/01 12:05
L7	31369	(A61M15/08; A61M16/06; A61M16/0616; A61M16/0633; A61M16/0666; A61M16/0683; A61M16/0825; A61M16/208; A61M2210/0618; A61M2240/00; A62B18/00; A62B18/02; A62B18/08; A62B18/084; A62B35/00).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/12/01 12:06
L8	161	(mcauley.in. near alastair) (prentice.in. near craig) (gleeson.in. near oliver)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2015/12/01 12:14
L9	4	L8 and ((headgear harness strap belt) and (lateral laterally) and (nose nostril nasal nare cannulae cannula)).clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/12/01 12:14
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S 2	1171	("0007476" "0077540" "0396936" "0428592" "0443191" "0603021" "0701538" "0718785" "0759152" "0812706" "0838434" "0853431" "0855439" "1109318" "1125542" "1155608" "1158780" "1162416" "1176886" "1192186" "1206045"	US-PGPUB; USPAT; USOCR	OR	ON	2011/08/09 14:27

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S3	61680	(((nasal nose nare) with (cannula prong)) cannula)	US-PGPUB; USPAT; USOCR	OR	ON	2011/08/09 15:16
S4	4158	(((nasal nose nare) with (cannula prong)) cannula) and "128".clas.	US-PGPUB; USPAT; USOCR	OR	ON	2011/08/09 15:16
S5	2375	(((nasal nose nare) with (cannula prong)) cannula) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2011/08/09 15:16
S6	12	("20100252044" "6626177" "6581601" "20070074724" "20030200970" "7578294" "7874293" "20040065330" "5193532" "20050011524" "4915105" "4782832").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2011/08/09 15:41
S7	2453	angled with (prong cannula)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/08/10 09:30
S8	135	S7 and "128".clas.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/08/10 09:30
S9	71	S7 and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/08/10 09:30
S10	38	angled with (prong pillow cannula) with	US-PGPUB;	OR	ON	2011/08/10

		(nose nasal nare)	USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB			09:31
S11	3	S10 and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2011/08/10 09:31
S12	45	offset with (prong pillow cannula) with (nose nasal nare)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/08/10 09:51
S13	2	S12 and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2011/08/10 09:51
S14	4863	(prong pillow cannula) with (nose nasal nare)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2011/08/10 09:54
S15	809	S14 and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2011/08/10 09:54
S16	3188	(cannula ((prong pillow cannula) with (nose nasal nare))) same (replacable removable)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2011/08/10 12:12
S17	150	S16 and "128".clas. and @ad< = "20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2011/08/10 12:12
S18	984	(((prong pillow cannula) with (nose nasal nare))) and (replacable removable interchangable)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2011/08/10 12:15
S19	125	S18 and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2011/08/10 12:15
S20	4276	(((prong cannula) with (nose nasal	US-PGPUB;	OR	ON	2011/08/10

		nare)))	USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB			12:17
S21	720	\$20 and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2011/08/10 12:17
S22	108	("0443191" "0718785" "0838434" "1192186" "1221246" "1270404" "1443820" "1610793" "2100374" "2702089" "2792000" "3731678" "3902486").PN. OR ("4915105").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2011/08/10 12:27
S23	2252	(mcualey prentice gleeson).in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2011/08/10 16:03
S24	18	(mcualey prentice gleeson).in. near (alastair craig oliver)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2011/08/10 16:03
S25	2	(((((prong cannula) and (nose nasal nare)))).clm. and S24	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2011/08/10 16:04
S26	2312	((128/207.18) or (128/206.21) or (128/207.13) or (128/206.11) or (128/206.18) or (128/203.22)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	OFF	2011/08/10 16:06
S27	625	(((((prong cannula) and (nose nasal nare)))) and S26	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2011/08/10 16:06
S28	6966	((128/200.24) or (128/200.26) or (128/203.12) or (128/203.15) or (128/203.16) or (128/203.17) or (128/205.25) or (128/206.21)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2011/08/10 16:08
S29	1022	(((((prong cannula) and (nose nasal nare)))) and (S26 S28)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2011/08/10 16:09
S30	5446	(cannula ((nose nasal nare nostril) with (plug prong pillow))) and "128".clas.	US-PGPUB; USPAT;	OR	ON	2013/04/11 14:01

			USOCR; EPO; JPO; DERWENT; IBM_TDB			
S31	2094	(cannula ((nose nasal nare nostril) with (plug prong pillow))) and "128".clas. and (\$PAP (positive with pressure))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/11 14:02
S 32	8	tiep.in. and "128".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT, IBM_TDB	OR	ON	2013/04/11 14:03
S33	36	("2535938" "2677371" "3794021" "3973564" "4054133" "4106505" "4120300" "4256101").PN. OR ("4535767").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2013/04/11 14:04
S34	10	(US-20110009763-\$ or US- 20080142019-\$ or US-20070175473-\$ or US-20070107737-\$ or US-20050284484- \$ or US-20040134494-\$).did. or (US- 8333194-\$ or US-7225807-\$ or US- 5477852-\$ or US-5269296-\$).did.	US-PGPUB; USPAT	OR	ON	2013/04/11 14:46
S35	4	S34 and @ad<="20040223"	US-PGPUB: USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/11 14:46
S36	150	("2793326" "2931358" "3481339" "3516407" "3640282" "3707151" "3766924" "3794036" "3850176" "3856051" "3903893" "4056104" "4090518" "4106505" "4156426" "4178937" "4235239" "4273124" "4422456" "4465067" "4538606" "4709308" "4753233" "4782832" "4818320" "4836200" "4915105" "5042478").PN. OR ("5269296").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2013/04/11 14:47
S37	218	(wood landis).in. and "128".clas.	US-PGPUB; USPAT; USOCR	OR	ON	2013/04/11 14:53
S38	70	S37 and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/11 14:54
S39	2	("6439234").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2013/04/11 14:56
S40	2	("6478026").PN.	US-PGPUB;	OR	OFF	2013/04/11

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB			14:59
S41	2	("6679265").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	OFF	2013/04/11 15:00
S42	2	("20030079749").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	OFF	2013/04/12 09:10
S43	0	(humidifer with (\$PAP)) and "128".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/12 09:31
S44	0	(humidifer same (\$PAP)) and "128".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/12 09:31
S45	1	(humidifer and (\$PAP)) and "128".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/12 09:31
S46	0	(humidifer and (\$PAP)) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/12 09:31
S47	14	(humidifer and (\$PAP (positive with pressure) blower fan turbine impeller generator generating compressor pump)) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/12 09:32
S48	0	(option\$ with humidifer with (\$PAP (positive with pressure) blower fan turbine impeller generator generating compressor pump)) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT	OR	ON	2013/04/12 09:32

			IBM_TDB			
S49	O	(option\$ same humidifer same (\$PAP (positive with pressure) blower fan turbine impeller generator generating compressor pump)) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/12 09:33
S50	733	((humidify humidifier humidifying) and (\$PAP (positive with pressure) blower fan turbine impeller generator generating compressor pump)) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/12 09:34
S51	11	(option\$ with (humidify humidifier humidifying) with (\$PAP (positive with pressure) blower fan turbine impeller generator generating compressor pump)) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/12 09:34
S52	45	matula.in. and "128".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/12 09:38
S53	2	S52 and @ad<="20040223"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/12 09:38
S54	309	(ball with socket) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/12 09:39
S55	109	(ball with socket) and "128".clas. and @ad<="20040223" and (cannula cannulae (nose nasal nare nostril))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/12 09:40
S56	1267	(oval ellip\$) and "128".clas. and @ad<="20040223" and (cannula cannulae (nose nasal nare nostril))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/12 09:57
S57	350	"128".clas. and @ad<="20040223" and ((cannula cannulae (nose nasal nare nostril)) same (oval ellip\$))	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2013/04/12 09:58

			EPO; JPO; DERWENT IBM TDB			
S58	745	"128".clas. and @ad<="20040223" and ((strap headgear harness) with (tube hose))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/12 10:28
S59	21	(mcualey prentice gleeson).in. near (alastair craig oliver)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/12 10:59
S60	4	S59 and (aperture hole opening vent).clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/12 10:59
S61	4	S59 and (aperture hole opening vent).clm. and (cannula cannulae nasal nostril nose nare).clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2013/04/12 11:00
S62	1	S59 and (aperture hole opening vent).clm. and (cannula cannulae nasal nostril nose nare).clm. and flange.clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/04/12 11:00
S63	2817	((128/207.18) or (128/206.21) or (128/207.13) or (128/206.11) or (128/206.18) or (128/203.22)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2013/09/10 12:49
S64	9019	((128/200.24) or (128/200.26) or (128/203.12) or (128/203.15) or (128/203.16) or (128/203.17) or (128/205.25) or (128/206.21)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	OFF	2013/09/10 12:49
S65	10479	S63 S64	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/09/10 12:49
S66	2253	(nose nostril nasal nare cannula) and S65 and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 12:49
S67	7697	(nose nostril nasal nare cannula) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 13:08
S68	1783	(nose nostril nasal nare cannula) and	US-PGPUB;	OR	ON	2013/09/10

	University and the second	(ball joint socket) and "128".clas. and @ad<="20040223"	USPAT; USOCR			13:08
S69	1378	S68 not S66	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 13:08
S70	4234	(nose nostril nasal nare cannula) and (ball joint socket) and "128".clas.	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 13:18
S71	2451	S70 not (S66 S68)	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 13:18
S72	48	matula.in. and "128".clas.	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 14:08
S73	62	hoffman.in. and "128".clas.	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 14:08
S74	247	RIC.as. and "128".clas.	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 14:10
S75	2	("2003180088").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB		OFF	2013/09/10 14:13
S76	2	("20030180088").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB		OFF	2013/09/10 14:13
S77	9	(("20030180088") or ("1695263") or ("7178525")).PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2013/09/10 14:14
S78	12	(("20030180088") or ("1695263") or ("7178525") or ("20030200970")).PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2013/09/10 14:16
S79	112	((nose nostril nasal nare cannula) with (vent venting)) and S65 and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 14:31
S80	2	((nose nostril nasal nare cannula) with (ball with socket)) and S65 and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 14:34
S81	1	((vent venting) with (ball with socket)) and S65 and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 14:35
S82	2	((vent venting) same (ball with socket)) and S65 and @ad<="20040223"	US-PGPUB; USPAT;	OR	ON	2013/09/10 14:36

			USOCR			***************************************
S83	5	ziaee.in. and S65 and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 14:46
S84	1660	((tube conduit hose) with (strap headgear)) and "128".clas.	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:05
S85	748	((tube conduit hose) with (strap headgear)) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:05
S86	19794	((tube tubular conduit hose) adj\$3 (strap headgear)) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:06
S87	21443	((tube tubular conduit hose) near\$3 (strap headgear)) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:06
S88	20782	((tube conduit hose) near\$3 (strap headgear)) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:06
S89	20782	((tube conduit hose) near\$3 (strap headgear)) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:06
S90	18892	((tube conduit hose) adj\$3 (strap headgear)) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:06
S91	748	((tube conduit hose) with (strap headgear)) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:06
S92	1	((tube conduit hose) with (strap headgear) with textile) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:08
S93	574	((tube conduit hose tubular) with (strap headgear)).detd. and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:09
S94	16	((tube conduit hose tubular) with (strap headgear) with (textile fabric)).detd. and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:11
S95	17	((tube conduit hose tubular) with (strap headgear harness) with (textile fabric)).detd. and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:11
S96	622	((tube conduit hose tubular) with (strap headgear harness)).detd. and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:13
S97	605	S96 not S95	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:13
S98	76	(thickness with (nasal nostril nare nose) with (prong pillow))	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:30
S99	6	(thickness with (nasal nostril nare nose) with (prong pillow)) and "128".clas. and @ad<="20040223"	US-PGPUB; USPAT; USOCR	OR	ON	2013/09/10 16:30
S100	23	(mcualey prentice gleeson).in. near (alastair craig oliver)	US-PGPUB; USPAT; USOCR; EPO; JPO;	OR	ON	2013/09/10 16:45

	and the second		DERWENT IBM_TDB			
S101	1	S100 and (aperture hole opening vent venting).clm. and (cannula cannulae nasal nostril nose nare).clm. and flange.clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/09/10 16:45
S102	1	S100 and (aperture hole opening vent venting leak leaking leakage).clm. and (cannula cannulae nasal nostril nose nare).clm. and flange.clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/09/10 16:45
S103	6	S100 and (aperture hole opening vent venting leak leaking leakage).clm. and (cannula cannulae nasal nostril nose nare).clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/09/10 16:46
S104	6	S100 and (aperture hole opening vent venting leak leaking leakage).clm. and (cannula cannulae nasal nostril nose nare).clm. and (ball and socket)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/09/10 16:46
S105	2	S100 and (aperture hole opening vent venting leak leaking leakage).clm. and (cannula cannulae nasal nostril nose nare).clm. and (ball and socket).clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2013/09/10 16:46
S106	2202	((ball socket) with (joint connector connection) with (leak leakage leaking))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB		ON	2014/02/28 08:48
S107	3083	((128/207.18) or (128/206.21) or (128/207.13) or (128/206.11) or (128/206.18) or (128/203.22)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	OFF	2014/02/28 08:52
S108	9990	((128/200.24) or (128/200.26) or (128/203.12) or (128/203.15) or (128/203.16) or (128/203.17) or (128/205.25) or (128/206.21)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	OFF	2014/02/28 08:52
S109	3083	((128/207.18) or (128/206.21) or (128/207.13) or (128/206.11) or (128/206.18) or (128/203.22)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	OFF	2014/02/28 08:52
S110	9990	((128/200.24) or (128/200.26) or (128/203.12) or (128/203.15) or (128/203.16) or (128/203.17) or (128/205.25) or (128/206.21)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO;	OR	OFF	2014/02/28 08:52

			DERWENT IBM_TDB			
S111	11515	S109 S110	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2014/02/28 08:52
S112	19	((ball socket) with (joint connector connection) with (leak leakage leaking)) and (S107 S108 S111)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2014/02/28 08:52
S113	11	((ball socket) with (joint connector connection) with (leak leakage leaking) with (channel passage passageway)) and (S107 S108 S111)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2014/02/28 08:54
S114	11	((ball socket) with (joint connector connection) with (leak leakage leaky leaking) with (channel passage passageway)) and (S107 S108 S111)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2014/02/28 08:58
S115	210	((ball socket) with (joint connector connection) with (leak leakage leaky leaking) with (channel passage passageway))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2014/02/28 08:59
S116	19	S115 AND ((A61M16/06 OR	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB		ON	2014/02/28 09:00
S117	2	S116 and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2014/02/28 09:00

S118	3777	(((ball socket) adj (joint connector connection)) with ((leak leakage leaky leaking) (channel passage passageway)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT, IBM_TDB	OR	ON	2014/02/28 09:10
S119	29	(((ball socket) adj (joint connector connection)) with ((leak leakage leaky leaking) with (channel passage passageway)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/28 09:13
S120	44	(((ball socket) adj (joint connector connection)) with ((leak leakage leaky leaking) same (channel passage passageway)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/28 09:13
S121	24	(S119 S120) and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2014/02/28 09:13
S122	93	(((ball socket) with (joint connector connection)) with ((leak leakage leaky leaking) same (channel passage passageway))) and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/28 09:23
S123	69	S122 not (S119 S120 S121)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT IBM_TDB	OR	ON	2014/02/28 09:23
S124	257	(((ball socket) with (joint connector connection)) with ((leak leakage leaky leaking) same (channel passage passageway)))	US-PGPUB: USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/28 09:24
S125	83	S124 AND ((A61M16/06 OR A61M16/0683 OR A61M16/08 OR A61M2016/0825 OR A61M2016/0611 OR A61M2016/0616 OR A61M2016/0638 OR A61M2016/0633 OR A61M1/1698 OR A61M2001/1006 OR A61M2205/42 OR A61M3/0258 OR A61M2039/1027 OR A61M2205/8225 OR A61M39/10 OR A61M39/1011 OR A61M39/105 OR A61M3/0254 OR F16L37/23 OR F16L1/15 OR F16L27/04 OR F16L37/413 OR F16L27/047 OR F16L37/40 OR F16L11/18 OR F16L13/02 OR F16L13/10 OR F16L23/00 OR F16L37/32 OR F16L37/34 OR F16L37/36 OR F16L41/021 OR F16L59/185 OR F16L59/21 OR F16L11/133 OR F16L11/22 OR F16L15/001 OR	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/28 09:25

		F16L19/02 OR F16L19/04 OR F16L1/26 OR F16L2201/30 OR F16L23/167 OR F16L27/067 OR F16L27/073 OR F16L27/0824 OR F16L27/0824 OR F16L27/0828 OR F16L27/0857 OR F16L27/1004 OR F16L27/12 OR F16L37/120 OR F16L37/120 OR F16L37/38 OR F16L37/127 OR F16L37/38 OR F16L37/127 OR F16L37/38 OR F16L37/44 OR F16L37/56 OR F16L37/56 OR F16L37/56 OR F16L39/00 OR F16L39/00 OR F16L39/00 OR F16L39/00 OR F16L51/025 OR F16L39/00 OR F16L51/025 OR F16L55/1683 OR F16L55/17 OR F16L59/22). CPC. OR (128/205.25 OR 128/206.24 OR 128/205.25 OR 128/201.19 OR 128/206.27 OR 128/201.19 OR 128/207.13 OR 128/201.19 OR 128/201.12 OR 128/204.18 OR 128/201.12 OR 128/201.13 OR 128/201.14 OR 128/201.13 OR 128/201.12 OR 128/205.27 OR 128/201.12 OR 128/206.21 OR 128/206.21 OR 128/206.20 OR 128/201.12 OR 128/207.16 OR 128/205.28 OR 128/206.11 OR 128/207.12 OR 128/207.16 OR 128/30 OR 285/261 OR 285/146.1 OR 285/106 OR 285/190 OR 285/140.1 OR 285/106 OR 285/190 OR 285/271 OR 285/330 OR 285/332.2 OR 285/333 OR 285/349 OR 285/94 OR 285/371 OR 285/331 OR 285/351 OR 285/360 OR 285/370 OR 285/370 OR 285/370 OR 285/370 OR 285/371 OR 285/111 OR 285/113 OR 285/114 OR 285/111 OR 285/113 OR 285/114 OR 285/111 OR 285/113 OR 285/114 OR 285/111 OR 285/113 OR 285/114 OR 285/111 OR 285/113 OR 285/114 OR 285/121.7 OR 285/13 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/14 OR 285/34 OR 285/34 OR 285/35 OR 285/34 OR 285/34 OR 285/34 OR 285/34 OR 285/34 OR 285/34 OR 285/34 OR 285/34 OR 285/34 OR 285/34 OR 285/34 OR 285/34 OR 285/34 OR 285/34 OR 285/34 OR 285/34 OR 285/34 OR 285/34 OR 285/3				
S126	93	S124 and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/28 09:25
S127	484	(((ball socket) with (joint connector connection)) with ((vent venting vented leak leakage leaky leaking) same (channel passage passageway)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT;		ON	2014/02/28 09:26

			IBM_TDB			
S128	179	S127 and @ad< = "20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/28 09:26
S129	86	S128 not (S119 S120 S121 S125 S126)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/28 09:27
S130	94	S127 AND ((A61M16/06 OR A61M16/0683 OR A61M16/08 OR A61M2016/0825 OR A61M2016/0611 OR A61M2016/0638 OR A61M2016/0633 OR A61M2016/0638 OR A61M2001/1006 OR A61M205/42 OR A61M3/0258 OR A61M2039/1027 OR A61M39/1011 OR A61M39/105 OR A61M39/1011 OR A61M39/105 OR A61M39/1011 OR A61M39/105 OR A61M3/0254 OR F16L37/23 OR F16L1/15 OR F16L27/04 OR F16L37/413 OR F16L27/04 OR F16L37/40 OR F16L11/18 OR F16L13/02 OR F16L37/40 OR F16L37/30 OR F16L37/32 OR F16L37/30 OR F16L37/32 OR F16L37/34 OR F16L37/36 OR F16L37/32 OR F16L37/34 OR F16L37/36 OR F16L41/021 OR F16L59/185 OR F16L59/21 OR F16L11/133 OR F16L59/21 OR F16L11/133 OR F16L11/22 OR F16L15/001 OR F16L27/067 OR F16L27/073 OR F16L27/067 OR F16L27/073 OR F16L27/067 OR F16L27/073 OR F16L27/0804 OR F16L27/0824 OR F16L27/0804 OR F16L27/0824 OR F16L37/365 OR F16L37/12 OR F16L37/38 OR F16L37/12 OR F16L37/38 OR F16L37/12 OR F16L37/38 OR F16L37/12 OR F16L37/39 OR F16L39/06 OR F16L37/565 OR F16L39/06 OR F16L37/30 OR F16L39/06 OR F16L37/38 OR F16L39/06 OR F16L37/38 OR F16L39/06 OR F16L37/38 OR F16L39/06 OR F16L37/38 OR F16L39/06 OR F16L39/005 OR F16L39/06 OR F16L39/005 OR F16L39/06 OR F16L39/005 OR F16L39/06 OR F16L39/005 OR F16L39/06 OR F16L39/005 OR F16L39/06 OR F16L39/005 OR F16L39/06 OR F16L39/005 OR F16L39/06 OR F16L39/005 OR F16L39/06 OR F16L39/005 OR F16L39/06 OR F16L39/005 OR F16L39/06 OR F16L41/04 OR F16L59/22).CPC. OR (128/205.25 OR 128/206.24 OR 128/207.13 OR 128/206.24 OR 128/207.13 OR 128/207.11 OR 128/207.13 OR 128/207.11 OR 128/206.27 OR 128/207.11 OR 128/207.13 OR 128/207.11 OR 128/207.13 OR 128/207.11 OR 128/207.13 OR 128/207.11 OR 128/207.14 OR 128/205.27 OR 128/207.15 OR 128/207.16 OR 128/207.18 OR 128/207.16 OR 128/205.28 OR 128/206.21 OR 285/330 OR 285/330 OR 285/330 OR 285/330 OR 285/330 OR 285/330 OR 285/330 OR 285/330 OR 285/330 OR 285/330 OR 285/330 OR 285/266 OR 285/266 OR 285/266 OR 285/266 OR 285/266 OR 285/266 OR 285/266 OR 285/266 OR 285/266 OR 285/266 OR 285/266 OR 285/266 OR 285/266 OR 285/266 OR	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/28

		285/281 OR 285/347 OR 285/351 OR 285/370 OR 285/374 OR 285/45 OR 285/8 OR 285/91 OR 285/918 OR 285/98 OR 285/11 OR 285/112 OR 285/113 OR 285/114 OR 285/121.7 OR 285/124.1 OR 285/124.4 OR 285/127.1 OR 285/13 OR 285/14 OR 285/144.1 OR 285/145.3 OR 285/14 OR 285/144.1 OR 285/145.3 OR 285/147.1 OR 285/146.2 OR 285/15 OR 285/163 OR 285/264 OR 285/254 OR 285/263 OR 285/264 OR 285/266 OR 285/267 OR 285/288.11 OR 285/288.5 OR 285/288.6 OR 285/29 OR 285/299 OR 285/302 OR 285/305 OR 285/312 OR 285/302 OR 285/317 OR 285/311 OR 285/321 OR 285/322 OR 285/331 OR 285/332 OR 285/331 OR 285/332 OR 285/331 OR 285/336 OR 285/359 OR 285/331 OR 285/358 OR 285/359 OR 285/363 OR 285/358 OR 285/359 OR 285/383 OR 285/368 OR 285/375 OR 285/383 OR 285/419 OR 285/422 OR 285/423 OR 285/419 OR 285/910 OR 285/914 OR 285/917 OR 285/910 OR 285/911 OR 285/917 OR 285/919 OR 285/95).OCLS.)				
S131	32	S130 and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/28 09:38
S132	12	(((ball socket) with (joint connector connection)) with ((vent venting vented leak leakage leaky leaking) same (channel passage passageway))) and ((A61M2016/0825).CPC.)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/28 10:43
S133	45	(((ball socket) and (joint connector connection)) and ((vent venting vented leak leakage leaky leaking) and (channel passage passageway))) and ((A61M2016/0825).CPC.)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/28 10:43
S134	3	S133 and @ad<="20040223"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/02/28 10:44
S135	32	("2366067" "3431370" "3548827" "4004586" "4056116" "4084843" "4146254" "4676241" "4686977" "4773680" "4778447").PN. OR ("4875718").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2014/02/28 10:44
S136	77424	(128/200.14; 128/200.22; 128/200.24; 128/200.26; 128/201.12; 128/201.13; 128/201.14; 128/201.19; 128/201.22; 128/202.27; 128/203.12; 128/203.15; 128/203.16; 128/203.17; 128/203.22; 128/203.25; 128/203.26; 128/204.12; 128/204.18; 128/204.23; 128/205.24; 128/205.25; 128/205.27; 128/205.28; 128/206.11; 128/206.12; 128/206.13; 128/206.18; 128/206.21; 128/206.22;	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT IBM_TDB	OR	ON	2015/09/14 16:14

S137	35	128/206.23; 128/206.24; 128/206.26; 128/206.27; 128/206.28; 128/206.29; 128/207.11; 128/207.12; 128/207.13; 128/207.14; 128/207.15; 128/207.16; 128/207.17; 128/207.18; 128/912; 128/DIG.26; 2/454; 285/101; 285/106; 285/11; 285/121.7; 285/112; 285/113; 285/114; 285/121.7; 285/124.1; 285/124.4; 285/127.1; 285/13; 285/144.1; 285/145.3; 285/146.1; 285/147.1; 285/145.3; 285/146.1; 285/147.1; 285/145.3; 285/266; 285/254; 285/261; 285/263; 285/266; 285/265; 285/263; 285/266; 285/265; 285/263; 285/266; 285/265; 285/263; 285/266; 285/263; 285/263; 285/263; 285/263; 285/263; 285/263; 285/263; 285/263; 285/283.11; 285/388.5; 285/383; 285/331; 285/332; 285/332; 285/333; 285/331; 285/332; 285/333; 285/333; 285/331; 285/332; 285/333; 285/336; 285/351; 285/353; 285/363; 285/363; 285/363; 285/363; 285/370; 285/374; 285/35; 285/423; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/42; 285/45; 285/47; 285/55; 285/8; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 285/91; 295/91; 295/91; 295/91; 295/91; 295/91; 295/91; 295/91; 295/91; 295/91; 295/91; 295/		OR	ON	2015/09/14 16:14
S138	78421	\$).did. (A61B5/0205; A61B5/08; A61B5/083; A61B5/0836; A61B5/087; A61B5/097; A61B5/14551; A61B5/4806; A61B5/4818; A61B5/6819; A61J1/1418; A61J11/0005; A61J17/006; A61M1/1698; A61M11/00; A61M11/005; A61M11/06; A61M15/00; A61M15/0033; A61M15/0065; A61M15/0085; A61M15/08; A61M16/00; A61M16/0003; A61M16/04; A61M16/0465; A61M16/0488; A61M16/0497; A61M16/0493; A61M16/0497; A61M16/06; A61M16/0633;	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2015/09/14 16:15

	A61M16/0666; A61M16/0672; A61M16/0677; A61M16/0683; A61M16/08; A61M16/0816; A61M16/0825; A61M16/0875; A61M16/0858; A61M16/0875; A61M16/10; A61M16/1045; A61M16/107; A61M16/1075; A61M16/109; A61M16/12; A61M16/122; A61M16/125; A61M16/14; A61M16/142; A61M16/16; A61M16/161; A61M16/162; A61M16/18; A61M16/161; A61M16/162; A61M16/18; A61M2001/1006; A61M2016/0021; A61M20016/0024; A61M2016/0039; A61M2016/0633; A61M2016/0039; A61M2016/0633; A61M2016/0616; A61M2016/0633; A61M2016/0638; A61M2016/0825; A61M2016/039; A61M2205/071; A61M2205/18; A61M2205/077; A61M2205/3606; A61M2205/3331; A61M2205/3606; A61M2205/3653; A61M2205/3606; A61M2205/3653; A61M2205/42; A61M2205/3653; A61M2205/42; A61M2205/8206; A61M2205/42; A61M2205/825; A61M2205/42; A61M2205/825; A61M2205/325; A61M2200/0025; A61M2205/325; A61M2200/005; A61M2230/42; A61M2230/43; A61M2230/42; A61M2230/43; A61M2230/42; A61M2230/435; A61M2230/42; A61M2230/435; A61M2230/42; A61M2230/435; A61M2230/43; A61M2230/435; A61M2230/50; A61M2230/435; A61M2230/50; A61M2230/435; A61M2230/50; A61M2230/435; A61M2230/43; A61M2230/435; A61M2230/43; A61M39/105; A62B17/00; A62B17/04; A62B18/00; A62B18/02; A62B18/08; A62B18/00; A62B18/02; F16L13/10; F16L15/001; F16L19/02; F16L13/10; F16L15/001; F16L27/007; F16L27/073; F16L27/04; F16L27/0857; F16L27/0828; F16L27/0857; F16L27/0828; F16L27/0857; F16L27/0828; F16L27/0857; F16L27/0828; F16L37/32; F16L39/03; F16L37/36; F16L37/32; F16L39/03; F16L37/36; F16L37/32; F16L39/03; F16L37/36; F16L37/44; F16L37/56; F16L37/36; F16L37/44; F16L37/56; F16L37/36; F16L37/44; F16L37/56; F16L37/36; F16L37/44; F16L39/05; F16L39/06; F16L47/32; F16L39/05; F16L39/06; F16L47/32; F16L39/05; F16L39/06; F16L47/32; F16L39/05; F16L39/06; F16L47/32; F16L59/185; F16L59/21; F16L59/22; Y10S128/26; Y10S128/912).cpc.			
S139 192	(S136 S138) and (swivel\$ (ball with socket) (ball adj joint) (socket adj joint)) and (nose nostril nasal nare cannulae cannula)	US-PGPUB; OR USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM TDB	ON	2015/09/14 16:17
S140 512	S139 and @ad<="20040223"	US-PGPUB; OR	ON	2015/09/14

		USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB			16:18
S141 1354	"0443191" "0628111" "0718785" "0781516" "0812706" "0835075" "0838434" "1081745" "112542" "1139177" "1158780" "1120045" "129186" "1203079" "1206045" "121246" "1270404" "1288647" "1443820" "1610793" "1632449" "1653572" "1818028" "1835757" "1837591" "1926027" "200200146755" "20020112730" "20020124849" "20030111081" "20030189492" "20040035431" "20050028822" "20050033247" "20050061326" "2056753" "20050061326" "2056753" "2047042" "2168705" "2168705" "2245969" "2248477" "2254854" "2259817" "2287939" "2317608" "2378468" "2449346" "2473518" "2477706" "2378468" "2473518" "247706" "23792000" "2793326" "2810385" "22870200" "2793200" "2793326" "2810385" "2931356" "3040741" "3056402" "3066674" "3182659" "3234939" "3315674" "3356122" "3293458" "33135674" "3363833" "3481339" "3516407" "3556122" "3566862" "3568678" "3792700" "3793264" "31936244" "330273" "339368" "3481339" "3516407" "3560242" "3792000" "379336" "389363" "3481339" "3516407" "3566024" "379000" "379336" "389363" "3481339" "3516407" "3766924" "3792702" "3794036" "3792702" "3794036" "3792708" "3794036" "3796246" "3799624" "379000" "3793151" "3893624" "379000" "3793151" "3893624" "379000" "3797151" "3703851" "3850168" "3850168" "385015" "386055" "386055" "3860424" "37905694" "3792702" "3794036" "3796246" "3792702" "3794036" "3796246" "3792702" "3794036" "3796246" "3792702" "3794036" "3796246" "3799624" "3790000" "3707151" "3860357" "3860644" "37905694" "37905694" "37905694" "3790000" "4166467" "4167185" "4172455" "4178937" "4266840" "4266840" "4266840" "4266840" "4266840" "4266840" "4266840" "4266840" "4266840" "4266840" "4266840" "4266840" "4266840" "4266840" "4266840" "4266840" "4266840" "426877" "4304229" "431335" "4328797" "4336798"	US-PGPUB; USOCR	OR	O	2015/09/14

"4367735"	"4367816"	"4402316"				ì
"4406283"	"4412537"	"4414973"	-		***************************************	ì
"4422456"	"4437462"	"4454881"				•
						ì
"4465065"	"4465067"	"4467799"				
"4493614"	"4502480"	"4522639"				
"4534344"	"4535767"	"4538606"			****	1
"4546491"	"4549542"	"4558710"	-			•
"4559939"	"4559941"	"4577375"				•
"4587967"	"4595003"	"4601465"				ì
"4602644"	"4616646"	"4616647"				i
1	"4621632"	"4622964"				
"4617637"						1
"4622965"	"4625721"	"4648394"	-		****	į
"4649912"	"4655213"	"4657010"	-		***************************************	1
"4660555"	"4664108"	"4665570"				ì
"4671271"	"4674492"	"4676236"				ì
"4676241"	"4677975"	"4677977"				
"4686977"	"4699139"	"4706664"			1111	1
	"4709308"	"4736740"	-		*****	1
"4708446"			-		***	ì
"4739755"	"4739757"	"4753233"				ì
"4770169"	"4774941"	"4774944"				1
"4774946"	"4782832"	"4790308"				3
"4799477"	"4807617"	"4808160"				1
"4809692"	"4818320"	"4819629"				i
"4821713"	"4836200"	"4838258"				
"4841953"	"4848334"	"4848366"				1
						•
"4852565"	"4870959")		. 1			ì
("4878491"	"4899740"	"4901356"				ì
"4905683"	"4907584"	"4910806"				
"4915105"	"4915106"	"4919128"			******	
"4938210"	"4938212"	"4941469" İ	-			•
"4944310"	"4971051"	"4974586"				ì
"4986269"	"4987895"	"4989596"				ì
"4989599"	"4996983"	"5000173"				

"5005568"	"5005571"	"5018519"			110	- }
"5022900"	"5024220"	"5025805"				ì
"5036846"	"5038772"	"5038776"				
"5040530"	"5042473"	"5042478"				i
"5046200"	"5046491"	"5046512"				ì
"5063922"	"5065756"	"5069205"				•
"5074297"	"5080094"	"5097424"				ì
"5105807"	"5109839"	"5109840"			******	
1						1
"5113854"	"5113857"	"5117818"				ì
"5117819"	"5121745"	"5127397"				
"5133347"	"5137017"	"5139510"				
"5140980"	"5140982"	"5148802"				ì
"5159938"	"5161525"	"5178138"				1
"5185005"	"5186165"	"5188101"				
"5193534"	"5199421"	"5199424"				ì
"5231983"	"5233978"	"5237986"	-			1
"5243971"	"5245995"	"5265592"				ì
	!	1				
"5265595"	"5269296"	"5271391"				
"5279286"	"5279289"	"5280784"				ì
"5297544"	"5299599"	"5301689"				1
"5307793"	"5308337"	"5311862"				i
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		A61J11/0005; A61J17/006;				
		A61M1/1698; A61M11/00; A61M11/005;				
		A61M11/06; A61M15/00; A61M15/0033;				
		A61M15/0065; A61M15/0085;				
		A61M15/08; A61M16/00; A61M16/0003;				
		A61M16/0057; A61M16/0066;				
		A61M16/04; A61M16/0465;				
		A61M16/0488; A61M16/049;				
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		A61M16/06; A61M16/0633;				
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		A61M16/109; A61M16/12; A61M16/122;				
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		A61M16/16; A61M16/161; A61M16/162;				
		A61M16/18; A61M16/201; A61M16/203;				
		A61M16/208; A61M2001/1006;				
		A61M2016/0021; A61M2016/0024;				
		A61M2016/0039; A61M2016/0611;				
		A61M2016/0616; A61M2016/0633;				
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		A61M2205/07; A61M2205/071;				
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		A61M39/1011; A61M39/105;				
		A62B17/00; A62B17/04; A62B18/00;				
		A62B18/02; A62B18/08; A62B18/082;				
		A62B18/084; A62B25/005; A62B35/00;				
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		B64D2231/025; F16L1/15; F16L1/26;				
		F16L11/133; F16L11/18; F16L11/22;				
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		F16L37/38; F16L37/40; F16L37/413;				
2.8	11	F16L37/44; F16L37/56; F16L37/565;				
	33	, , ,				

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S150	1925	(S148 S149) and (swivel\$ (ball with socket) (ball adj joint) (socket adj joint)) and (nose nostril nasal nare cannulae cannula)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/15 11:15
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12/1/2015 12:27:06 PM

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Search Notes

Application/Control No.	Applicant(s)/Patent Under Reexamination
14846226	MCAULEY ET AL.
Examiner	Art Unit
ANNETTE DIXON	3778

Date	Examiner
12/1/15	afd
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CPC COMBINATION SETS - SEAR	CHED	
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class Subclass Date Exam			

SEARCH NOTES		
Search Notes	Date	Examiner
Inventor Name Search	12/1/15	afd

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

Part of Paper No.: 20151201RMD U.S. Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/846,226 09/04/2015 Ala		Alastair Edwin McAuley	FPHCR.112C2	8898
	7590 10/07/201 RTENS OLSON & BE	EXAM	IINER	
2040 MAIN ST FOURTEENTH	REET			
IRVINE, CA 92	2614		ART UNIT	PAPER NUMBER
			3778	
			NOTIFICATION DATE	DELIVERY MODE
			10/07/2015	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jayna.cartee@knobbe.com efiling@knobbe.com

EXHIBIT 1004 - PAGE 184

UNITED STATES PATENT AND TRADEMARK OFFICE



Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.uspto.gov

> Doc Code: TRACK1.GRANT

	Prior	Granting Request for itized Examination ck I or After RCE)	Application No.:14/846,226	
1.	THE REQL	JEST FILED <u>September 4, 2015</u>	IS GRANTED .	
		identified application has met the for an original nonprovisional app for an application undergoing co		
2.			rgo prioritized examination. The application will be course of prosecution until one of the following occurs:	
	A.	filing a petition for extension of	f time to extend the time period for filing a reply;	
	B.	filing an amendment to amend	the application to contain more than four independent	
		claims, more than thirty total c	laims, or a multiple dependent claim;	
	C.	C. filing a request for continued examination ;		
	D. filing a notice of appeal;			
	E. filing a request for suspension of action;			
	F. mailing of a notice of allowance;			
	G.	mailing of a final Office action;		
	H.	completion of examination as de	fined in 37 CFR 41.102; or	
	l.	abandonment of the application.		
	Telephone	inquiries with regard to this decisi	on should be directed to Kimberly Inabinet at 571-272-4618.	
	/ Kimberly	Inabinet/	Paralegal Specialist, Office of Petitions	

U.S. Patent and Trademark Office PTO-2298 (Rev. 02-2012)

Office of Petitions: Routing Sheet



Application No. 14/846,226

This application is being forwarded to your office for further processing. A decision has been rendered on a petition filed in this application, as indicated below. For details of this decision, please see the document PET.OP.DEC filed on the same date as this document.

X	GRANTED
	DISMISSED
	DENIED

Office of Petitions: Dec	Mailing Month	
Application No.	14846226	* 1 4 8 4 6 2 2 6 *
	mber only, no slashes or commas. Ex f year of filing+last 5 numbers", Ex. for	
Deciding Official:	Kimberly Inabinet	
Count (1) - Palm Credit Decision: GRANT	14/846,226 FINANCE WORK NEEDED Select Check Box for YES	
Decision Type: 643 - Track O	ne request	* 6 4 3 *
Notes:		
Count (2)	FINANCE WORK NEEDED	
Decision: n/a	Select Check Box for YES	
Decision Type: NONE		
Notes:		
Count (3)	FINANCE WORK NEEDED	
Decision: n/a	Select Check Box for YES	
Decision Type: NONE		
Notes:		
Initials of Approving C	Official (if required)	If more than 3 decisions, attach 2nd count sheet & mark this box
Printed on: 10/2/2015	Office	of Petitions Internal Document - Ver. 5.0

	PAT	ENT APPLI		Application or Docket Number 14/846,226						
	APP	LICATION A	OR	OTHER THAN SMALL ENTITY						
	FOR	NUMBE		,	R EXTRA	RATE(\$)	FEE(\$)	1	RATE(\$)	FEE(\$)
	IC FEE FR 1.16(a), (b), or (c))	N	/ A	١	J/A	N/A		1	N/A	280
SEA	RCH FEE FR 1.16(k), (i), or (m))	N	/ A	N	J/A	N/A		1	N/A	600
	MINATION FEE FR 1.16(o), (p), or (q))	N	/ A	١	J/A	N/A		1	N/A	720
	AL CLAIMS FR 1.16(i))	19	minus	20= *				OR	x 80 =	0.00
	PENDENT CLAIN FR 1.16(h))	MS 3	minus	3 = *					x 420 =	0.00
APPLICATION SIZE FEE (37 CFR 1.16(s)) If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).										0.00
MUL	TIPLE DEPENDE	ENT CLAIM PRE	SENT (3	7 CFR 1.16(j))						0.00
* If ti	ne difference in co	olumn 1 is less th	an zero,	enter "0" in colur	nn 2.	TOTAL		1	TOTAL	1600
AMENDMENT A		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL RATE(\$)	ENTITY ADDITIONAL FEE(\$)	OR	OTHEF SMALL RATE(\$)	
ME	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	х =		OR	x =	
AM	Application Size Fe	ee (37 CFR 1.16(s))	ı]		
	FIRST PRESENTA	TION OF MULTIPL	E DEPEN	DENT CLAIM (37 C	CFR 1.16(j))			OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	
IТВ		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)		RATE(\$)	ADDITIONAL FEE(\$)
ME	Total (37 CFR 1.16(i))	*	Minus	**	=	X =		OR	x =	
AMENDMENT E	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
AMI		ee (37 CFR 1.16(s))]		
	FIRST PRESENTA	TION OF MULTIPL	E DEPEN	DENT CLAIM (37 C	CFR 1.16(j))			OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	
*	* If the entry in co * If the "Highest N * If the "Highest Nu The "Highest Num	lumber Previous ımber Previously I	ly Paid F Paid For"	or" IN THIS SPA IN THIS SPACE is	CE is less than a less than 3, ent	20, enter "20".	in column 1.			



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UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION	FILING or	GRP ART				
NUMBER	371(c) DATE	UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
14/846 226	09/04/2015	3771	1600	FPHCR.112C2	19	3

20995 KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614 CONFIRMATION NO. 8898 FILING RECEIPT



Date Mailed: 09/23/2015

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections

Inventor(s)

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Craig Robert Prentice, Auckland, NEW ZEALAND;

Oliver Gleeson, Auckland, NEW ZEALAND;

Applicant(s)

Fisher & Paykel Healthcare Limited, Auckland, NEW ZEALAND;

Power of Attorney: The patent practitioners associated with Customer Number 20995

Domestic Priority data as claimed by applicant

This application is a CON of 14/333,134 07/16/2014 which is a CON of 10/598,026 10/18/2007 PAT 8783257 which is a 371 of PCT/NZ05/00023 02/18/2005

Foreign Applications (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see http://www.uspto.gov for more information.)

NEW ZEALAND 531332 02/23/2004 NEW ZEALAND 534606 08/06/2004

Permission to Access - A proper **Authorization to Permit Access to Application by Participating Offices** (PTO/SB/39 or its equivalent) has been received by the USPTO.

If Required, Foreign Filing License Granted: 09/18/2015

The country code and number of your priority application, to be used for filing abroad under the Paris Convention,

is **US 14/846.226**

Projected Publication Date: 12/31/2015

page 1 of 3

Non-Publication Request: No

Early Publication Request: No

Title

BREATHING ASSISTANCE APPARATUS

Preliminary Class

128

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

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LICENSE FOR FOREIGN FILING UNDER

Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

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The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign AssetsControl, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

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The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The U.S. offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to promote and facilitate business investment. SelectUSA provides information assistance to the international investor community; serves as an ombudsman for existing and potential investors; advocates on behalf of U.S. cities, states, and regions competing for global investment; and counsels U.S. economic development organizations on investment attraction best practices. To learn more about why the United States is the best country in the world to develop technology, manufacture products, deliver services, and grow your business, visit http://www.SelectUSA.gov or call +1-202-482-6800.

Applicant Name (if Applicant is a juristic entity)

Document Description: Power of Attorney

Approved for use through 11/30/2

PTO/AIA/82A (07-13)
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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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TRANSMITTAL FOR POWER OF ATTORNEY TO ONE OR MORE REGISTERED PRACTITIONERS

NOTE: This form is to be submitted with the Power of Attorney by Applicant form (PTO/AIA/82B) to identify the application to which the Power of Attorney is directed, in accordance with 37 CFR 1.5, unless the application number and filing date are identified in the Power of Attorney by Applicant form. If neither form PTO/AIA/82A nor form PTO/AIA82B identifies the application to which the Power of Attorney is directed, the Power of Attorney will not be recognized in the application. Application Number Unknown Herewith Filing Date Alastair Edwin McAuley First Named Inventor Title BREATHING ASSISTANCE APPARATUS Unknown Art Unit Unknown Examiner Name **FPHCR.112C2** Attorney Docket Number SIGNATURE of Applicant or Patent Practitioner Signature /Michael Guiliana/ Date (Optional) 2015-09-04 Name Registration 42611 Michael A. Guiliana Number Title (if Applicant is a juristic entity)

NOTE: This form must be signed in accordance with 37	7 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. It
more than one applicant, use multiple forms.	
*Total of forms are submitted.	

This collection of information is required by 37 CFR 1.131, 1.32, and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Docket No.: FPHCR.000GEN Customer No. 20,995

POWER OF ATTORNEY BY APPLICANT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

I hereby revoke all previous powers of attorney given in the application identified in the attached transmittal letter.

I hereby appoint Practitioner(s) associated with the following Customer Number as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the application referenced in the attached transmittal letter (form PTO/AIA/82A or equivalent): Customer No. 20,995

Please recognize or change the correspondence address for the application identified in the attached transmittal letter to the address associated with Customer No. 20,995.

I am the Applicant: FISHER & PAYKEL HEALTHCARE LIMITED, the Assignee or Person to Whom the Inventor is Under an Obligation to Assign.

Signature of Applicant for Patent

The undersigned (whose title is supplied below) is authorized to act on behalf of the applicant.

Signature:	Gado	Date: 3//7//3
Name:	L. GRADON.	Title: SENIOR VICE PRESIDENT
Signature:	manuel	Date: 31 7 13
Name:	Michael Daniell	Title: CEO

14737883:ah 012513 Doc Code: TRACK1.REQ

Document Description: TrackOne Request

PTO/AIA/424 (04-14)

CERTIFICATION AND REQUEST FOR PRIORITIZED EXAMINATION UNDER 37 CFR 1.102(e) (Page 1 of 1)

First Named Inventor:	Alastair Edwin McAuley	Nonprovisional Application Number (if known):	Unknown
Title of Invention:	BREATHING ASSISTANCI	E APPARATUS	

APPLICANT HEREBY CERTIFIES THE FOLLOWING AND REQUESTS PRIORITIZED EXAMINATION FOR THE ABOVE-IDENTIFIED APPLICATION.

- 1. The processing fee set forth in 37 CFR 1.17(i)(1) and the prioritized examination fee set forth in 37 CFR 1.17(c) have been filed with the request. The publication fee requirement is met because that fee, set forth in 37 CFR 1.18(d), is currently \$0. The basic filing fee, search fee, and examination fee are filed with the request or have been already been paid. I understand that any required excess claims fees or application size fee must be paid for the application.
- 2. I understand that the application may not contain, or be amended to contain, more than four independent claims, more than thirty total claims, or any multiple dependent claims, and that any request for an extension of time will cause an outstanding Track I request to be dismissed.
- 3. The applicable box is checked below:
 - I. Original Application (Track One) Prioritized Examination under § 1.102(e)(1)
- i. (a) The application is an original nonprovisional utility application filed under 35 U.S.C. 111(a).
 This certification and request is being filed with the utility application via EFS-Web.
 ---OR---
 - (b) The application is an original nonprovisional plant application filed under 35 U.S.C. 111(a). This certification and request is being filed with the plant application in paper.
- ii. An executed inventor's oath or declaration under 37 CFR 1.63 or 37 CFR 1.64 for each inventor, <u>or</u> the application data sheet meeting the conditions specified in 37 CFR 1.53(f)(3)(i) is filed with the application.
 - II. Request for Continued Examination Prioritized Examination under § 1.102(e)(2)
- i. A request for continued examination has been filed with, or prior to, this form.
- ii. If the application is a utility application, this certification and request is being filed via EFS-Web.
- iii. The application is an original nonprovisional utility application filed under 35 U.S.C. 111(a), or is a national stage entry under 35 U.S.C. 371.
- iv. This certification and request is being filed prior to the mailing of a first Office action responsive to the request for continued examination.
- v. No prior request for continued examination has been granted prioritized examination status under 37 CFR 1.102(e)(2).

Signature / Michael Guiliana /	Date 2015-09-04
Name (Print/Typed) Michael A. Guiliana	Practitioner 42611
Note: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for Submit multiple forms if more than one signature is required.*	or signature requirements and certifications.
*Total of forms are submitted.	

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

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Request Not to Publish. I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application has not and will not be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.									
Representative Information:									
this information in the Either enter Custon	Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32). Either enter Customer Number or complete the Representative Name section below. If both sections are completed the customer Number will be used for the Representative Information during processing.								
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Application Da	nta Sheet 37 CFR 1.76	Attorney Docket Number	FPHCR.112C2
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Title of Invention	BREATHING ASSISTANCE A	APPARATUS	

This section allows for the applicant to claim priority to a foreign application. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55. When priority is claimed to a foreign application that is eligible for retrieval under the priority document exchange program (PDX) ¹the information will be used by the Office to automatically attempt retrieval pursuant to 37 CFR 1.55(i)(1) and (2). Under the PDX program, applicant bears the ultimate responsibility for ensuring that a copy of the foreign application is received by the Office from the participating foreign intellectual property office, or a certified copy of the foreign priority application is filed, within the time period specified in 37 CFR 1.55(g)(1).

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Application Number	Country i	Filing Date (YYYY-MM-DD)	Access Code ⁱ (if applicable)				
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534606	NZ	2004-08-06					
Additional Foreign Priority Data may be generated within this form by selecting the Add button.							

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications

This application (1) claims priority to or the benefit of an application filed before March 16, 2013 and (2) also
contains, or contained at any time, a claim to a claimed invention that has an effective filing date on or after March
16, 2013.
NOTE: By providing this statement under 37 CFR 1.55 or 1.78, this application, with a filing date on or after March
16, 2013, will be examined under the first inventor to file provisions of the AIA.

Authorization to Permit Access:

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Application Da	ita Sheet 37 CFR 1.76	Attorney Docket Number	FPHCR.112C2			
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Title of Invention	BREATHING ASSISTANCE A	APPARATUS				
If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the instant patent application						

the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the instant patent application is filed access to the instant patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, WIPO, or other intellectual property office in which a foreign application claiming priority to the instant patent application is filed to have access to the instant patent application.

In accordance with 37 CFR 1.14(h)(3), access will be provided to a copy of the instant patent application with respect to: 1) the instant patent application-as-filed; 2) any foreign application to which the instant patent application claims priority under 35 U.S.C. 119(a)-(d) if a copy of the foreign application that satisfies the certified copy requirement of 37 CFR 1.55 has been filed in the instant patent application; and 3) any U.S. application-as-filed from which benefit is sought in the instant patent application.

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing this Authorization.

Applicant Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.						
Applicant 1				Remove	,	
If the applicant is the inventor (or the remaining joint inventor or inventors under 37 CFR 1.45), this section should not be completed. The information to be provided in this section is the name and address of the legal representative who is the applicant under 37 CFR 1.43; or the name and address of the assignee, person to whom the inventor is under an obligation to assign the invention, or person who otherwise shows sufficient proprietary interest in the matter who is the applicant under 37 CFR 1.46. If the applicant is an applicant under 37 CFR 1.46 (assignee, person to whom the inventor is obligated to assign, or person who otherwise shows sufficient proprietary interest) together with one or more joint inventors, then the joint inventor or inventors who are also the applicant should be identified in this section.						
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If the Applicant is an Org	janization	check here.				
Organization Name	Organization Name Fisher & Paykel Healthcare Limited					
Mailing Address Information For Applicant:						
Address 1 15 Maurice Paykel Place, East Tamaki						
Address 2						
City	Auckla	ınd	State/Province			
Country NZ			Postal Code	2013		
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Phone Numb	er				Fax Numb	er		
Email Addres	s						•	
Additional Assignee or Non-Applicant Assignee Data may be generated within this form by selecting the Add button.								
Signature:								
NOTE: This to certifications.	form must	be signed	in accordance	with 37 CFR	1.33. See 3	37 CFR 1.4	4 for signature r	requirements and
Signature /Michael Guiliana/ Date (YYYY-MM-DD) 2015-09-04) 2015-09-04				
First Name	Michael		Last Name	Guiliana		Regist	tration Number	42611
Additional Signature may be generated within this form by selecting the Add button. Add								

PTO/AIA/14 (07-14)

Approved for use through 04/30/2017. OMB 0651-0032 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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Application Da	ata Shoot 37 CED 1 76	Attorney Docket Number	FPHCR.112C2
Application Data Sheet 37 CFR 1.76		Application Number	
Title of Invention	BREATHING ASSISTANCE A	APPARATUS	

This collection of information is required by 37 CFR 1.76. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 23 minutes to complete, including gathering, preparing, and submitting the completed application data sheet form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
 - 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
 - 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
 - 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent C o o p eration Treaty.
 - 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
 - 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
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 - 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

RMD

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of Invention	BREATHING ASSISTANCE APPARATUS							
As the belo	As the below named inventor, I hereby declare that:							
This declar								
The above-i	dentified application was made or authorized to be made by me.							
I believe tha	t I am the original inventor or an original joint inventor of a claimed invention in the application.							
	I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.							
	WARNING:							
Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.								
LEGAL NA	AME OF INVENTOR							
Inventor: _	Alastair Edwin McAuley Date (Optional): 19/A., /14.							
	ication data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have say filed. Use an additional PTO/AIA/01 form for each additional inventor.							

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.53. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

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DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN **APPLICATION DATA SHEET (37 CFR 1.76)**

Title of Invention	BREATHING ASSISTANCE APPARATUS
As the belo	w named inventor, I hereby declare that:
This declar	
	United States application or PCT international application number 14/333134 filed on July 16, 2014
The above-	identified application was made or authorized to be made by me.
I believe tha	it I am the original inventor or an original joint inventor of a claimed invention in the application.
	cnowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 prisonment of not more than five (5) years, or both.
	WARNING:
contribute to (other than a to support a petitioners/a USPTO. Pe application (patent. Furt referenced is	oplicant is cautioned to avoid submitting personal information in documents filed in a patent application that may definite theft. Personal information such as social security numbers, bank account numbers, or credit card numbers a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO petition or an application. If this type of personal information is included in documents submitted to the USPTO, pplicants should consider redacting such personal information from the documents before submitting them to the attitioner/applicant is advised that the record of a patent application is available to the public after publication of the unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a thermore, the record from an abandoned application may also be available to the public if the application is a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms ubmitted for payment purposes are not retained in the application file and therefore are not publicly available.
LEGAL NA	AME OF INVENTOR
Inventor: _ Signature:	Craig Robert Prentice Date (Optional): ZO AUG-14
Note: An appl been previous	ication data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have sly filed. Use an additional PTO/AIA/01 form for each additional inventor.

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- A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Doc code: Oath

Document Description: Oath or declaration filed

PTO/AIA/02 (07-13)

Approved for use through 01/31/2014. OMB 0651-0032 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)

Title of Invention	BREATHING ASSISTANC	E APPARATUS				
This statement is directed to: The attached application, OR United States application or PCT international application number 14/333134 filed on July 16, 2014 LEGAL NAME of inventor to whom this substitute statement applies: (E.g., Given Name (first and middle (if any)) and Family Name or Surname) Oliver Gleeson Residence (except for a deceased or legally incapacitated inventor):						
Mailing Addres	kland ss (except for a deceased or legally incap ata Avenue, Point England	State pacitated inventor):	Country NZ			
city Auckland State Zip Country NZ						
I believe the above-named inventor or joint inventor to be the original inventor or an original joint inventor of a claimed invention in the application. The above-identified application was made or authorized to be made by me. I hereby acknowledge that any willful false statement made in this statement is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.						
Relationship to the inventor to whom this substitute statement applies: Legal Representative (for deceased or legally incapacitated inventor only), Assignee, Person to whom the inventor is under an obligation to assign, Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or Joint Inventor.						

[Page 1 of 2]

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case, Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Petent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

SUBSTITUTE STATEMENT

	· · · · · · · · · · · · · · · · · · ·							
Circumstances permitting execution of this substitute statement:								
Inventor is deceased,								
Inventor is under legal incapacity,								
Inventor cannot be found or reached after diligent effort, or								
Inventor has refused to execute the o	ath or declaration under 37 CF	R 1.63.						
If there are joint inventors, please check the a	ppropriate box below:							
An application data sheet under 37 C or is currently submitted.	An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been							
OR An application data sheet under 37 C Statement Supplemental Sheet (PTC information is attached. See 37 CFR	0/AIA/11 or equivalent) naming							
	WARNING:							
Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.								
PERSON EXECUTING THIS SUBSTITUTE STA	ATEMENT:							
Name: Jon Harwood Date (Optional):								
Signature: .								
APPLICANT NAME AND TITLE OF PERSON I								
If the applicant is a juristic entity, list the applica		ner:						
Fisher & Paykel Health Applicant Name:	ncare Limited							
Title of Person Executing This Substitute Statement: Group Intellect	tual Property Manager	•						
The signer, whose title is supplied above, is authorized to act on behalf of the applicant.								
Residence of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent):								
City	State	Country						
City State Country Mailing Address of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent)								
	State	Zip	Country					
Note: Use an additional PTO/AIA/02 form for each inventor who is deceased, legally incapacitated, cannot be found or reached after dilicent effort, or has refused to execute the oath or declaration under 37 CFR 1.63.								

Privacy Act Statement

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CERTIFICATE OF NON-REVOCATION OF POWER OF ATTORNEY

I, THE UNDERSIGNED, hereby certify that:

- 1. by a Power of Attorney dated 5 November 2013 Fisher & Paykel Healthcare Limited appointed me as its Attorney on the terms and subject to the conditions set out in such Power of Attorney;
- 2. I have executed the attached document pursuant to the powers conferred upon me by such Power of Attorney; and
- 3. at the time of signing this Certificate I have not received any notice or intimation of the revocation of my appointment or of the Power of Attorney.

DATED

Joh/Harwood

FPHCR.112C2 PATENT

BREATHING ASSISTANCE APPARATUS

INCORPORATION BY REFERENCE TO ANY PRIORITY APPLICATIONS

[0001] Any and all applications for which a foreign or domestic priority claim is identified in the Application Data Sheet as filed with the present application are hereby incorporated by reference under 37 CFR 1.57.

BACKGROUND OF THE INVENTIONS

Field of the Inventions

[0002] The present inventions relate to apparatuses for treating sleep apnoea. For example, the present inventions can provide a nasal positive airway pressure device.

Description of the Related Art

[0003] Obstructive Sleep Apnoea (OSA) is a sleep disorder that affects up to at least 5% of the population in which muscles that normally hold the airway open relax and ultimately collapse, sealing the airway. The sleep pattern of an OSA sufferer is characterised by repeated sequences of snoring, breathing difficulty, lack of breathing, waking with a start and then returning to sleep. Often the sufferer is unaware of this pattern occurring. Sufferers of OSA usually experience daytime drowsiness and irritability due to a lack of good continuous sleep.

[0004] In an effort to treat OSA sufferers, a technique known as Continuous Positive Airway Pressure (CPAP) was devised. A CPAP device consists of a gases supply (or blower) with a conduit connected to supply pressurised gases to a patient, usually through a nasal mask. The pressurised air supplied to the patient effectively assists the muscles to keep the patient's airway open, eliminating the typical OSA sleep pattern.

[0005] The procedure for administering CPAP treatment has been well documented in both the technical and patent literature. Briefly stated, CPAP treatment acts as a pneumatic splint of the airway by the provision of a positive pressure, usually in the range 4 to 20 cm H.sub.2O. The air is supplied to the airway by a motor driven blower whose outlet passes via an air delivery hose to a nose (or nose and/or mouth) mask sealingly engaged to a patient's face by means of a harness or other headgear. An exhaust port is provided in the

delivery tube proximate to the mask. More sophisticated forms of positive airway pressure devices, such as bi-level devices and auto-titrating devices, are described in U.S. Pat. No. 5,148,802 of Respironics, Inc. and U.S. Pat. No. 5,245,995 of Rescare Limited, respectively.

[0006] U.S. Pat. No. 5,477,852 of Airways Ltd, Inc. discloses a nasal positive airway pressure device that has a pair of nasal members each having a cannula tip to be inserted into the nares of the patient. Each cannula is tapered from a substantially circular cross-section outside the patient's nostril to a substantially oval cross-section at the tip inserted into the nostril. An inflatable cuff surrounds each cannula with the interior space of the cuff communicating with the lumen of the cannula through at least one aperture in the sidewall of the cannula. The nasal members are connected to one or more flexible hoses that, in turn, are connected to a source of positive air pressure. In use, positive air pressure is supplied to each cannula tip through the air hoses and nasal members. The positive air pressure inflates the cuffs to hold the nasal members in place and to effect treatment. The nasal device of U.S. Pat. No. 5,477,852 is attached to headgear that is located about a patient's head; this headgear could be considered by many patients as cumbersome and uncomfortable.

[0007] Conventional nasal masks used for administrating CPAP treatment are also considered uncomfortable and cumbersome, and prior art nasal masks and the like are noisy (due to air leaks). These disadvantages in many cases are a formidable obstacle to patient acceptance of such treatment. Therefore, a substantial number of patients either cannot tolerate treatment or choose to forego treatment. It is believed a substantial number of such patients could benefit from a nasal positive airway pressure apparatus that is more convenient to use and comfortable to wear, thereby resulting in increased treatment compliance.

[0008] As oxygen is supplied as a dry gas it is well known in the art to either heat and/or humidify gases before delivering them for breathing by a patient. In particular when delivering oxygen, or oxygen or air mixture, it has proven beneficial to humidify the gases first. In WO01/41854 of Vapotherm, Inc. a system is disclosed that allows the delivery of humidified oxygen through a nasal cannula. This system uses a narrow bore conduit and nasal cannula with a high resistance to gas flows, thereby requiring the oxygen be of a high

pressure. Air, as well as oxygen can also be passed down the conduit and nasal cannula and it too must be of a high pressure. This system allows the delivery of high flows of oxygen enriched air to the patient, but is limited in the flows achievable due to the narrow bore of the cannula resulting in high resistance gas flow and excessive velocity and noise upon exiting the cannula. Furthermore, the narrowness of the nasal cannula in this system allows easy expiration of gases between the prongs and nares and therefore does not create any positive airway pressure.

[0009] Innomed Technologies, Inc. manufactures a nasal cannula device called the NASALAIRE.TM.. In this device air or oxygen travels down a wide bore conduit to nasal cannula. The NASALAIRE.TM. creates a physical seal between the nares and itself, and relies on the absence of leaks around itself and the nares to deliver pressure supplied by a continuous positive airway pressure (CPAP) blower to the airway of the wearer.

SUMMARY OF THE INVENTIONS

[0010] It is an object of at least some of the present inventions to provide a breathing assistance apparatus which goes someway to overcoming the above mentioned disadvantages or which will at least provide the public a useful choice.

[0011] Accordingly in a first aspect the present inventions consists in a breathing assistance apparatus comprising:

[0012] nasal cannula, shaped to fit within a user's nares, and adapted to deliver said humidified gases to said user,

[0013] a pressurised source of gases,

[0014] transportation means adapted to, in use, be in fluid communication with said source of gases and said nasal cannula and adapted to in use convey said gases to said user,

[0015] wherein said nasal cannula including at least one prong allowing high flow delivery of said humidified gases and creating a positive airway pressure in said patient's airway, said at least one prong having an angled end, such that in use, gases flowing through said prong are directed to said user's nasal passages.

[0016] In a second aspect the present inventions consists in a breathing assistance apparatus comprising:

[0017] nasal cannula, shaped to fit within a user's nares,

[0018] a pressurised source of gases,

[0019] transportation means adapted to, in use, be in fluid communication with said source of gases and said nasal cannula and adapted to in use convey said gases to said user,

[0020] wherein said nasal cannula are adapted to deliver said humidified gases to said user, said nasal cannula including at least one prong allowing high flow delivery of said humidified gases and creating positive airway pressure in said patient's airway, said at least one prong having an end that is flared outwardly.

[0021] To those skilled in the art to which the inventions relate, many changes in construction and widely differing embodiments and applications of the invention will suggest themselves without departing from the scope of the inventions as defined in the appended claims. The disclosures and the descriptions herein are purely illustrative and are not intended to be in any sense limiting.

BRIEF DESCRIPTION OF THE DRAWINGS

[0022] Preferred forms of the present inventions will now be described with reference to the accompanying drawings.

[0023] FIG. 1 is a block diagram of a system providing humidified continuous positive airway pressure to a user as might be used in conjunction with a nasal cannula of the present invention.

[0024] FIG. 2 is a perspective view of a first embodiment of the nasal cannula of the present invention.

[0025] FIG. 3 is a side view of the nasal cannula of FIG. 2.

[0026] FIG. 4 is a plan view of the nasal cannula of FIG. 2.

[0027] FIG. 5 is a prong end view of the nasal cannula of FIG. 2

[0028] FIG. 6 is an exploded view of the nasal cannula of FIG. 2.

- [0029] FIG. 7 is a side view of a second embodiment of a nasal cannula of the present invention.
- [0030] FIG. 8 is a side view of a third embodiment of a nasal cannula of the present invention.
- [0031] FIG. 9 is a perspective view of a fourth embodiment of a nasal cannula of the present invention.
 - [0032] FIG. 10 is a side view of the nasal cannula of FIG. 9.
 - [0033] FIG. 11 is an exploded perspective view of the nasal cannula of FIG. 9.
 - [0034] FIG. 12 is a front view of the prongs of the nasal cannula of FIG. 9.
 - [0035] FIG. 13 is an exploded side view of the nasal cannula of FIG. 9.
- [0036] FIG. 14 is a side cross-sectional view of a fifth embodiment of the nasal cannula of the present invention where the connection between a body part and connector of the cannula includes a plurality of channels.
 - [0037] FIG. 15 is a cross-section through AA of the nasal cannula of FIG. 14.
- [0038] FIG. 16 is a side cross-sectional view of a sixth embodiment of the nasal cannula of the present invention including a shield that protects an outlet vent from inlet gases.
 - [0039] FIG. 17 is a cross-section through BB of the nasal cannula of FIG. 16.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0040] Whether used in a hospital environment or in a home environment, the nasal cannula of the present inventions will generally have associated three main pieces of apparatus. Firstly, an active humidifier, which that controls the temperature of a heater plate heating a body of water to achieve a desired temperature and humidity of the gases being humidified. Secondly, a transport conduit from the humidifier to the patient is also required, which is preferably heated to reduce condensation, or "rain out". Thirdly, a cannula designed to fit into the nasal cavity and deliver humidified, pressurized gases. In particular, in one embodiment the nasal cannula of the present invention has two flared end prongs that seal within a patient's nares, although in some embodiments the cannula may have a single prong. The cannula prongs are shaped such that a step is created between them so that the prongs

abut the user's nasal septum in use. Furthermore, the gripping action of the sides of the prongs to the user's septum in use prevents the prongs from dislodging from the user's nares. In another embodiment the prongs of the nasal cannula are angled toward one another as well as having an angled profile at the outlet of gases, such that gases flow from the prongs flows back into the nasal passage and is not forced up into the rest of the nasal cavity.

Pressure (CPAP) system is shown in which a patient 1 is receiving humidified and pressurised gases through the nasal cannula 2 of the present invention. The cannula 2 is connected to a humidified gases transportation pathway or inspiratory conduit 3. It should be understood that delivery systems could also be VPAP (Variable Positive Airway Pressure) and BiPAP (Bi-level Positive Airway Pressure) or numerous other forms of respiratory therapy. Inspiratory conduit 3 is connected to the outlet 4 of a humidification chamber 5 that contains a volume of water 6. The inspiratory conduit 3 may contain heating means or heater wires (not shown) which heat the walls of the conduit to reduce condensation of humidified gases within the conduit. The humidification chamber 6 is preferably formed from a plastics material and may have a highly heat conductive base (for example an aluminium base) which is in direct contact with a heater plate 7 of humidifier 8. The humidifier 8 is provided with control means or electronic controller 9 that may comprise a microprocessor based controller executing computer software commands stored in associated memory.

[0042] The controller 9 receives input from sources such as user input means or dial 10 through which a user of the device may, for example, set a predetermined required value (preset value) of humidity or temperature of the gases supplied to patient 1. The controller may also receive input from other sources; for example, temperature and/or flow velocity sensors 11 and 12 through connector 13 and heater plate temperature sensor 14. In response to the user set humidity or temperature value input via dial 10 and the other inputs, controller 9 determines when (or to what level) to energise heater plate 7 to heat the water 6 within humidification chamber 5. A flow of gases (for example air) is provided to the chamber through inlet 16 from a gases supply means or blower 15. As the volume of water 6 within humidification chamber 5 is heated, water vapour begins to fill the volume of the chamber above the water's surface and is passed out of the humidification chamber 5 through

outlet 4. Exhaled gases from the patient's mouth are passed directly to ambient surroundings in FIG. 1.

[0043] The blower 15 is provided with variable pressure regulating means or a variable speed fan 20 which draws air or other gases through the blower inlet 17. The speed of the variable speed fan 20 is controlled by the electronic controller 18 (or alternatively the function of the controller 18 could carried out by the controller 9) in response to inputs from the controller 9 and a user set predetermined required value (preset value) of pressure or fan speed via the dial 19.

Flared Prong Nasal Cannula

[0044] A first embodiment of a nasal cannula of the present invention is shown in detail in FIGS. 2 to 6. Referring to FIGS. 2 and 6, the nasal cannula 2 comprises three main components; the prong part 21, body part 22 and ball connector 23.

[0045] The prong part 21 has two nasal prongs 24, 25, each of which are substantially shaped to follow the contours of the human nares and in use are placed inside a user's nares. The prongs 24, 25 extend out from a hollow tubular body 26 that in use fits to the body part 22. Each of the prongs 24, 25 are integrally moulded with the tubular body 26 in a flexible plastics material or rubber, such as silicone, other thermoset elastomers or thermoplastic elastomers such as Kraton.TM.. The prongs 24, 25 are substantially oval tubular members that allow for a passage of gases. In particular, as shown in FIG. 5, the prongs are oval in shape and angled in the same manner as a human's nares. The prongs 24, 25 are angled toward one another (or toward the vertical axis Y) at the top 27, 28 of the prongs and away from one another at the bottom 29, 30 of the prongs. Furthermore, the ends 31, 32 of the prongs flare outwardly and preferably are formed such that the ends of the prongs are thinner in cross-section than the rest of the prongs. The flared thinner section ends 31, 32 of the prongs assist with the sealing of the prongs 24, 25 in use within the user's nares. When in use and with gases flowing through the prongs the force of the gas pressure will force the prong ends 31,32 to flare outwardly and seal against the inside of the user's nares.

[0046] The prongs 24, 25 each include a step 33, 34 formed along their lengths. Each of the steps 33, 34 are formed on the prongs 24, 25 in an opposing manner such that in use, when the prongs are within a user's nares the steps 33, 34 abut the user's nasal septum

and form a ledge that prevents dislodgement of the prongs. The prongs 24, 25 also have protrusions 35, 36 formed on their outer edges that abut the sides of the user's nares (opposite to the nasal septum). The protrusions 35, 36 assist in preventing the dislodgement of the prongs, especially if the user moves his or her head. The protrusions 35, 36 also maintain the prongs within the user's nares in a correct orientation such that in use gases flow through the prongs and directly up the user's nasal passages.

[0047] The body part 22 is a tubular passageway in which the prong part 21 is connected at one end and a ball joint 37 at the other end. The ball joint 37 extends from the connector 23 and slots into a complementary shaped (partial sphere) socket end 39. The body part 22 also has a number of apertures 38 formed in it, which act as a bias flow outlet vent. Therefore, any gases exhaled by the user through their nose will exit through the apertures 38.

[0048]The connector 23 is preferably connected to the inspiratory conduit 3 (see FIG. 1) that supplies gases flow to the cannula 2. The inspiratory conduit 3 may be moulded directly to the connector 23 or other connection mechanisms may be used, such as a friction fit formed between the connector and conduit.

[0049] Although a ball and socket joint, as described above, between the body part 22 and connector 23 is preferred other connections may be utilised, such as a flexible piece of silicone, or other appropriate connection. The connection between the cannula body and connector must be able to be flexed or rotated to allow for the inspiratory conduit 3 to be moved without causing the dislodgement of the nasal cannula 2 from the user's nares.

[0050] In the preferred form of the nasal cannula 2 of the present invention the body part 22 and connector 23 are preferably made from a hard or rigid plastics material, such as polypropylene, polycarbonate or acetyl. In other forms the body part 22 and connector 23 may be of different plastics materials to allow for increased slidability between these parts.

[0051] The prong part 21 may be supplied in various different sizes such that different sized user's may remove an existing prong part and simply attach a different sized flexible plastics prong part over the body part 22.

[0052]To provide additional comfort for the user or ensure the nasal cannula of the present invention do not fall from a user's nares, the nasal cannula may be used in

combination with a headgear strap, which in one embodiment is a small flexible tube. For example, FIG. 1 shows a headgear strap 40 extending from the nasal cannula 2. The ends of the headgear strap that attach to the cannula may attach to extensions (or loops) 41 on the body part 22 of the cannula shown in FIG. 2, or may attach about other appropriate areas of the cannula, for example, about the connector 23.

[0053] The abovementioned embodiment of the nasal cannula 2 of the present invention is preferably a wide bore pronged cannula used for high flow conditions.

[0054] A second embodiment of the present invention is shown in FIG. 7. In this embodiment of the nasal cannula 42 the prongs 43, 44 are preferably small bore prongs for use with lower flow conditions. The prongs 43, 44 are similarly shaped to the prongs 24, 25 detailed above, but may not seal in the same manner as the abovementioned prongs due to the smaller size of the prongs. In fact these prongs may not seal at all in use within the user's nares.

[0055] Furthermore, in this second embodiment the nasal cannula 42 is smaller and weighs less as it is only comprised of a prong body 45 and prongs 43, 44, where the body 45 is connected to a small tube that is formed with corrugations or bellows 48 that connect to an inspiratory tube or conduit 47 (similar to the inspiratory conduit 3 described above) that receives a supply of gases.

[0056] The corrugations of bellows 48 will bend or move when a weight or force is placed on the cannula, thereby preventing dislodgement of the cannula 42 from a user's face in use. In particular, the corrugations or bellows 48 prevent transferral of the torque onto the cannula 42 when a user moves his or her head.

[0057] The body 45 of the cannula 42 is provided with a number of apertures 46 that allows for gases exhaled by the users to be expelled into the ambient air.

[0058] The prong body and prongs of this embodiment of the cannula of the present invention are preferably formed a flexible plastics material or rubber, such as silicone, other thermoset elastomers or thermoplastic elastomers such as Kraton.TM..

[0059] A third embodiment of the nasal cannula of the present invention is shown in FIG. 8 where the cannula may be provided with corrugated or baffled sections on the prongs. The nasal cannula 49 of this embodiment is similar to that of FIG. 2 but the prongs

50, 51 have a series of corrugations 52, 53 formed in them. The corrugations 52, 53 allow for movement of each of the prongs 50, 51 for a better user fit, and allow for movement of the cannula 49 without causing dislodgement of the prongs from the user's nares.

Angled Prong Nasal Cannula

[0060] A fourth embodiment of the nasal cannula of the present invention is shown in FIGS. 9 to 13. The nasal cannula 60 has a similar construction to the nasal cannula of FIG. 2 and comprises three main components; a prong part 61, body part 62 and ball jointed connector 63.

[0061] The prong part 61 preferably has two nasal prongs 64, 65, each of which are substantially shaped to follow the contours of the human nares and in use are placed inside a user's nares. In some forms a cannula with only one prong may be provided. The prongs 64, 65 extend out from a hollow tubular body 66 that in use fits to the body part 62, preferably about an extension 67 (as shown in the exploded view of the nasal cannula of FIG. 11). Each of the prongs 64, 65 are integrally moulded with the tubular body 66 in a flexible plastics material or rubber, such as silicone, other thermoset elastomers or thermoplastic elastomers, such as Kraton.TM.. The prongs 64, 65 are substantially oval tubular members that allow for a passage of gases.

[0062] In particular, as shown in FIG. 12, the prongs are oval in shape (to reflect the shape of human nares) and angled in the same manner as a human's nares. The prongs 64, 65 are angled toward one another (or toward the horizontal axis X) such that angles .alpha. are formed between the midlines m, n through each respective prong 64, 65. The angled profile of the prongs 64, 65 means that they are more ergonomically correct with a human's nares and may assist in directing the gases flow from the prongs to the user's nasal cavities. The prongs 64, 65 are constructed such that their cross-sectional width narrows closer to the tip of each prong.

[0063] In the preferred form the prongs 64, 65 have an angled and profiled end 76 (see FIG. 10). The angled ends 76 assist in directing gases flow to the user's nasal passages.

[0064] Each of the prongs 64, 65 has a flange 73, 74 disposed about its circumference. The flanges 73, 74 are at a position on the prongs 64, 65 such that the each of the flanges rests against the outside of each of the patient's nares. The flanges 73, 74 do not

extend inside the nares, but rest at the entranceway of the user's nares, and preferably seal the nares. In some users the flanges 73, 74 may extend within the user's nares and provide sealing of the nares. The flanges 73, 74 are preferably thin flexible extensions that extend substantially completely around the circumference of the prongs 64, 65. The flanges 73, 74 are preferably substantially elliptical in shape with one side (for example, side 89, which in use will abut the nasal septum of a user) of the flange extending out from each prong further than the other side of each prong. There is a recessed area 88 on each of the prongs between the flange and the shaped ends of the prongs in which preferably in use the ends of a user's nares rest.

[0065] The body part 62 is a tubular passageway in which the prong part 61 is connected at one end and a ball joint 69 at the other end. The ball joint 69 extends from the connector 63 and slots into a complementary shaped (partial sphere) socket end 70 on the body part 62. The body part 62 may also have a plurality of apertures 71 formed in it, which acts as a bias flow outlet vent. Therefore, any gases exhaled by the user through their nose will exit through the apertures 71.

[0066] A shield 75 (illustrated by the dashed line in FIG. 10) may extend over the bias vent 71 inside the body part 70 to prevent gases from the blower (gases supply 15) from interacting with the bias vent 71 and vent holes, causing noise in use.

[0067] In a sixth embodiment as shown in FIGS. 16 and 17 a nasal cannula without a prong part is shown, but that includes a shield similar to that described above. In this embodiment a body part 90 and a ball jointed connector 91 fit together as described above. The body part 90 includes an expiratory vent shield 92 that extends down from the top wall 94 of the body part 90 and shields the outlet vent 93.

[0068] Referring back to FIGS. 10 to 13, preferably the ball joint connector 63 is angled and extends into a swivelable connector 68. The swivel connector 68 is capable in use of being connected to the inspiratory conduit 3 (see FIG. 1) that supplies gases flow to the cannula 60. The inspiratory conduit 3 may be moulded directly to the connector 68 or other connection mechanisms may be used, such as a friction fit formed between the connector 68 and the conduit 3.

[0069] In other forms of the present invention the ball joint connector 63 or the ball joint 69 may have formed in it a plurality of channels. One example of this is the embodiment of FIGS. 14 and 15. Such channels allow there to be a leak when gases flow through the connector to the cannula and prongs. The channels are therefore capable of acting as a bias flow and a separate bias flow out outlet (such as that outlet 71 described above) may not be required.

[0070] In FIGS. 14 and 15 only a body part 82 and ball jointed connector 83 are shown. The body part 82 and ball jointed connector 83 join in a manner as described above, where the substantially half sphere shaped end 84 of the body part 82 receives the substantially half sphere shaped end 85 of the connector 83. The ends 84, 85 enable a rotation between the body part 82 and connector 83. In this embodiment two channels 86, 87 are formed in the connector end 85. Two channels are shown in this embodiment but there may be only one or any number of channels. Similarly, channels may be formed in the body part end 84.

[0071] It is preferred that there is a ball and socket joint, as described above, between the body part 62 and connector 63, although other connections may be utilised, such as a flexible piece of silicone, or other appropriate connection. The connection between the cannula body and connector must be able to be flexed or rotated to allow for the inspiratory conduit 3 to be moved without causing the dislodgement of the nasal cannula 60 from the user's nares.

[0072] In the preferred form of the nasal cannula 60 of the present invention the body part 62, connector 63, ball joint 69 and swivel connector 68 are preferably made from a hard or rigid plastics material, such as polypropylene, polycarbonate or acetyl. In other forms these may be of different plastics materials to allow for increased slidability between these parts.

[0073] The prong part 61 may be supplied in various different sizes such that different sized user's may remove an existing prong part and simply attach a different sized flexible plastics prong part over the body part 62.

[0074] To provide additional comfort for the user or ensure the nasal cannula of the present invention does not fall from a user's nares, the nasal cannula 60 is preferably used

in combination with a headgear strap. The strap may be similar to that shown in FIG. 1 with relation to the first form of the nasal cannula 2. In this fourth form of the nasal cannula 60 the body part 62 has headgear extensions 72, 73 that extend out from the body part 70. The extensions 72, 73 each have a channel 77, 78 formed in them that is capable of receiving an end 80, 81 of the headgear strap 79. The strap ends 80, 81 in use are threaded through apertures (preferably two) and extend into and are held in the channels 77, 78. In this form the headgear strap 79 is made from a small diameter silicon, rubber or similar type material. Therefore, when the strap ends 80, 81 are threaded through the apertures friction is created that maintains the straps within the apertures and prevents the straps from slipping from the cannula.

[0075] In other forms the ends of the headgear strap that attach to the cannula may attach to extensions (or loops) 41 on the body part 22 of the cannula shown in FIG. 6, or may attach about other appropriate areas of the cannula, for example, about the connector 23.

WHAT IS CLAIMED IS:

1. A mask assembly for delivering positive airway pressure to a user, the mask comprising:

a rigid mask body comprising a central portion, an outer surface having at least a curved portion and a mask body periphery, the mask body periphery comprising a left peripheral side and a right peripheral side;

a prong part comprising a hollow body removably sealed to the rigid mask body defining an enclosed space, a prong part periphery extending along a periphery of the hollow body, and first and second nasal prongs extending from the hollow body, the periphery of the prong part removably sealed to the mask body periphery in use, the prong part being formed as a single piece and being more flexible than the rigid mask body;

an inspiratory conduit connected to the rigid mask body configured to deliver pressurized gases into the enclosed space defined by the rigid mask body and the prong part for inhalation by a user in use;

a headgear arrangement configured to maintain the prong part in a position with the first and second prongs against a user's nares in use, the headgear arrangement comprising first and second headgear extensions and a headgear strap;

the first headgear extension having a distal end connected to the left peripheral side of the rigid mask body and a proximal end disposed proximally toward a left side of a user's face in use, the first headgear extension comprising a first portion and a second portion, the first portion of the first headgear extension comprising the distal end of the first headgear extension and extending at least along a first lateral direction extending laterally away from the left peripheral side of the rigid mask body, the second portion of the first headgear extension extending from the first portion, along a second direction extending more proximally toward the user than the first direction in use;

the second headgear extension having a distal end connected to the right peripheral side of the rigid mask body and a proximal end disposed proximally toward a right side of a user's face in use, the second headgear extension comprising a first portion and a second portion, the first portion of the second headgear extension comprising the distal end of the second headgear extension and extending at least along a third lateral direction extending laterally away from the rigid mask body, the second portion of the second headgear extension extending from the first portion, along a fourth direction extending more proximally toward the user than the third direction in use;

the headgear strap comprising a flexible tube having first and second ends, the first end connected to the first headgear extension at a first location between the distal end and the proximal ends of the first headgear extension and a second end connected to the second headgear extension at a second location disposed between the proximal and distal ends of the second headgear extension; and

at least a first bias flow vent disposed on the curved portion of the outer surface of the rigid mask body, the first bias flow vent being configured to vent a gas from the enclosed space between the rigid mask body and the prong part, to an outside of the rigid mask body during use.

- 2. The mask assembly of Claim 1, wherein the first bias flow vent comprises a flow vent outer surface, the flow vent outer surface being recessed inwardly from the curved portion of the outer surface of the rigid mask body.
- 3. The mask assembly of Claim 1, additionally comprising a conduit connection disposed on the rigid mask body and connecting the inspiratory conduit to the rigid mask body, the first bias flow vent comprising a plurality of apertures arranged symmetrically on left and right sides of the conduit connection.
- 4. The mask assembly of Claim 1, wherein the rigid mask body is configured to direct gases entering the rigid mask body from the conduit away from the bias flow vent.
- 5. The mask assembly of Claim 4, wherein the rigid mask body is configured to direct gases entering the rigid mask body from the prong part toward the bias flow vent.
- 6. A mask assembly for delivering positive airway pressure to a user, the mask comprising:

a rigid mask body comprising a central portion, an outer surface having at least a curved portion;

an inspiratory conduit connected to the rigid mask body;

a prong part comprising a hollow body and first and second nasal prongs extending from the hollow body, the hollow body removably connected to the mask body;

a first headgear extension having a distal end connected to the rigid mask body and a proximal end disposed proximally toward a user in use, the first headgear extension comprising a first portion and a second portion, the first portion of the first headgear extension comprising the distal end of the first headgear extension and extending at least along a first lateral direction extending laterally away from the rigid mask body, the second portion of the first headgear extension extending from the first portion, along a second direction extending more proximally toward the user than the first direction in use;

a second headgear extension having a distal end connected to the rigid mask body and a proximal end disposed proximally toward a user in use, the second headgear extension comprising a first portion and a second portion, the first portion of the second headgear extension comprising the distal end of the second headgear extension and extending at least along a third lateral direction extending laterally away from the rigid mask body, the second portion of the second headgear extension along a fourth direction more proximally toward the user than the third direction in use; and

a headgear strap connected to the first headgear extension at a first location between the distal end and the proximal ends of the first headgear extension and connected to the second headgear extension at a second location disposed between the proximal and distal ends of the second headgear extension.

7. The mask assembly of Claim 6, wherein the first portion of the first headgear extension is shorter than the second portion of the first headgear extension and the first portion of the second headgear extension is shorter than the second portion of the second headgear extension.

- 8. The mask assembly of Claim 6, wherein the headgear strap comprises a flexible tube and is connected to the second portion of the first headgear extension and the second portion of the second headgear extension.
- 9. The mask assembly of Claim 6, wherein the first portion of the first headgear extension and the first portion of the second headgear extension extend laterally outward distally of a sealing location between the prong part and the mask body and the second portion of the first headgear extension and the second portion of the second headgear extension terminate proximally of the sealing location between the prong part and the mask body.
- 10. The mask assembly of Claim 6, wherein the headstrap comprises first and second ends, the first end extending along first and second opposite sides of the second portion of the first headgear extension at the connection to the first headgear extension, the second end extending along first and second opposite sides of the second portion of the second headgear extension at the connection to the second headgear extension.
- 11. The mask assembly of Claim 6, wherein the second portion of the first headgear extension and the second portion of the second headgear extension terminate proximally of a mating region between the hollow body of the prong portion and the rigid mask body.
- 12. The mask assembly of Claim 6, wherein the hollow body of the prong portion and the rigid mask body overlap each other in a mating region.
- 13. The mask assembly of Claim 12, wherein the hollow body, the first prong and the second prong are integrally formed in a monolithic component.
- 14. The mask assembly of Claim12, wherein the first prong and the second prong are angled toward each other in the proximal direction.
- 15. The mask assembly of Claim 6, wherein the rigid mask body comprises a recessed curved portion of the curved outer which is recessed inwardly into the rigid mask body relative to a surrounding portion of the curved outer surface, the recessed curved portion comprising a plurality of apertures defining a bias flow outlet vent.
- 16. The mask assembly of Claim 6, wherein the rigid mask body is configured to direct gases entering the rigid mask body from the conduit away from the bias flow vent,

and to direct gases entering the rigid mask body from the prong part toward the bias flow vent.

17. A mask assembly for delivering positive airway pressure to a user, the mask comprising:

a rigid mask body;

an inspiratory conduit connected to the rigid mask body;

a prong part comprising a hollow body and first and second nasal prongs extending from the hollow body, the hollow body removably connected to the mask body;

a first headgear extension having a distal end connected to the rigid mask body and a proximal end disposed proximally toward a user in use, the first headgear extension extending from the rigid mask body, at least along a first lateral direction extending laterally away from the rigid mask body and along a second direction extending more proximally toward the user than the first direction in use; and

a second headgear extension having a distal end connected to the rigid mask body and a proximal end disposed proximally toward a user in use, the second headgear extension extending from the rigid mask body at least along a third lateral direction extending laterally away from the rigid mask body, the second portion of the second headgear extension along a fourth direction more proximally toward the user than the third direction in use.

- 18. The mask assembly of Claim 17 additionally comprising a headgear strap connected to the first headgear extension at a first location between the distal end and the proximal ends of the first headgear extension and connected to the second headgear extension at a second location disposed between the proximal and distal ends of the second headgear extension.
- 19. The mask assembly of Claim 18, wherein the headgear strap comprises a flexible tube engaged with the first and second headgear extensions.

ABSTRACT OF THE DISCLOSURE

A nasal cannula can be shaped to fit within a user's nares, where the nasal cannula includes at least one prong allowing high flow delivery of humidified gases and creates positive airway pressure in the patient's airway. The prongs can have angled ends such that, in use, gases flowing through the prongs are directed to the user's nasal passages. The nasal cannula body can be partially swivelling and preferably has a ball joint connector. The nasal cannula can have at least one flared end prong that preferably seals within a patient's nare.

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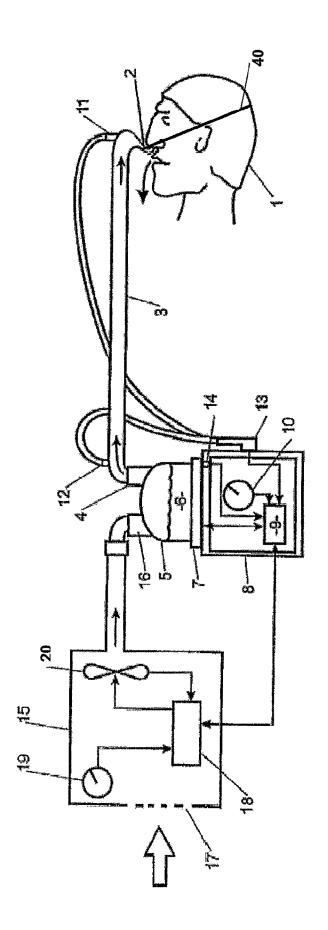
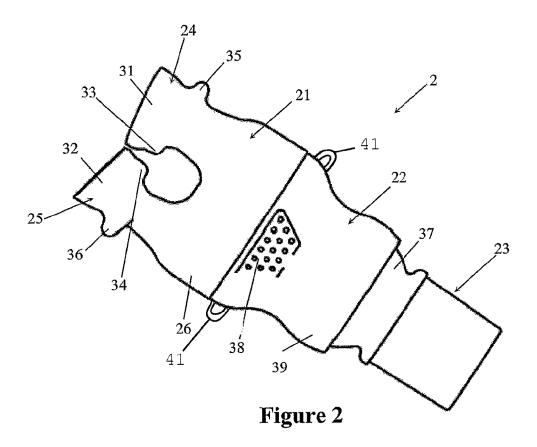


Figure 1



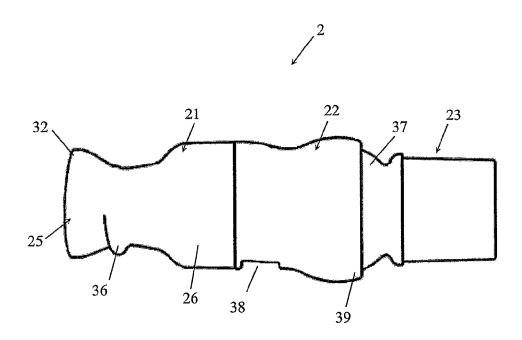


Figure 3

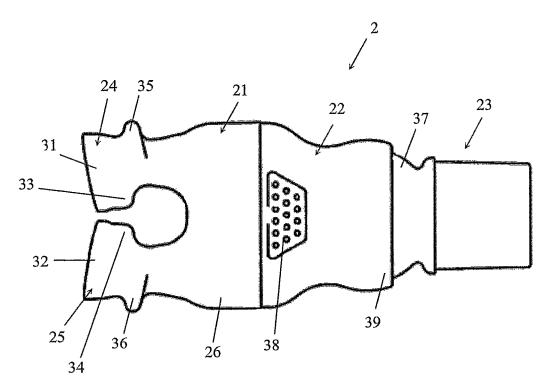


Figure 4

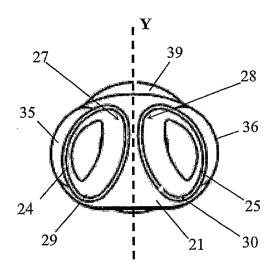


Figure 5

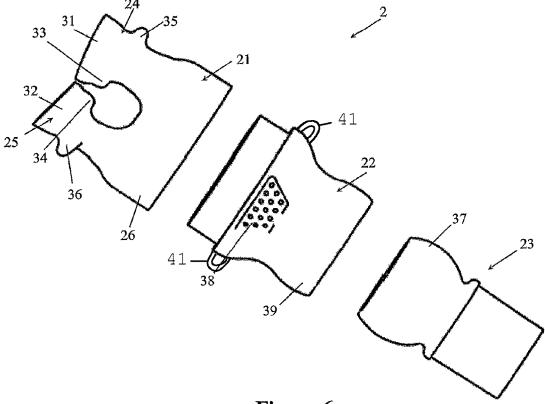


Figure 6

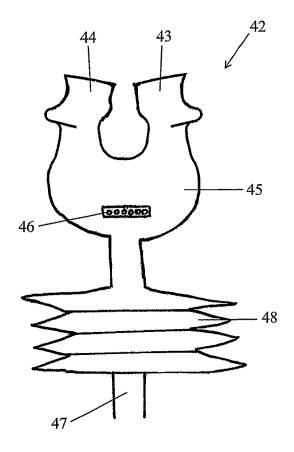


Figure 7

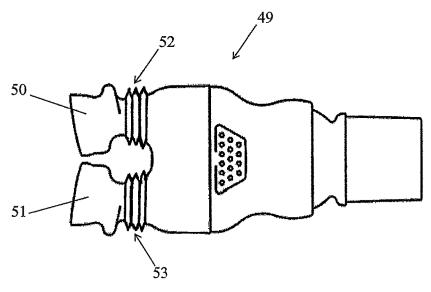


Figure 8

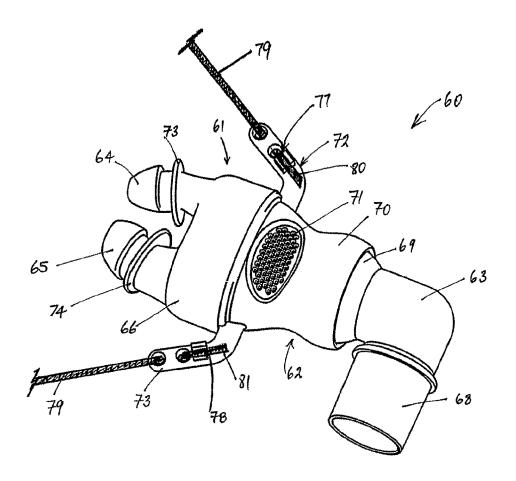


Figure 9

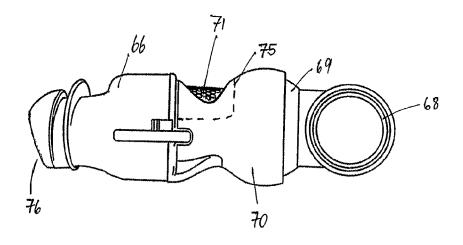


Figure 10

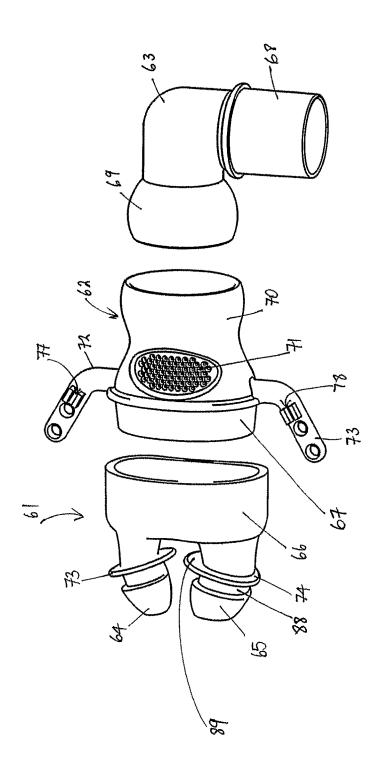


Figure 11

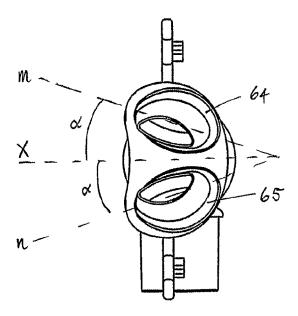


Figure 12

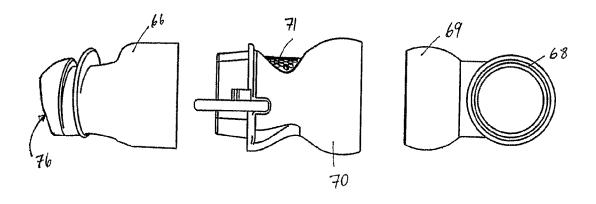


Figure 13

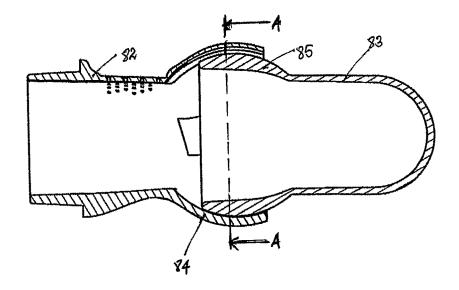


Figure 14

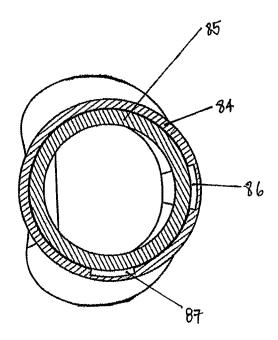
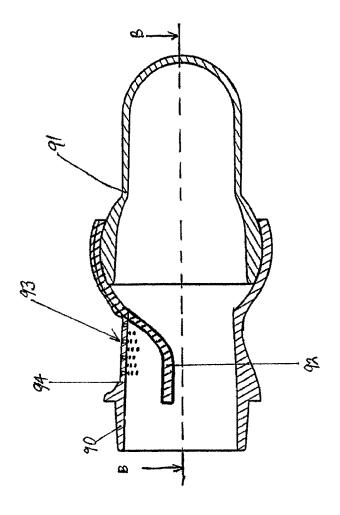


Figure 15



ligure 16

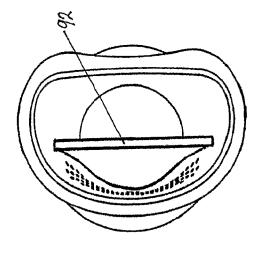


Figure 17

Docket No.: FPHCR.112C2 Customer No. 20995

INFORMATION DISCLOSURE STATEMENT

Inventor : Alastair Edwin McAuley

App. No. : Unknown

Filed : Herewith

For : BREATHING ASSISTANCE

APPARATUS

Examiner : Unknown

Art Unit : Unknown

Conf. No. : Unknown

CERTIFICATE OF EFS WEB TRANSMISSION

I hereby certify that this correspondence, and any other attachment noted on the automated Acknowledgement Receipt, is being transmitted from within the Pacific Time zone to the Commissioner for Patents via the EFS Web server

September 04, 2015 (Date)

/Michael Guiliana/

Michael A. Guiliana, Reg. No. 42,611

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

References and Listing

Pursuant to 37 CFR 1.56, an Information Disclosure Statement listing references is provided herewith. Copies of any listed foreign and non-patent literature references are being submitted.

No Disclaimers

To the extent that anything in the Information Disclosure Statement or the listed references could be construed as a disclaimer of any subject matter supported by the present application, Applicant hereby rescinds and retracts such disclaimer.

Timing of Disclosure

This Information Disclosure Statement is being filed within three months of the filing date or date of national phase entry, with an RCE or before receipt of a First Office Action after an RCE, and no fee is believed to be required.

Application No.: Unknown Filing Date: Herewith

The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment, to Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: September 04, 2015 By:/Michael Guiliana/

Michael A. Guiliana Registration No. 42,611 Attorney of Record Customer No. 20995 (949) 760-0404

21499031

	Application No.	Unknown
INFORMATION DISCLOSURE	Filing Date	Herewith
STATEMENT BY APPLICANT	First Named Inventor	Alastair Edwin McAuley
STATEMENT BY AFFLICANT	Art Unit	Unknown
(Multiple sheets used when necessary)	Examiner	Unknown
SHEET 1 OF 5	Attorney Docket No.	FPHCR.112C2

			U.S. PATENT	DOCUMENTS	
Examiner Initials	Cite No.	Document Number Number - Kind Code (if known) Example: 1,234,567 B1	Publication Date MM-DD-YYYY	Name	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear
	1	301,111	07-01-1884	Genese	
	2	472,238	04-05-1892	Van Orden	
	3	577,926	03-02-1897	Miller	
	4	718,470	01-13-1903	Jones	
	5	751,091	02-02-1904	Moran	
	6	770,013	09-13-1904	Linn	
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	9	2,359,506	10-03-1944	Battley et al.	
	10	2,388,604	11-06-1945	Eisenbud	
	11	2,508,050	05-16-1950	Valente	
	12	2,738,788	03-20-1956	Matheson et al.	
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	25	4,915,105	04-10-1990	Lee	
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	27	4,986,269	01-22-1991	Hakkinen	
	28	5,016,625	05-21-1991	Hsu et al.	

Examiner Signature	Date Considered

^{*}Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

	Application No.	Unknown
INFORMATION DISCLOSURE	Filing Date	Herewith
STATEMENT BY APPLICANT	First Named Inventor	Alastair Edwin McAuley
STATEMENT BY APPLICANT	Art Unit	Unknown
(Multiple sheets used when necessary)	Examiner	Unknown
SHEET 2 OF 5	Attorney Docket No.	FPHCR.112C2

U.S. PATENT DOCUMENTS					
Examiner Initials	Cite No.	Document Number Number - Kind Code (if known) Example: 1,234,567 B1	Publication Date MM-DD-YYYY	Name	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear
	29	5,065,756	11-19-1991	Rapoport	
	30	5,094,236	03-10-1992	Amad	
	31	5,113,857	05-19-1992	Dickerman et al.	
	32	5,148,802	09-22-1992	Sanders et al.	
	33	5,245,995	09-21-1993	Sullivan et al.	
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	35	5,477,852	12-26-1995	Landis et al.	
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	37	5,551,419	09-03-1996	Froehlich et al.	
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	Examiner Signature	Date Considered
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	Application No.	Unknown	
INFORMATION DISCLOSURE	Filing Date	Herewith	
STATEMENT BY APPLICANT	First Named Inventor	Alastair Edwin McAuley	
STATEMENT BY AFFLICANT	Art Unit	Unknown	
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SHEET 3 OF 5	Attorney Docket No.	FPHCR.112C2	

			U.S. PATENT	DOCUMENTS	
Examiner Initials	Cite No.	Document Number Number - Kind Code (if known) Example: 1,234,567 B1	Publication Date MM-DD-YYYY	Name	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear
	57	6,679,265	01-20-2004	Strickland et al.	
	58	6,851,425	02-08-2005	Jaffre et al.	
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l Examiner Signature	I Date Considered
Examinor orginatoro	Batto Gorioladica

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	Application No.	Unknown
INFORMATION DISCLOSURE	Filing Date	Herewith
STATEMENT BY APPLICANT	First Named Inventor	Alastair Edwin McAuley
STATEMENT BY APPLICANT	Art Unit	Unknown
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SHEET 4 OF 5	Attorney Docket No.	FPHCR.112C2

	U.S. PATENT DOCUMENTS				
Examiner Initials	Cite No.	Document Number Number - Kind Code (if known) Example: 1,234,567 B1	Publication Date MM-DD-YYYY	Name	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear
	85	D250,131	10-31-1978	Lewis, et al.	
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	89	D320,677	10-08-1991	Kumagai et al.	
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	99	D686,313	07-16-2013	Matula et al.	

	FOREIGN PATENT DOCUMENTS						
Examiner Cite Initials No.		Foreign Patent Document Country Code-Number-Kind Code Example: JP 1234567 A1	Publication Date MM-DD-YYYY	Name	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	T ¹	
	100	CA 131 16 62	12-22-1992	New England Thermoplastics, Inc.			
	101	CN 217 253 8	07-20-1994	Suda Telecommunications Applia		√- Abs	
	102	EP1646910	08-19-2015	CareFusion 202, Inc.			
	103	GB 190 224 431	12-24-1902	Emery			
	104	GB 880 824	10-25-1961	Oxygenaire London Ltd.			
	105	GB 1 467 828	03-23-1977	Laerdal			
	106	WO2001/041854	06-14-2001	Vapotherm, Inc.			

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	Application No.	Unknown
INFORMATION DISCLOSURE	Filing Date	Herewith
STATEMENT BY APPLICANT	First Named Inventor	Alastair Edwin McAuley
STATEMENT BY AFFEIGANT	Art Unit	Unknown
(Multiple sheets used when necessary)	Examiner	Unknown
SHEET 5 OF 5	Attorney Docket No.	FPHCR.112C2

	FOREIGN PATENT DOCUMENTS							
Examiner Cite Country Code-Number-Kind Code Initials No. Code Example: JP 1234567 A1		Publication Date MM-DD-YYYY	Name	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	T ¹			
	107	WO2002/074372	09-26-2002	The Government of the U.S.A./Secretary of the Department of Health and Human Services				
	108	WO 2005/086946	09-22-2005	Respironics, Inc.				
	109	WO 2005/021075	03-10-2005	Fisher & Paykel Healthcare Limited				
	110	WO 2005/051468	06-09-2005	Resmed Limited				

21499012

Examiner Signature Date Considered

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Doc Code: FAI.REQ

Document Description: Request First Action Interview

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Approved for use through 01/31/2013. OMB 0651-0031 U.S. Patent and Trademark Office; U. S. DEPARTMENT OF COMMERCE

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REQUEST FOR FIRST ACTION INTERVIEW (FULL PILOT PROGRAM)								
Attorney Docket PHCR.112C2	Attorney Docket Number: FPHCR.112C2 Application Number Unknown Filing date: Herewith							
First Named Alastair Edwin McAuley	Title: BREATHING ASS	SISTANCE APPARATUS						
APPLICANT HEREBY REQUESTS A APPLICATION. See Instruction Sheet		THE ABOVE-IDENTIFIED						
The application must contain thre	ee (3) or fewer independent claims	and twenty (20) or fewer total claims.						
 The application must not contain any multiple dependent claims. By filing this request: Applicant is agreeing to make an election without traverse if the Office determines that the claims are not obviously directed to a single invention; and Applicant is agreeing not to request for a refund of the search fee and any excess claims fee paid in the application after the mailing or notification of the pre-interview communication prepared by the examiner. Other attachments: 								
Signature /Michael Guiliana/		Date 2015-09-04						
Name (Print/Typed) Michael A. Guilian								
Note: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*. *Total of forms are submitted.								

The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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REQUEST FOR FIRST ACTION INTERVIEW (FULL PILOT PROGRAM)							
Attorney Docket FPHCR.112C2 Application Number Unknown Filing date: Herewith							
First Named Inventor: Alastair Edwin McAuley Title: BREATHING A	SSISTANCE APPARATUS						
APPLICANT HEREBY REQUESTS A FIRST ACTION INTERVIEW IN THE ABOVE-IDENTIFIED APPLICATION. See Instruction Sheet on page 2.							
The application must contain three (3) or fewer independent cla	ims and twenty (20) or fewer total claims.						
 The application must not contain any multiple dependent claims. By filing this request: Applicant is agreeing to make an election without traverse if the Office determines that the claims are not obviously directed to a single invention; and Applicant is agreeing not to request for a refund of the search fee and any excess claims fee paid in the application after the mailing or notification of the pre-interview communication prepared by the examiner. Other attachments:							
Signature /Michael Guiliana/	Signature /Michael Guiliana/ Date 2015-09-04						
Name (Print/Typed) Michael A. Guiliana Registration Number 42611							
Note: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.							
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The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Electronic Patent /	Application Fee	2 Transmit	tal	
Application Number:				
Filing Date:				
Title of Invention:	BREATHING ASSISTAN	ICE APPARATUS		
First Named Inventor/Applicant Name:	Alastair Edwin McAule	≥ y		
Filer:	Michael A. Guiliana			
Attorney Docket Number:	FPHCR.112C2			
Filed as Large Entity				
Filing Fees for Track I Prioritized Examination - Nonp	rovisional Applicatio	n under 35 US	C 111(a)	
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Utility application filing	1011	1	280	280
Utility Search Fee	1111	1	600	600
Utility Examination Fee	1311	1	720	720
Request for Prioritized Examination	1817	1	4000	4000
Pages:				
Claims:				
Miscellaneous-Filing:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)			
Publ. Fee- Early, Voluntary, or Normal	1504	1	0	0			
PROCESSING FEE, EXCEPT PROV. APPLS.	1830	1	140	140			
Petition:							
Patent-Appeals-and-Interference:							
Post-Allowance-and-Post-Issuance:							
Extension-of-Time:							
Miscellaneous:							
	Tot	al in USD	(\$)	5740			

Electronic Acknowledgement Receipt				
EFS ID:	23411404			
Application Number:	14846226			
International Application Number:				
Confirmation Number:	8898			
Title of Invention:	BREATHING ASSISTANCE APPARATUS			
First Named Inventor/Applicant Name:	Alastair Edwin McAuley			
Customer Number:	20995			
Filer:	Michael A. Guiliana/Melanie Neat			
Filer Authorized By:	Michael A. Guiliana			
Attorney Docket Number:	FPHCR.112C2			
Receipt Date:	04-SEP-2015			
Filing Date:				
Time Stamp:	16:44:40			
Application Type:	Utility under 35 USC 111(a)			

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$5740
RAM confirmation Number	17134
Deposit Account	111410
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File Listing	j:				
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.
1	TrackOne Request	FPHCR112C2_Track_One.pdf	113888	no	2
	, 	'	e551a75e213829cdc15ed20a33c03a0ab9b 89d7e		
Warnings:					
Information:			 		
2	Application Data Sheet	FPHCR112C2_ADS.pdf	1819479	no	8
			79f9c15794e62a157a25fade5bc8c1bf0c9c 75a6		
Warnings:					
Information:		I			
3	Oath or Declaration filed	FPHCR112C2_Declarations_fro	413824	no	9
		m_Parent.pdf	800d192d8ff0e3f5a41c5d626f83383f02096 3c6		
Warnings:					
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4		FPHCR112C2_Application.pdf	229778	yes	19
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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.