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.
10/323,170	12/18/2002	Chad Williams	008849.00026	7537
22908 BANNER & W	7590 02/27/201 TTCOFF, LTD.	8	EXAM	INER
	VACKER DRIVE		HESS, DO	UGLAS A
CHICAGO, IL	60606		ART UNIT	PAPER NUMBER
			3651	
			NOTIFICATION DATE	DELIVERY MODE
			02/27/2018	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):

eofficeaction@bannerwitcoff.com

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

In re Patent No.: 6,830,423 :

Issue Date: December 14, 2004 :

Application No.: 10/323,170 : DECISION ON PETITION

.....

Filed: December 18, 2002 :

Title: PERSONAL MOBILITY VEHICLE

LIFT

This is a decision on the renewed petition under 37 CFR § 1.378(b), January 18, 2018, in response to the decision mailed October 18, 2017 dismissing the original petition to accept the unintentionally delayed payment of a maintenance fee for the above-identified patent

The petition under 37 CFR §1.378(b) is **GRANTED**.

This patent expired on December 14, 2016 for failure to pay the 11.5 year maintenance fee. The maintenance fee is hereby accepted and the above-identified patent is reinstated as of the mail date of this decision.

The rules and statutory provisions governing the operations of the U.S. Patent and Trademark Office require payment of a fee on filing each petition under 37 CFR § 1.378(b). In this instance, the fees required are \$7,400 for the maintenance fee due at 11.5 years and \$1,700 for the delayed payment of the fee due at 11.5 years. The total fees owed are \$9,100. Petitioner submitted a payment of \$9,100 on June 21, 2017.

Telephone inquiries concerning this matter may be directed to Vanitha Elgart at 571.272.7395.

/VANITHA ELGART/ Vanitha Elgart Petitions Examiner Office of Petitions

Office of Petitions: Routing Sheet



Application No. 10/323,170

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 Petition	ons: Decision	Count Sheet		Mailing Month			
Application No		0323170	*	0 3 2 3 1 7 0	*		
For US serial numbers: enter number only, no slashes or commas. Ex: 10123456 For PCT: enter "51+single digit of year of filing+last 5 numbers", Ex. for PCT/US05/12345, enter 51512345							
Deciding Offici	al: ELC	GART, VANITE	HA AH				
Count (1) - Palm Cro Decision: GRANT	edit 10/	323,170 FINANCE WORK NEEDED To Select Check Box for YES	S	* G R A N T *			
Decision Type: 53	3 - 37 CFR 1.378(c)	- TO ACCEPT UNINTENT	ONAL DEL ▼	* 5 3 3 *			
Notes:							
Count (2)							
Decision: n/a		FINANCE WORK NEEDED	S				
Decision Type: NO	DNE						
Notes:							
Count (3)							
Decision: n/a		Select Check Box for YES	5				
lo	DNE						
Notes:							
Initials o	f Approving Official (if		2nd c	re than 3 decisions, attach ount sheet & mark this box Internal Document - Ver. 5	.0		



United States Patent and Trademark Office

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

APPLICATION NUMBER FILING OR 371(C) DATE FIRST NAMED APPLICANT ATTY. DOCKET NO./TITLE 10/323,170 12/18/2002 Chad Williams

Charles J. Prescott, P.A. Suite 115 2033 Wood Street Sarasota, FL 34237

CONFIRMATION NO. 7537 POWER OF ATTORNEY NOTICE



Date Mailed: 02/08/2018

P-1826

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 01/18/2018.

• The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

> Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at (571) 272-4000 or (571) 272-4200 or 1-888-786-0101.

/nrhayden/	



SUITE 3000

CHICAGO, IL 60606

United States Patent and Trademark Office

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

APPLICATION NUMBER FILING OR 371(C) DATE FIRST NAMED APPLICANT ATTY. DOCKET NO./TITLE 10/323,170 12/18/2002 Chad Williams

22908 BANNER & WITCOFF, LTD. TEN SOUTH WACKER DRIVE

CONFIRMATION NO. 7537 POA ACCEPTANCE LETTER



Date Mailed: 02/08/2018

008849.00026

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 01/18/2018.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

> Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at (571) 272-4000 or (571) 272-4200 or 1-888-786-0101.

/nrhayden/	

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

PATENT - POWER OF ATTORNEY OR **REVOCATION OF POWER OF ATTORNEY** WITH A NEW POWER OF ATTORNEY AND **CHANGE OF CORRESPONDENCE ADDRESS**

Under the Paperwork Reduction Act of 1995 no persons are required to	respond to a collection of infor	mation unless it displays a valid GMB control number
PATENT - POWER OF ATTORNEY	Patent Number	6830423
OR	Issue Date	December 14, 2004
	First Named Inventor	Chad Williams
EVOCATION OF POWER OF ATTORNEY WITH A NEW POWER OF ATTORNEY AND	Title	Personal Mobility Vehicle Lift
IANGE OF CORRESPONDENCE ADDRESS	Attorney Docket No.	008849.00026

		accouncy Do		008849.00	W126	
i hereby revoke all p	previous powers of attorney given in the above-iden	tified patent.				
OR I hereby appoint attorney(s) or age States Patent ar OR	rney is submitted herewith. t Practitioner(s) associated with the Customer Numl gent(s) with respect to the patent identified above, ad Trademark Office connected therewith: t Practitioner(s) named below as my/our attorney(s) ne United States Patent and Trademark Office conne	and to transact) or agent(s) wi	all busine th respect	ss in the Unite	d 22908	
	Practitioner(s) Name	<u> </u>	Rej	istration Num	per	
ļ		<u> </u>	**********			
		 				
			••••••••			
<u>OR</u>	ociated with the above-identified Customer Number ociated with the Customer Number identified in the	box at right:	ate		2 Zip	
Country						***************************************
Telephone		Er	nail	***************************************		
I am the; Applicant. OR Patent owner. Statement unde.	r 37 CFR 3.73(c) (Form PTO/AIA/96) submitted herev AGNA ÜRE of Applic		lwnor			
Signature			244161	Date	January 18, 2018	
Name	William Read			Telephone	841-351-2776	
Title and Company	Chief Financial Officer, Harmer Mobility, LLC			-A		
	all the applicants or patent owners of the entire int nultiple forms, check the box below, and identify the forms are submitted.					one signature

This collection of information is required by 37 CFR 1.31, 1.32, and 1.33. The information is required to obtain or retain a benefit by the public, which is to update (and by the USPTO to process) the file of a patent or reexamination proceeding. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 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 incluidual 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 FRES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1950, Alexandria, VA 22313-1450.

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

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.
- 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.
- 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).
- 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.
- 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.
- 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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Patent of: Atty. Docket No.: 008849.00026

Chad Williams, et al.

Serial No.: 10/323,170 6,830,423 Patent No.:

Filed: December 18, 2001 Issue Date: December 14, 2004

For: Personal Mobility Vehicle Lift Confirmation No.: 7511

RENEWED PETITION TO ACCEPT UNINTENTIONALLY DELAYED PAYMENT OF 3RD MAINTENANCE FEE

U.S. Patent and Trademark Office Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Commissioner:

In response to the communication dated October 18, 2017 dismissing the petition to accept the unintentionally delayed payment of 3rd maintenance fee, applicant hereby submits the following:

- 1. Renewed petition, signed by the attorney of record
- 2. Power of attorney
- 3. 3.73(c) statement

Applicant requests any necessary extension of time for the submission of this paper. If any fees are required or an overpayment is made, the Commissioner is authorized to debit or credit our deposit account 19-0733.

Respectfully submitted,

BANNER & WITCOFF, LTD.

Dated: January 18, 2018 /Kevin C. Keenan/ By:

> Kevin C. Keenan Registration No. 65,490

10 South Wacker Drive

Suite 3000

Chicago, IL 60606 312.463.5000 Fax: 312.463.5001

Electronic Patent Application Fee Transmittal						
Application Number:	10	323170				
Filing Date:	18	-Dec-2002				
Title of Invention:	PE	rsonal mobility v	/EHICLE LIFT			
First Named Inventor/Applicant Name:	Chad Williams					
Filer:	Kevin Cassidy Keenan/Stephanie Bodamer					
Attorney Docket Number:	P-1826					
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:						
Extension-of-Time:						

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)	
Extension - 1 month with \$0 paid	1251	1	200	200	
Miscellaneous:					
	Tot	al in USD	(\$)	200	

Electronic Acknowledgement Receipt				
EFS ID:	31542882			
Application Number:	10323170			
International Application Number:				
Confirmation Number:	7537			
Title of Invention:	PERSONAL MOBILITY VEHICLE LIFT			
First Named Inventor/Applicant Name:	Chad Williams			
Correspondence Address:	Charles J. Prescott, P.A. - Suite 115 2033 Wood Street Sarasota FL 34237 US 9419574208 cj.prescott@verizon.net			
Filer:	Kevin Cassidy Keenan/Stephanie Bodamer			
Filer Authorized By:	Kevin Cassidy Keenan			
Attorney Docket Number:	P-1826			
Receipt Date:	18-JAN-2018			
Filing Date:	18-DEC-2002			
Time Stamp:	17:55:22			
Application Type:	Utility under 35 USC 111(a)			
Payment information:				

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	\$200

RAM confirmation Number	011918INTEFSW00005323190733			
Deposit Account	190733			
Authorized User	Kevin Keenan			
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:				
37 CER 1.16 (National application filing search	h and examination fees)			

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

37 CFR 1.17 (Patent application and reexamination processing fees)

37 CFR 1.19 (Document supply fees)

37 CFR 1.20 (Post Issuance fees)

37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
			19986		
1	Assignee showing of ownership per 37 CFR 3.73	Assignee_statement_18939825 .pdf	c609ef2f04e9756064c38ee6d39d85dd42c0 dcaa	no	1
Warnings:	-				
Information:					
			74898		
2	Petition for review by the Office of Petitions	Petition.pdf	ad3ccaef449d96621b15d5105c9c207c1d6 aab2e	no	3
Warnings:					
Information:					
			557424		
3	Power of Attorney	ExecutedPOA.PDF	88b2b8ff6d7f7a95aaf0f90f703a07155de5b bfb	no	2
Warnings:					
Information:					
			18066		
4	Petition for review by the Office of Petitions	transmittal.pdf	f98fbd72582d32d009b0e6421d6b0293e78 d69e9	no	1
Warnings:					
Information:					
			30737		
5	Fee Worksheet (SB06)	fee-info.pdf	221569dc72604b0744212265a43a02906eb f7e73	no	2
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.

PTO/SB/96 (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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.

STATEMENT UNDER 37 CFR 3.73(b)			
Applicant/Patent Owner: Harmar Mobility, LLC			
Application No./Patent No.: 6,830,423 F	iled/Issue Date: December 14, 2004		
Titled: PERSONAL MOBILITY VEHICLE LIFT			
T ENOUGH WOBIETT VEHICLE ENT			
Harmar Mobility, LLC , a	Corporation gnee, e.g., corporation, partnership, university, government agency, etc.		
	gnee, e.g., corporation, partnership, university, government agency, etc.		
states that it is:			
1. x the assignee of the entire right, title, and interest in;			
2. an assignee of less than the entire right, title, and interest i	n		
(The extent (by percentage) of its ownership interest is	%); or		
3. the assignee of an undivided interest in the entirety of (a con	nplete assignment from one of the joint inventors was made)		
the patent application/patent identified above, by virtue of either:			
A. An assignment from the inventor(s) of the patent application	ion/patent identified above. The assignment was		
recorded in the United States Patent and Trademark Office			
Frame, or for which a copy therefore			
OR			
B. x A chain of title from the inventor(s), of the patent application/	patent identified above, to the current assignee as follows:		
4. France Object Williams and Jeff Double	To Obodos Fatomorios dos		
From: Chad Williams and Jeff Duval The document was recorded in the United States	-		
	or for which a copy thereof is attached.		
11001 <u>010200</u> ,1141110 <u>0021</u> ,	or for which a copy thereof to attached.		
2. From: Chadco Enterprises, Inc.	To: _Harmar Mobility, LLC		
The document was recorded in the United States			
Reel <u>016686</u> , Frame <u>0486</u> ,	or for which a copy thereof is attached.		
0. 5	T		
 From: The document was recorded in the United States 	To:		
Additional documents in the chain of title are listed on a supplemental sheet(s).			
As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.			
[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]			
The undersigned (whose title is supplied below) is authorized to act on	behalf of the assignee.		
/Kevin C. Keenan/	January 18, 2018		
Signature	Date		
Kevin C. Keenan	Attorney for Assignee		
Printed or Typed Name	Title		

PTC/SB/66 (12-13)

Approved for use through 05/31/2015. OMB 0651-0016

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays valid OMB control number.

PETITION TO ACCEPT UNINTENTIONALLY DELAYED PAYMENT OF MAINTENANCE FEE IN AN EXPIRED PATENT (37 CFR 1.378(b))				
Patent Number	Issue Date (YYYY-MM-DD)	Application Number	Filing Date (YYYY-MM-DD)	Docket Number (if applicable)
6830423	2004-12-14	10323170	2002-12-18	008849.00026\US
application leading t				per and (2) the application number of the actual U.S. d with the correct patent. 37 CFR 1.366(c) and (d).
SMALL ENTITY Patentee clai	ims, or has previously	claimed, small ent	ity status. See 37 Cl	FR 1.27.
	EMENT TO SMALL EN to longer entitled to sm		See 37 CFR 1.27(g)	
NOT Small Entity			Small Entity	
Fee 3 ½ year	Code (1551)		Fee 3 ½ year	Code (2551)
7 ½ year	(1552)		O 7 ½ year	(2552)
11 ½ year	(1553)		O 11 ½ year	(2553)
PETITION FEE The petition fee required by 37 CFR 1.17(m) (Fee Code 1558 /2558) must be paid as a condition of accepting unintentionally delayed payment of the maintenance fee.				
MAINTENANCE FEE (37 CFR 1.20(e)-(g)) The appropriate maintenance fee must be submitted with this petition.				
STATEMENT THE UNDERSIGNED CERTIFIES THAT THE DELAY IN PAYMENT OF THE MAINTENANCE FEE TO THIS PATENT WAS UNINTENTIONAL				
PETITIONER(S) REQUEST THAT THE DELAYED PAYMENT OF THE MAINTENANCE FEE BE ACCEPTED AND THE PATENT REINSTATED				
THIS PORTION M	UST BE COMPLETED	BY THE SIGNAT	ORY OR SIGNATOR	RIES
37 CFR 1.378(c) states: "Any petition under this section must be signed in compliance with 37 CFR 1.33(b)."				
I certify, in accordance with 37 CFR 1.4(d)(4) that I am				
An attorney or agent registered to practice before the Patent and Trademark Office				
A sole patentee				
A joint patentee; I certify that I am authorized to sign this submission on behalf of all the other patentees as evidenced by the power of attorney in the application				
A joint patentee; all of whom are signing this e-petition				
The assignee of record of the entire interest that qualifies as an authorized party under 37 CFR 1.33(b)				

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays valid OMB control number.

Patent Practitioner			
A signature of the applicant or representative is required in accordance with 37 CFR 1.33 and 10.18. Please see 37 CFR 1.4(d) for the form of the signature			
Signature	/Kevin C. Keenan/	Date (YYYY-MM-DD)	2018-01-18
Name	Kevin C. Keenan	Registration Number	65490

This collection of information is required by 37 CFR 1.378(b). 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 hour 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. This form can only be used when in conjunction with EFS-Web. If this form is mailed to the USPTO, it may cause delays in reinstating the patent.

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 d etermine whether the Freedom of Information Act requires disclosure of these records.
- 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.
- 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).
- A record related to an In ternational 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 inspections 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.

Document code: WFEE

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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.usplo.gov NOV 0 8 2017 APPLICATION FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/323,170 12/18/2002 Chad Williams P-1826 7537 10/18/2017 7590 **EXAMINER** Charles J. Prescott, P.A. HESS, DOUGLAS A Suite 115 2033 Wood Street Sarasota, FL 34237 ART UNIT PAPER NUMBER 3651 MAIL DATE **DELIVERY MODE**

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

10/18/2017

PAPER

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

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

In re Patent No.: 6,830,423

Issue Date: December 14, 2004

Application No.: 10/323,170 : DECISION ON PETITION

Filed: December 18, 2002

Title: PERSONAL MOBILITY VEHICLE

LIFT

This is a decision on the petition filed under 37 CFR 1.378(b), filed June 21, 2017, to accept the unintentionally delayed payment of a maintenance fee for the above-identified patent.

The petition under 37 CFR §1.378(b) is **DISMISSED**.

Any request for reconsideration under 37 CFR 1.378(d) may be filed within TWO (2) MONTHS from the mail date of this decision. Extensions of time under 37 CFR 1.136(a) are permitted. This is **not** a final agency action within the meaning of 5 USC 704.

A maintenance fee payment is required in a patent at 3.5 years, 7.5 years, and 11.5 years from the date of issuance. A petition may be filed to accept the unintentionally delayed payment of a maintenance fee in the event that a maintenance fee is not timely paid.

A petition to accept the unintentionally delayed payment of a maintenance fee under 35 U.S.C. 41(c) and 37 CFR 1.378(b) must be accompanied by: (1) a statement that the delay was unintentional; (2) payment of the appropriate maintenance fee, unless previously submitted; (3) payment of the petition fee set forth in 37 CFR 1.17(m). Where there is a question as to whether the delay in payment of the maintenance fee under 35 U.S.C. 41(c) and 37 CFR 1.378(b) was unintentional, the Director may require additional information. This change went into effect on December 18, 2013, the effective date of the Patent Law Treaties Implementation Act, and applies to this petition. The petition lacks item (1) above.

Regarding item (1), the statement of unintentional delay is not proper. Petitioner's attention is directed to 37 CFR 1.33(b), which states:

- (b) Amendments and other papers. Amendments and other papers, except for written assertions pursuant to § 1.27(c)(2)(iii) or (c)(2)(iv), filed in the application must be signed by:
 - (1) A patent practitioner of record;

Application/Control Number: 10/323,170 Page 2

Art Unit: OPET

(2) A patent practitioner not of record who acts in a representative capacity under the provisions of § 1.34; or

(3) The applicant (§ 1.42). Unless otherwise specified, all papers submitted on behalf of a juristic entity must be signed by a patent practitioner.

An unsigned amendment (or other paper) or one not properly signed by a person having authority to prosecute the application is not entered. This applies, for instance, where the amendment (or other paper) is signed by only one of two applicants/patentees and the one signing has not been given a power of attorney by the other applicant/patentee or where the amendment (or other paper) is signed by an individual who is not on record as having authority to act on behalf of an assignee.

A petition submitted on behalf of a juristic entity must be signed by a patent practitioner in accordance with current 37 CFR 1.33(b)(3).

Therefore, as the petition is not signed by all the inventors and the record herein fails to disclose that petitioner herein was ever given a power of attorney to act on behalf of the joint patentee, or that he is an assignee of the entire interest and has complied with the provisions of 37 CFR 3.73 (see form PTO/96), the petition is considered to not contain a proper statement of unintentional delay.

Further correspondence with respect to this matter should be delivered through one of the following mediums:

By mail: Mail Stop PETITIONS

Commissioner for Patents Post Office Box 1450

Alexandria, VA 22313-1450

By hand: Customer Service Window

Mail Stop Petitions Randolph Building 40l Dulany Street Alexandria, VA 22314

By fax: (571) 273-8300

ATTN: Office of Petitions

By internet: EFS-Web¹

by internet.

http://portal.uspto.gov (for help using EFS-Web call the Patent Electronic Business Center at (866) 217-9197).

Application/Control Number: 10/323,170 Page 3

Art Unit: OPET

Telephone inquiries concerning this matter should be directed to Vanitha Elgart at (571) 272-7395.

/VANITHA ELGART/ Vanitha Elgart Petitions Examiner Office of Petitions



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.
10/323,170	12/18/2002	Chad Williams	P-1826	7537
Charles J. Preso	7590 10/18/201 cott. P.A.	7	EXAM	INER
Suite 115 2033 Wood Stre			HESS, DO	UGLAS A
Sarasota, FL 34	237		ART UNIT	PAPER NUMBER
			3651	
			MAIL DATE	DELIVERY MODE
			10/18/2017	PAPER

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.

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

In re Patent No.: 6,830,423 :

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Application No.: 10/323,170 : DECISION ON PETITION

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 - (1) A patent practitioner of record;

Application/Control Number: 10/323,170 Page 2

Art Unit: OPET

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(3) The applicant (§ 1.42). Unless otherwise specified, all papers submitted on behalf of a juristic entity must be signed by a patent practitioner.

An unsigned amendment (or other paper) or one not properly signed by a person having authority to prosecute the application is not entered. This applies, for instance, where the amendment (or other paper) is signed by only one of two applicants/patentees and the one signing has not been given a power of attorney by the other applicant/patentee or where the amendment (or other paper) is signed by an individual who is not on record as having authority to act on behalf of an assignee.

A petition submitted on behalf of a juristic entity must be signed by a patent practitioner in accordance with current 37 CFR 1.33(b)(3).

Therefore, as the petition is not signed by all the inventors and the record herein fails to disclose that petitioner herein was ever given a power of attorney to act on behalf of the joint patentee, or that he is an assignee of the entire interest and has complied with the provisions of 37 CFR 3.73 (see form PTO/96), the petition is considered to not contain a proper statement of unintentional delay.

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¹ http://portal.uspto.gov (for help using EFS-Web call the Patent Electronic Business Center at (866) 217-9197).

Application/Control Number: 10/323,170 Page 3

Art Unit: OPET

Telephone inquiries concerning this matter should be directed to Vanitha Elgart at (571) 272-7395.

/VANITHA ELGART/ Vanitha Elgart Petitions Examiner Office of Petitions

Office of Petitions: Routing Sheet



Application No. 10/323,170

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.

GRANTED

X DISMISSED

DENIED

Office of Petitions: Decision Count Sheet				Mailing Month	
Application No.	1	0323170	 ∗ 1	0 3 2 3 1 7 0	*
For US serial numbers: ent For PCT: enter "51+single of	-			/12345, enter 51512345	5
Deciding Official:	ELG	ART, VANITH	A		
Count (1) - Palm Credit Decision: DISMISSED		23,170 FINANCE WORK NEEDED Select Check Box for YES	* D	I S M I S S E D	
Decision Type: 533 - 37	CFR 1.378(c) -	TO ACCEPT UNINTENTION	NAL DEI ▼	* 5 3 3 *	
Notes:					
Count (2)					
Decision: n/a	T	FINANCE WORK NEEDED Select Check Box for YES			
Decision Type: NONE					
Notes:					
Count (3)					
Decision: n/a	-	FINANCE WORK NEEDED Select Check Box for YES			
Decision Type: NONE					
Notes:					
Initials of Appro	ving Official (if r		2nd cou	e than 3 decisions, attach unt sheet & mark this box nternal Document - Ver. 5	0

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PETITION TO ACCEPT UNINTENTIONALLY D	ELAYED PAYMENT OF	Oocket Number (Optional)	7
MAINTENANCE FEE IN AN EXPIRED PATER Page 1 of 3	NT (37 CFR 1.378(b))	HARMAR.1826	3
Mail to: Mail Stop Petition Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 Fax: (571) 273-8300	31 F		463 913 9.8 9
NOTE: If information or assistance is needed in completing this for Patent No. 6,830,423	Application Number	•	
Issue Date December 14, 2004	Filing Date December		
CAUTION: Maintenance fee payment must correctly identify: (1) to application number of the actual U.S. application (or reils/are associated with the correct patent, 37 CFR 1.366(issue application) leading to issuan		
Also complete the following information, if applicable.			
The above-identified patent			
is a reissue of original Patent No.	original issue date		-
original application number			
original filing date			
resulted from the entry into the U.S. under 35 U.S.C. 371 of in	nternational application		ľ
-			1
filed on			1
CERTIFICATE OF	F MAILING (37 CFR 1.8(a))		3 1
I hereby certify that this paper (* along with any paper referred to a Postal Service on the date shown below with sufficient postage as f for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, or facsimile below. June 21, 2017	īrst class mail in an envelope addre	essed to Mail Stop Petition, Commissioner	
Date	/	Signature	
l out		-0.400	
Jule	David A. Frijouf, 5	00,422	[]

[page 1 of 3]

This collection of information is required by 37 CFR 1.378(b). 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. Confidentially is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 1 hour 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: Mall Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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

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PETITION TO ACCEPT UNINTENTIONALLY DELAYED PAYMENT OF MAINTENANCE FEE IN AN EXPIRED PATENT (37 CFR 1.378(b))						
	Page	2 of 3			·	
1. SMALL ENTITY				3		
Patentee asserts, or has previously asse	rted, small entity status. S	ee 37 CFR 1.27	'.			
2. LOSS OF ENTITLEMENT TO SMALL ENTITY:	STATUS					
Patentee is no longer entitled to small e	ntity status. See 37 CFR 1.	27(g).				
3. MICRO ENTITY						
Patentee certifies, or has previously cer Form PTO/SB/15A or 8 or equivalent must elt						
4. LOSS OF ENTITLEMENT TO MICRO ENTITY	STATUS					
Patentee is no longer entitled to micro	entity status. See 37 CFR 1	.29(i).				
5. MAINTENANCE FEE (37 CFR 1.20(e)-(g))						
The appropriate maintenance fee must	be submitted with this pet	tition, unless it	was paid e	earlier.		
Undiscounted	Small	Entity		Micro	Entity	
Amount Fee (Code	Amount	Fee	(Code)	Amount	Fee	(Code)
\$ 3½ yr fee (1551)	\$	3% yr fee	(2551)	\$	3½ yr fee	(3551)
5 7% yr fee (1552)	\$	7% yr fee	(2552)	□\$	7⅓ yr fee	(3552)
\$ 7,400.00 11½ yr fee (1553)	\$	11% yr fee	(2553)	 \$	11½ yr fee	(3553)
			MAINTE	NANCE FEE BEING SUBM	ITTED \$ 7,40	0.00
6. PETMON FEE					-	
The petition fee required by 37 CF.	R 1.17(m) of:			•		
	counted (Fee Code 1558);	or				
\$\$mall						
must be paid as a condition of acco		lelayed payme	nt of a mai	intenance fee. (Note: Th	ere is currently	no
micro entry amount for the people			PE	TITION FEE BEING SUBM	птеD \$ <u>1,700</u>	0.00
7. MANNER OF PAYMENT						
Enclosed is a check for the sum of \$						
Please charge Deposit Account No the sum of \$						
Payment by credit card, Form PTO-2038 is attached.						
Payment made via EFS-Web.						
8. AUTHORIZATION TO CHARGE ANY FEE DEFICIENCY						
The Director is hereby authorized to charge any maintenance fee or petition deficiency to Deposit Account No. 06-2120						

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JUN 2 1 2017

PTO/58/66 (08-15) Approved for use through 07/31/2018. OMB 0551-0016
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PETITION TO ACCEPT U	NINTENTIONALLY DELAYED PAYMENT	
OF MAINTENANCE FEE IN AN EXPIRED PATENT (37 CFR 1.378(b))		
	Page 3 of 3	
9. OVERPAYMENT		
As to any overpayment made, please	400	
Credit to Deposit Account No.	120	
OR		
Send refund check	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.		
10. STATEMENT		
The delay in payment of the maintenance fee for the	his patent was unintentional.	
11. PETITIONER(S) REQUEST THAT THE DELAYED PAYMENT OF	F THE MAINTENANCE PER BE ACCEPTED AND THE PATENT REINSTATED.	
Date	Signature(s) of Petitioner(s)	
Dett	Joe Ayette, Harmar Mobility LLC, VP of Operations	
Registration Number, if applicable	Typed or Printed Name(s)	
,,	"	
Telephone Number		
	Address	
	Addica	
<u> </u>	Address	
37 CFR 1.378(c) states: "Any petition under this section must	be signed in compliance with § 1.33(b)."	
12. ENCLOSURES		
Maintenance Fee Payment		
Petition fee under 37 CFR 1.17(m) (fee for filing the main	· · · · · · · · · · · · · · · · · · ·	

Document code: WFEE

United States Patent and Trademark Office Sales Receipt for Accounting Date: 02/23/2018

GARIAS SALE #00000001 Mailroom Dt: 06/21/2017 10323170

01 FC: 1553 7,400.00 OP 02 FC: 1558 1,700.00 OP Document code: WFEE

United States Patent and Trademark Office Sales Receipt for Accounting Date: 02/23/2018

GARIAS

ADJ #00000002 Mailroom Dt: 06/21/2017 Seq No: 6 Sales Acctg Dt: 06/27/2017 10323170 01 FC: 1599 -9100.00 OP

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	BASIC FEE (37 CFR 1.16(a), (b),	or (c))	N/A			N/A		N/A			N/A					
	SEARCH FEE (37 CFR 1.16(k), (i), (or (m))	N/A			N/A		N/A		N/A		N/A			N/A	
	EXAMINATION FE (37 CFR 1.16(o), (p),		N/A			N/A		N/A			N/A					
	TOTAL CLAIMS (37 CFR 1.16(i)) minus 20 = *									OR	x \$ =					
INDEPENDENT CLAIMS (37 CFR 1.16(h)) minus 3 = *								x \$ =			x \$ =					
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	MULTIPLE DEPEN	IDENT CLAIM PRI	ESENT (3	7 CFR 1.16(j)))											
* If t	he difference in col	umn 1 is less than	zero, ente	r "0" in colur	mn 2.			TOTAL			TOTAL					
	APP	(Column 1)	Columr	I 1	SMAL	L ENTITY	OR									
AMENDMENT	02/11/2008	REMAINING AFTER AMENDMENT		NUMBER PREVIOU PAID FOR	ISLY	PRESENT EXTRA		RATE (\$)	ADDITIONAL FEE (\$)		RATE (\$)	ADDITIONAL FEE (\$)				
)ME	Total (37 CFR 1.16(i))	* 74	Minus	** 74		= 0		X \$25 =	0	OR	x \$ =					
Z	Independent (37 CFR 1.16(h))	* 11	Minus	***11		= 0		X \$105 =	0	OR	x \$ =					
١MΕ	Application S	ize Fee (37 CFR 1	.16(s))													
	FIRST PRESEN	NTATION OF MULTIP	LE DEPEN	DENT CLAIM	(37 CFF	R 1.16(j))				OR						
								TOTAL ADD'L FEE	0	OR	TOTAL ADD'L FEE					
		(Column 1)		(Columr	,	(Column 3)										
		CLAIMS REMAINING AFTER AMENDMENT		HIGHES NUMBE PREVIOU PAID FO	ER JSLY	PRESENT EXTRA		RATE (\$)	ADDITIONAL FEE (\$)		RATE (\$)	ADDITIONAL FEE (\$)				
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AMENDMENT	Independent (37 CFR 1.16(h))	*	Minus	***		=		X \$ =		OR	x \$ =					
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AM	FIRST PRESEN	NTATION OF MULTIP	LE DEPEN	DENT CLAIM	(37 CFF	R 1.16(j))				OR						
* If	the entry in column	1 is less than the e	ntry in col	umn 2, write	column 3.	• '	TOTAL ADD'L FEE	otrumost C	OR (amin	TOTAL ADD'L FEE						
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This collection of information is required by 37 CFR 1.16. 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, 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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a. Serial No.	f. Foreign Priority		Print Claim(s)	p. PTO-1449
b. Applicant(s)	g. Disclaimer		Print Fig.	q. PTOL-85b
c. Continuing Data	h. Microfiche Append	lix m	. Searched Colun	nn r. Abstract
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h. Sequence Listing	·		11	
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Application No.	Applicant(s)	
10/323,170	WILLIAMS ET AL.	
Examiner	Art Unit	
Douglas A Hoss	3651	

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a. Serial No.	f. Foreign Priority	k. Print Claim(s)	p. PTO-1449
b. Applicant(s)	g. Disclaimer	I. Print Fig.	q. PTOL-85b
c. Continuing Data	h. Microfiche Appendix	m. Searched Colun	
d. PCT	i. Title	n. PTO-270/328	s. Sheets/Figs
e. Domestic Priority	j. Claims Allowed	o. PTO-892	t. Other - Issue Class T
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CLAIMS			
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initials

Issue Classification

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Application No.	Applicant(s)	
10/323,170	WILLIAMS ET AL.	
Examiner	Art Unit	
Douglas A Hess	3651	

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	ÇLA	ss		SUBCLASS	CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)								
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11	INTERNATIONAL CLASSIFICATION													
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QUERY CONTROL FORM			RTIS U	SE ONLY
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	J	ACKET	
a. Serial No.	f. Foreign Priority	k. Print Claim(s)	p. PTO-1449
b. Applicant(s)	g. Disclaimer	I. Print Fig.	q. PTOL-85b
c. Continuing Data	h. Microfiche Appendix	m. Searched Column	r. Abstract
d. PCT	i. Title	n. PTO-270/328	s. Sheets/Figs
e. Domestic Priority	j. Claims Allowed	o. PTO-892	t. Other - Issue Class to

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g. Brief Description	
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CLAIMS	
a. Claim(s) Missing	
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PART B - FEE(S) TRANSMITTAL



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

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(703) 746-4000 or <u>Fax</u>

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 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.

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1) 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, must have its own certificate of mailing or transmission. 7590 04/09/2004 Charles J. Prescott, P.A. Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO, on the date indicated below. Suite 115 2033 Wood Street Sarasota, FL 3423 (Signature (Date) APPLICATION NO. FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/323,170 12/18/2002 Chad Williams P-1826 7537 TITLE OF INVENTION: PERSONAL MOBILITY VEHICLE LIFT SMALL ENTITY APPLN, TYPE ISSUE FEE PUBLICATION FEE TOTAL FEE(S) DUE DATE DUE YES \$665 \$0 \$665 07/09/2004 nonprovisional **EXAMINER** ART UNIT CLASS-SUBCLASS HESS, DOUGLAS A 3651 414-462000 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the Charles J. Prescott names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer attorneys or agents. If no name is listed, no name will be printed. Number is required. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) Chadco Enterprises, Inc. Sarasota, Florida Please check the appropriate assignee category or categories (will not be printed on the patent); Scorporation or other private group entity U government 🕒 individual 4a. The following fee(s) are enclosed: 4b. Payment of Fee(s): 🛢 Issue Fee A check in the amount of the fee(s) is enclosed. ☐ Publication Fee □ Payment by credit card. Form PTO-2038 is attached. 10 Advance Order - # of Copies _ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number 16-2454 (enclose an extra copy of this form). Director for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above. (Authorized Signature) NOTE; The Issue Fee and Publication Fee (if required) will not be accepted from anyone 04/27/2004 SMINASS2 00000067 10323170 other than the applicant; a registered attorney or agent; or the assignee or oth interest as shown by the records of the United States Patent and Trademark Office. 665.00 OP 01 FC:2501 30.00 OP 02 FC:8001

This collection of information 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, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO. Commissioner for Patents Alexandria Virginia 22313-1450.

SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

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website: www.patentsprescott.com

LAW OFFICES OF CHARLES J. PRESCOTT, P.A.

A PROFESSIONAL ASSOCIATION

PATENTS TRADEMARKS COPYRIGHTS AND RELATED MATTERS

April 22, 2004

MAIL STOP ISSUE FEE Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

Re:

U.S. Patent Application Serial No. 10/323,170

Title: Personal Mobility Vehicle Lift

Inventor: Chad Williams Group Art Unit: 3651 Confirmation No. 7537

Sir:

In response to the Notice of Allowance and Issue Fee Due mailed April 9, 2004, please enter the enclosed Issue Fee Transmittal (PTOL85) in the file of this application.

My check in the amount of Six Hundred Ninety Five Dollars (\$695.00) as payment for the issue fee and advance order of ten (10) copies of the prospective patent is enclosed. You are authorized to charge any underpayment, or credit any overpayment, to Deposit Account No. 16-2454. Thank you for your cooperation in this matter.

Sincerely,

Charles J. Prescott

CJP:mm Enclosures

cc: Chadco Enterprises, Inc.

CERTIFICATE OF MAILING

I HEREBY CERTIFY that this cover letter, form PTOL-85 and check is being deposited in the U.S. Postal Service, first class postage paid, addressed to MAIL STOP ISSUE FEE, Commissioner for Patents, P O Box 1450, Alexandria, Virginia 22313-1450, this April 22, 2004.

Charles Mescrill
Charles J. Prescott



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

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

04/09/2004

Charles J. Prescott, P.A. Suite 115 2033 Wood Street Sarasota, FL 34237

EXAMINER	
 HESS, DOUGLAS A	

HESS, DOUGLAS A

PAPER NUMBER

ART UNIT

DATE MAILED: 04/09/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/323,170	12/18/2002	Chad Williams	P-1826	7537

TITLE OF INVENTION: PERSONAL MOBILITY VEHICLE LIFT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$665	\$0	\$665	07/09/2004

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 THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

 Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. 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.

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.

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or <u>Fax</u>

(703) 746-4000

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CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)

7590

04/09/2004

Charles J. Prescott, P.A. Suite 115 2033 Wood Street Sarasota, FL 34237 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, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO, on the date indicated below.

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(Depositor's name	
(Signature	
(Date	

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/323 170	12/18/2002	Chad Williams	P. 1826	7537

TITLE OF INVENTION: PERSONAL MOBILITY VEHICLE LIFT

APPLN. TYPE	SMALL ENTITY	ISSUE FI	EE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$665		\$0	\$665	07/09/2004
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HESS, DO	OUGLAS A	3651		414-462000	_	
CFR 1.363).	ce address or indication of "F	,	names o	inting on the patent front page f up to 3 registered patent a R, alternatively, (2) the name ring as a member a registered	attorneys or 1 of a single	
	ion (or "Fee Address" Indica or more recent) attached. Us	tion form e of a Customer	agent) ar	d the names of up to 2 regis or agents. If no name is liste	stered patent	

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or category	ories (will not be printed on the patent); unidividual ucorporation or other private group entity ugovernm	nen
4a. The following fee(s) are enclosed:	4b. Payment of Fee(s):	
☐ Issue Fee	☐ A check in the amount of the fee(s) is enclosed.	
☐ Publication Fee	☐ Payment by credit card. Form PTO-2038 is attached.	
☐ Advance Order - # of Copies	☐ The Director is hereby authorized by charge the required fee(s), or credit any overpayment Deposit Account Number(enclose an extra copy of this form).	t, to
Director for Patents is requested to apply the Issue Fee	nd Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.	
(Authorized Signature)	(Date)	

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/323,170	12/18/2002	Chad Williams	P-1826 7537	
75	90 04/09/2004		EXAM	INER
Charles J. Prescot	tt, P.A.		HESS, DO	UGLAS A
Suite 115 2033 Wood Street			ART UNIT	PAPER NUMBER
Sarasota, FL 34237	,		3651	
			DATE MAILED: 04/09/200	4

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

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

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) system (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 (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

	Application No.	Applicant(s)
	10/323,170	WILLIAMS ET AL.
Notice of Allowability	Examiner	Art Unit
	Douglas A Hess	3651
The MAILING DATE of this communication ap All claims being allowable, PROSECUTION ON THE MERITS herewith (or previously mailed), a Notice of Allowance (PTOL- NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT	opears on the cover sheet winds (OR REMAINS) CLOSED in 85) or other appropriate common RIGHTS. This application is	ith the correspondence address n this application. If not included unication will be mailed in due course. THIS
of the Office or upon petition by the applicant. See 37 CFR 1.3 1. This communication is responsive to <u>amendment filed</u> 3		
 The allowed claim(s) is/are 1-12. 		
3. The drawings filed on 18 December 2002 are accepted	by the Examiner.	
 4. Acknowledgment is made of a claim for foreign priority a) All b) Some* c) None of the: 1. Certified copies of the priority documents he. 2. Certified copies of the priority documents he. 3. Copies of the certified copies of the priority International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DAT noted below. Failure to timely comply will result in ABANDO THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 5. A SUBSTITUTE OATH OR DECLARATION must be sure INFORMAL PATENT APPLICATION (PTO-152) which is a sure including changes required by the Notice of Draftsperior (a) including changes required by the Notice of Draftsperior (b) including changes required by the attached Examin Paper No./Mail Date Identifying indicia such as the application number (see 37 CF each sheet. Replacement sheet(s) should be labeled as such attached Examiner's comment regarding REQUIREMENT. 	ave been received. ave been received in Application documents have been received. TE" of this communication to file NMENT of this application. Abmitted. Note the attached EX gives reason(s) why the oath of must be submitted. Derson's Patent Drawing Review. Derson's Amendment / Comment of the Neader according to 37 Ceposit of BIOLOGICAL MAT	on No and in this national stage application from the set a reply complying with the requirements. AMINER'S AMENDMENT or NOTICE OF or declaration is deficient. W (PTO-948) attached or in the Office action of the drawings in the front (not the back) of FR 1.121(d). TERIAL must be submitted. Note the
Attachment(s) 1. Notice of References Cited (PTO-892) 2. Notice of Draftperson's Patent Drawing Review (PTO-94) 3. Information Disclosure Statements (PTO-1449 or PTO/S Paper No./Mail Date 4. Examiner's Comment Regarding Requirement for Depos of Biological Material	6. ☐ Interview S Paper No SB/08), 7. ☐ Examiner's	Informal Patent Application (PTO-152) Summary (PTO-413), Mail Date S Amendment/Comment S Statement of Reasons for Allowance Douglas A Hess Primary Examiner Art Unit: 3651

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PATENT NUMBER and ISSUE DATE

U.S. UTILITY Patent Application

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SEARCH NOTES

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PAGE 1/11 * RCVD AT 3/17/2004 11:40:28 AM [Eastern Standard Time] * SVR:USPTO-EFXRF-1/6 * DNIS:8729306 * CSID:19419574210 * DURATION (mm-ss):02-40

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PATENTS TRADEMARKS COPYRIGHTS AND RELATED MATTERS

OFFICIAL

March 17, 2004

Via Facsimile

MAIL STOP AMENDMENT NO FEE Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

Re:

Applicant: Chad Williams Serial No. 10/323.170

Filed: 12/18/2002

For: Personal Mobility Vehicle Lift

Group Art Unit: 3651

Examiner: Douglas A. Hess

Sir:

SUITE 115 2033 WOOD STREET

(941) 957-4208

FAX (841) 957-4210

SARASOTA, FLORIDA 34237

e-mail: cj.prescott@verizon.net website: www.patentsprescott.com

In response to the Examiner's office action mailed December 17, 2003, please enter the enclosed amendment in the official file of this application.

It is my understanding that no fee is required to enter this amendment; however you are authorized to deduct any underpayment from deposit account No. 16-2454.

Thank you for your cooperation in this matter.

Sincerely,

Larle Hureat

Charles J. Prescott

CJP:mm Enclosures

cc: Mr. Chad Williams

CERTIFICATE OF MAILING

I HEREBY CERTIFY that this correspondence is being facsimile transmitted to (703) 872-9306 addressed to the Honorable Commissioner for Patents, Box No Fee Amendment, P. O. Box 1450, Alexandria, VA 22313-1450 this March 17, 2004.

Charles I Propost

PAGE 3/11 * RCVD AT 3/17/2004 11:40:28 AM [Eastern Standard Time] * 5VR:USPTO-EFXRF-116 * DNIS:8729306 * CSID:19419574210 * DURATION (mm-ss):02:40

Appl 10/323,170

Amdt dated March 17, 2004

Reply to Office Action of December 17, 2003

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

MAR 1 7 2004

Appl. No.

: 10/323,170

Applicant

: Chad Williams

Filed

: 12/18/2002

Title

: Personal Mobility Vehicle Lift

TC/A.U.

: 3651

Examiner

: Douglas A. Hess

Docket No. : P-826

Honorable Commissioner for Patents

P. O. Box 1450

Alexandria, VA 22313-1450

AMENDMENT

Sir:

In response to the Office Action of December 17, 2003, please amend the aboveidentified application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 8 of this paper.

This listing of claims will replace all prior versions, and tistings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A personal mobility vehicle (PMV) lift for loading and

offloading a personal mobility vehicle (PMV) into and from a rear portion of a vehicle,

the vehicle having an interior floor and a trailer hitch rigidly attached to the rear of the

vehicle to which said PMV lift is rigidly engageable and from which said PMV lift

receives substantially total support, said PMV lift comprising:

an elongated laterally extending lifting boom (12) and a drive mechanism

(20) connected adjacent a proximal end (22) thereof, said drive

mechanism including an elongated flexible lifting cable or belt

extending downwardly from a distal end (42) of said lifting boom,

said drive mechanism operably connected to a proximal portion of

said lifting cable or belt whereby a PMV attachable to a distal end

of said lifting cable or belt and may be raised or lowered by

operation of said drive mechanism;

an elongated upright stanchion (14) supportively connected at an upper

end thereof to the proximal end of said lifting boom, said lifting

boom pivotably movable and laterally extending from said

stanchion;

an elongated lift support arm (16 or 16') supportively connected at a distal

end (28) thereof to a lower end of said stanchion, said lift support

arm laterally extending from and positioning said stanchion;

PAGE 5/11 * RCVD AT 3/17/2004 11:40:28 AM [Eastern Standard Time] * SVR:USPTO-EFXRF-1/6 * DNIS:8729306 * CSID:19419574210 * DURATION (mm-ss):02-40

Appl 10/323,170 Amdt dated March 17, 2004

Reply to Office Action of December 17, 2003

a trailer hitch engaging member (38) connectable at a first end thereof to the trailer hitch, a second end of said trailer hitch engaging member connected to a proximal end (34/36) of said lift support arm whereby said PMV-lift is substantially fully supported by the trailer hitch provides an only means for supporting said PMV lift;

a rotation stop mounted on said stanchion for limiting rotation of said lifting boom with respect to an upright axis of said stanchion between a first position within the rear of the vehicle whereby the PMV may be lowered or lifted with respect to the floor of the vehicle and a second position behind the vehicle whereby the PMV may be lowered to or lifted from the ground.

Claim 2 (original): A personal mobility vehicle (PMV) lift as set forth in Claim 1, wherein: said lifting boom is vertically adjustable on said stanchion.

Claim 3 (original): A personal mobility vehicle (PMV) lift as set forth in Claim 1, wherein: said lift support arm is laterally adjustable with respect to said trailer hitch engaging member.

Claim 4 (original): A personal mobility vehicle (PMV) lift as set forth in Claim 1, wherein the traller hitch includes a class II or III receiver having a straight rectangular receiving cavity and wherein:

said trailer hitch engaging member has an outside rectangular cross section configuration substantially closely mating within the receiving cavity of the trailer hitch preventing substantial axial rotation of said trailer hitch engaging member while positioned

within the trailer hitch thus fully supporting said lift support arm from substantial rotation about a longitudinal axis of the trailer hitch.

Claim 5 (currently amended) A personal mobility vehicle (PMV) lift for loading and offloading a personal mobility vehicle (PMV) into and from a rear portion of a vehicle, the vehicle having an interior floor and a trailer hitch rigidly attached to the rear of the vehicle to which said PMV lift is rigidly engageable and from which said PMV lift receives substantially total support, said PMV lift comprising:

an elongated laterally extending lifting boom (12) and a drive mechanism (20) connected adjacent a proximal end (22) thereof, said drive mechanism including an elongated flexible lifting cable or belt (24) extending downwardly from a distal end (42) of said lifting boom, said drive mechanism operably connected to a proximal portion of said lifting cable or belt whereby a PMV attachable to a distal end (26) of said lifting cable or belt and may be raised or lowered by operation of said drive mechanism;

- an elongated upright stanchion (14) supportively connected at an upper end thereof to the proximal end of said lifting boom, said lifting boom pivotally movable about a longitudinal axis of, and laterally extending from, said stanchion;
- an elongated <u>laterally extending</u> lift support arm (16 or 16') supportively connected at a distal end thereof to a lower end of said stanchion;
- a trailer hitch engaging member (38) connectable at a first end (40) thereof to the trailer hitch, a second end (36) of said trailer hitch engaging member connected to a proximal end of said lift support

PAGE 7/11 * RCVD AT 3/17/2004 11:40:28 AM [Eastern Standard Time] * SVR:USPTO-EFXRF-116 * DNIS:8729306 * CSID:19419574210 * DURATION (mm-ss):02-40

Appl 10/323,170

Amdt dated March 17, 2004

Reply to Office Action of December 17, 2003

arm whereby said PMV lift is substantially fully supported by the trailer hitch:

- said lift support arm laterally extending from a longitudinal axis of the trailer hitch a distance whereby said stanchion is positioned in proximity to a side of the vehicle;
- a rotation stop mounted on said stanchion which limits rotation of said lifting boom about an upright axis of said stanchion whereby the distal end of said lifting boom is prevented from movement further from said trailer hitch engaging member than that of said stanchion.
- Claim 6 (original): A personal mobility vehicle (PMV) lift as set forth in Claim 5, wherein: said lifting boom is vertically adjustable on said stanchion.
- Claim 7 (original): A personal mobility vehicle (PMV) lift as set forth in Claim 5, wherein: said lift support arm is laterally adjustable with respect to said trailer hitch engaging member.

Claim 8 (original): A personal mobility vehicle (PMV) lift as set forth in Claim 5, wherein the trailer hitch includes a class II or III receiver having a straight rectangular receiving cavity and wherein:

> said trailer hitch engaging member has an outside rectangular cross section configuration substantially closely mating within the receiving cavity of the trailer hitch preventing substantial axial rotation of said trailer hitch engaging member while positioned within the trailer hitch thus fully supporting said lift support arm from substantial rotation about a longitudinal axis of the trailer hitch.

PAGE 8111 * RCVD AT 31712004 11:40:28 AM [Eastern Standard Time] * SVR:USPTO-EFXRF-116 * DNIS:8729306 * CSID:19419574210 * DURATION (mm-ss):02-40-

Appl 10/323,170

Amdt dated March 17, 2004

Reply to Office Action of December 17, 2003

Claim 9 (currently amended): A personal mobility vehicle (PMV) lift for loading and offloading a personal mobility vehicle (PMV) into and from a rear portion of a vehicle, the vehicle having a trailer hitch rigidly attached to the rear of the vehicle to which said PMV lift is rigidly engageable and from which said PMV lift receives substantially total support, said PMV lift comprising:

- a lifting boom (12) having an elongated laterally extending arm (18) and a drive mechanism (20) connected adjacent a proximal end thereof, said drive mechanism including an elongated flexible lifting cable or belt (24) extending therefrom and downwardly from a distal end (42) of said lifting boom, said drive mechanism powering said lifting cable in and out with respect to said lifting boom;
- an elongated upright stanchion (14) supportively connected at an upper end thereof to the proximal end (22) of said lifting boom;
- an elongated <u>laterally extending</u> (16) lift support arm supportively connected at a distal end (28) thereof to a lower end of said stanchion <u>said stanchion being positioned laterally from the trailer hitch and in proximity to a side of the vehicle;</u>
- a trailer hitch engaging member (30) connectable at a first end (40) thereof to the trailer hitch, a second end (36) of said trailer hitch engaging member connected to a proximal end of said lift support arm whereby said PMV lift is substantially fully supported by the trailer hitch;
- a rotation stop which limits rotation of said lifting boom about an upright axis of said stanchion whereby substantially further from the trailer

PAGE 9/11 * RCVD AT 3/17/2004 11:40:28 AM [Eastern Standard Time] * SVR:USPTO-EFXRF-116 * DNIS:8729306 * CSID:19419574210 * DURATION (mm-ss):02-40

Appl 10/323,170 Amdt dated March 17, 2004

Reply to Office Action of December 17, 2003

hitch than a plane passing through the upright-axis of said stanchion and oriented lengthwise to the vehicle length of said lift support arm.

Claim 10 (original): A personal mobility vehicle (PMV) lift as set forth in Claim 9, wherein:

said lifting boom is vertically adjustable on said stanchion.

Claim 11 (original): A personal mobility vehicle (PMV) lift as set forth in Claim 9, wherein:

said lift support arm is laterally adjustable with respect to said trailer hitch engaging member.

Claim 12 (original): A personal mobility vehicle (PMV) lift as set forth in Claim 9, wherein the trailer hitch includes a class II or III receiver having a straight rectangular receiving cavity and wherein:

said trailer hitch engaging member has an outside rectangular cross section configuration substantially closely mating within the receiving cavity of the trailer hitch preventing substantial axial rotation of said trailer hitch engaging member while positioned within the trailer hitch thus fully supporting said lift support arm from substantial rotation about a longitudinal axis of the trailer hitch.

PAGE 10/11 * RCVD AT 3/17/2004 11:40:28 AM [Eastern Standard Time] * SVR:USPTO-EFXRF-116 * DNIS:8729306 * CSID:19419574210 * DURATION (mm-ss):02-40

Appl 10/323,170

Amdt dated March 17, 2004

Reply to Office Action of December 17, 2003

REMARKS

The undersigned wishes to thank Examiner Hess for the courtesy of a telephone

interview and review of draft amended claims. Based upon Examiner Hess' comments

following his review of the draft amended claims, it would appear as though the case as it

now stands is in condition for allowance.

THE REJECTION

Claims 1 to 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over

O'Meara in view of Compton. Summarily, it is submitted that, as with the telephone

interview with Examiner Hess, the references of record to not teach a laterally extending

lift support arm (16 or 16') which positions the upright stanchion in proximity to the side of

the vehicle. Rather, the references of record appear to be all generally oriented along the

centerline of the vehicle and the trailer hitch.

Moreover, to limit the stress placed upon the trailer hitch as it is twisted by the

invention when loaded with a PMV, rotational movement of the lifting boom (12) about the

axis of the upright stanchion (14) is restricted so that the distal end (42) of the lifting boom

(12) cannot rotate further out beyond the axis of the stanchion or the side of the vehicle.

These features have been more positively included in the amended claims and it is

submitted that this case is now in condition for allowance. However, if Examiner Hess

finds any further informalities, he is requested to contact the undersigned directly by

telephone to resolve them.

Respectfully submitted,

Charles J. Prescott Reg. No. 30,316

2033 Wood Street, Suite 115

Sarasota, Florida 34237

(941) 957-4208

Page 8 of 9

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Reply to Office Action of December 17, 2003

CERTIFICATE OF MAILING

HEREBY CERTIFY that the foregoing is being facsimile transmitted to the Honorable Commissioner for Patents, (703) 872-9306, this March 17, 2004

Charles J. Prescott



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 DAT	TE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/323,170 12/18/200)2	Chad Williams	P-1826	7537
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Charles J. Pres	scott, P.A.			HESS, DOI	JGLAS A
2033 Wood Stre	eet			ART UNIT	PAPER NUMBER
Sarasota, FL 3	34237			3651	

DATE MAILED: 12/17/2003

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

6.	Application No.	Applicant(s)
	10/323,170	WILLIAMS ET AL.
Office Action Summary	Examiner	Art Unit
	Douglas A. Hess	3651
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet with the	e correspondence address
A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication If the period for reply specified above is less than thirty (30) days, a r - If NO period for reply is specified above, the maximum statutory perio - Failure to reply within the set or extended period for reply will, by stat - Any reply received by the Office later than three months after the mai earned patent term adjustment. See 37 CFR 1.704(b). Status	1. 1.136(a). In no event, however, may a reply be eply within the statutory minimum of thirty (30) od will apply and will expire SIX (6) MONTHS froute, cause the application to become ABANDO!	timely filed days will be considered timely. om the mailing date of this communication. NED (35 U.S.C. & 133).
<u></u>	Dagambar 2002	
1) Responsive to communication(s) filed on <u>18</u>		
·	is action is non-final.	
 Since this application is in condition for allow closed in accordance with the practice under 		
Disposition of Claims		
4) Claim(s) 1-12 is/are pending in the application	on.	
4a) Of the above claim(s) is/are withdo	rawn from consideration.	
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-12</u> is/are rejected.		
7) Claim(s) is/are objected to.	Manager and the second	
8)☐ Claim(s) are subject to restriction andApplication Papers	/or election requirement.	
<u> </u>		
9) The specification is objected to by the Exami		- Francisco
10) The drawing(s) filed on is/are: a) □ acceptable and any objection to the	•	
Replacement drawing sheet(s) including the corre		• •
11) The oath or declaration is objected to by the		
Priority under 35 U.S.C. §§ 119 and 120		
12) Acknowledgment is made of a claim for forei	an priority under 35 U.S.C. § 119	(a)-(d) or (f).
a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume 3. Achieved the certified copies of the priority docume the priority docume application from the International Bure the see the attached detailed Office action for a list acknowledgment is made of a claim for domestince a specific reference was included in the first terms of the priority documents of the priority documents.	nts have been received. nts have been received in Applicationity documents have been received in Applicationity documents have been received (PCT Rule 17.2(a)). st of the certified copies not receive to the certified copies of the specification first sentence of the specification	etion No ved in this National Stage ved. P(e) (to a provisional application) or in an Application Data Sheet.
a) The translation of the foreign language p	* *	
14) Acknowledgment is made of a claim for domest reference was included in the first sentence of	stic priority under 35 U.S.C. §§ 12 the specification or in an Applicat	20 and/or 121 since a specific tion Data Sheet. 37 CFR 1.78.
Attachment(s)		
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal	ry (PTO-413) Paper No(s) I Patent Application (PTO-152)

Application/Control Number: 10/323,170 Page 2

Art Unit: 3651

DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 3. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Meara (6,095,349) in view of Compton (6,152,675).
 - O'Meara teaches the claimed invention as shown on the attached marked up copy of his Figure 1. O'Meara teaches a rotation stop that actually does not allow any rotation instead of limiting the rotation of the boom with respect to the stanchion as claimed. Compton discloses a portable hoist for mounting in a vehicle attached hitch that includes a swivel joint between his stanchion and boom. Compton also discloses that it may be

1)

Art Unit: 3651

effective to utilize a well known joint which allows rotation but limits rotation in the range of 180-360 degrees (see Compton column 3, lines 11-13). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the limiting swivel joint of Compton in place of the freely rotating joint of O'Meara based on the application in which the device is used.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

5. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Douglas A. Hess whose telephone number is (703)308-3428.

The examiner can normally be reached on Monday-Thursday 6:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Ellis can be reached on (703)308-2560. The fax phone number for the

organization where this application or proceeding is assigned is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703)308-1113.

Douglas A. Hess Primary Examiner

Art Unit 3651

DAH

December 10, 2003

Application/Control No. 10/323,170 Applicant(s)/Patent Under Reexamination WILLIAMS ET AL. Examiner Douglas A. Hess 3651 Applicant(s)/Patent Under Reexamination WILLIAMS ET AL. Page 1 of 2

U.S. PATENT DOCUMENTS

*	Document Number Date Country Code-Number-Kind Code MM-YYYY		Name	Classification	
	Α	US-4,881,864	11-1989	Amato, Joseph G.	414/543
	В	US-5,540,537	07-1996	Welch, Wilmer M.	414/462
	С	US-5,791,858	08-1998	Sasser, Kenneth W.	414/462
	D	US-6,036,417	03-2000	Weaver, Danny C.	410/7
	Е	US-6,042,328	03-2000	McVaugh, Arthur K.	414/546
	F	US-6,089,431	07-2000	Heyworth, Malcolm Edward	224/521
	G	US-6,095,349	08-2000	O'Meara, Richard Vincent	212/180
	H	US-6,138,991	10-2000	Myers, Jr., Robert	254/323
	1	US-6,152,675	11-2000	Compton, Mark	414/543
	J	US-6,202,868	03-2001	Murray, David N.	212/294
	К	US-6,203,044	03-2001	Conaway et al.	280/304.1
	L	US-6,250,483	06-2001	Frommer, John C.	212/180
	М	US-6,386,820	05-2002	Cunningham, Michael W.	414/550

FOREIGN PATENT DOCUMENTS

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

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
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	x	

*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.

Notice of References Cited Application/Control No. | Applicant(s)/Patent Under Reexamination | WILLIAMS ET AL. | Examiner | Douglas A. Hess | 3651 | Page 2 of 2

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	Α	US-6,478,528	11-2002	Asbury, George N.	414/550
	В	US-6,499,610	12-2002	Spitsbergen, Michael	212/179
	С	US-6,547,507	04-2003	Gest et al.	414/543
	D	US-6,599,078	07-2003	Elder, George Scott	414/542
	Е	US-6,578,722	06-2003	Perkins et al.	212/180
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FOREIGN PATENT DOCUMENTS

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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.

Approved for use through 10/31/2002. OMB 0551-0031
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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 1

Co	mplete if Known	5 J
Application Number		P
Filing Date		SS = 1
First Named Inventor	Chad Williams	200 200
Group Art Unit		9
Examiner Name		6.7
Attorney Docket Number	P-1826	13 F

				U.S. PATENT DOCL	JMENTS	
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		4127200		Mann	11-28-78	
XV		4671729		McFarland	6-9-87	
		4697975		Lippold	10-6-87	
		4705448		Mungons	11-10-87	
		4738581		Kuhlman	4-19-88	
2111		4741660		Kent	5-3-88	
2/14		5011361		Peterson	4-30-91	
		5114120		Bratelt	5-19-92	
2/12.		5205700		Lin	4-27-93	
		5431522		Ross	6-11-95	
In	· ·	5431526		Peterson	7-11-95	
201		<u>5752799</u>		Carey	5-19-98	
7781)		5810547		Bruno	9-22-98	
M		5816763		Hamann	10-6-98	
2011		5853282		Bechler	12-29-98	
		5007289		Kruse	12-28-99	
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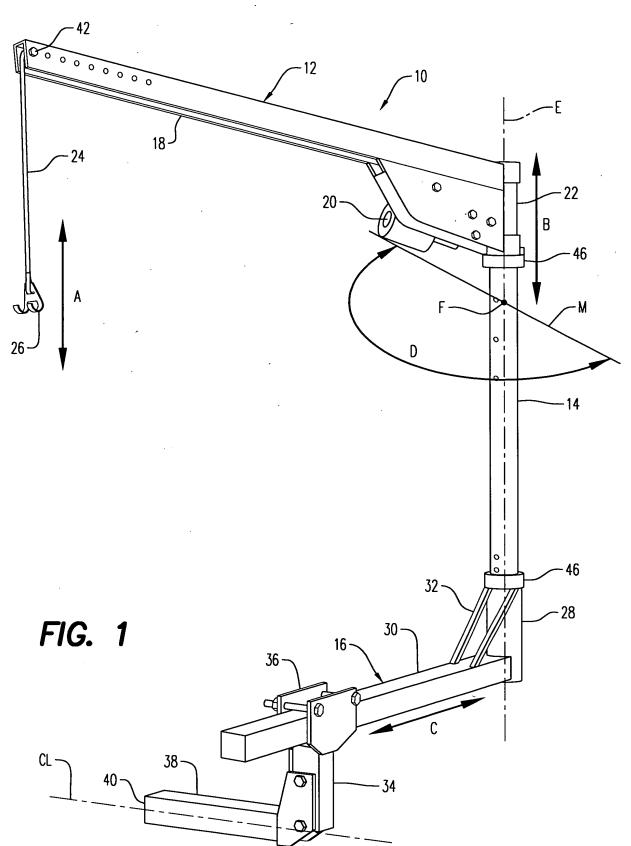
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Examiner	\mathcal{D}	Date	12/2/20
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Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

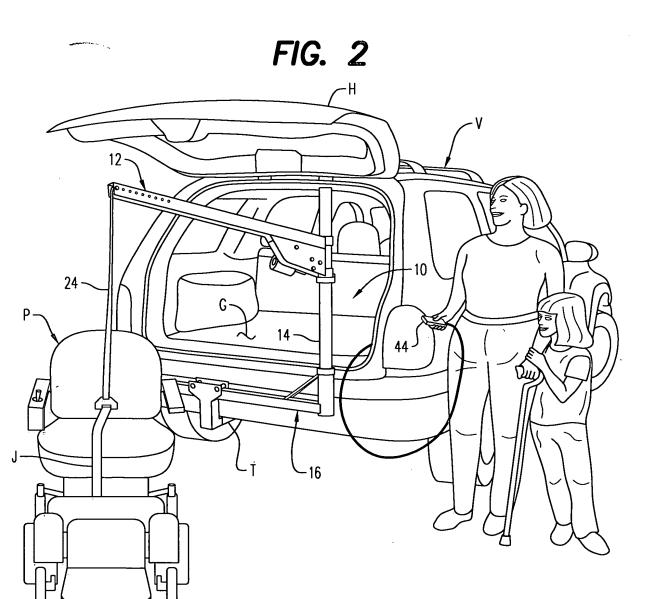
^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁶ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.



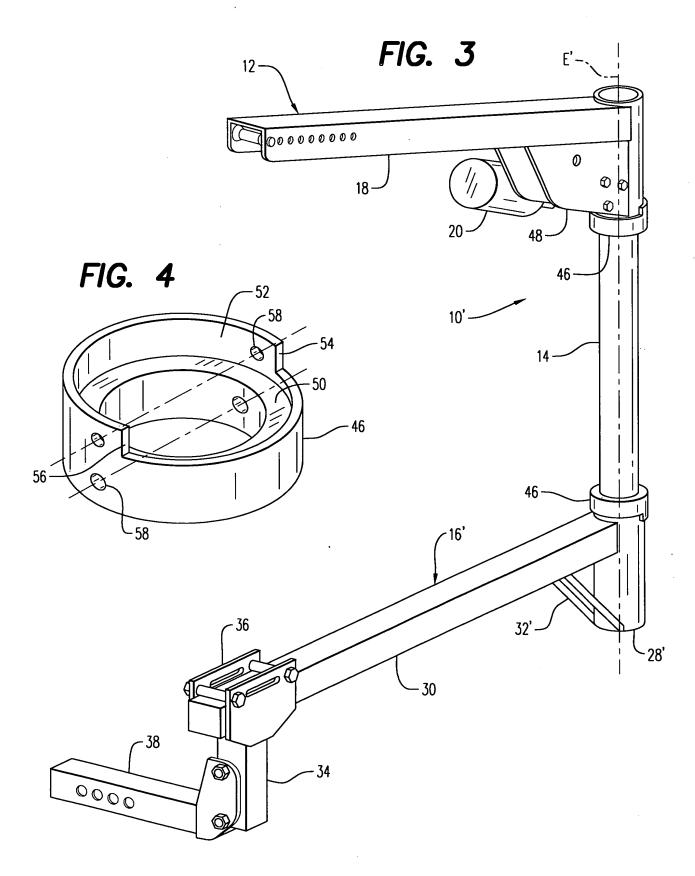








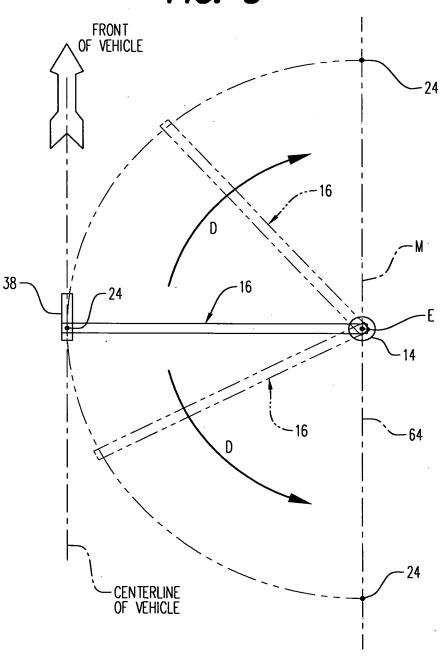




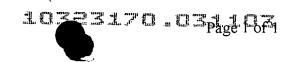












Commissioner for Patents Washington, DC 20231 www.uspto.gov

APPLICATION NUMBER

FILING/RECEIPT DATE

FIRST NAMED APPLICANT

ATTORNEY DOCKET NUMBER

10/323,170

12/18/2002

Chad Williams

P-1826

Charles J. Prescott, P.A. Suite 115 2033 Wood Street Sarasota, FL 34237



CONFIRMATION NO. 7537
FORMALITIES LETTER
OC000000009452883

Date Mailed: 01/30/2003

NOTICE TO FILE CORRECTED APPLICATION PAPERS

Filing Date Granted

An application number and filing date have been accorded to this application. The application is informal since it does not comply with the regulations for the reason(s) indicated below. Applicant is given TWO MONTHS from the date of this Notice within which to correct the informalities indicated below. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

The required item(s) identified below must be timely submitted to avoid abandonment:

- Replacement drawings in compliance with 37 CFR 1.84 and 37 CFR 1.121 are required. The drawings submitted are not acceptable because:
 - The application includes photographs of the invention subject matter that appear capable of illustration and which are illegible after scanning (see 37 CFR 1.84(b)). See Figure(s) 1 & 2.

A copy of this notice MUST be returned with the reply.

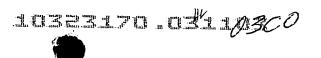
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Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE







IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Chad Williams

Serial No. 10/323,170

Filed: 12/18/2002

For: Personal Mobility Vehicle Lift

Examiner:

Conf. No. 7537

RESPONSE TO NOTICE TO FILE CORRECTED APPLICATION PAPERS

To: Commissioner for Patents

U.S. Patent and Trademark Office Initial Patent Examination Division

Washington, D.C. 20231

Sir:

This is responsive to the Notice to File Corrected Application Papers mailed January 30, 2003.

The notice requires replacement drawings because "the application includes photographs which are illegible after scanning".

Enclosed herewith are four pages of drawings representing a complete set of drawings to replace those drawings filed with the application on December 18, 2002.

Also enclosed is a copy of the Notice to File Corrected Application Papers.

CERTIFICATE OF MAILING

I HEREBY CERTIFY that this Response and the replacement drawings are being deposited in the U.S. Mail, first class postage paid, in an envelope addressed to the Commissioner for Patents, Initial Patent Examination Division, Washington, D.C. 20231, this March 3, 2003.

parles J. Prescott

Respectfully submitted,

Charles J. Prescott

Reg. No. 30,316

Charles J. Prescott, P.A. 2033 Wood Street, Suite 115

Sarasota, Florida 34237

(941) 957-4208



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Serial No. 10/323,170

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Examiner:

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Charles J. Prescott, P.A.

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Sarasota, Florida 34237

(941) 957-4208



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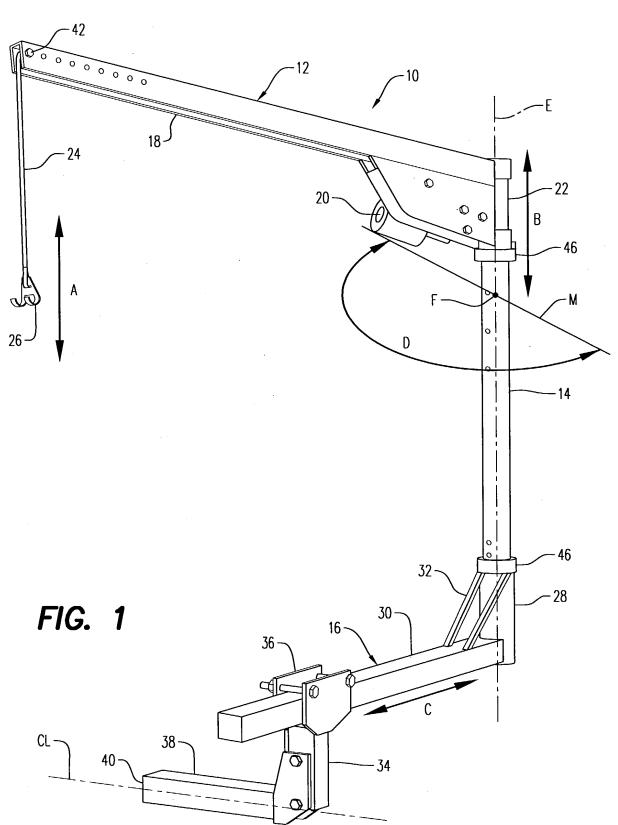
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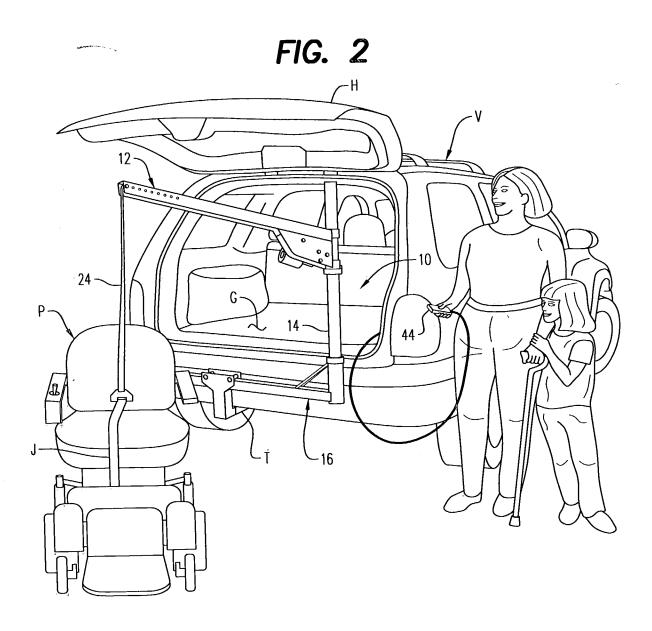
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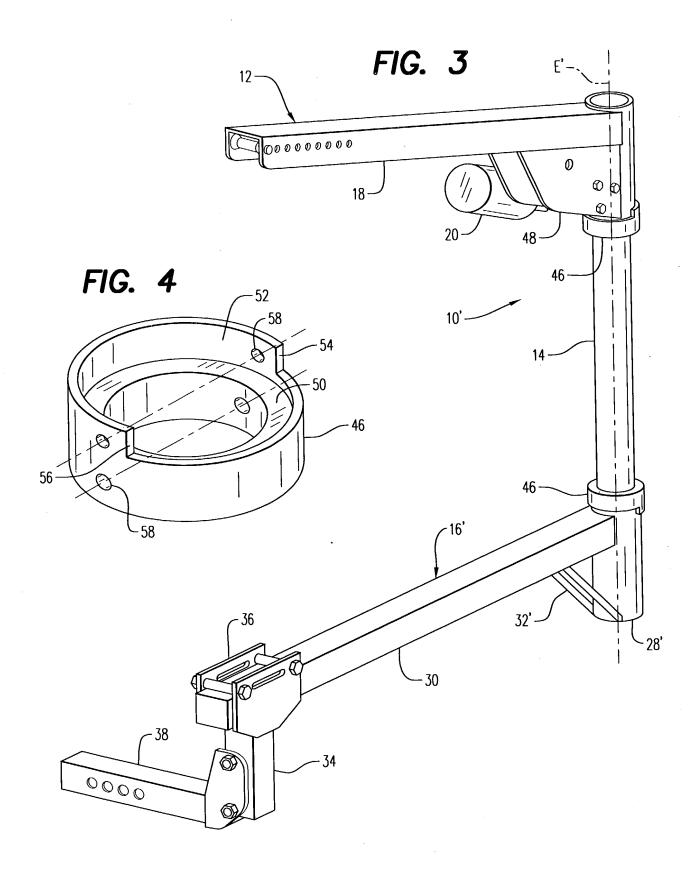




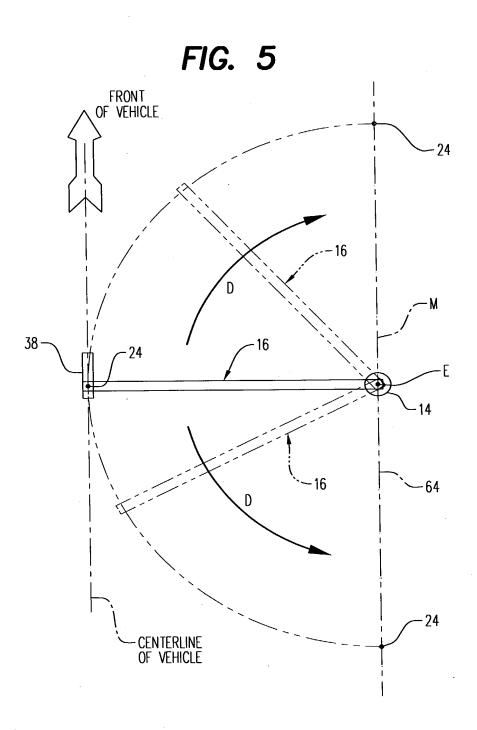














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UTILITY
PATENT APPLICATION
TRANSMITTAL

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Attorr	ey Docket No.	P-3	1826	÷.	
First I	nventor	Chad	Wil	liams	
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(Only for new nonprovisional applications under 37 CFR 1.53(b)) Express Mail Label No. EV 018593406US Assistant Commissioner for Patents **APPLICATION ELEMENTS** ADDRESS TO: **Box Patent Application** See MPEP chapter 600 concerning utility patent application contents. Washington, DC 20231 Fee Transmittal Form (e.g., PTO/SB/17) CD-ROM or CD-R in duplicate, large table or (Submit an original and a duplicate for fee processing) Computer Program (Appendix) Applicant claims small entity status. 8. Nucleotide and/or Amino Acid Sequence Submission See 37 CFR 1.27. (if applicable, all necessary) Specification [Total Pages 16 $_{3}$ | \bar{x} Computer Readable Form (CRF) - Descriptive title of the invention b. Specification Sequence Listing on: - Cross Reference to Related Applications CD-ROM or CD-R (2 copies); or - Statement Regarding Fed sponsored R & D - Reference to sequence listing, a table, i i. 🔲 or a computer program listing appendix Statements verifying identity of above copies - Background of the Invention - Brief Summary of the Invention **ACCOMPANYING APPLICATION PARTS** - Brief Description of the Drawings (if filed) - Detailed Description 9. Assignment Papers (cover sheet & document(s)) - Claim(s) 37 CFR 3.73(b) Statement Power of - Abstract of the Disclosure 10. Attomey (when there is an assignee) English Translation Document (if applicable) 4. X Drawing(s) (35 U.S.C. 113) | Total Sheets Copies of IDS Information Disclosure 12. 5. Oath or Declaration [Total Pages Citations Statement (IDS)/PTO-1449 Newly executed (original or copy) Copy from a prior application (37 CFR 1.63 (d)) **Preliminary Amendment** 13. a. Return Receipt Postcard (MPEP 503) b. 14. X (for continuation/divisional with Box 18 completed) (Should be specifically itemized) Certified Copy of Priority Document(s) (if foreign priority is claimed) DELETION OF INVENTOR(S) 15. Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR Request and Certification under 35 U.S.C. 122 16. 1.63(d)(2) and 1.33(b). (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent. 6. X Application Data Sheet. See 37 CFR 1.76 17. Other: 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76: Continuation Divisional Continuation-in-part (CIP) of prior application No.:_ Prior application information: Group Art Unit: For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. 19. CORRESPONDENCE ADDRESS Customer Number or Bar Code Lebel Correspondence address below (Jasett Customer Na. or ettech bar code japel here) Name Charles J. Prescott 2033 Wood Street, Suite 115 **Address** City State Zip Code Sarasota, Florida 34237 Country US Telephone (941) 957-4208 Fax 957-4210 Charles J. Prescott/ Registration No. (Attorney/Agent) 30,316 Name (Print/Type) Signature Date

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FEE TRANSMITTAL for FY 2002

Patent fees are subject to annual revision

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

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First Named Inventor	Chad Williams									
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METHOD OF PAYMENT (check all that apply)	FEE CALCULATION (continued)								
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Account Name Charles J. Prescott	127	50	227	25	Surcharge - late provisional filing fee or cover sheet				
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Charge fee(s) indicated below X Credit any overpayments		2,520	l	2,520	· .				
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1. BASIC FILING FEE	115	110	215	55	Extension for reply within first month				
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SUBMITTED BY Complete (if applicable) Name (Print/Type) Charles J. Prescott Registration No. 941-957-4208 30,316 Telephone (Attorney/Agent) Signature Date

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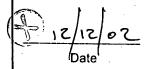
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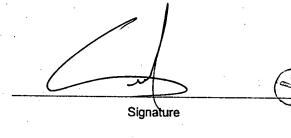
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REQUEST AND CERTIFICATION UNDER 35 U.S.C. 122(b)(2)(B)(i)

First	Named Inventor	Chad Williams	
		Mobility Vehicle Lift	
Atty I	Docket Number	P-1826	_

I hereby 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 agreement, that requires publication at eighteen months after filing. I hereby request that the attached application not be published under 35 U.S.C. 122(b).





Chad Williams
Typed or printed name

This request must be signed in compliance with 37 CFR 1.33(b) and submitted with the application upon filing.

Applicant may rescind this nonpublication request at any time. If applicant rescinds a request that an application not be published under 35 U.S.C. 122(b), the application will be scheduled for publication at eighteen months from the earliest claimed filing date for which a benefit is claimed.

If applicant subsequently files an application directed to the invention disclosed in the attached application in another country, or under a multilateral international agreement, that requires publication of applications eighteen months after filing, the applicant must notify the United States Patent and Trademark Office of such filing within forty-five (45) days after the date of the filing of such foreign or international application. Failure to do so will result in abandonment of this application (35 U.S.C. 122(b)(2)(B)(iii)).

Burden Hour Statement: This collection of information is required by 37 CFR 1.213(a). The information is used by the public to request that an application not be published under 35 U.S.C. 122(b) (and the PTO to process that request). Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This form is estimated to take 6 minutes to complete. This time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

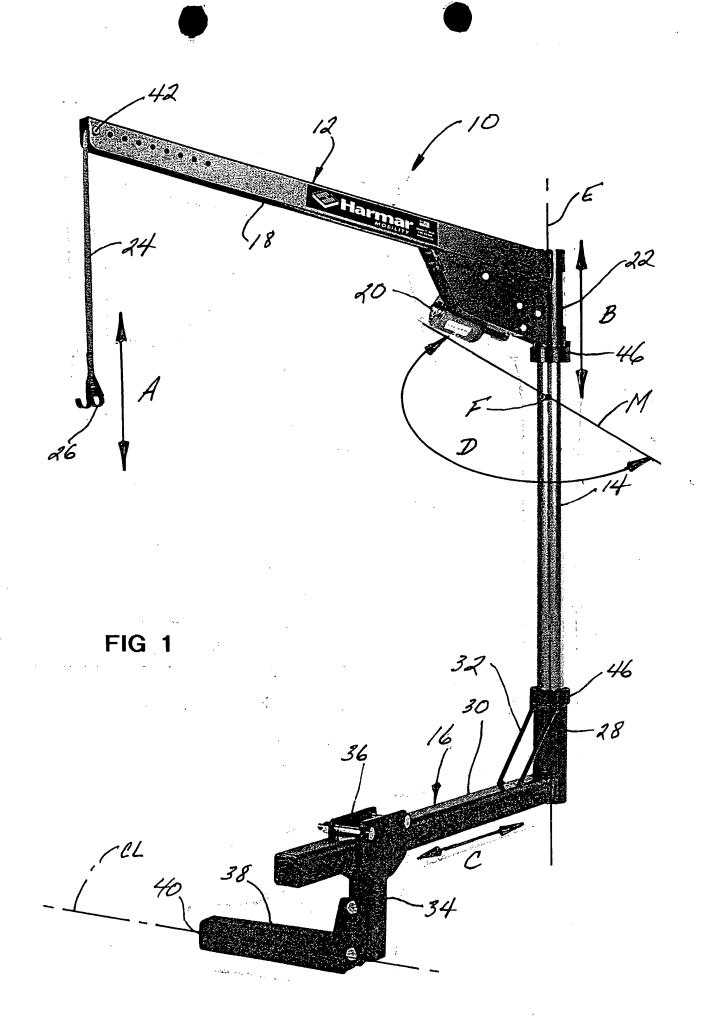


FIG 2



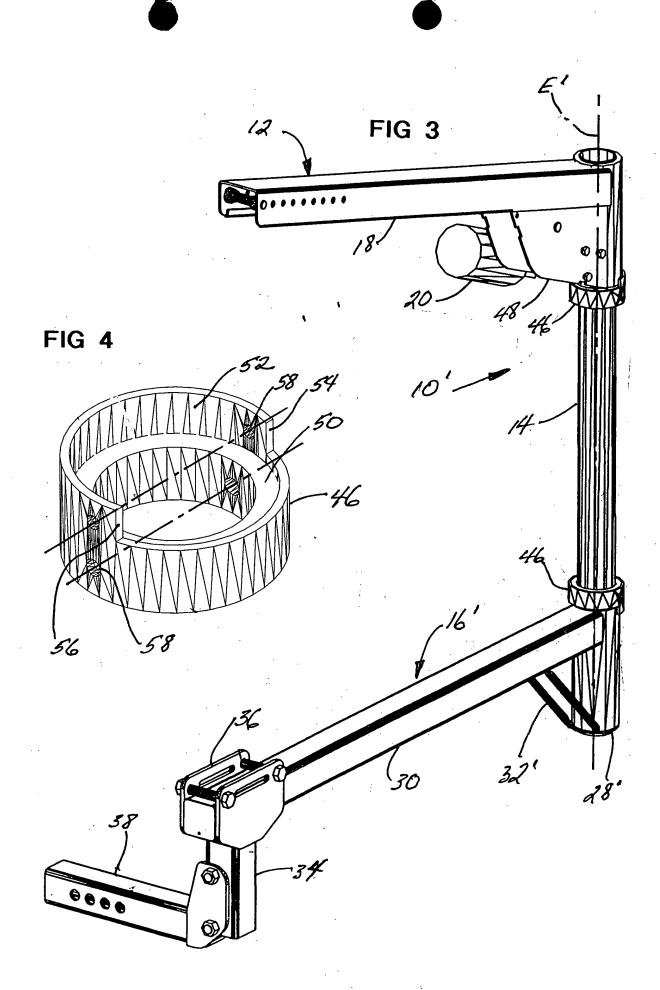
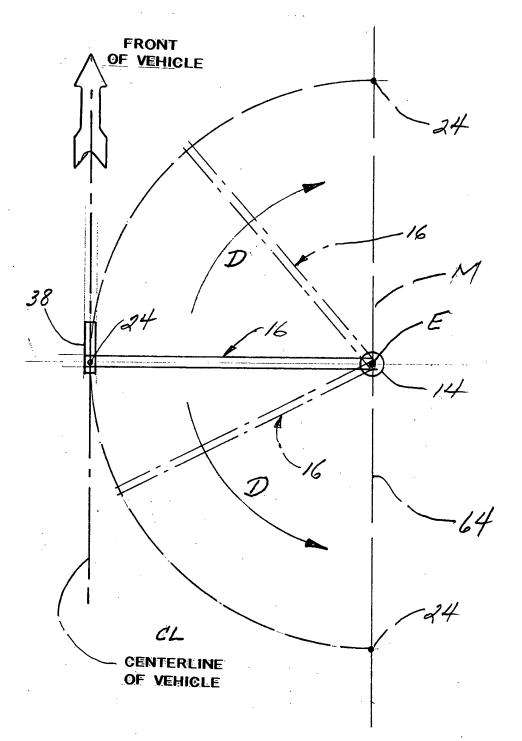


FIG 5



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TITLE OF THE INVENTION

Personal Mobility Vehicle Lift

CROSS-REFERENCE TO RELATED APPLICATIONS

None

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

None

INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC

None

BACKGROUND OF THE INVENTION

Field of the Invention

This invention relates generally to lift mechanisms for a personal mobility vehicle (PMV) and more particularly to a lift for a PMV which is attachable to a class II or Class III trailer hitch attached to the rear of a vehicle.

Description of Prior Art

The popularity of self-propelled personal mobility vehicles (PMV) for use by the physically challenged is gaining in popularity. These PMV's are typically of a three or four wheeled design and are used by those physically challenged who are either able to ambulate short distances or who travel with a personal attendant able to assist in the loading and offloading of a PMV from a car trunk or a rear door of a van thus facilitating access by the physically challenged person during PMV use and storage.

Several patented prior art systems and apparatus for the storage and conveyance of a PMV when not in use are disclosed in the following prior U.S. patents:

- U.S. Patent No. 6,007,289 to Kruse, et al.
- U.S. Patent No. 5,114,120 to Bartelt, et al.
- U.S. Patent No. 4,741,660 to Kent
- U.S. Patent No. 4,705,448 to Mungons
- U.S. Patent No. 5,011,361 to Peterson
- U.S. Patent No. 5,8616,763 to Hamann et al.
- U.S. Patent No. 5,431,522 to Ross
- U.S. Patent No. 4,127,200 to Mann
- U.S. Patent No. 4,671,729 to McFarland
- U.S. Patent No. 6,386,410 to Van Dusen et al.
- U.S. Patent No. 4,697,975 to Lippold
- U.S. Patent No. 4,738,581 to Kuhlman
- U.S. Patent No. 5,752,799 to Carey et al.
- U.S. Patent No. 5,853,282 to Bechler et al.
- U.S. Patent 5,810,547 to Bruno et al.
- U.S. Patent 5,205,700 to Lin et al.
- U.S. Patent 5,431,526 to Peterson et al.

Of particular interest in these prior art devices, the invention taught by Bartelt in U.S. Patent 5,114,120 teaches an equipment mounting system which supportively engages with and depends upon support from a class II or class III trailer hitch attached to the back of the vehicle. These class II and class III trailer hitches typically provide a rectangular elongated cavity for receiving a closesly similarly configured tongue of a trailer hitch. This equipment mounting system includes a pivotal leg which extends laterally

beyond the right side of the vehicle for deployment and pick up of equipment stored at the rear of the vehicle on this system.

Another notable prior art U.S. Patent 6,007,289 invented by Kruse teaches a wheelchair lift which is also attached to the rear trailer hitch structure attached to the rear of a vehicle. In this PMV lift, a lift support assembly is provided at the lower end of the upright stanchion so that a PMV may be loaded and offloaded onto a ground or sidewalk or road surface which is adjacent to and outboard from the side of the vehicle.

In depending upon the trailer hitch devices attached to the rear of such a conveyance vehicle, sufficient strength for lifting a PMV becomes an issue. The further from the center line of the vehicle and thus the trailer hitch mechanism that a PMV being lifted from or into the rear of the vehicle gets, the greater the torsional load being placed on the rectangular cavity and the trailer hitch itself. In the Bartelt disclosure, the equipment appears to be of relatively light weight nature, while the Kruse teaching depends for added strength upon this lift support assembly 26 to allow the apparatus to deploy and lift a PMV onto and from a surface which is substantially outboard or laterally disposed from the right side of the vehicle.

In the present invention, this load bearing limitation between the PMV lift and the trailer hitch itself is dealt with by strictly limiting the arch or rotational movement of the lifting boom about the upright axis of the stanchion so that no movement is permitted beyond a plane lying fore and aft to the vehicle and passing through the upright stanchion of the PMV lift itself.

BRIEF SUMMARY OF THE INVENTION

This invention is directed to a personal mobility vehicle (PMV) lift for loading and offloading a personal mobility vehicle (PMV) into and from a rear portion of a vehicle, the vehicle having an interior floor and a trailer hitch rigidly attached to the rear of the vehicle to which the PMV lift is rigidly engageable. The PMV lift receives substantially all of its support from the trailer hitch and includes an elongated laterally extending lifting boom and a drive mechanism connected adjacent a proximal end thereof. The drive mechanism includes an elongated flexible lifting cable or belt which is operably connectable for raising and lowering the PMV by operation of the drive mechanism. An upright stanchion is supportively connected to the lifting boom while an elongated lift support arm is supportively connected to a lower end of the stanchion. A trailer hitch engaging member is connectable at one end to the trailer hitch, the other end of which is connected to and supports a proximal end of the lift support arm. The PMV lift and PMV are substantially supported entirely by the trailer hitch.

It is therefore an object of this invention to provide a PMV lift for loading and offloading a PMV into and from the rear portion of a vehicle by utilizing as a sole support for the PMV lift and PMV a class II or class III trailer hitch having a rectangular receiving cavity longitudinally disposed there through.

Still another object of this invention is to provide a PMV lift which solely depends upon the interengaging structure with a class II or class III trailer hitch for its support and which limits the amount of stress placed on the trailer hitch by preventing actuate movement of the lifting boom from exceeding a predetermined distance from the center line of the vehicle and the trailer hitch itself.

In accordance with these and other objects which will become apparent hereinafter, the instant invention will now be described with reference to the accompanying drawings.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S)

Figure 1 is a perspective view of the invention.

Figure 2 is a perspective view of the invention attached to the rear of a vehicle an in use in deploying a personal mobility vehicle (PMV).

Figure 3 is a perspective view of an alternate embodiment of the invention.

Figure 4 is a perspective view of the rotation limit collar shown in the embodiments of Figures 1 and 3.

Figure 5 is a top plan schematic view of the rotational limiting movement of the lifting boom of the invention.

DETAILED DESCRIPTION OF THE INVENTION

Referring now to the drawings, the preferred embodiment of the invention is there shown generally at numeral 10 in Figures 1 and 2. This personal mobility vehicle (PMV) lift 10 is structured for the loading and offloading of a personal mobility vehicle (PMV) shown generally at P in Figure 2. The PMV P is to be offloaded from a floor surface G of a vehicle V with the rear door H or trunk deck lid (not shown) in the open position. The PMV P is thus deployable from the floor G to the ground as shown in Figure 2 for use and then reloaded from the ground back onto the floor surface G for storage and conveyance.

The PMV lift 10 includes a lifting boom 12 having a power drive unit 20 attached adjacent the proximal end housing 22 thereof. The drive mechanism 20 includes a drive motor of a conventional battery powered nature engaged with a gear set (not shown) to

rotate a drum or spool (also not shown) whereby a flexible cable or belt **24** is extended downwardly and lifted upwardly in the direction of arrow **A** about distal end roller **42** by appropriate operation of the drive mechanism **20**.

A hook or attaching means **26** is provided at the distal end of the flexible cable or belt **24** which is attachable to a lifting harness **J** shown in Figure 2 attached to the PMV **P**.

The proximal end housing 22 of the lifting boom 12 includes an elongated upright local cavity for receiving an upper end of an elongated cylindrical stanchion 14 which is fabricated of suitably sized steel tubing. By clamping means, the lifting boom 12 is positionable vertically in the direction of arrow B on the upright stanchion 14. Spaced apart NYLON or DELRIN upper and lower bushings (not shown) positioned between the proximal end housing 22 and the upper end of the stanchion 14 reduce rotational friction.

A stationary lift support arm 16 includes an elongated horizontally disposed beam 30 having an upright cylindrical stanchion support housing 28 disposed at one end thereof. Braces 32 reinforce the rigid orthogonal connection between the support beam 30 and the upright stanchion support housing 28. An upright offset member 34 is connected by clamping, slidable engagement to the other end of the elongated support beam 30 thus allowing adjustable lateral positioning of the support beam 30 in the direction of arrow C with respect to a trailer hitch engaging member 38.

The distal end **40** of the trailer hitch engaging member is insertable into a conventional class II or class III trailer hitch **T** as seen in Figure 2. The cross sectional shape of the cavity provided by the trailer hitch **T** is closely mated and aligned with the outer rectangular surface of the elongated trailer hitch engaging member **38** whereby substantially no rotational movement about the longitudinal centerline **CL** of the vehicle **V**

is permitted. This singular support aspect is of the utmost importance to the present invention as substantially all of the weight-bearing function is borne by the strength of the class II or class III trailer hitch in receiving and supporting the downward and torsional load of not only the weight of the entire PMV lift 10, but also that of the PMV P.

An alternate embodiment of the invention 10' in Figure 3 is substantially identical to that described in Figures 1 and 2 except that the support beam 30 of the lift support arm 16' is rigidly connected to the upper end of the stanchion support member 28' with the strengthening bracing 32' extending downwardly at an acute angle therebetween for added strength.

Referring now particularly to Figures 1, 4 and 5, a most important aspect of the invention is there shown with respect to limiting the stress placed upon the interengaging attachment between the trailer hitch T and the trailer hitch engaging member 38. In initially deploying or storing the PMV P with respect to the floor G, the lifting boom 12 is inwardly disposed from the stanchion 14 and, because the PMV P is close to the centerline CL of the vehicle, very minimal torsional load is imposed on the interconnection between the trailer hitch engaging member 38 and the trailer hitch T. However, once the PMV P is positioned rearwardly of the vehicle V for either deployment or lifting of the PMV P, the distal end roller 42 and flexible cable or strap 24 are likely to be moved away from the centerline CL of the vehicle V. As described in prior art, this rotational movement of the lifting boom 12 which would position the PMV P beyond the side surface of the vehicle V and the upright stanchion 14 would dramatically increase the torsional or twisting load placed on the trailer hitch T.

To prevent such overstressing of the trailer hitch T and the interengaging contact with the trailer hitch engaging member 38, the rotational movement of the lifting boom 12 is thus strictly limited to movement in the direction of arrow D in Figures 1 and 5 about the upright axis E of stanchion 14. That is to say that the lifting boom 12 and the distal end portion of the flexible cable or strap 24 are prohibited from rotational movement beyond a fore-and-aft plane lying within line M which passes through the centerline E of the stanchion 14. In other words, the lifting boom 12 cannot swing beyond a position which is further from the centerline CL of the trailer hitch T and trailer hitch engaging member 38 than that of the stanchion 14.

To effect this rotational limitation of the lifting boom 12 on stanchion 14, a rotation limit collar 46 as best seen in Figure 4 is provided. This collar 46 is lockably engageable onto the stanchion just above the stanchion support member 28 or 28' and just below the proximal portion 22 of the lifting boom 12. Attachment of each collar 46 is effected through threaded fasteners (not shown) in threaded openings 58 which bear against the outer surface of the stanchion 14 to secure the longitudinal spacing and rotational spacing of each collar 46.

Stop surfaces **54** and **56** bear against stop members (not shown) attached to or integral with the proximal housing **22** and stanchion support **28** so as to effect the desired rotational limitation of the lifting boom **12** about the vertical axis **E** of stanchion **14** as previously described.

By this arrangement, the structural integrity of the trailer hitch **T** is not compromised or overstressed so long as the personal mobility vehicle **P** is deployed and

stored from a position which lies substantially between the longitudinal axis **CL** of the vehicle **V** and the upright axis **E** or **E'** of the stanchion **14**.

While the instant invention has been shown and described herein in what are conceived to be the most practical and preferred embodiments, it is recognized that departures may be made therefrom within the scope of the invention, which is therefore not to be limited to the details disclosed herein, but is to be afforded the full scope of the claims so as to embrace any and all equivalent apparatus and articles.

CLAIM OR CLAIMS

1. A personal mobility vehicle (PMV) lift for loading and offloading a personal mobility vehicle (PMV) into and from a rear portion of a vehicle, the vehicle having an interior floor and a trailer hitch rigidly attached to the rear of the vehicle to which said PMV lift is rigidly engageable and from which said PMV lift receives substantially total support, said PMV lift comprising:

an elongated laterally extending lifting boom and a drive mechanism connected adjacent a proximal end thereof, said drive mechanism including an elongated flexible lifting cable or belt extending downwardly from a distal end of said lifting boom, said drive mechanism operably connected to a proximal portion of said lifting cable or belt whereby a PMV attachable to a distal end of said lifting cable or belt and may be raised or lowered by operation of said drive mechanism;

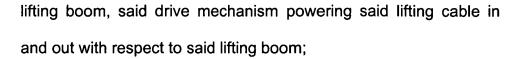
- an elongated upright stanchion supportively connected at an upper end thereof to the proximal end of said lifting boom;
- an elongated lift support arm supportively connected at a distal end thereof to a lower end of said stanchion;
- a trailer hitch engaging member connectable at a first end thereof to the trailer hitch, a second end of said trailer hitch engaging member connected to a proximal end of said lift support arm whereby said PMV lift is substantially fully supported by the trailer hitch;

- a rotation stop mounted on said stanchion for limiting rotation of said lifting boom with respect to an upright axis of said stanchion between a first position within the rear of the vehicle whereby the PMV may be lowered or lifted with respect to the floor of the vehicle and a second position behind the vehicle whereby the PMV may be lowered to or lifted from the ground.
- 2. A personal mobility vehicle (PMV) lift as set forth in Claim 1, wherein: said lifting boom is vertically adjustable on said stanchion.
- A personal mobility vehicle (PMV) lift as set forth in Claim 1, wherein:
 said lift support arm is laterally adjustable with respect to said trailer hitch engaging member.
- 4. A personal mobility vehicle (PMV) lift as set forth in Claim 1, wherein the trailer hitch includes a class II or III receiver having a straight rectangular receiving cavity and wherein:
 - said trailer hitch engaging member has an outside rectangular cross section configuration substantially closely mating within the receiving cavity of the trailer hitch preventing substantial axial rotation of said trailer hitch engaging member while positioned within the trailer hitch thus fully supporting said lift support arm from substantial rotation about a longitudinal axis of the trailer hitch.
- 5. A personal mobility vehicle (PMV) lift for loading and offloading a personal mobility vehicle (PMV) into and from a rear portion of a vehicle, the vehicle having an interior floor and a trailer hitch rigidly attached to the rear of the vehicle to which said

PMV lift is rigidly engageable and from which said PMV lift receives substantially total support, said PMV lift comprising:

- an elongated laterally extending lifting boom and a drive mechanism connected adjacent a proximal end thereof, said drive mechanism including an elongated flexible lifting cable or belt extending downwardly from a distal end of said lifting boom, said drive mechanism operably connected to a proximal portion of said lifting cable or belt whereby a PMV attachable to a distal end of said lifting cable or belt and may be raised or lowered by operation of said drive mechanism;
- an elongated upright stanchion supportively connected at an upper end thereof to the proximal end of said lifting boom;
- an elongated lift support arm supportively connected at a distal end thereof to a lower end of said stanchion;
- a trailer hitch engaging member connectable at a first end thereof to the trailer hitch, a second end of said trailer hitch engaging member connected to a proximal end of said lift support arm whereby said PMV lift is substantially fully supported by the trailer hitch;
- a rotation stop mounted on said stanchion which limits rotation of said lifting boom about an upright axis of said stanchion whereby the distal end of said lifting boom is prevented from movement further from said trailer hitch engaging member than that of said stanchion.

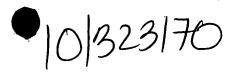
- 6. A personal mobility vehicle (PMV) lift as set forth in Claim 5, wherein: said lifting boom is vertically adjustable on said stanchion.
- 7. A personal mobility vehicle (PMV) lift as set forth in Claim 5, wherein: said lift support arm is laterally adjustable with respect to said trailer hitch engaging member.
- 8. A personal mobility vehicle (PMV) lift as set forth in Claim 5, wherein the trailer hitch includes a class II or III receiver having a straight rectangular receiving cavity and wherein:
 - said trailer hitch engaging member has an outside rectangular cross section configuration substantially closely mating within the receiving cavity of the trailer hitch preventing substantial axial rotation of said trailer hitch engaging member while positioned within the trailer hitch thus fully supporting said lift support arm from substantial rotation about a longitudinal axis of the trailer hitch.
- 9. A personal mobility vehicle (PMV) lift for loading and offloading a personal mobility vehicle (PMV) into and from a rear portion of a vehicle, the vehicle having a trailer hitch rigidly attached to the rear of the vehicle to which said PMV lift is rigidly engageable and from which said PMV lift receives substantially total support, said PMV lift comprising:
 - a lifting boom having an elongated laterally extending arm and a drive mechanism connected adjacent a proximal end thereof, said drive mechanism including an elongated flexible lifting cable or belt extending therefrom and downwardly from a distal end of said



- an elongated upright stanchion supportively connected at an upper end thereof to the proximal end of said lifting boom;
- an elongated lift support arm supportively connected at a distal end thereof to a lower end of said stanchion;
- a trailer hitch engaging member connectable at a first end thereof to the trailer hitch, a second end of said trailer hitch engaging member connected to a proximal end of said lift support arm whereby said PMV lift is substantially fully supported by the trailer hitch;
- a rotation which limits rotation of said lifting boom about an upright axis of said stanchion substantially further from the trailer hitch than a plane passing through the upright axis of said stanchion and oriented lengthwise to the vehicle.
- 10. A personal mobility vehicle (PMV) lift as set forth in Claim 9, wherein: said lifting boom is vertically adjustable on said stanchion.
- 11. A personal mobility vehicle (PMV) lift as set forth in Claim 9, wherein: said lift support arm is laterally adjustable with respect to said trailer hitch engaging member.
- 12. A personal mobility vehicle (PMV) lift as set forth in Claim 9, wherein the trailer hitch includes a class II or III receiver having a straight rectangular receiving cavity and wherein:



said trailer hitch engaging member has an outside rectangular cross section configuration substantially closely mating within the receiving cavity of the trailer hitch preventing substantial axial rotation of said trailer hitch engaging member while positioned within the trailer hitch thus fully supporting said lift support arm from substantial rotation about a longitudinal axis of the trailer hitch.



ABSTRACT OF THE DISCLOSURE

A personal mobility vehicle (PMV) lift for loading and offloading a personal mobility vehicle (PMV) into and from a rear portion of a vehicle, the vehicle having an interior floor and a trailer hitch rigidly attached to the rear of the vehicle to which the PMV lift is rigidly engageable. The PMV lift receives substantially all of its support from the trailer hitch and includes an elongated laterally extending lifting boom and a drive mechanism connected adjacent a proximal end thereof. The drive mechanism includes an elongated flexible lifting cable or belt which is operably connectable for raising and lowering the PMV by operation of the drive mechanism. An upright stanchion is supportively connected to the lifting boom while an elongated lift support arm is supportively connected to a lower end of the stanchion. A trailer hitch engaging member is connectable at one end to the trailer hitch, the other end of which is connected to a proximal end of the lift support arm. The PMV lift is substantially fully supported by the trailer hitch.



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DECLADATI	ON E		Attorney Docket Number	P-1826
DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION		First Named Inventor	Chad Williams	
		COMPLETE IF KNOWN		
(37	CFF	R 1.63)	Application Number	
型 Declaration		☐ Declaration	Filing Date	
Submitted	OR	Submitted after Initial	Group Art Unit	
with Initial Filing		Filing (surcharge (37 CFR 1.16 (e)) required)	Examiner Name	

As a below named inventor, I her	eby decla	re that:				
My residence, mailing address, and	i citizenshi	p are as stat	ed below next to my na	me.		·
I believe I am the original, first and names are listed below) of the subj	sole invent ject matter	tor (if only on which is clai	ne name is listed below) med and for which a pa	or an original, first atent is sought on the	and joint inv	/entor (if plural entitled:
Personal Mobili	ty Veh	icle Li	ift			
the specification of which		(7	itle of the Invention)			
is attached hereto						
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was filed on (MM/DD/YYYY)				states Application i	NULLIDEL OF F	C) international
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DECLARATION — Utility or Design Patent Application

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Address			
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Country	Telephone (941)	957-4208	_{-ax} (941)957-4210
I hereby declare that all statements made are believed to be true; and further that made are punishable by fine or imprison validity of the application or any patent iss	these statements were made with ment, or both, under 18 U.S.C. 1	th the knowledge that willful	false statements and the like so
NAME OF SOLE OR FIRST INVE	ENTOR:	A petition has been file	d for this unsigned inventor
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Inventor's Signature	7		Date 12/12/07
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Mailing Address 2075 47th	Street		
Mailing Address			·
chy Sarasota	_{State} Florida	zip 34234	Country US
NAME OF SECOND INVENTOR	: 0	A petition has been file	ed for this unsigned inventor
Given Name Jeft [first and middle [if any]]	f	Family Name or Sumame	DuVal
Inventor's Signature	1		Date 12/17/02
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Mailing Address 1637 Oak	Street, #23		
Mailing Address	Ţ		
Chy Sarasota	State Florida	zip 34236	Country US
Additional inventors are being named	d on thesupplemental Addit	ional Inventor(s) sheet(s) PT	O/SB/02A attached hereto.

PATENT APPLICATION SERIAL NO. 0 323/70

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE FEE RECORD SHEET

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PATENT APPLICATION FEE DETERMINATION RECORD

Effective October 1, 2001

Application or Docket Number

10323 170

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APPLICATION DATA SHEET

APPLICATION INFORMATION

Application Type:: Regular

Subject Matter:: Utility

Suggested Classification::

Suggested Group Art Unit::

CD-ROM or CD-R?:: None

Title:: Personal Mobility Vehicle Lift

Attorney Docket Number:: P-1826

Request for Early Publication?:: No

Request for Non-Publication?:: Yes

Suggested Drawing Figure:: 1

Total Drawing Sheets:: 4

Small Entity?:: Yes

Petition Included?:: No

Secrecy Order in Parent Appl.?:: No

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Status:: Full Capacity

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Representative Customer

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UTILITY PATENT APPLICATION **TRANSMITTAL**

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Attorr	ey Docket No.	P-	1826	1.	
First I	nventor	Chad	Wil	liams	
Title	Personal	Mobi	Lity	Vehicle	Lift
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- Statement Rec	ce to Related Applications garding Fed sponsored R & D				l or CD-R (2 copi	es); or
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5. Oath or Declaration	[Total Pages 2] i	12.	Information Disc Statement (IDS)	LA	Copies of IDS Citations
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6. X Application Data	Sheet. See 37 CFR 1.76		_ ا	or its equivalent.		
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18. If a CONTINUING APPLI	CATION, check appropriate box, and	supply t	he requ	isite information belov	w and in a prelim	inary amendment,
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Name	Charles J. Prescott					
	2033 Wood Street, Sui	te 115	5			
Address						<u> </u>
City	Sarasota,	St	ate	Florida	Zip Code	34237
Country	US	Teleph	one	(941) 957-4208	3 Fax	957-4210
Name (Print/Type)	Charles J. Prescott		Regi	stration No. (Attorne	eylAgent) 30	,316
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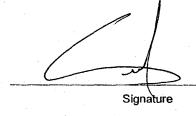
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REQUEST AND CERTIFICATION UNDER 35 U.S.C. 122(b)(2)(B)(i)

First	Named Inventor	Chad	Wil	Liams		_
	Personal				Lift	-
Atty (Oocket Number		P-18	326		

I hereby 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 agreement, that requires publication at eighteen months after filing. I hereby request that the attached application not be published under 35 U.S.C. 122(b).





Chad Williams
Typed or printed name

This request must be signed in compliance with 37 CFR 1.33(b) and submitted with the application upon filing.

Applicant may rescind this nonpublication request at any time. If applicant rescinds a request that an application not be published under 35 U.S.C. 122(b), the application will be scheduled for publication at eighteen months from the earliest claimed filing date for which a benefit is claimed.

If applicant subsequently files an application directed to the invention disclosed in the attached application in another country, or under a multilateral international agreement, that requires publication of applications eighteen months after filing, the applicant must notify the United States Patent and Trademark Office of such filing within forty-five (45) days after the date of the filing of such foreign or international application. Failure to do so will result in abandonment of this application (35 U.S.C. 122(b)(2)(B)(iii)).

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APPLICATION DATA SHEET

APPLICATION INFORMATION

Application Type:: Regular

Subject Matter:: Utility

Suggested Classification::

Suggested Group Art Unit::

CD-ROM or CD-R?:: None

Title:: Personal Mobility Vehicle Lift

Attorney Docket Number:: P-1826

Request for Early Publication?:: No

Request for Non-Publication?:: Yes

Suggested Drawing Figure:: 1

Total Drawing Sheets:: 4

Small Entity?:: Yes

Petition Included?:: No

Secrecy Order in Parent Appl.?:: No

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TITLE OF THE INVENTION

Personal Mobility Vehicle Lift

CROSS-REFERENCE TO RELATED APPLICATIONS

None

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

None

INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC

None

BACKGROUND OF THE INVENTION

Field of the Invention

This invention relates generally to lift mechanisms for a personal mobility vehicle (PMV) and more particularly to a lift for a PMV which is attachable to a class II or Class III trailer hitch attached to the rear of a vehicle.

Description of Prior Art

The popularity of self-propelled personal mobility vehicles (PMV) for use by the physically challenged is gaining in popularity. These PMV's are typically of a three or four wheeled design and are used by those physically challenged who are either able to ambulate short distances or who travel with a personal attendant able to assist in the loading and offloading of a PMV from a car trunk or a rear door of a van thus facilitating access by the physically challenged person during PMV use and storage.

Several patented prior art systems and apparatus for the storage and conveyance of a PMV when not in use are disclosed in the following prior U.S. patents:

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- U.S. Patent No. 6,007,289 to Kruse, et al.
- U.S. Patent No. 5,114,120 to Bartelt, et al.
- U.S. Patent No. 4,741,660 to Kent
- U.S. Patent No. 4,705,448 to Mungons
- U.S. Patent No. 5,011,361 to Peterson
- U.S. Patent No. 5,8616,763 to Hamann et al.
- U.S. Patent No. 5,431,522 to Ross
- U.S. Patent No. 4,127,200 to Mann
- U.S. Patent No. 4,671,729 to McFarland
- U.S. Patent No. 6,386,410 to Van Dusen et al.
- U.S. Patent No. 4,697,975 to Lippold
- U.S. Patent No. 4,738,581 to Kuhlman
- U.S. Patent No. 5,752,799 to Carey et al.
- U.S. Patent No. 5,853,282 to Bechler et al.
- U.S. Patent 5,810,547 to Bruno et al.
- U.S. Patent 5,205,700 to Lin et al.
- U.S. Patent 5,431,526 to Peterson et al.

Of particular interest in these prior art devices, the invention taught by Bartelt in U.S. Patent 5,114,120 teaches an equipment mounting system which supportively engages with and depends upon support from a class II or class III trailer hitch attached to the back of the vehicle. These class II and class III trailer hitches typically provide a rectangular elongated cavity for receiving a closesly similarly configured tongue of a trailer hitch. This equipment mounting system includes a pivotal leg which extends laterally

beyond the right side of the vehicle for deployment and pick up of equipment stored at the rear of the vehicle on this system.

Another notable prior art U.S. Patent 6,007,289 invented by Kruse teaches a wheelchair lift which is also attached to the rear trailer hitch structure attached to the rear of a vehicle. In this PMV lift, a lift support assembly is provided at the lower end of the upright stanchion so that a PMV may be loaded and offloaded onto a ground or sidewalk or road surface which is adjacent to and outboard from the side of the vehicle.

In depending upon the trailer hitch devices attached to the rear of such a conveyance vehicle, sufficient strength for lifting a PMV becomes an issue. The further from the center line of the vehicle and thus the trailer hitch mechanism that a PMV being lifted from or into the rear of the vehicle gets, the greater the torsional load being placed on the rectangular cavity and the trailer hitch itself. In the Bartelt disclosure, the equipment appears to be of relatively light weight nature, while the Kruse teaching depends for added strength upon this lift support assembly 26 to allow the apparatus to deploy and lift a PMV onto and from a surface which is substantially outboard or laterally disposed from the right side of the vehicle.

In the present invention, this load bearing limitation between the PMV lift and the trailer hitch itself is dealt with by strictly limiting the arch or rotational movement of the lifting boom about the upright axis of the stanchion so that no movement is permitted beyond a plane lying fore and aft to the vehicle and passing through the upright stanchion of the PMV lift itself.

BRIEF SUMMARY OF THE INVENTION

This invention is directed to a personal mobility vehicle (PMV) lift for loading and offloading a personal mobility vehicle (PMV) into and from a rear portion of a vehicle, the vehicle having an interior floor and a trailer hitch rigidly attached to the rear of the vehicle to which the PMV lift is rigidly engageable. The PMV lift receives substantially all of its support from the trailer hitch and includes an elongated laterally extending lifting boom and a drive mechanism connected adjacent a proximal end thereof. The drive mechanism includes an elongated flexible lifting cable or belt which is operably connectable for raising and lowering the PMV by operation of the drive mechanism. An upright stanchion is supportively connected to the lifting boom while an elongated lift support arm is supportively connected to a lower end of the stanchion. A trailer hitch engaging member is connectable at one end to the trailer hitch, the other end of which is connected to and supports a proximal end of the lift support arm. The PMV lift and PMV are substantially supported entirely by the trailer hitch.

It is therefore an object of this invention to provide a PMV lift for loading and offloading a PMV into and from the rear portion of a vehicle by utilizing as a sole support for the PMV lift and PMV a class II or class III trailer hitch having a rectangular receiving cavity longitudinally disposed there through.

Still another object of this invention is to provide a PMV lift which solely depends upon the interengaging structure with a class II or class III trailer hitch for its support and which limits the amount of stress placed on the trailer hitch by preventing actuate movement of the lifting boom from exceeding a predetermined distance from the center line of the vehicle and the trailer hitch itself.

In accordance with these and other objects which will become apparent hereinafter, the instant invention will now be described with reference to the accompanying drawings.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S)

Figure 1 is a perspective view of the invention.

Figure 2 is a perspective view of the invention attached to the rear of a vehicle an in use in deploying a personal mobility vehicle (PMV).

Figure 3 is a perspective view of an alternate embodiment of the invention.

Figure 4 is a perspective view of the rotation limit collar shown in the embodiments of Figures 1 and 3.

Figure 5 is a top plan schematic view of the rotational limiting movement of the lifting boom of the invention.

DETAILED DESCRIPTION OF THE INVENTION

Referring now to the drawings, the preferred embodiment of the invention is there shown generally at numeral 10 in Figures 1 and 2. This personal mobility vehicle (PMV) lift 10 is structured for the loading and offloading of a personal mobility vehicle (PMV) shown generally at **P** in Figure 2. The PMV **P** is to be offloaded from a floor surface **G** of a vehicle **V** with the rear door **H** or trunk deck lid (not shown) in the open position. The PMV **P** is thus deployable from the floor **G** to the ground as shown in Figure 2 for use and then reloaded from the ground back onto the floor surface **G** for storage and conveyance.

The PMV lift 10 includes a lifting boom 12 having a power drive unit 20 attached adjacent the proximal end housing 22 thereof. The drive mechanism 20 includes a drive motor of a conventional battery powered nature engaged with a gear set (not shown) to

rotate a drum or spool (also not shown) whereby a flexible cable or belt **24** is extended downwardly and lifted upwardly in the direction of arrow **A** about distal end roller **42** by appropriate operation of the drive mechanism **20**.

A hook or attaching means **26** is provided at the distal end of the flexible cable or belt **24** which is attachable to a lifting harness **J** shown in Figure 2 attached to the PMV **P**.

The proximal end housing 22 of the lifting boom 12 includes an elongated upright cylindrical cavity for receiving an upper end of an elongated cylindrical stanchion 14 which is fabricated of suitably sized steel tubing. By clamping means, the lifting boom 12 is positionable vertically in the direction of arrow B on the upright stanchion 14. Spaced apart NYLON or DELRIN upper and lower bushings (not shown) positioned between the proximal end housing 22 and the upper end of the stanchion 14 reduce rotational friction.

A stationary lift support arm 16 includes an elongated horizontally disposed beam 30 having an upright cylindrical stanchion support housing 28 disposed at one end thereof. Braces 32 reinforce the rigid orthogonal connection between the support beam 30 and the upright stanchion support housing 28. An upright offset member 34 is connected by clamping, slidable engagement to the other end of the elongated support beam 30 thus allowing adjustable lateral positioning of the support beam 30 in the direction of arrow C with respect to a trailer hitch engaging member 38.

The distal end **40** of the trailer hitch engaging member is insertable into a conventional class II or class III trailer hitch **T** as seen in Figure 2. The cross sectional shape of the cavity provided by the trailer hitch **T** is closely mated and aligned with the outer rectangular surface of the elongated trailer hitch engaging member **38** whereby substantially no rotational movement about the longitudinal centerline **CL** of the vehicle **V**

is permitted. This singular support aspect is of the utmost importance to the present invention as substantially all of the weight-bearing function is borne by the strength of the class II or class III trailer hitch in receiving and supporting the downward and torsional load of not only the weight of the entire PMV lift 10, but also that of the PMV P.

An alternate embodiment of the invention 10' in Figure 3 is substantially identical to that described in Figures 1 and 2 except that the support beam 30 of the lift support arm 16' is rigidly connected to the upper end of the stanchion support member 28' with the strengthening bracing 32' extending downwardly at an acute angle therebetween for added strength.

Referring now particularly to Figures 1, 4 and 5, a most important aspect of the invention is there shown with respect to limiting the stress placed upon the interengaging attachment between the trailer hitch T and the trailer hitch engaging member 38. In initially deploying or storing the PMV P with respect to the floor G, the lifting boom 12 is inwardly disposed from the stanchion 14 and, because the PMV P is close to the centerline CL of the vehicle, very minimal torsional load is imposed on the interconnection between the trailer hitch engaging member 38 and the trailer hitch T. However, once the PMV P is positioned rearwardly of the vehicle V for either deployment or lifting of the PMV P, the distal end roller 42 and flexible cable or strap 24 are likely to be moved away from the centerline CL of the vehicle V. As described in prior art, this rotational movement of the lifting boom 12 which would position the PMV P beyond the side surface of the vehicle V and the upright stanchion 14 would dramatically increase the torsional or twisting load placed on the trailer hitch T.

To prevent such overstressing of the trailer hitch T and the interengaging contact with the trailer hitch engaging member 38, the rotational movement of the lifting boom 12 is thus strictly limited to movement in the direction of arrow D in Figures 1 and 5 about the upright axis E of stanchion 14. That is to say that the lifting boom 12 and the distal end portion of the flexible cable or strap 24 are prohibited from rotational movement beyond a fore-and-aft plane lying within line M which passes through the centerline E of the stanchion 14. In other words, the lifting boom 12 cannot swing beyond a position which is further from the centerline CL of the trailer hitch T and trailer hitch engaging member 38 than that of the stanchion 14.

To effect this rotational limitation of the lifting boom 12 on stanchion 14, a rotation limit collar 46 as best seen in Figure 4 is provided. This collar 46 is lockably engageable onto the stanchion just above the stanchion support member 28 or 28' and just below the proximal portion 22 of the lifting boom 12. Attachment of each collar 46 is effected through threaded fasteners (not shown) in threaded openings 58 which bear against the outer surface of the stanchion 14 to secure the longitudinal spacing and rotational spacing of each collar 46.

Stop surfaces **54** and **56** bear against stop members (not shown) attached to or integral with the proximal housing **22** and stanchion support **28** so as to effect the desired rotational limitation of the lifting boom **12** about the vertical axis **E** of stanchion **14** as previously described.

By this arrangement, the structural integrity of the trailer hitch **T** is not compromised or overstressed so long as the personal mobility vehicle **P** is deployed and

stored from a position which lies substantially between the longitudinal axis **CL** of the vehicle **V** and the upright axis **E** or **E'** of the stanchion **14**.

While the instant invention has been shown and described herein in what are conceived to be the most practical and preferred embodiments, it is recognized that departures may be made therefrom within the scope of the invention, which is therefore not to be limited to the details disclosed herein, but is to be afforded the full scope of the claims so as to embrace any and all equivalent apparatus and articles.

CLAIM OR CLAIMS

- 1. A personal mobility vehicle (PMV) lift for loading and offloading a personal mobility vehicle (PMV) into and from a rear portion of a vehicle, the vehicle having an interior floor and a trailer hitch rigidly attached to the rear of the vehicle to which said PMV lift is rigidly engageable and from which said PMV lift receives substantially total support, said PMV lift comprising:
 - an elongated laterally extending lifting boom and a drive mechanism connected adjacent a proximal end thereof, said drive mechanism including an elongated flexible lifting cable or belt extending downwardly from a distal end of said lifting boom, said drive mechanism operably connected to a proximal portion of said lifting cable or belt whereby a PMV attachable to a distal end of said lifting cable or belt and may be raised or lowered by operation of said drive mechanism;
 - an elongated upright stanchion supportively connected at an upper end thereof to the proximal end of said lifting boom;
 - an elongated lift support arm supportively connected at a distal end thereof to a lower end of said stanchion;
 - a trailer hitch engaging member connectable at a first end thereof to the trailer hitch, a second end of said trailer hitch engaging member connected to a proximal end of said lift support arm whereby said PMV lift is substantially fully supported by the trailer hitch;

- a rotation stop mounted on said stanchion for limiting rotation of said lifting boom with respect to an upright axis of said stanchion between a first position within the rear of the vehicle whereby the PMV may be lowered or lifted with respect to the floor of the vehicle and a second position behind the vehicle whereby the PMV may be lowered to or lifted from the ground.
- 2. A personal mobility vehicle (PMV) lift as set forth in Claim 1, wherein: said lifting boom is vertically adjustable on said stanchion.
- A personal mobility vehicle (PMV) lift as set forth in Claim 1, wherein:
 said lift support arm is laterally adjustable with respect to said trailer hitch engaging member.
- 4. A personal mobility vehicle (PMV) lift as set forth in Claim 1, wherein the trailer hitch includes a class II or III receiver having a straight rectangular receiving cavity and wherein:
 - said trailer hitch engaging member has an outside rectangular cross section configuration substantially closely mating within the receiving cavity of the trailer hitch preventing substantial axial rotation of said trailer hitch engaging member while positioned within the trailer hitch thus fully supporting said lift support arm from substantial rotation about a longitudinal axis of the trailer hitch.
- 5. A personal mobility vehicle (PMV) lift for loading and offloading a personal mobility vehicle (PMV) into and from a rear portion of a vehicle, the vehicle having an interior floor and a trailer hitch rigidly attached to the rear of the vehicle to which said

PMV lift is rigidly engageable and from which said PMV lift receives substantially total support, said PMV lift comprising:

- an elongated laterally extending lifting boom and a drive mechanism connected adjacent a proximal end thereof, said drive mechanism including an elongated flexible lifting cable or belt extending downwardly from a distal end of said lifting boom, said drive mechanism operably connected to a proximal portion of said lifting cable or belt whereby a PMV attachable to a distal end of said lifting cable or belt and may be raised or lowered by operation of said drive mechanism;
- an elongated upright stanchion supportively connected at an upper end thereof to the proximal end of said lifting boom;
- an elongated lift support arm supportively connected at a distal end thereof to a lower end of said stanchion;
- a trailer hitch engaging member connectable at a first end thereof to the trailer hitch, a second end of said trailer hitch engaging member connected to a proximal end of said lift support arm whereby said PMV lift is substantially fully supported by the trailer hitch;
- a rotation stop mounted on said stanchion which limits rotation of said lifting boom about an upright axis of said stanchion whereby the distal end of said lifting boom is prevented from movement further from said trailer hitch engaging member than that of said stanchion.

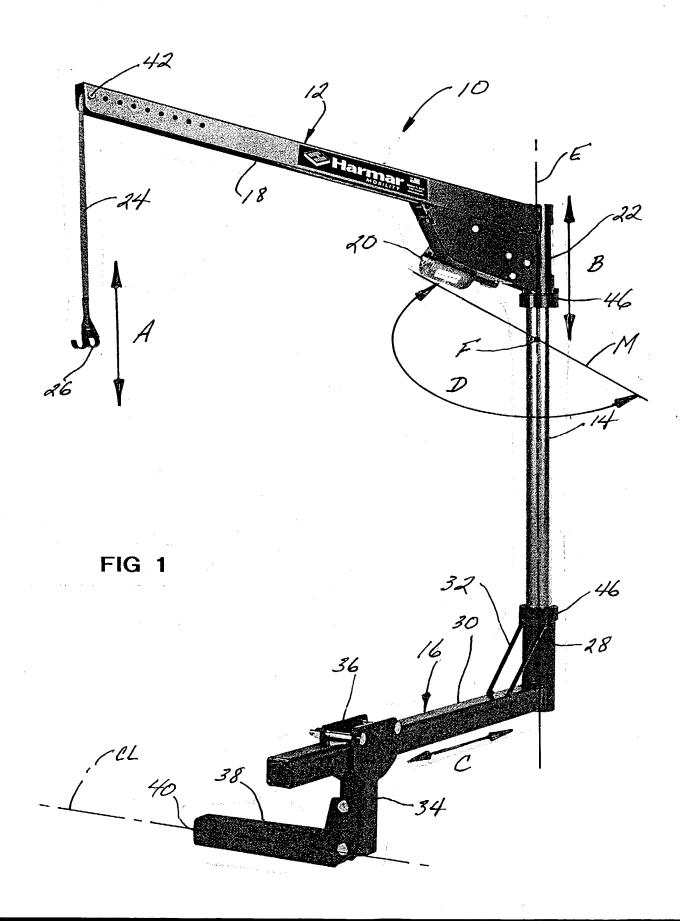
- 6. A personal mobility vehicle (PMV) lift as set forth in Claim 5, wherein: said lifting boom is vertically adjustable on said stanchion.
- A personal mobility vehicle (PMV) lift as set forth in Claim 5, wherein:
 said lift support arm is laterally adjustable with respect to said trailer hitch engaging member.
- 8. A personal mobility vehicle (PMV) lift as set forth in Claim 5, wherein the trailer hitch includes a class II or III receiver having a straight rectangular receiving cavity and wherein:
 - said trailer hitch engaging member has an outside rectangular cross section configuration substantially closely mating within the receiving cavity of the trailer hitch preventing substantial axial rotation of said trailer hitch engaging member while positioned within the trailer hitch thus fully supporting said lift support arm from substantial rotation about a longitudinal axis of the trailer hitch.
- 9. A personal mobility vehicle (PMV) lift for loading and offloading a personal mobility vehicle (PMV) into and from a rear portion of a vehicle, the vehicle having a trailer hitch rigidly attached to the rear of the vehicle to which said PMV lift is rigidly engageable and from which said PMV lift receives substantially total support, said PMV lift comprising:
 - a lifting boom having an elongated laterally extending arm and a drive mechanism connected adjacent a proximal end thereof, said drive mechanism including an elongated flexible lifting cable or belt extending therefrom and downwardly from a distal end of said

- lifting boom, said drive mechanism powering said lifting cable in and out with respect to said lifting boom;
- an elongated upright stanchion supportively connected at an upper end thereof to the proximal end of said lifting boom;
- an elongated lift support arm supportively connected at a distal end thereof to a lower end of said stanchion;
- a trailer hitch engaging member connectable at a first end thereof to the trailer hitch, a second end of said trailer hitch engaging member connected to a proximal end of said lift support arm whereby said PMV lift is substantially fully supported by the trailer hitch;
- a rotation which limits rotation of said lifting boom about an upright axis of said stanchion substantially further from the trailer hitch than a plane passing through the upright axis of said stanchion and oriented lengthwise to the vehicle.
- 10. A personal mobility vehicle (PMV) lift as set forth in Claim 9, wherein: said lifting boom is vertically adjustable on said stanchion.
- 11. A personal mobility vehicle (PMV) lift as set forth in Claim 9, wherein: said lift support arm is laterally adjustable with respect to said trailer hitch engaging member.
- 12. A personal mobility vehicle (PMV) lift as set forth in Claim 9, wherein the trailer hitch includes a class II or III receiver having a straight rectangular receiving cavity and wherein:

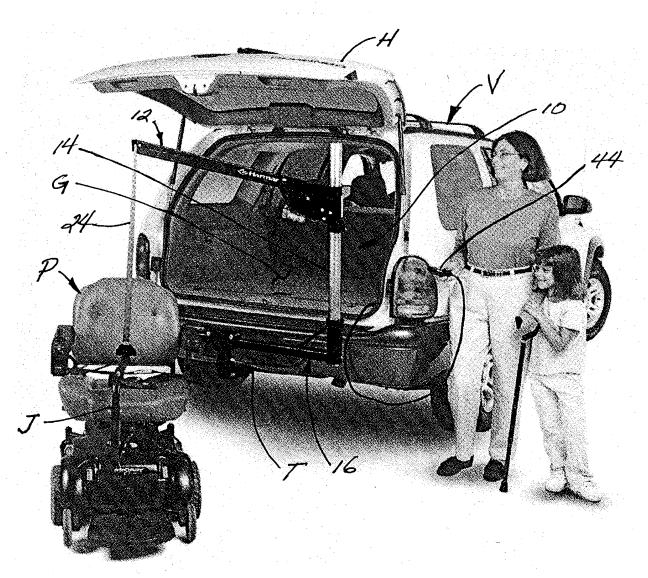
said trailer hitch engaging member has an outside rectangular cross section configuration substantially closely mating within the receiving cavity of the trailer hitch preventing substantial axial rotation of said trailer hitch engaging member while positioned within the trailer hitch thus fully supporting said lift support arm from substantial rotation about a longitudinal axis of the trailer hitch.

ABSTRACT OF THE DISCLOSURE

A personal mobility vehicle (PMV) lift for loading and offloading a personal mobility vehicle (PMV) into and from a rear portion of a vehicle, the vehicle having an interior floor and a trailer hitch rigidly attached to the rear of the vehicle to which the PMV lift is rigidly engageable. The PMV lift receives substantially all of its support from the trailer hitch and includes an elongated laterally extending lifting boom and a drive mechanism connected adjacent a proximal end thereof. The drive mechanism includes an elongated flexible lifting cable or belt which is operably connectable for raising and lowering the PMV by operation of the drive mechanism. An upright stanchion is supportively connected to the lifting boom while an elongated lift support arm is supportively connected to a lower end of the stanchion. A trailer hitch engaging member is connectable at one end to the trailer hitch, the other end of which is connected to a proximal end of the lift support arm. The PMV lift is substantially fully supported by the trailer hitch.







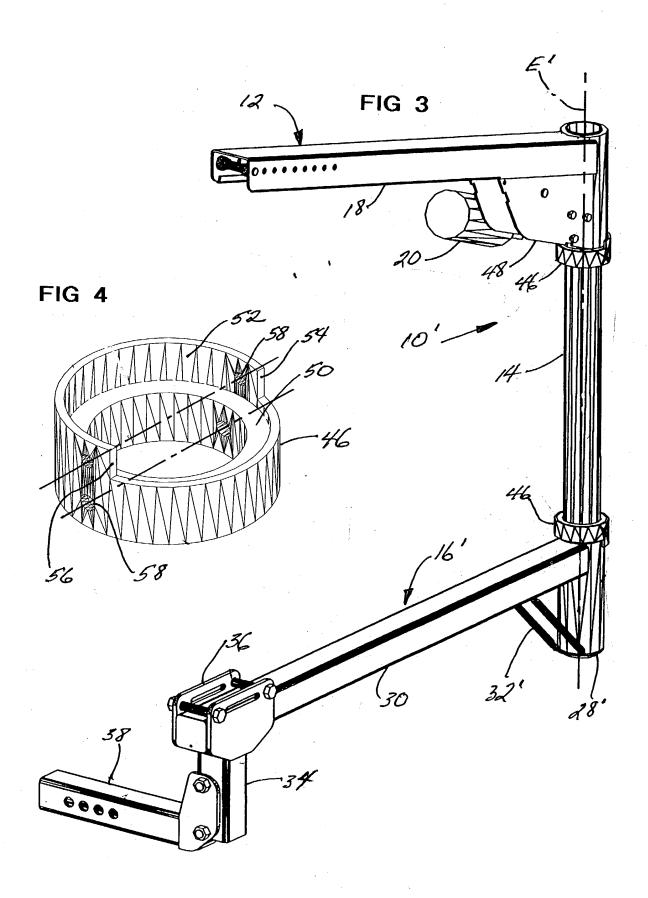
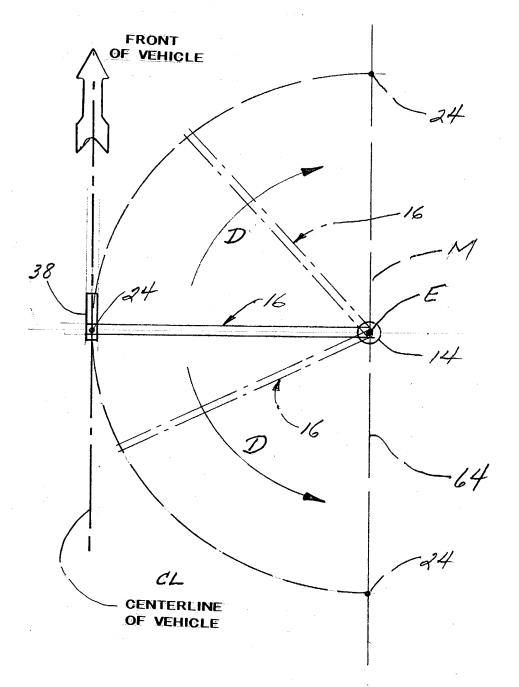


FIG 5



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(37 CFR 1.	63)	Application Numb		/		
☑ Declaration ☐	5	Filing Date				
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with Initial Filing	Filing (surcharge (37 CFR 1.16 (e)) required)	Examiner Name				
As a below named inventor, I he	reby declare that:					
My residence, mailing address, and	d citizenship are as stated	d below next to my name	3 .			
I believe I am the original, first and	sole inventor (if only one	name is listed below) or	r an original firet	and joint invent	or (if plural	
riaines are listed below) of the sub	ject matter which is claime	ed and for which a pate	nt is sought on th	ne invention enti	tled:	
Personal Mobili	ty Vehicle Lif	Ē t				
41	(Title	e of the Invention)				
the specification of which is attached hereto	·	•				
OR		as United Sta	ites Application i	Number or PCT	International	
was filed on (MM/DD/YYYY)			поот гррподион н			
Application Number	and was am	ended on (MM/DD/YYY	Y)	(11	applicable).	
I hereby state that I have reviewer amended by any amendment spe	and understand the concifically referred to above	itents of the above ident	ified specification	n, including the d	claims, as	
I acknowledge the duty to disclose in-part applications, material inform PCT international filing date of the	e information which is mat mation which became ava e continuation-in-part appl	terial to patentability as allable between the filing lication.	defined in 37 CF date of the prio	R 1.56, includin r application and	g for continuation- I the national or	
I hereby claim foreign priority ber certificate, or 365(a) of any PCT America, listed below and have certificate, or any PCT internation	also identified below by	which designated at lease	st one country of	ther than the Ur	nited States of	
Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed		py Attached?	
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Application Number(s)	(MM/DD/YYYY)	numbers supplem	al provisional aps are listed on a nental priority da 1/02B attached h	ta sheet		

[Page 1 of 2]
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DECLARATION —	Utility	or Design	Patent A	Application
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NAME OF SOLE OR FIRST INVENTOR :		A petition has been fil	led for this unsigned inventor
Given Name (first and middle [if any]) Chad		Family Name or Surname Wil	lliams
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NAME OF SECOND INVENTOR:		A petition has been	filed for this unsigned inventor
Given Name Jeff (first and middle [if any])		Family Name or Surname	DuVal
Inventor's Signature			Date 12/17/02
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Mailing Address	Vo. de de		
City Sarasota State I	Florida	ZIP 34236	Country US
Additional inventors are being named on the	supplemental Addi	tional Inventor(s) sheet(s) F	PTO/SB/02A attached hereto.