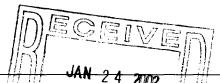
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Mark if additional names of conveying parties attached

U.S. Department of Commerce Patent and Trademark Office

PATENT

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Month		
	Day	Year
Name (line 1) Carl A. Caspers 08	23	2001

Name (line 2) **Execution Date** Second Party Month Day

Name (line 1) Name (line 2)

Mark if additional names of receiving parties attached **Receiving Party** Name (line 1) | Barbara J. Caspers If document to be recorded

is an assignment and the Name (line 2) receiving party is not domiciled in the United States, an appointment of a domestic Address (line 1) 33346 Shorewood Drive representative is attached. (Designation must be a

separate document from Address (line 2) Assignment.)

Address (line 3) Avon 56310 State/Country

**Domestic Representative Name and Address** Enter for the first Receiving Party only. Name Address (line 1)

Address (line 2)

Address (line 3) Address (line 4)

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FORM PTO-16 Expires 06/30/99 OMB 0651-0027	19B <b>Page 2</b>	U.S. Department of Commerce Patent and Trademark Office PATENT				
Correspondent Name and Address Area Code and Telephone Number (612) 340-8933						
Name	Gerald E. Helget					
Address (line 1) RIDER BENNETT EGAN & ARUNDEL						
Address (line 2)	Address (line 2) 333 South Seventh Street					
Address (line 3)	Suite 2000					
Address (line 4)	Address (line 4) Minneapolis, MN 55402					
Pages  Enter the total number of pages of the attached conveyance document including any attachments  # 6						
Application Number(s) Or Patent Number(s) Mark if additional numbers attached.						
	the Patent Application Number or the Patent Number (DO NOT ENTER BOTH	numbers for the same property).				
		ent Number(s)				
09/492.406	09/534,274 09/670,853					
09/785,714	09/829,306 09/790,391					
If this document is being filed together with a <u>new</u> Patent Application, enter the date the patent application was signed by the first named executing inventor.  Month Day Year						
Patent Cooperation Treaty (PCT)						
Enter PCT application number PCT PCT PCT						
	U.S. Application					
Number as not been assigned. PCT PCT PCT PCT						
Number of Properties  Enter the total number of properties involved. # 6						
Fee Amount Fee Amount for Properties Listed (37 CFR 3.41): \$ 240.00						
Method of Payment: Enclosed ⊠ Deposit Account ☐ Deposit Account						
•	ment by deposit account or if additional fees can be charged to the account.)					
	Deposit Account Number:	# 50-1188				
	Authorization to charge additional fees:	Yes 🛛 No 🗌				
Statement and Signature  To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.						
Gerald E. Helget	- March	November 6, 2001				
Name of Person Signing Signature Date						

# **ASSIGNMENT**

WHEREAS, Carl A. Caspers, a citizen of the United States of America, residing at 33346 Shorewood Drive, Avon, Minnesota 56310, made an invention disclosed and claimed in an application for United States letters patent entitled SOCKET LINER FOR ARTIFICIAL LIMB filed on January 27, 2000 under Serial No. 09/492,406;

WHEREAS, Barbara J. Caspers, residing at 33346 Shorewood Drive, Avon, Minnesota 56310, is desirous of acquiring an interest in and to said invention, and in and to the letters patent that issues thereon;

NOW, THEREFORE, Be It Known, that for good and valuable consideration, the receipt of which is hereby acknowledged by the undersigned, the entire right, title and interest of said Carl A. Caspers, in and to said application for United States letters patent, and the invention disclosed and claimed therein, the resultant patent or patents for said invention, and any renewals, reissues, extensions, substitutions, continuations or divisions thereof, continuations-in-part thereof, including all rights to apply for and obtain patents therefore in all foreign countries, is hereby sold, assigned and transferred unto said Barbara J. Caspers.

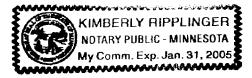
Carl A. Caspers agrees to sign such papers, testify orally and do other things at the expense of Barbara J. Caspers, or her successors or assigns, as may be reasonably necessary for the purpose of obtaining and enforcing such patents.

The Commissioner of Patents is hereby authorized and requested to issue said letters patent in accordance with this agreement.

Signed at TEC Interface Systems this 23 day of August, 2001.

Carl A. Caspers

STATE OF MN ) ss. COUNTY OF Stearns )



Subscribed and sworn to before me this <u>August</u>, 2001.

Notary Public

722193.1

# **ASSIGNMENT**

WHEREAS, Carl A. Caspers, a citizen of the United States of America, residing at 33346 Shorewood Drive, Avon, Minnesota 56310, made an invention disclosed and claimed in an application for United States letters patent entitled VACUUM PUMP AND SHOCK ABSORBER FOR ARTIFICIAL LIMB filed on March 23, 2000 under Serial No. 09/534,274;

WHEREAS, Barbara J. Caspers, residing at 33346 Shorewood Drive, Avon, Minnesota 56310, is desirous of acquiring an interest in and to said invention, and in and to the letters patent that issues thereon;

NOW, THEREFORE, Be It Known, that for good and valuable consideration, the receipt of which is hereby acknowledged by the undersigned, the entire right, title and interest of said Carl A. Caspers, in and to said application for United States letters patent, and the invention disclosed and claimed therein, the resultant patent or patents for said invention, and any renewals, reissues, extensions, substitutions, continuations or divisions thereof, continuations-in-part thereof, including all rights to apply for and obtain patents therefore in all foreign countries, is hereby sold, assigned and transferred unto said Barbara J. Caspers.

Carl A. Caspers agrees to sign such papers, testify orally and do other things at the expense of Barbara J. Caspers, or her successors or assigns, as may be reasonably necessary for the purpose of obtaining and enforcing such patents.

The Commissioner of Patents is hereby authorized and requested to issue said letters patent in accordance with this agreement.

Signed at TEC Interface Systems this 23 day of August, 2001.

Carl A. Caspers

STATE OF MV ) ss.

COUNTY OF STEARS

KIMBERLY RIPPLINGER NOTARY PUBLIC - MINNESOTA My Comm. Exp. Jan. 31, 2005

Subscribed and sworn to before me this 3 day of August, 2001.

Notary Public

719165.1

# **ASSIGNMENT**

WHEREAS, Carl A. Caspers, a citizen of the United States of America, residing at 33346 Shorewood Drive, Avon, Minnesota 56310, made an invention disclosed and claimed in an application for United States letters patent entitled SOCKET LINER FOR ARTIFICIAL LIMB filed on September 27, 2000 under Serial No. 09/670,853;

WHEREAS, Barbara J. Caspers, residing at 33346 Shorewood Drive, Avon, Minnesota 56310, is desirous of acquiring an interest in and to said invention, and in and to the letters patent that issues thereon;

NOW, THEREFORE, Be It Known, that for good and valuable consideration, the receipt of which is hereby acknowledged by the undersigned, the entire right, title and interest of said Carl A. Caspers, in and to said application for United States letters patent, and the invention disclosed and claimed therein, the resultant patent or patents for said invention, and any renewals, reissues, extensions, substitutions, continuations or divisions thereof, continuations-in-part thereof, including all rights to apply for and obtain patents therefore in all foreign countries, is hereby sold, assigned and transferred unto said Barbara J. Caspers.

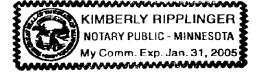
Carl A. Caspers agrees to sign such papers, testify orally and do other things at the expense of Barbara J. Caspers, or her successors or assigns, as may be reasonably necessary for the purpose of obtaining and enforcing such patents.

The Commissioner of Patents is hereby authorized and requested to issue said letters patent in accordance with this agreement.

Signed at TEC Interface Statems this 23 day of August, 2001.

Carl A. Caspers

STATE OF MN ) ss. COUNTY OF STEARINS )



Subscribed and sworn to before me this <u>13</u> day of <u>August</u>, 2001.

Notary Publi

722198.1

# **ASSIGNMENT**

WHEREAS, Carl A. Caspers, a citizen of the United States of America, residing at 33346 Shorewood Drive, Avon, Minnesota 56310, made an invention disclosed and claimed in an application for United States letters patent entitled VACUUM APPARATUS AND METHOD FOR MANAGING RESIDUAL LIMB VOLUME IN AN ARTIFICIAL LIMB filed on February 16, 2001 under Serial No. 09/785,714;

WHEREAS, Barbara J. Caspers, residing at 33346 Shorewood Drive, Avon, Minnesota 56310, is desirous of acquiring an interest in and to said invention, and in and to the letters patent that issues thereon;

NOW, THEREFORE, Be It Known, that for good and valuable consideration, the receipt of which is hereby acknowledged by the undersigned, the entire right, title and interest of said Carl A. Caspers, in and to said application for United States letters patent, and the invention disclosed and claimed therein, the resultant patent or patents for said invention, and any renewals, reissues, extensions, substitutions, continuations or divisions thereof, continuations-in-part thereof, including all rights to apply for and obtain patents therefore in all foreign countries, is hereby sold, assigned and transferred unto said Barbara J. Caspers.

Carl A. Caspers agrees to sign such papers, testify orally and do other things at the expense of Barbara J. Caspers, or her successors or assigns, as may be reasonably necessary for the purpose of obtaining and enforcing such patents.

The Commissioner of Patents is hereby authorized and requested to issue said letters patent in accordance with this agreement.

Signed at TEC Tother Face System Sthis 23 day of August, 2001.

Carl A Caspers

STATE OF MIN

COUNTY OF STEARING

KIMBERLY RIPPLINGER
NOTARY PUBLIC - MINNESOTA
My Comm. Exp. Jan. 31, 2005

Subscribed and sworn to before me this 28 day of August, 2001.

Notary Public

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Attorney Docket No.: 13722-178

## **ASSIGNMENT**

WHEREAS, Carl A. Caspers, a citizen of the United States of America, residing at 33346 Shorewood Drive, Avon, Minnesota 56310, made an invention disclosed and claimed in an application for United States letters patent entitled OSMOTIC MEMBRANE AND VACUUM SYSTEM FOR ARTIFICIAL LIMB filed on April 9, 2001 under Serial No. 09/829,306;

WHEREAS, Barbara J. Caspers, residing at 33346Shorewood Drive, Avon, Minnesota 56310, is desirous of acquiring an interest in and to said invention, and in and to the letters patent that issues thereon;

NOW, THEREFORE, Be It Known, that for good and valuable consideration, the receipt of which is hereby acknowledged by the undersigned, the entire right, title and interest of said Carl A. Caspers, in and to said application for United States letters patent, and the invention disclosed and claimed therein, the resultant patent or patents for said invention, and any renewals, reissues, extensions, substitutions, continuations or divisions thereof, continuations-in-part thereof, including all rights to apply for and obtain patents therefore in all foreign countries, is hereby sold, assigned and transferred unto said Barbara J. Caspers.

Carl A. Caspers agrees to sign such papers, testify orally and do other things at the expense of Barbara J. Caspers, or her successors or assigns, as may be reasonably necessary for the purpose of obtaining and enforcing such patents.

The Commissioner of Patents is hereby authorized and requested to issue said letters patent in accordance with this agreement.

Signed at TEC Interface this 23 day of August

Carl A. Caspers

STATE OF MN ) ss.

Subscribed and sworn to before me this 33 day of AUQUST, 2001.

722201.1

KIMBERLY RIPPLINGER
NOTARY PUBLIC - MINNESOTA
My Comm. Exp. Jan. 31, 2005

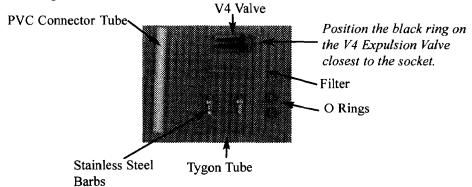
TOTAL P.02





The one-way V4 Expulsion Valve provides an escape route for air, perspiration and water, while creating a mild negative pressure socket system. In a closed chamber, the patient's weight bearing creates a draw as the limb changes in volume and additional space is acquired. This space becomes an "air pocket" within the chamber. The V4 releases this air and re-establishes negative pressure. The socket environment is continually maintained by the vacuum lock that the V4 creates, allowing patients to walk with their limb under a constant negative pressure system.

The V4 Expulsion Valve must be used in conjunction with the TEC® UltraLink or TEC ProLink Suspension Sleeve. When air is evacuated properly and the UltraLink or ProLink are used for proximal sealing, the sleeve will hold a distinct and conformed fit against the prosthesis. We also recommend you use two sheaths with the TEC® Interface System. The first sheath should be donned over the liner onto the thigh. The second sheath should be donned over the first and deflected over the top of the socket brim to protect the suspension sleeve from the socket wall during knee flexion.



#### Recommended attachment when drilling through the socket wall:

- 1. Drill a hole in the distal, posterior of the socket using a 5/32" drill bit and tap with a 10/32 bit.
- 2. Use 90 second epoxy on the threads of the selected barb and screw into hole. Be careful not to clog the hole in the barb.
- 3. Slide the tygon tube over the barb and insert the filter.
- 4. Slide another tygon tube over the filter and insert V4 valve.

## Recommended attachment when drilling through foam or wood and socket wall:

- 1. Drill a 1/4" hole through the outer laminate, wood, foam and into the socket.
- 2. Slightly countersink the hole on the inside of the socket.
- 3. Sand the exterior of the PVC connector tube. Then apply epoxy to the exterior of the PVC connector and insert the PVC connector tube into the 1/4" hole and extend 1/8" into the socket.
- 4. Use epoxy to fill the countersink around the PVC connector tube.
- 5. Use a sanding cone to grind the PVC connector tube flush with the inside of the socket.
- 6. Trim the PVC connector tube on the exterior of the socket.
- 7. Roughen the inside of the rigid tube with sandpaper.
- 8. Repeat above steps 2 through 4.

\*\*Vent covers to allow air and moisture to drain outside of the cover.

Authorized Representative: TEC Motion Magnus Paulins gata 1 S-254 33 Helsingborg Sweden

CE

820 Sundial Drive · Waite Park, MN · 56387 · USA · 800-688-4832 · www.tecinterface.com

REV. 7/12/01 PATENTED: 5,258,037 - 5,376,132 -5,534,034 - 5,571,208 © 2001 À division of Caspers-Schneider Technologies, Inc.

REEL: 012547 FRAME: 0729

## **ASSIGNMENT**

WHEREAS, Carl A. Caspers, a citizen of the United States of America, residing at 33346 Shorewood Drive, Avon, Minnesota 56310, made an invention disclosed and claimed in an application for United States letters patent entitled VACUUM PUMP AND SHOCK ABSORBER FOR ARTIFICIAL LIMB filed on February 21, 2001 under Serial No. 09/790,391;

WHEREAS, Barbara J. Caspers, residing at 33346 Shorewood Drive, Avon, Minnesota 56310, is desirous of acquiring an interest in and to said invention, and in and to the letters patent that issues thereon;

NOW, THEREFORE, Be It Known, that for good and valuable consideration, the receipt of which is hereby acknowledged by the undersigned, the entire right, title and interest of said Carl A. Caspers, in and to said application for United States letters patent, and the invention disclosed and claimed therein, the resultant patent or patents for said invention, and any renewals, reissues, extensions, substitutions, continuations or divisions thereof, continuations-in-part thereof, including all rights to apply for and obtain patents therefore in all foreign countries, is hereby sold, assigned and transferred unto said Barbara J. Caspers.

Carl A. Caspers agrees to sign such papers, testify orally and do other things at the expense of Barbara J. Caspers, or her successors or assigns, as may be reasonably necessary for the purpose of obtaining and enforcing such patents.

The Commissioner of Patents is hereby authorized and requested to issue said letters patent in accordance with this agreement.

Signed at TEC Interface Systemshis 23 day of Algust, 2001.

Carl A Caspers

STATE OF MN ) ss.

RECORDED: 01/24/2002

COUNTY OF STORMS

KIMBERLY RIPPLINGER
NOTARY PUBLIC - MINNESOTA
My Comm. Exp. Jan. 31, 2005

Subscribed and sworn to before me this 3 day of April , 2001.

Notary Public

719093.1