PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Loren Shih	01/27/2000
Walter A. Aviles	01/20/2000
Thomas H. Massie	01/27/2000
Walter C. Shannon III	01/27/2000

RECEIVING PARTY DATA

Name:	SensAble Technologies, Inc.	
Street Address:	15 Constitution Way	
City:	Woburn	
State/Country:	MASSACHUSETTS	
Postal Code:	01801	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	11840491

CORRESPONDENCE DATA

Fax Number: (617)523-1231

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 617-570-1000

Email: tbeckwith@goodwinprocter.com

Correspondent Name: Patent Administrator

Address Line 1: Goodwin Procter LLP Exchange Place
Address Line 4: Boston, MASSACHUSETTS 02109

NAME OF SUBMITTER: W. Gary Dewar

Total Attachments: 12

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WHEREAS, We, Loren Shih, Walter A. Aviles, Thomas H. Massie and Walter C. Shannon III have invented one or more improvements in:

SYSTEMS AND METHODS FOR SCULPTING VIRTUAL OBJECTS IN A HAPTIC VIRTUAL REALITY ENVIRONMENT

described in an application (or provisional application) for Letters Patent of the United States:

identified by Attorney Docket No. SNS-006CP1, and/or executed by us of even date herewith and about to be filed in the United States Patent Office;

Serial No. 09/347,637 filed in the United States Patent Office on July 6, 1999; and

WHEREAS, SensAble Technologies, Inc. (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the State of Delaware, and having a usual place of business at 215 First Street, Cambridge, MA 02142 desires to acquire an interest therein, in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives, our entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to the inventions described in said application, together with our entire right, title and interest in and to said application and such Letters Patent as may issue thereon or claim priority under international convention, including but not limited to continuations, divisionals, reissues, and reexaminations of said application of such Letters Patent; said inventions, applications and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all of our rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of our entire right, title and interest in and to said inventions, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all Letters Patent to ASSIGNEE for its own name as assignee of our entire right, title and interest therein.

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns, and legal representatives, but at its or their expense and charges, including: the execution of applications for patents in foreign countries; the execution of substitution, reissue, divisional or continuation applications; and preliminary or other statements or the giving of testimony in any interference or other proceeding in which said inventions or any application or patent directed thereto may be involved; and

we further hereby authorize ASSIGNEE or its attorneys or agents to insert the correct serial number and filing date into this assignment, if none is indicated on that date of our execution of this assignment;

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF	, we have	ve hereunto set ou	ir hands and affixed our seals the date se
forth below.			\sim
		Inventor:	Loren Shih
Commonwealth of Massachusetts County of Middle Sex)) ss		•
Subscribed and sworn to befor <u>January</u> , 1999. 2000	e me, by	the above-named	d Loren Shih this <u>27th</u> day of
			La vice M. Canda week
		Note - Deblie	Prince M. andrews
		Notary Public	on Expires: <i>Tune 11, 2000</i>
		My Commissio	on Expires: July 11, 2000
		Inventor:	
		mventor.	Walter A. Aviles
Commonwealth of Massachusetts)		
County of) ss		
Subscribed and sworn to befor, 1999.	e me, by	the above-named	d Walter A. Aviles this day of
			· · · · · · · · · · · · · · · · · · ·
		Notary Public	
		My Commissio	n Expires:

840051

		Inventor:		·
			Thomas H. Massie	
Commonwealth of Massachusetts County of)) ss			
Subscribed and sworn to before, 1999.	re me, by	the above-name	d Thomas H. Massie this	day of
		•		
		Notary Public		
		My Commissio	on Expires:	<u> </u>
		Inventor:	Walter C. Shannon III	•
Commonwealth of Massachusetts County of)) ss			
Subscribed and sworn to before, 1999.	re me, by	y the above-name	d Walter C. Shannon III this	day of
		Notary Public		
		My Commission	on Expires:	
		•		

450JSS7268/10.840051-1

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		Inventor:		
		mventor.	Loren Shih	
Commonwealth of Massachusetts County of)) ss			
Subscribed and sworn to before, 1999.	re me, by	y the above-name	d Loren Shih this _	day of
	4	Notary Public My Commission	n Expires:	
		Inventor:	(A)	Re.
State of California	,		Walter A. Aviles	
Commonwealth of Massachusetts County of San Diego)) ss			
Subscribed and sworn to befo	re me. b	v the above-name	d Walter A./Aviles	this 20 day of
January 2000	·	<u> </u>	salartn	nar
	• .	Notary Public My Commission	on Expires: Fel	04.2000
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SAN DIEGO	COUNTY	m Ī		

PATENT

REEL: 024886 FRAME: 0515

•		Inventor:	· ·	
			Thomas H. Massie	
Commonwealth of Massachusetts County of)) ss			
Subscribed and sworn to before, 1999.	re me, by	the above-named	Thomas H. Massie this	_day of
•		Notary Public My Commission	n Expires:	•
		Inventor:		
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Commonwealth of Massachusetts County of)) ss		
Subscribed and sworn to before 1999.	re me, by	the above-name	d Loren Shih this day of
		N Dublic	
		Notary Public My Commission	on Expires:
		Inventor:	Walter A. Aviles
Commonwealth of Massachusetts)) ss		
County of	,		J. WK A. Avillag this day o
Subscribed and sworn to before 1999.	re me, by	the above-name	d Walter A. Aviles this day o
		Notary Public	
		My Commission	on Expires:

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Joint	Assignment
Page	3

		Inventor: Mouth Maller Thomas H. Massie
Commonwealth of Massachusetts)	
County of Middlesex) ss	
Subscribed and sworn to befo	re me, by	the above-named Thomas H. Massie this 27th day of
JANUARY , 1999.2000		LA ALA
		Notary Public ROSERTA KTITLER
		My Commission Expires: Notary Public Commonwealth of Messachusetts
	•	My Commission Expires November 24, 2006
		Inventor: Walter C. Shannon III
		watter C. Shannon III
Commonwealth of Massachusetts	,	
County of) ss	
• .	,	
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·		Inventor:	·	<u> </u>
		•	Thomas H. Massie	
Commonwealth of Massachusetts County of Middlesex)) ss			
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		Notary Public		-
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		Inventor:	Walter C. Shannon III	WIT
Commonwealth of Massachusetts County of Middlesex)) ss			
Subscribed and sworn to before Tanuary, 1999, 2000	re me, by		ed Walter C. Shannon III this <u>27</u> Univ. 4h Andrews	day of
		Notary Public		-
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RECORDED: 08/25/2010