504587564 10/10/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4634276

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JAEWON KIM	09/20/2017
JUSTIN M. JOHNSON	09/20/2017
CRAIG W. LINDSAY	10/03/2017
DIPANKAR GHOSH	09/02/2017

RECEIVING PARTY DATA

Name:	3M INNOVATIVE PROPERTIES COMPANY
Street Address:	P.O. BOX 33427
City:	ST. PAUL
State/Country:	MINNESOTA
Postal Code:	55133-3427

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15565597

CORRESPONDENCE DATA

Fax Number: (651)736-3833

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.

Phone: 651-733-1500 Email: lengel@mmm.com

Correspondent Name: 3M INNOVATIVE PROPERTIES COMPANY

Address Line 1: PO BOX 33427

Address Line 4: ST. PAUL, MINNESOTA 55133-3427

ATTORNEY DOCKET NUMBER:	76283US009
NAME OF SUBMITTER:	LINDA ENGEL
SIGNATURE:	/Linda Engel/
DATE SIGNED:	10/10/2017
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 4

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PATENT 504587564 REEL: 043826 FRAME: 0963

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

Case No:

76283US009

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:

V	NAVEGUIDE WITH HIGH E	DIELECTRIC	RESONATORS	
The specification of which	1:			
is attached hereto;				
was filed on as United States App	plication No.			
	International Application No. April 18, 2016		PCT/US2016/028038	
The above-identified appl	ication was made or authorized to	o be made by m	ne.	
fine or imprisonment of no In addition, for good and v	at any willful false statement made of more than 5 years, or both. valuable consideration, receipt of	which is acknow	wledged, I have agreed to a	ssion and transfer
3M COMPANY, and a cord assigns, the entire right, to continuation (in whole or it is me or made jointly with the commination of, my employ all Letters Patent, reexamplements (including the right own name and to claim and the mational conventions, continuation (in whole or it part upon the said inventionave been by me had this	I transfer unto the 3M INNOVATI reporation of Delaware, having its little, and interest in and to the said in part) of said application, and in others (provided any such improvement with 3M COMPANY and arbinations, reissues, or extensions to apply for Letters Patent, Utility priority rights for such foreign at treaties, or otherwise), which have part), renewal, reexamination, ron or improvements thereon, to be assignment and transfer not been	principal office a d invention and and to any and ovement is mad ny of its existing thereof, of the L y Models, or Inv applications to v ve been or may reissue, or other e held and enjo en made;	at Saint Paul, Minnesota, its application, and in and to ar all improvements in the saine during, or within one year or future subsidiaries), and Jnited States of America and rentors' Certificates in foreig which such applications are on the begranted thereon or on ar or further application based yed as fully and exclusively	successors and my division or division or division or after the in and to any and divisional for countries in its entitled under my divisional, din whole or in as they would
consideration any further a hat may be deemed nece	elf and for my heirs, executors, at applications, assignments, and do assary by said Company, its succ and to obtain or maintain Letters	ocuments, and t essors, assigns	to perform such other acts a , and nominees, fully to seci	is I lawfully may, ure its right, title.
do hereby authorize and granted upon any of the saite, and interest therein.	request the Commissioner of Par aid applications, to said 3M Innov	tents to issue a rative Properties	ny and all Letters Patent whi s Company, as the assignee	ich may be of the entire right
Legal Name of Inventor:				
Jaewon Kim				· ·
Inventor's Signature:		Date:	20/17	

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

Case No:

76283US009

	WAVEGUIDE WITH	HIGH DIELECT	RIC RESONATORS
The specification of w	hich:		
is attached here	eto;		
was filed on as United State.	s Application No.		
is identified as F	PCT International Application April 18, 2016	n No.	PCT/US2016/028038
The above-identified a	pplication was made or aut	horized to be made	by me.
I hereby acknowledge fine or imprisonment of	that any willful false statem f not more than 5 years, or	nent made in this ded both.	claration is punishable under 18 U.S.C. 1001 by
assigns, the entire right continuation (in whole by me or made jointly termination of, my empall Letters Patent, reex thereto (including the rown name and to clain international convention continuation (in whole part upon the said invelopment been by me had to further agree for method to further agree for met	it, title, and interest in and to rin part) of said application with others (provided any subloyment with 3M COMPAN aminations, reissues, or exight to apply for Letters Path any priority rights for such ns, treaties, or otherwise), for in part), renewal, reexamination or improvements there this assignment and transfernself and for my heirs, exempted.	o the said invention in, and in and to any uch improvement is IY and any of its existensions thereof, of ent, Utility Models, or foreign applications which have been or ination, reissue, or eon, to be held and er not been made; cutors, and administ	fice at Saint Paul, Minnesota, its successors and and application, and in and to any division or and all improvements in the said invention made made during, or within one year after the sting or future subsidiaries), and in and to any and the United States of America and countries foreign in Inventors' Certificates in foreign countries in its to which such applications are entitled under may be granted thereon or on any divisional, other or further application based in whole or in enjoyed as fully and exclusively as they would trators, to execute and deliver without further
that may be deemed n	ecessary by said Company	, its successors, ass	and to perform such other acts as I lawfully may, igns, and nominees, fully to secure its right, title, ty Models, or Inventors' Certificates in any and all
I do hereby authorize a granted upon any of th title, and interest therei	e said applications, to said	ner of Patents to isso 3M Innovative Prope	ue any and all Letters Patent which may be erties Company, as the assignee of the entire right
Legal Name of Inver	Mor:		
Justin M. Johns	on		nunua
Inventor's Signature		Date: 9/20/201	7

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

Case No:

76283US009

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application and for which a patent is sought on the invention entitled:	

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The specification of	which:	
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was filed on as United State	es Application No.	
is identified as filed on	PCT International Application No. April 18, 2016	PCT/US2016/028038
The above-identified	application was made or authorized to be	made by me.
l hereby acknowledg fine or imprisonment	pe that any willful false statement made in of not more than 5 years, or both.	his declaration is punishable under 18 U.S.C. 1001 by
and do nereby assig 3M COMPANY, and assigns, the entire riq continuation (in whol by me or made jointh	n and transfer unto the 3M INNOVATIVE f a corporation of Delaware, having its princ ght, title, and interest in and to the said inv e or in part) of said application, and in and y with others (provided any such improven	ch is acknowledged, I have agreed to assign and transfer PROPERTIES COMPANY, a wholly-owned subsidiary of sipal office at Saint Paul, Minnesota, its successors and ention and application, and in and to any division or to any and all improvements in the said invention made sent is made during, or within one year after the its existing or future subsidiaries), and in and to any and

ir а 3 3 C þ١ te 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.

regalivame of inventor	
Craig W. Lindsay	
Inventor's Signature:	Date:
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DECLARATION AND ASSIGNMENT, FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR § 1.63)

Case No:

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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:

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med on	April 18, 2016	
The above-identified	application was made or authorized t	to be made by me.
I hereby acknowledge fine or imprisonment	that any willful false statement mad of not more than 5 years, or both.	le in this declaration is punishable under 18 U.S.C. 1001 by
3M COMPANY, and a assigns, the entire rig continuation (in whole by me or made jointly termination of, my em all Letters Patent, ree thereto (including the own name and to clair international convention continuation (in whole part upon the said invihave been by me had	a corporation of Delaware, having its ht, title, and interest in and to the said or in part) of said application, and in with others (provided any such improployment with 3M COMPANY and as examinations, reissues, or extensions right to apply for Letters Patent. Utility many priority rights for such foreign a ons, treaties, or otherwise), which has or in part), renewal, reexamination, renewal, reexamination, this assignment and transfer not beet	
consideration any funt that may be deemed r	ner applications, assignments, and di recessary by said Company, its succ	nd administrators, to execute and deliver without further ocuments, and to perform such other acts as I lawfully may, essors, assigns, and nominees, fully to secure its right, title, Patent, Utility Models, or Inventors' Certificates in any and all
I do hereby authorize a granted upon any of the litle, and interest there	ie said applications, to said 3M Innov	itents to issue any and all Letters Patent which may be vative Properties Company, as the assignee of the entire right,
granted upon any or tr	e said applications, to said 3M Innovin.	itents to issue any and all Letters Patent which may be vative Properties Company, as the assignee of the entire right
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title, and interest there Legal Name of Invent	e said applications, to said 3M Innovin.	Itents to issue any and all Letters Patent which may be vative Properties Company, as the assignee of the entire right. Date:

PATENT REEL: 043826 FRAME: 0968

RECORDED: 10/10/2017