FORM PTO-1619A

Expires 06/30/99

08-17-2001

U.S. Department of Commerce Patent and Trademark Office **PATENT**

101814898

RECORDATION FORM COVER SHEET

4 4.01	PATENTS ONLY
	emarks: Please record the attached original document(s) or copy(ies).
Submission Type	Conveyance Type
X New	X Assignment Security Agreement
Resubmission (Non-Recordation) Document ID#	License Change of Name
Correction of PTO Error Reel # Frame # Corrective Document	Merger U.S. Government (For Use ONLY by U.S. Government Agencies)
Reel # Frame #	Departmental File Secret File
Conveying Party(ies)	Mark if additional names of conveying parties attached Execution Date Month Day Year
Name (line 1) Mussivand, Tofy	08 03 01
Name (line 2)	
Second Party	Execution Date Month Day Year
Name (line 1) Day, Kevin	08 03 01
Name (line 2)	
Receiving Party	Mark if additional names of receiving parties attached
Name (line 1) World Heart Corporation	If document to be recorded is an assignment and the receiving party is not
Name (line 2)	domiciled in the United States, an appointment of a domestic
Address (line 1) 1 Laser Street	representative is attached. (Designation must be a separate document from
Address (line 2) Nepean	Assignment.)
Address (line 3) Ontario	Canada K2E 7V1 State/Country Zip Code
Domestic Representative Name an	
Name	
Address (line 1)	
Address (line 2)	
Address (line 3)	
Address (line 4)	
2001 LMUELLER 00000021 09356120 581 40.00 OP	FOR OFFICE USE ONLY

Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief Information Officer, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20503. See OMB Information Collection Budget Package 0651-0027, Patent and Trademark Assignment Practice. DO NOT SEND REQUESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS ADDRESS.

Mail documents to be recorded with required cover sheet(s) information to: Commissioner of Patents and Trademarks, Box Assignments, Washington, D.C. 20231

FORM	PTO-1619B
Expires 06/	30/99
OMB 0651-	0027

Page 2

J.S. Department of Commerce
Patent and Trademark Office
PATENT

Correspondent Name and Address Area Code and Telephone Number 937/223-2050	
Name Killworth, Gottman, Hagan & Schaeff, L.L.P.	
Address (line 1) One Dayton Centre	
Address (line 2) One South Main Street, Suite 500	
Address (line 3) Dayton, Ohio 45402	
Address (line 4)	
Pages Enter the total number of pages of the attached conveyance document including any attachments.	
Application Number(s) or Patent Number(s) Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property). Patent Application Number(s) 09356120 Mark if additional numbers attached Patent Number (DO NOT ENTER BOTH numbers for the same property). Patent Number(s)	
If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor.	Year
Patent Cooperation Treaty (PCT) Enter PCT application number only if a U.S. Application Number PCT	
Number of Properties Enter the total number of properties involved. #]
Fee Amount Fee Amount for Properties Listed (37 CFR 3.41): \$ 40.00]
Method of Payment: Enclosed X Deposit Account Deposit Account (Enter for payment by deposit account or if additional fees can be charged to the account.) Deposit Account Number: #]
Authorization to charge additional fees: Yes No 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 indicated herein.	i, as
Susan M. Luna-Patent Agent MSAM M JML August 6, 200)1
Name of Person Signing Signature Date	

FORM PTO-1619C Expires 05/30/99 OMB 0651-0027

RECORDATION FORM COVER SHEET CONTINUATION DATENTS ONLY

U.S. Department of Commerce Patent and Trademark Office PATENT

	P	AIENIS	JINL T		
Conveying Pa		Mark if addition	onal names of conveying p	arties attached	Execution Date Month Day Year
Name (line 1) Ch	en, Ji-Feng				07 20 01
Name (line 2)					Execution Date
Name (line 1)					Month Day Year
Name (line 2)					7
Name (line 1)					Execution Date Month Day Year
Name (line 2)]
Receiving Par	ty(ies)		Mark if additional names o	of receiving par	ties attached
Enter additional R	eceiving Party(ies)	<u> </u>			
Name (line 1)					If document to be recorded is an assignment and the
Name (line 2)					receiving party is not domiciled in the United States, an appointment
Address (line 1)					of a domestic representative is attached. (Designation must be a separate
Address (line 2)			L. CHILLIAN TO THE CONTRACT OF		document from Assignment.)
Address (line 3)	City		State/Country	Zip C	ode
Name (line 1)					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
Address (line 1)					domestic representative is attached. (Designation must be a separate document from
Address (line 2)					Assignment.)
Address (line 3)	City		State/Country	Zin	Code
Application N	umber(s) or Patent Nu	mber(s)	Mark if additional nu		
	Patent Application Number or the				
	tent Application Number(s)			Patent Nun	
	Contrapplication Number(s)				
					1

PATENT REEL: 012069 FRAME: 0014

+613-583-9869

T-238 P.03/05 F-401

1/3

ASSIGNMENT

Chen JC.

Whereas, Tofy Mussivand, Ji-Feng Cheng, and Kevin Day (hereinafter 'the Assignors'), whose full post office addresses are 2616 Mer Bleue Road, Navan, Ontario, Canada, K4B 1H9; 1217 Elbur Avenue Lakewood, Ohio, 44107, U.S.A.; and 2 Spur Avenue, Ottawa, Ontario, Canada, K2M 2B5, respectively, have made an invention which is the subject of a United States Patent Application 09/356,120 filed on July 16, 1999 and emitted CONDUIT FOR A MECHANICAL CIRCULATORY DEVICE (hereinafter "the Patent Application");

Whereas World Heart Corporation (hereinafter "the Assignee"), whose full post office address is 1 Laser Street, Nepean, Outario, Canada, K2E 7V1, is desirous of acquiring the whole right, title and interest in and to the Patent Application, and the invention or inventions described therein;

Now therefore, in consideration of one dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Assignors hereby sell, assign and transfer to the Assignee, all their right, title and interest, in the United States, Canada, and all other countries and jurisdictions throughout the world, in and to the Patent Application, and the invention or inventions described therein, and all divisions and continuations thereof, including their corresponding right to claim priority from the Patent Application in any country or jurisdiction, including all their corresponding right, title and interest in and to any Patents which may issue therefrom, including all reissues, renewals and extensions thereof, and including all right to sue for past infringement theraunder, all the said Patents to be held and enjoyed by the said Assignee to the full end of the term for which the said Patents are granted, as fully and entirely as the said Patents could have been held and enjoyed by the said Assignment had not been made;

And the Assignors hereby covenant and agree without further consideration, to communicate with Assignee, its successors and assigns, any facts known respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors or assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid Assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States. Canada, and all other

PATENT

REEL: 012069 FRAME: 0015

countries and jurisdictions throughout the world, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns;

And the Assignors hereby covenant that they have the full right to convey the interest assigned by this Assignment, and have not executed and will not execute any agreement in conflict with this Assignment;

And the Assignors and the Assignee hereby authorize the firm of Gowling Lafleur Henderson LLP, whose full post office address is 160 Elgin Street, Suite 2600, Ottawa, Ontario K1P 1C3, Canada, to correct errors in this Assignment, or to insert any further identification or other information necessary or desirable to make this Assignment suitable for recordal in any Patent Office.

SIGNED at [(City/Town)	(Country)	this O3 (Date)	day of <u>AUGUST</u> (Month)	_, <u>2001</u> (Year)
	READ BEAD :: Please Print or Type)		Tofy Muss	Mussiyy	d ny
SIGNED at _	(Cisy/Town)	(Country)	_, this(Date)	day of(Month)	(Year)
(Signature of Witt	ness)		Ji-Feng Cl	ieng	
(Name of Witness	: Please Print or Type)		(Signature of A	Assignor)	
SIGNED at _	(Ciry/Town)	(Country)	, this	day of(Month)	(Year)

PATENT REEL: 012069 FRAME: 0016 FROM-GOWLING

3/3

(Signature of Witness)	Kevin Day
(Name of Wimess: Please Print or Type)	(Signature of Assignor)

The undersigned Assignee hereby accepts this Assignment.

_ day of <u>AUGUST</u> (Month)

CHAIRMAN + CHIEF SCIENTIFIC (Title of Authorized Signing Officer: Please Print or Type) OFFICER

2/3

countries and jurisdictions throughout the world, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns;

And the Assignors hereby covenant that they have the full right to convey the interest assigned by this Assignment, and have not executed and will not execute any agreement in conflict with this Assignment;

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SIGNED at		"' ims "" day of "		•
(City/Town)	(Сешлиу)	(Dase)	(Manth)	(Year)
(Signature of Witness)		Tofy Mussivand		
(2. Busines of Alimens)		_		
(Name of Witness: Please Print or Type)		(Signature of Assignor)		
SIGNED at		_, this day of _		د
(City/Te\1)	(Country)	(Dete)	(Month)	(Year)
		Ji-Feng Cheng	•	
(Signature of Witness)				
(Name of Witness: Please Print or Type)		(Signature of Assignor)		
SIGNED at Ottawn	Canada	this day of _	Quant	. Zwl
(City/Town)	(Country)	(Date)	(Nontr)	(Atm)

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07/13/01 FRI 12:56 FAX 6137614478 OHIRC CVD Ø 007 04-07-01 2220-E23-E13+ 3/3 Kevin Day (Name of Witness: Please Print or Type) The undersigned Assignee hereby accepts this Assignment CANADA this 03 day of AUGUST (Date)

> PATENT REEL: 012069 FRAME: 0019

TOPY MUSSIVAND
(Name of Authorized Signing Officer: Please Print or Type)

CHAIRMAN *CHIEF SCIENTIAL OFFICER (Title of Authorized Signing Officer: Please Print of Type)

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T-238 P.84/05 F-40)

2/3

countries and jurisdictions throughout the world, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns;

And the Assignors hereby covenant that they have the full right to convey the interest assigned by this Assignment, and have not executed and will not execute any agreement in conflict with this Assignment;

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SIGNED at			_, this	$\underline{}$ day of $\underline{}$		
	(City/Tewn)	(Сонляу)	(Date	t)	(Month)	(Yes)
(Signature of Witness	3)	····	Tofy M	lussivand	#* ##	
(Name of Wimess: P	lease Print of Type)		(Signature	of Assignar)	<u> </u>	
SIGNED at	eveland, (City/Town)	USA (Country)	_, this	day of _	July (Man)	200/ (Year)
al	e Kassub				Chen	
CHRISTING (Name of Witness: P	E KASSUBI lease Print or Type)	9	(Signature	of Assignment	7/3	
SIGNED at	(Cinc(Fa3m)	(Country)	_ this	day of _	(Mosth)	

PATENT

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.

FEE TRANSMITTAL for FY 2001

Patent fees are subject to annual revision.

TOTAL AMOUNT OF F	AYMENT
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(\$) 40.00

Complete if Known		
Application Number	09/356,120	
Filing Date	July 16, 1999	
First Named Inventor	Tofy Mussivand	
Examiner Name	S. Getzow	
Group Art Unit	3762	
Attorney Docket No.	GOW 0066 PA	

METHOD OF PAYMENT	FEE CALCULATION (continued)			
The Commissioner is hereby authorized to charge	3. ADDITIONAL FEES			
indicated fees and credit any overpayments to: Deposit	Large Small			
Account Number	Entity Entity Fee Fee Fee Fee Fee Description	Fee Paid		
Deposit	Code (\$) Code (\$)			
Account Name	105 130 205 65 Surcharge - late filing fee or oath			
Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17	127 50 227 25 Surcharge - late provisional filing fee or cover sheet			
Applicant claims small entity status.	139 130 139 130 Non-English specification			
See 37 CFR 1.27	147 2,520 147 2,520 For filing a request for ex parte reexamination			
2. X Payment Enclosed:	112 920* 112 920* Requesting publication of SIR prior to			
Check X Credit card Money Other	Examiner action 113 1,840* 113 1,840* Requesting publication of SIR after			
FEE CALCULATION	Examiner action			
1. BASIC FILING FEE	115 110 215 55 Extension for reply within first month			
Large Entity Small Entity	116 390 216 195 Extension for reply within second month			
Fee Fee Fee Fee Description Code (\$) Code (\$) Fee Paid	117 890 217 445 Extension for reply within third month			
101 710 201 355 Utility filing fee	118 1,390 218 695 Extension for reply within fourth month			
106 320 206 160 Design filing fee	128 1,890 228 945 Extension for reply within fifth month			
107 490 207 245 Plant filing fee	119 310 219 155 Notice of Appeal			
108 710 208 355 Reissue filing fee	120 310 220 155 Filing a brief in support of an appeal			
114 150 214 75 Provisional filing fee	121 270 221 135 Request for oral hearing			
CURTOTAL (4) (C)	138 1,510 138 1,510 Petition to institute a public use proceeding			
SUBTOTAL (1) (\$) -0-	140 110 240 55 Petition to revive - unavoidable			
2. EXTRA CLAIM FEES	141 1,240 241 620 Petition to revive - unintentional			
Extra Claims below Fee Paid	142 1,240 242 620 Utility issue fee (or reissue)			
Total Claims	143 440 243 220 Design issue fee			
Claims ————————————————————————————————————	144 600 244 300 Plant issue fee			
Multiple Dependent	122 130 122 130 Petitions to the Commissioner			
Large Entity Small Entity	123 50 123 50 Processing fee under 37 CFR 1.17(q)			
Fee Fee Fee Fee Description	126 180 126 180 Submission of Information Disclosure Stmt	40.00		
Code (\$) Code (\$) 103 18 203 9 Claims in excess of 20	. 581 40 581 40 Recording each patent assignment per property (times number of properties)	40.00		
102 80 202 40 Independent claims in excess of 3	146 710 246 355 Filing a submission after final rejection (37 CFR § 1.129(a))	1		
104 270 204 135 Multiple dependent claim, if not paid	149 710 249 355 For each additional invention to be			
109 80 209 40 ** Reissue independent claims over original patent	examined (37 CFR § 1.129(b))			
110 18 210 9 ** Reissue claims in excess of 20 and over original patent	179 710 279 355 Request for Continued Examination (RCE)			
and over original patent	169 900 169 900 Request for expedited examination of a design application			
SUBTOTAL (2) (\$) -0-	Other fee (specify)	40.00		
**or number previously paid, if greater; For Reissues, see above	*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$)	40.00		

Complete (if applicable) SUBMITTED BY Registration No. Telephone (937) 223-2050 Susan M. Luna - Patent Agent 38,769 Name (Print/Type) (Attorney/Agent) Date August 6, 2001 Signature

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

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FEE TRANSMITTAL for FY 2001

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RECORDED: 08/08/2001

TOTAL AMOUNT OF PAYMENT

(\$) 40.00

Complete if Known			
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First Named Inventor	Tofy Mussivand		
Examiner Name	S. Getzow		
Group Art Unit	3762		
Attorney Docket No.	GOW 0066 PA		

METHOD OF PAYMENT	FEE CALCULATION (continued)					
1. The Commissioner is hereby authorized to charge	3. ADDITIONAL FEES					
indicated fees and credit any overpayments to:	Large Small					
Account Number	Entity Entity Fee Fee Fee Fee Fee Description	Fee Paid				
Deposit	Code (\$) Code (\$)	700100				
Account	105 130 205 65 Surcharge - late filing fee or oath					
Name Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17	127 50 227 25 Surcharge - late provisional filing fee or cover sheet					
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FEE CALCULATION	113 1,840° 113 1,840° Requesting publication of SIR after Examiner action					
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1. BASIC FILING FEE Large Entity Small Entity	116 390 216 195 Extension for reply within second month					
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114 150 214 75 Provisional filing fee	121 270 221 135 Request for oral hearing					
	138 1,510 138 1,510 Petition to institute a public use proceeding					
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2. EXTRA CLAIM FEES	141 1,240 241 620 Petition to revive - unintentional					
Fee from Extra Claims <u>below</u> <u>Fee Paid</u>	142 1,240 242 620 Utility issue fee (or reissue)					
Total Claims20** = X =	143 440 243 220 Design issue fee					
Independent 3** = X =	144 600 244 300 Plant issue fee					
Multiple Dependent	122 130 122 130 Petitions to the Commissioner					
	123 50 123 50 Processing fee under 37 CFR 1.17(q)					
Large Entity Small Entity Fee Fee Fee Fee Fee Description	126 180 126 180 Submission of Information Disclosure Stmt					
Code (\$) Code (\$) 103 18 203 9 Claims in excess of 20	581 40 581 40 Recording each patent assignment per property (times number of properties)	40.00				
102 80 202 40 Independent claims in excess of 3	146 710 246 355 Filing a submission after final rejection (37 CFR § 1.129(a))					
104 270 204 135 Multiple dependent claim, if not paid 109 80 209 40 ** Reissue independent claims	149 710 249 355 For each additional invention to be examined (37 CFR § 1.129(b))					
over original patent 110 18 210 9 ** Reissue claims in excess of 20	179 710 279 355 Request for Continued Examination (RCE)					
and over original patent	169 900 169 900 Request for expedited examination of a design application					
SUBTOTAL (2) (\$) -0-	Other fee (specify)					
**or number previously paid, if greater; For Reissues, see above *Reduced by Basic Filling Fee Paid SUBTOTAL (3) (\$) 40.00						

SUBMITTED BY				Complete (if applicable)	
Name (PrintlType)	Susan M. Luna - Patent Agent	Registration No. (Attorney/Agent)	38,769	Telephone	(937) 223-2050
Signature	Susan nr. fim			Date	August 6, 2001

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