# 506878367 09/20/2021

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6925188

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
EMILIAN STOIMENOV	07/22/2019
RUI ZHAO	07/22/2019
KAUSTUBH PRAKASH KALGAONKAR	08/16/2019
IVAYLO ANDREANOV ENCHEV	08/15/2019
KHURAM SHAHID	08/07/2019
ANTHONY PHILLIP STARK	07/22/2019
GUOLI YE	08/25/2019
MAHADEVAN SRINIVASAN	07/26/2019
YIFAN GONG	07/25/2019
HOSAM ADEL KHALIL	07/22/2019

## **RECEIVING PARTY DATA**

MICROSOFT TECHNOLOGY LICENSING, LLC	
Street Address: ONE MICROSOFT WAY	
City: REDMOND	
State/Country:	WASHINGTON
Postal Code:	98052

# **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	17474829

## **CORRESPONDENCE DATA**

Fax Number:

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.

**Email:** usdocket@microsoft.com

Correspondent Name: SCHWEGMAN LUNDBERG & WOESSNER, P.A.

Address Line 1: P.O. BOX 2938

Address Line 4: MINNEAPOLIS, MINNESOTA 55402

ATTORNEY DOCKET NUMBER:	406848-US-CNT/1777.D17US2
NAME OF SUBMITTER:	TYLYN MOORE

PATENT 506878367 REEL: 057546 FRAME: 0013

SIGNATURE:	/tylyn moore/				
DATE SIGNED:	09/20/2021				
Total Attachments: 21					
source=1777D17US2_ASSN#page1.tif					
source=1777D17US2_ASSN#page2.tif					
source=1777D17US2_ASSN#page3.tif					
source=1777D17US2_ASSN#page4.tif					
source=1777D17US2_ASSN#page5.tif					
source=1777D17US2_ASSN#page6.tif					
source=1777D17US2_ASSN#page7.tif					
source=1777D17US2_ASSN#page8.tif					
source=1777D17US2_ASSN#page9.tif					
source=1777D17US2_ASSN#page10.tit					
source=1777D17US2_ASSN#page11.tit					
source=1777D17US2_ASSN#page12.tit					
source=1777D17US2_ASSN#page13.tit					
source=1777D17US2_ASSN#page14.tit					
source=1777D17US2_ASSN#page15.tit					
source=1777D17US2_ASSN#page16.tit					
source=1777D17US2_ASSN#page17.tit					
source=1777D17US2_ASSN#page18.tit					
source=1777D17US2_ASSN#page19.til					
source=1777D17US2_ASSN#page20.tit					
source=1777D17US2_ASSN#page21.tit					

PATENT REEL: 057546 FRAME: 0014

### RECORDATION FORM COVER SHEET PATENTS ONLY

Attv Ref/Docket No.: 406848-US-CNT (1777.D17US2) Patent and Trademark Office To the Director of the U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof. Name and address of receiving party(ies): 1. Name of conveying party(ies): Name: Microsoft Technology Licensing, LLC Emilian Stoimenov, Rui Zhao, Kaustubh Prakash Kalgaonkar, Ivaylo Andreanov Enchev, Khuram Shahid, Street Address: One Microsoft Way Anthony Phillip Stark, Guoli Ye, Mahadevan Srinivasan, City: Redmond State: WA Zip Country: United States of America Yifan Gong, Hosam Adel Khalil Zip: 98052 Additional name(s) of conveying party(ies) attached? Additional name(s) & address(es) attached? []Yes [ ]Yes [X]No [X]No 3. Nature of conveyance: [ ] Merger [X] Assignment [ ] Security Agreement [ ] Change of Name [ ] Other Execution Date: July 22, 2019, July 22, 2019, August 16, 2019, August 15, 2019, August 7, 2019, July 22, 2019, August 25, 2019, July 26, 2019, July 25, 2019, July 26, 2019 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: B. Patent No.(s) A. Patent Application No.(s) Serial No. 17/474,829 Additional numbers attached? [ ]Yes [X]No 6. Total number of applications and patents involved: 1 5. Name and address of party to whom correspondence 7. Total fee (37 CFR 3.41):\$ 0.00 concerning document should be mailed: Name: Rigel J. Menard **ПEnclosed** [Authorized to be charged to deposit account Address: 19-0743 Schwegman Lundberg & Woessner, P.A. P.O. Box 2938 Please charge any additional fees or credit any over Minneapolis, Minnesota 55402 payments to our Deposit Account No.: 19-0743 DO NOT USE THIS SPACE 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. Rigel J. Menard/Reg. No. 66,520 /Rigel J Menard/ 9/17/2021 Name of Person Signing Date Signature Total number of pages including cover sheet: 21

Mail documents to be recorded with required cover sheet information to:

**Commissioner of Patents and Trademarks** Mail Stop Assignment Recordation Services P.O. Box 1450 Alexandria, VA 22313-1450

**PATENT** REEL: 057546 FRAME: 0015

1 8	Emili	an Stoin	nenov (".	ASSIGNOR")	am	the	original	invent	or or	an	orig	jina	ıl joint
inventor	of	subject	matter	("INVENTIO	N")	disc	dosed a	and/or	claim	ied	in	a	patent
application	on e	ntitled "⊊	<u> DN-DEVI</u>	CE CUSTOM	WA	<u>KE W</u>	<u> (ORD DE</u>	TECTIO	<u>N</u> ", w	hich	¥.,		

$\boxtimes$	will be filed. ASSIGNOR hereby authorizes, and requests
	ASSIGNEE'S legal representative, Microsoft Technology Licensing
	LLC, One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S
	LEGAL REPRESENTATIVES), to insert here in parentheses (filed
	on 25 July 2019 and given Application No. 16/522,416 by
	the following Office United States Patent Office this
	APPLICATION's Application No., filing date, and Office, when known
	was filed on and was given Application No by the
	following Office "Patent Office ";

Microsoft Technology Licensing, LLC, a Washington limited liability company, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to, and is desirous of acquiring, the entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES"));

ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S LEGAL REPRESENTATIVES to insert the Application No., filing date, and Office into the following table for any APPLICATION DERIVATIVES after they are known;

00000000	Application No.	Filing Date	Office
0000000000			
Assessed.			

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to the ASSIGNEE, ASSIGNOR's entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES"));

	07/2.2 <b>\</b> 201
Inventor's Signature	Date
Emilian Stoimenov	tauruan Voesanse Gamesia
Printed Name in English	Printed Name in Native Language
	(if other than English)

I Rui Zhao ("ASSIGNOR") am the original inventor or an original joint inventor of subject matter ("INVENTION") disclosed and/or claimed in a patent application entitled "ON-DEVICE CUSTOM WAKE WORD DETECTION", which:

$\boxtimes$	will be filed. ASSIGNOR hereby authorizes, and	d requests,
	ASSIGNEE'S legal representative, Microsoft Technolog	γ Licensing,
	LLC, One Microsoft Way, Redmond, Washington 98052	(ASSIGNEE'S
	LEGAL REPRESENTATIVES), to insert here in parent	heses (filed
	on 25 July 2019 and given Application No. 16/52	<u>2,416</u> by
	the following Office United States Patent Office	this
	APPLICATION's Application No., filing date, and Office, w	hen known;
	was filed on and was given Application No	_ by the
	following Office "Patent Office ";	

Microsoft Technology Licensing, LLC, a Washington limited liability company, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to, and is desirous of acquiring, the entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES"));

ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S LEGAL REPRESENTATIVES to insert the Application No., filing date, and Office into the following table for any APPLICATION DERIVATIVES after they are known;

Application No.	Filing Date	Office

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to the ASSIGNEE, ASSIGNOR's entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES"));

走之花	7/22/2019
Inventor's Signature	Date
Rui Zhao	LX L
Printed Name in English	Printed Name in Native Language
	(if other than English)

PATENT ASSIGNMENT

MS Docket No.: 406848-US-NP

original join	t inventor of subjec		the original inventor or an sclosed and/or claimed in a RD DETECTION", which:			
	ASSIGNEE'S legal r LLC, One Microsoft LEGAL REPRESENT on the following O	ASSIGNOR hereby authorepresentative, Microsoft Towns (1994) Washington (1994) Washington (1994) Washington (1994) Washington (1994) Washing date, and given Application (1994) Washing date, and glication (1994) Washing date, and glication (1994) Washing (1994) W	Fechnology Licensing, on 98052 (ASSIGNEE'S in parentheses (filed Noby) this			
		5, 2019 and was given App following Office " <u>US Pater</u>				
behalf of itse of acquiring priority, in t derived ther United State	Microsoft Technology Licensing, LLC, a Washington limited liability company, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to, and is desirous of acquiring, the entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES"));					
ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S LEGAL REPRESENTATIVES to insert the Application No., filing date, and Office into the following table for any APPLICATION DERIVATIVES after they are known;						
Application	No.	Filing Date	Office			
	***************************************					
	www.					
		ARABARAKARARARA				

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to the ASSIGNEE, ASSIGNOR's entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES"));

taliano de la companya della company	VF.
Inventor's Signature	Date 10, 2019
Kaustubh Prakash Kalgaonkar	
Printed Name in English	Printed Name in Native Language
	(if other than English)

l Ivaylo	Andreanov E	ichev ("ASSIGNOR	) am the origin	d inventor or an o	riginal
joint inventor	of subject m	atter ("INVENTION	i') disclosed and	for claimed in a	patent
application ent	itled "ON-DE	VICE CUSTOM WAR	CE WORD DETECT	FION", which	

will be filed. ASSIGNOR hereby authorizes, and reques-	ts.
ASSIGNEE'S legal representative, Microsoft Technology Licensin	Ŋ,
LLC, One Microsoft Way, Redmond, Washington 98052 (ASSIGNE)	£'5
LEGAL REPRESENTATIVES), to insert here in parentheses (fil	ed
onand given Application No	by
the following Office	his
APPLICATION's Application No., filling date, and Office, when know	

was filed on July 25, 2019 and was given Application No 16/522,416 by the following Office "US Patent Office":

Microsoft Technology Licensing, LLC, a Washington limited liability company, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to, and is desirous of acquiring, the entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES")).

ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S LEGAL REPRESENTATIVES to insert the Application No., filing date, and Office into the following table for any APPLICATION DERIVATIVES after they are known.

Application No.	Filing Date	Office
	***************************************	***************************************

Page 1 of 2

REEL: 057546 FRAME: 0022

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to the ASSIGNEE. ASSIGNOR's entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES")).

ASSIGNOR agrees to execute all instruments and documents required for the making and prosecution of the APPLICATION (and APPLICATION DERIVATIVES), for litigation regarding letters patent derived therefrom, and for the purpose of protecting and perfecting title to the APPLICATION (and APPLICATION DERIVATIVES).

Inventor's Signature

Ivaylo Andreanov Enchev

Printed Name in English

08/15/2013

Date

UBAÑNO EHYEB

Printed Name in Native Language

(if other than English)

	Application No.	Filing Date	Office	
***************************************				
***************************************				
***************************************				
***************************************				

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to the ASSIGNEE, ASSIGNOR's entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES"));

53.3	
Lhur SZ	08/07/2014
Inventor's Signature	Date
Khuram Shahid	
Printed Name in English	Printed Name in Native Language
	(if other than English)

1/	Anth	ony Phill	ip Stark	("ASSIGN	IOR") a	m the	origin	ıal inven	tor or an	orig	gina	al joint
inventor	of	subject	matter	("INVEN	TION")	discl	osed	and/or	claimed	in	a	patent
applicati	on e	ntitled "Ω	N-DEVI	CE CUST	<u>OM WA</u>	KE W	ORD D	ETECTIO	<u>N</u> ", which			

$\boxtimes$	will be filed. ASSIGNOR hereby authorizes, and requests,
	ASSIGNEE'S legal representative, Microsoft Technology Licensing,
	LLC, One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S
	LEGAL REPRESENTATIVES), to insert here in parentheses (filed
	on <u>25 July 2019</u> and given Application No. <u>16/522,416</u> by
	the following Office United States Patent Office ) this
	APPLICATION's Application No., filing date, and Office, when known;
	was filed on and was given Application No by the
	following Office " Patent Office ";

Microsoft Technology Licensing, LLC, a Washington limited liability company, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to, and is desirous of acquiring, the entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES"));

ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S LEGAL REPRESENTATIVES to insert the Application No., filing date, and Office into the following table for any APPLICATION DERIVATIVES after they are known;

	Application No.	Filing Date	Office
Accessors.			
4			
20000000			

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to the ASSIGNEE, ASSIGNOR's entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES"));

C. J.	7-22-20/9
Inventor's Signature	Date
Anthony Phillip Stark	
Printed Name in English	Printed Name in Native Language
	(if other than English)
	And the property of the control of t

	l") disclosed and/or claim	or or an original joint inventor of ed in a patent application entitled h:			
ASSIGNEE'S le LLC, One Micr LEGAL REPRE on the following	gal representative, Micrososoft Way, Redmond, Wash SENTATIVES), to insert hand given Applica Office	tuthorizes, and requests, soft Technology Licensing, hington 98052 (ASSIGNEE'S tere in parentheses (filed tion No			
	uly 25, 2019 and was giver by the following Office " <u>US</u>				
Microsoft Technology Licensing, LLC, a Washington limited liability company, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to, and is desirous of acquiring, the entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES"));					
The state of the s	lo., filing date, and Office	SIGNEE'S LEGAL REPRESENTATIVES into the following table for any			
Application No.	Filing Date	Office			

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to the ASSIGNEE, ASSIGNOR's entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES")):

Gurli Ye	Ang 25. 20/9
Inventor's Signature	Date
Guoli Ye	of 13) /
Printed Name in English	Printed Name in Native Language
	(if other than English)

inventor of	subject matter ("l		si inventor or an original joint nd/or claimed in a patent <u>[ECTION</u> ", which:		
	ASSIGNEE'S legal r LLC, One Microsoft LEGAL REPRESENT on the following Of	ASSIGNOR hereby authorepresentative, Microsoft way, Redmond, Washingt ATIVES), to insert here and given Application ffice	Technology Licensing, on 98052 (ASSIGNEE'S in parentheses (filed Noby) this		
⊠		5. 2019 and was given App following Office " <u>US Pater</u>			
Microsoft Technology Licensing, LLC, a Washington limited liability company, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to, and is desirous of acquiring, the entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES"));					
ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S LEGAL REPRESENTATIVES to insert the Application No., filing date, and Office into the following table for any APPLICATION DERIVATIVES after they are known;					
Application	No.	Filing Date	Office		
<b>}</b>			· · · · · · · · · · · · · · · · · · ·		

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to the ASSIGNEE, ASSIGNOR's entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES"));

S. Mahadama	07/26/2019
Inventor's Signature	Date
Mahadevan Srinivasan	
Printed Name in English	Printed Name in Native Language
	(if other than English)

subject matt	er ("INVENTION") d		or an original joint inventor o a patent application entitled
	ASSIGNEE'S legal LLC, One Microsof LEGAL REPRESENT on the following O	ASSIGNOR hereby authorepresentative, Microsoft tway, Redmond, Washing (ATIVES), to insert here and given Application officeand plication plication No., filing date, as	Technology Licensing, ton 98052 (ASSIGNEE'S in parentheses (filed Noby) this
$\boxtimes$		<u>5, 2019</u> and was given Ap <sub>l</sub> e following Office " <u>US Pate</u>	
behalf of itse of acquiring, priority, in the derived there	If and its successor , the entire and ex ie INVENTION and t efrom, such as con	s and assigns ("ASSIGNEE") clusive rights, title and in he APPLICATION (and all o tinuing applications, in wh	limited liability company, on, is entitled to, and is desirous terest, including the right of ther applications and patents tole or in part, in and for the PLICATION DERIVATIVES"));
to insert the		iling date, and Office into	EE'S LEGAL REPRESENTATIVES  the following table for any
Application	No.	Filing Date	Office
<u> </u>		<i>\$</i>	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to the ASSIGNEE, ASSIGNOR's entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES")):

ASSIGNOR agrees to execute all instruments and documents required for the making and prosecution of the APPLICATION (and APPLICATION DERIVATIVES), for litigation regarding letters patent derived therefrom, and for the purpose of protecting and perfecting title to the APPLICATION (and APPLICATION DERIVATIVES).

Inventor's Signature

Yifan Gong

Printed Name in English

144 251 601 Pare 7.

Printed Name in Native Language

(if other than English)

	Hos	am Ad	el Khali	l ("ASSIG	NOR") a	am the	origina	l invent	or or a	an o	rigin	al joint
invento	r of	subje	ct mati	er ("INV	ENTION	l") disc	losed	and/or	claime	d i	n a	patent
application entitled "ON-DEVICE CUSTOM WAKE WORD DETECTION", which:												

$\boxtimes$	will be filed. ASSIGNOR hereby authorizes, and requi	ests,							
	ASSIGNEE'S legal representative, Microsoft Technology Licens	sing,							
	LLC, One Microsoft Way, Redmond, Washington 98052 (ASSIGNEE'S								
	LEGAL REPRESENTATIVES), to insert here in parentheses (filed								
	on 25 July 2019 and given Application No. 16/522,416	by							
	the following Office United States Patent Office	this							
	APPLICATION's Application No., filing date, and Office, when kno	)wn;							
	was filed on and was given Application No by the	<u>.</u>							
	following Office "Patent Office ";	ŕ							

Microsoft Technology Licensing, LLC, a Washington limited liability company, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to, and is desirous of acquiring, the entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES"));

ASSIGNOR hereby authorizes, and requests, ASSIGNEE'S LEGAL REPRESENTATIVES to insert the Application No., filing date, and Office into the following table for any APPLICATION DERIVATIVES after they are known:

******	Application No.	Filing Date	Office
····			
Å			

PATENT ASSIGNMENT MS Docket No.: 406848-US-NP

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns and transfers to the ASSIGNEE, ASSIGNOR's entire and exclusive rights, title and interest, including the right of priority, in the INVENTION and the APPLICATION (and all other applications and patents derived therefrom, such as continuing applications, in whole or in part, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES"));

L. 11	7/22/2019		
Inventor's Signature	Date		
Hosam Adel Khalil			
Printed Name in English	Printed Name in Native Language		
	(if other than English)		