# 504568025 09/27/2017

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4614735

SUBMISSION TYPE:		NEW ASSIGNMENT	-	
NATURE OF CONVEYANCE:		ASSIGNMENT		
CONVEYING PARTY D	ΑΤΑ			
		Name		Execution Date
GURUPRASAD SOMAS	SUNDAF	AM		09/21/2017
BENJAMIN D. ZIMMER				08/17/2017
ALEXANDRA R. CUNLI	FFE			08/17/2017
MOJTABA K. ELYADEF	RANI			09/09/2017
ARASH SANGARI				08/16/2017
EVAN J. RIBNICK				09/08/2017
RECEIVING PARTY DA				
Name:		NOVATIVE PROPERTIES (	COMPANY	
Street Address:	P.O. B	OX 33427		
City:	SAINT	PAUL		
State/Country:	MINNE	ESOTA		
Postal Code:	55133	-3427		
PROPERTY NUMBERS	5 Total:			
Property Type		Number		
Application Number:		15597479		
Fax Number:		(651)736-3833		
Correspondence will b		o the e-mail address first;		
U /	provide	d; if that is unsuccessful,	it will be sent via	a US Mail.
Phone:		651-733-1500 pibiok@mmm.com		
			k@mmm.com NNOVATIVE PROPERTIES COMPANY	
•		P.O. BOX 33427		
Address Line 4:		SAINT PAUL, MINNESOTA	A 55133-3427	
ATTORNEY DOCKET N	UMBER	78444US002		
NAME OF SUBMITTER:		PAULA J. BICK	PAULA J. BICK	
SIGNATURE:		/Paula J. Bick/	/Paula J. Bick/	
DATE SIGNED:		09/27/2017		

This document serves as an Oath/Declaration (37 CFR 1.63).

### **Total Attachments: 6**

source=Declaration\_Assignment\_Executed\_78444US002#page1.tif source=Declaration\_Assignment\_Executed\_78444US002#page2.tif source=Declaration\_Assignment\_Executed\_78444US002#page3.tif source=Declaration\_Assignment\_Executed\_78444US002#page4.tif source=Declaration\_Assignment\_Executed\_78444US002#page5.tif source=Declaration\_Assignment\_Executed\_78444US002#page5.tif

DECLARATION AND ASSIGNMENT,
FOR UTILITY OR DESIGN
PATENT APPLICATION (37 CFR § 1.63)

As a below named inventor, I believe I am an original inventor or an original joint inventor of a claimed invention in the application and for which a patent is sought on the invention entitled:

### AUTOMATIC ALIGNMENT AND ORIENTATION OF DIGITAL 3D DENTAL ARCH PAIRS

The specification of which:

is attached hereto;

$\boxtimes$	was filed on as United States A	May 17, 2017 pplication No.	15/597,479
	filed on	International Application No.	

The above-identified application was made or authorized to be made by me.

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 5 years, or both.

In addition, for good and valuable consideration, receipt of which is acknowledged, I have agreed to assign and transfer and do hereby assign and transfer unto the 3M INNOVATIVE PROPERTIES COMPANY, a wholly-owned subsidiary of 3M COMPANY, and a corporation of Delaware, having its principal office at Saint Paul, Minnesota, its successors and assigns, the entire right, title, and interest in and to the said invention and application, and in and to any division or continuation (in whole or in part) of said application, and in and to any and all improvements in the said invention made by me or made jointly with others (provided any such improvement is made during, or within one year after the termination of, my employment with 3M COMPANY and any of its existing or future subsidiaries), and in and to any and all Letters Patent, reexaminations, reissues, or extensions thereof, of the United States of America and countries foreign thereto (including the right to apply for Letters Patent, Utility Models, or Inventors' Certificates in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), which have been or may be granted thereon or on any divisional, continuation (in whole or in part), renewal, reexamination, reissue, or other or further application based in whole or in part upon the said invention or improvements thereon, to be held and enjoyed as fully and exclusively as they would have been by me had this assignment and transfer not been made;

I do further agree for myself and for my heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as I lawfully may, that may be deemed necessary by said Company, its successors, assigns, and nominees, fully to secure its right, title, and interest as aforesaid and to obtain or maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all countries; and

I do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of the said applications, to said 3M Innovative Properties Company, as the assignee of the entire right, title, and interest therein.

Legal Name of Inventor	
Guruprasad Somasundaram	
Inventor's Signature:	Date:
h-t-	9/21/2017

DECLARATION AND ASSIGNMENT,
FOR UTILITY OR DESIGN
PATENT APPLICATION (37 CFR § 1.63)

1	8.1 A -
Case	TNEY -
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78444US002

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I do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of the said applications, to said 3M Innovative Properties Company, as the assignee of the entire right, title, and interest therein.

Legal Name of Inventor:	
Benjamin D. Zimmer	
Inventor's Signature	Date: 2017-08-17

#### DECLARATION AND ASSIGNMENT, FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR § 1.63)

Case No:

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Legal Name of Inventor:	
Alexandra R. Cunliffe	
Inventor's Signature	Date:
Cire Uill	8/17/2017
3. Z	

FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR § 1.63)	Case No:	78444US002	
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REEL: 043715 FRAME: 0044

### DECLARATION AND ASSIGNMENT, FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR § 1.63)

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Case	NO:

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Legal Name of Inventor:		
Arash Sangari		
Inventor's Signature;	Date:	
<u>A. Sangari</u>	08,16,2017	

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The above-identified application was made or authorized to be made by me.

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 5 years, or both.

In addition, for good and valuable consideration, receipt of which is acknowledged, I have agreed to assign and transfer and do hereby assign and transfer unto the 3M INNOVATIVE PROPERTIES COMPANY, a wholly-owned subsidiary of 3M COMPANY, and a corporation of Delaware, having its principal office at Saint Paul, Minnesota, its successors and assigns, the entire right, title, and interest in and to the said invention and application, and in and to any division or continuation (in whole or in part) of said application, and in and to any and all improvements in the said invention made by me or made jointly with others (provided any such improvement is made during, or within one year after the termination of, my employment with 3M COMPANY and any of its existing or future subsidiaries), and in and to any and all Letters Patent, reexaminations, reissues, or extensions thereof, of the United States of America and countries foreign thereto (including the right to apply for Letters Patent, Utility Models, or Inventors' Certificates in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), which have been or may be granted thereon or on any divisional, continuation (in whole or in part), renewal, reexamination, reissue, or other or further application based in whole or in part upon the said invention or improvements thereon, to be held and enjoyed as fully and exclusively as they would have been by me had this assignment and transfer not been made;

I do further agree for myself and for my heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as I lawfully may, that may be deemed necessary by said Company, its successors, assigns, and nominees, fully to secure its right, title, and interest as aforesaid and to obtain or maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all countries; and

I do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of the said applications, to said 3M Innovative Properties Company, as the assignee of the entire right, title, and interest therein.

Legal Name of Inventor:			
Evan J. Ribnick			
Inventor's Signature:			Date:
	6	161	9/8/2017

PATENT REEL: 043715 FRAME: 0046

**RECORDED: 09/27/2017**