PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JAMES N. HAYES	10/27/2014
CHRIS W. SNYDER	10/27/2014

RECEIVING PARTY DATA

Name:	TRIMBLE NAVIGATION LIMITED	
Street Address:	935 STEWART DRIVE	
City:	SUNNYVALE	
State/Country:	CALIFORNIA	
Postal Code:	94085	

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	15706014	

CORRESPONDENCE DATA

Fax Number: (513)891-2100

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

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Correspondent Name: FREDERICK H. GRIBBELL, LLC

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ATTORNEY DOCKET NUMBER:	APA0534.US2
NAME OF SUBMITTER:	FREDERICK H. GRIBBELL
SIGNATURE:	/Fred Gribbell/
DATE SIGNED:	09/15/2017

Total Attachments: 6

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PATENT ASSIGNMENT

WHEREAS, WE, James N. Hayes, a citizen of the United States, residing at 4872 Stickley Road, Urbana, Ohio 43078, County of Champaign, and State of Ohio; and Chris W. Snyder, a citizen of the United States, residing at 1077 Wasson Road, Union City, Ohio 45390, County of Darke, and State of Ohio (hereinafter referred to as "ASSIGNORS"), have invented a TWO WAY OMNIDIRECTIONAL LENS, for which we have executed an application for Letters Patent of the United States, of even date herewith, or S/N _______, and

WHEREAS, Trimble Navigation Limited, a corporation duly organized and existing under the laws of California, having its principal place of business at 935 Stewart Drive, Sunnyvale, CA 94085 (hereinafter referred to as "ASSIGNEE"), is desirous of acquiring the entire interest therein:

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we, the said ASSIGNORS, hereby sell, assign, and transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title and interest in, to and under the Invention (wherein "Invention" includes modifications and improvements, in whole or in part) throughout the United States of America (including its territories and dependencies) and all countries foreign thereto, and said United States application and all nonprovisionals, divisions, renewals, continuations, and continuations-in-part thereof, and all Patents of the United States which may be granted thereon and all reissues, reexaminations and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said Invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models and designs which may be granted for said Invention in any country or countries foreign to the United States, and all extensions, renewals, reexaminations and reissues thereof;

TO BE HELD AND ENJOYED by said ASSIGNEE, its successors, and assigns, to the full ends of the respective terms for which said patents have been or may be granted, as fully and entirely as the same would have been held and enjoyed by us, had no sale and assignment of said interest been made.

EACH ASSIGNOR, individually, STATES the following:

As a named INVENTOR, I HEREBY DECLARE that: (a) the above-identified patent application was made or authorized to be made by me, (b) I believe that I am the original inventor or an original joint inventor of a claimed invention in the patent application, and (c) I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

Patent Assignment

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ASSIGNORS HEREBY authorize and request the Director of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

ASSIGNORS HEREBY grant the firm of FREDERICK H. GRIBBELL, LLC the power to insert in this Assignment any further identification or information which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office, or any foreign patent office, for recordation of this document.

ASSIGNORS HEREBY covenant that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

ASSIGNORS HEREBY further covenant and agree that we will: communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said Invention, and testify in any legal proceeding; sign all lawful future documents, including assignments in favor of ASSIGNEE, or its designees, as ASSIGNEE or its designee may from timeto-time present to me in order to perfect title in said Invention; execute all divisional, continuing, continuation-in-part, reissue, reexamination, renewal, and foreign applications in any country; and make all rightful oaths, and generally do everything possible to aid said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said Invention in all countries.

JOINT INVENTOR:		
Signed this 27 day of Cefober .:	2014.	
	100	es 4, Alyes
STATE OF Ohio SS	James N. Ha	yes.
COUNTY OF (hampaign)		
Before me personally appeared, person described in the above assignment, acknowledged the same to be his free act at	who signed the	, to me known to be the foregoing instrument in my presence and day and year aforesaid.
	Notary Publi	ic.
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Patent Assignment

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JOINT INVENTOR:	
Signed this <u>27</u> day of <u>OCTOBE</u>	Chris W. Snyder
STATE OF	SS:
COUNTY OF	no.
Before me personally appeared,	to me known to be the nt, who signed the foregoing instrument in my presence and t and deed, on the day and year aforesaid.
	Notary Public
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Patent Assignment

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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(c)			
Applicant/Patent Owner: James N. Hayes, et al. (inventors)			
Application No./Patent No.: New Divisional Application Filed/Issue Date: New Divisional Application			
Titled: TWO WAY OMNIDIRECTIONAL LENS			
Trimble Navigation Limited, a corporation			
(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)			
states that, for the patent application/patent identified above, it is (choose one of options 1, 2, 3 or 4 below):			
1. The assignee of the entire right, title, and interest.			
2. An assignee of less than the entire right, title, and interest (check applicable box):			
The extent (by percentage) of its ownership interest is%. Additional Statement(s) by the owners holding the balance of the interest <u>must be submitted</u> to account for 100% of the ownership interest.			
There are unspecified percentages of ownership. The other parties, including inventors, who together own the entire right, title and interest are:			
Additional Statement(s) by the owner(s) holding the balance of the interest <u>must be submitted</u> to account for the entire right, title, and interest.			
3. The assignee of an undivided interest in the entirety (a complete assignment from one of the joint inventors was made). The other parties, including inventors, who together own the entire right, title, and interest are:			
Additional Statement(s) by the owner(s) holding the balance of the interest <u>must be submitted</u> to account for the entire right, title, and interest.			
4. The recipient, via a court proceeding or the like (e.g., bankruptcy, probate), of an undivided interest in the entirety (a complete transfer of ownership interest was made). The certified document(s) showing the transfer is attached.			
The interest identified in option 1, 2 or 3 above (not option 4) is evidenced by either (choose one of options A or B below):			
A. An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 034043, Frame 0319, or for which a copy thereof is attached.			
B. A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:			
1. From: To:			
The document was recorded in the United States Patent and Trademark Office at			
Reel, Frame, or for which a copy thereof is attached.			
2. From: To:			
The document was recorded in the United States Patent and Trademark Office at			
Reel, Frame, or for which a copy thereof is attached.			

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This collection of information is required by 37 CFR 3.73(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 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.

REEL: 043605 FRAME: 0089

		STATEME	NT UNDER 37 CFR 3.7	<u>/3(c)</u>
3. From:			To:	
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	Reel	, Frame	, or for which a copy	thereof is attached.
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5. From:			To:	
	The docume	ent was recorded in the U	United States Patent and Tra	demark Office at
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6. From:			To:	
	The docume	ent was recorded in the U	United States Patent and Tra	demark Office at
	Reel	, Frame	, or for which a copy	thereof is attached.
Add	ditional document	ts in the chain of title are	listed on a supplemental sho	eet(s).
			nentary evidence of the chair ted for recordation pursuant	n of title from the original owner to the to 37 CFR 3.11.
[NOT Divisi	E: A separate co on in accordance	py (i.e., a true copy of the with 37 CFR Part 3, to	e original assignment docum record the assignment in the	nent(s)) must be submitted to Assignment records of the USPTO. See MPEP 302.08]
The undersig	ned (whose title i	s supplied below) is auth	norized to act on behalf of the	e assignee.
/Fred Grib	bell/	•		September 15, 2017
Signature				Date
Frederic	k H. Gribb	ell		33892
Printed or Typ	oed Name			Title or Registration Number

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Privacy Act Statement

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

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

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

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RECORDED: 09/15/2017