10/16/2018 505144666

PATENT ASSIGNMENT COVER SHEET

EPAS ID: PAT5191432

Electronic Version v1.1 Stylesheet Version v1.2

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
	Corrective Assignment to correct the ATTORNEY DOCKET NUMBER TO 0097749-992US0 RECORDED UNDER APPLICATION NUMBER 14578786 previously recorded on Reel 046759 Frame 0082. Assignor(s) hereby confirms the ASSIGNMENT.

CONVEYING PARTY DATA

Name	Execution Date
ANURAG WINDLASS GUPTA	07/29/2015
TIMOTHY ANDREW RATH	01/28/2015
SRINIVASAN SUNDAR RAGHAVAN	01/21/2015
SANTOSH KALKI	01/28/2015

RECEIVING PARTY DATA

Name:	AMAZON TECHNOLOGIES, INC.		
Street Address:	P.O. BOX 81226		
City:	SEATTLE		
State/Country:	WASHINGTON		
Postal Code:	98108-1226		

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14578786

CORRESPONDENCE DATA

Fax Number: (206)757-7700

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: 2066223150

PatentDocket@dwt.com, AMZNPatents@dwt.com, Email:

SamanthaTaylor@dwt.com, TraciHanson@dwt.com

Correspondent Name: DAVIS WRIGHT TREMAINE LLP - ATI Address Line 1: 1201 THIRD AVENUE SUITE 2200 Address Line 4: SEATTLE, WASHINGTON 98101

ATTORNEY DOCKET NUMBER:	0097749-992US0	
NAME OF SUBMITTER:	SUBMITTER: DAVID C. SCHLEIFER	
SIGNATURE:	/David C. Schleifer/	
DATE SIGNED:	10/16/2018	
	This document serves as an Oath/Declaration (37 CFR 1.63).	

PATENT REEL: 047242 FRAME: 0870 505144666

Total Attachments: 11		
source=2018-10-16_P17324-US0097749-992US0Corrective_AssignmentPrivileged_and_Confid	dential_#paç	1.titهٔو
source=2018-10-16_P17324-US0097749-992US0Corrective_AssignmentPrivileged_and_Confid	dential_#paç	2.titچو
source=2018-10-16_P17324-US0097749-992US0Corrective_AssignmentPrivileged_and_Confid	dential_#paç	յ ¢ 3.tii
source=2018-10-16_P17324-US0097749-992US0Corrective_AssignmentPrivileged_and_Confid	dential_#paç	4.ti1 ۇ ط
source=2018-10-16_P17324-US0097749-992US0Corrective_AssignmentPrivileged_and_Confid	dential_#paç	յ ¢ 5.tii
source=2018-10-16_P17324-US0097749-992US0Corrective_AssignmentPrivileged_and_Confidence and the source are sourced as a second confidence and the source are sourced as a second confidence and the source are sourced as a second confidence are sourced as a	dential_#paç	յ ∳ 6.tii
source=2018-10-16_P17324-US0097749-992US0Corrective_AssignmentPrivileged_and_Confid	dential_#paç	7.ti1 ۇ ر
source=2018-10-16_P17324-US0097749-992US0Corrective_AssignmentPrivileged_and_Confid	dential_#paç	8.titهُو
source=2018-10-16_P17324-US0097749-992US0Corrective_AssignmentPrivileged_and_Confid	dential_#paç	9.titو ۇ ز
source=2018-10-16_P17324-US0097749-992US0Corrective_AssignmentPrivileged_and_Confid	dential_#paç	յ ∳ 10.՝
source=2018-10-16 P17324-US 0097749-992US0 Corrective Assignment Privileged and Confid	dential #pac	ւե11։

PATENT REEL: 047242 FRAME: 0871

505018433 07/24/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5065181

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the ASSIGNMENT RECORDED UNDER INCORRECT APPLICATION NUMBER 14578841 previously recorded on Reel 037536 Frame 0245. Assignor(s) hereby confirms the ASSIGNMENT.

CONVEYING PARTY DATA

Name	Execution Date
ANURAG WINDLASS GUPTA	07/29/2015
TIMOTHY ANDREW RATH	01/28/2015
SRINIVASAN SUNDAR RAGHAVAN	01/21/2015
SANTOSH KALKI	01/28/2015

RECEIVING PARTY DATA

Name:	AMAZON TECHNOLOGIES, INC.	
Street Address:	P.O. BOX 81226	
City:	SEATTLE	
State/Country:	WASHINGTON	
Postal Code:	98108-1226	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14578786

CORRESPONDENCE DATA

Fax Number: (206)757-7700

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: 2066223150

Email: PatentDocket@dwt.com, AMZNPatents@dwt.com,

SamanthaTaylor@dwt.com, TraciHanson@dwt.com

Correspondent Name: DAVIS WRIGHT TREMAINE LLP - ATI Address Line 1: 1201 THIRD AVENUE SUITE 2200 SEATTLE, WASHINGTON 98101

ATTORNEY DOCKET NUMBER:	0097749 993US0 <u>0097749-992US0</u>	
NAME OF SUBMITTER:	DAVID C. SCHLEIFER	
SIGNATURE:	/David C. Schleifer/	
DATE SIGNED: 07/24/2018		
	This document serves as an Oath/Declaration (37 CFR 1.63).	

PATENT 505018433 REEL: 04**8259** FRAME: 08**8**2

Total Attachments: 9				
source=2018-07-24(0097749-993US0_	_Corrective_	_Assignment_as_Filed	Privileged_and_Confidential_#page1. t f
source=2018-07-24(0097749-993US0_	_Corrective_	_Assignment_as_Filed	Privileged_and_Confidential_#page2.tf
source=2018-07-24(0097749-993US0_	_Corrective_	_Assignment_as_Filed	Privileged_and_Confidential_#page3. t f
source=2018-07-24(0097749-993US0_	_Corrective_	_Assignment_as_Filed	Privileged_and_Confidential_#page4.tf
source=2018-07-24(0097749-993US0_	_Corrective_	_Assignment_as_Filed	Privileged_and_Confidential_#page5. t f
source=2018-07-24(0097749-993US0_	_Corrective_	_Assignment_as_Filed	Privileged_and_Confidential_#page6. t f
source=2018-07-24(0097749-993US0_	_Corrective_	_Assignment_as_Filed	Privileged_and_Confidential_#page7. t f
source=2018-07-24(0097749-993US0_	_Corrective_	_Assignment_as_Filed	Privileged_and_Confidential_#page8. t f
source=2018-07-24(0097749-993US0_	_Corrective_	_Assignment_as_Filed	Privileged_and_Confidential_#page9. t f

PATENT REEL: 046252 FRAME: 0883

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3703581

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ANURAG WINDLASS GUPTA	07/29/2015
TIMOTHY ANDREW RATH	01/28/2015
SRINIVASAN SUNDAR RAGHAVAN	01/21/2015
SANTOSH KALKI	01/28/2015

RECEIVING PARTY DATA

Name:	AMAZON TECHNOLOGIES, INC.
Street Address:	PO BOX 81226
City:	SEATTLE
State/Country:	WASHINGTON
Postal Code:	98108-1226

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14578841 1 <u>4/578,786</u>

CORRESPONDENCE DATA

Fax Number: (215)568-3439

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: 215-568-3100

Email: assignments@bakerlaw.com
Correspondent Name: BAKER & HOSTETLER LLP

Address Line 1: 2929 ARCH STREET

Address Line 2: CIRA CENTRE, 12TH FLOOR

Address Line 4: PHILADELPHIA, PENNSYLVANIA 19104-2891

ATTORNEY DOCKET NUMBER:	101058.000203
NAME OF SUBMITTER:	CARLY WHIMS
SIGNATURE:	/Carly Whims/
DATE SIGNED:	01/20/2016
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 7

PATENT REEL: 036350 FRAME: 0935

source=ASSIGNMENT#page1.tif	
source=ASSIGNMENT#page2.tif	
source=ASSIGNMENT#page3.tif	
source=ASSIGNMENT#page4.tif	
source=ASSIGNMENT#page5.tif	
source=ASSIGNMENT#page6.tif	
source=ASSIGNMENT#page7.tif	

PATENT REEL: 036359 FRAME: 0936

U.S. Patent Appln. No. 14/578,786 Filing Date December 22, 2014 Attorney Docket No. <u>101058.000203</u> Client Docket No. P17324-US

PARTIES TO THE ASSIGNMENT

Assignor(s):

ANURAG WINDLASS GUPTA

410 Terry Avenue North Seattle, WA 98109-5210

TIMOTHY ANDREW RATH

410 Terry Avenue North Seattle, WA 98109-5210

SRINIVASAN SUNDAR RAGHAVAN

410 Terry Avenue North Seattle, WA 98109-5210

SANTOSH KALKI

410 Terry Avenue North Seattle, WA 98109-5210

Assignee:

Amazon Technologies, Inc. PO Box 81226 Seattle, WA 98108-1226

AGREEMENT

WHEREAS, ASSIGNOR(S) (listed above) are inventor(s) of an invention entitled

"IDENTIFYING JOIN RELATIONSHIPS BASED ON TRANSACTIONAL ACCESS PATTERNS" (Invention) for which a non-provisional application for United States Letters Patent

Was filed on December 22, 2014, and accorded U.S. application no. 14/578,786; or

will be filed concurrently with the submission of this executed PATENT ASSIGNMENT for recordation.

Page 1 of 7

U.S. Patent Appln. No. 14/578,786

Attorney Docket No. 101058.000203

Filing Date December 22, 2014

Client Docket No. P17324-US

ASSIGNOR(S) hereby authorizes and requests ASSIGNEE'S legal representatives, of

Baker & Hostetler LLP, associated with Customer No. 23377, to insert in the header above and here in

parentheses (U.S. application no. 14/578,786, filed December 22, 2014) this application's U.S.

application number and filing date, when known.

WHEREAS, ASSIGNEE, a corporation of the State of Nevada, is desirous of acquiring the entire

right, title and interest in and to the invention and in and to any letters patent that may be granted

therefor in the United States and in any and all foreign countries;

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is

hereby acknowledged, ASSIGNOR(S) hereby sell, assign and transfer unto ASSIGNEE its successors and

assigns, the entire right, title and interest in and to said invention and any improvements thereto, said

Application and any and all letters patent which may be granted for said Invention in the United States

of America and its territorial possessions and in any and all foreign countries, and in any and all

provisional, divisions, reissues, re-examinations and continuations thereof, including the right to file

foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said

application to which said foreign applications are entitled by virtue of international convention, treaty or

otherwise, said invention, application and all letters patent on said invention to be held and enjoyed by

ASSIGNEE and its successors and assigns for their use and benefit and of their successors and assigns as

fully and entirely as the same would have been held and enjoyed by ASSIGNOR(5) had this assignment,

transfer and sale not been made. ASSIGNOR(S) hereby authorize and request the Commissioner of

Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR(S) agree to

execute all instruments and documents required for the making and prosecution of applications for

United States and foreign letters patent on said Invention, for litigation regarding said letters patent, or

for the purpose of protecting title to said invention or letters patent therefor.

Page 2 of 7

REEL: 046359 FRAME: 0938

U.S. Patent Appln. No. 14/578,786

Filing Date December 22, 2014

Attorney Docket No. 101058.000203

Client Docket No. P17324-US

AND ASSIGNOR(S) DOES HEREBY sell, assign, transfer, and convey to ASSIGNEE, its successors,

legal representatives, and assigns all claims for damages and all remedies arising out of any violation of

the rights assigned hereby that may have accrued prior to the date of assignment to ASSIGNEE, or may

accrue hereafter, including, but not limited to, the right to sue for, collect, and retain damages for past

infringements of said letters patent before or after issuance.

AND ASSIGNOR(S) DOES HEREBY covenant and agree that ASSIGNOR(S) will communicate to said

ASSIGNEE, its successors, legal representatives and assigns, any facts known to ASSIGNOR respecting the

Invention or said application, and testify in any legal proceeding, assist in the preparation of any other

patent property relating to the application and the Invention or any improvements made thereto,

sign/execute all lawful papers, provide all requested documents, execute and make all rightful oaths

and/or declarations in connection with the application and the invention including any improvements

made thereto, any patent applications filed therefrom, and any continuing application filed from any of

the aforementioned applications, and generally do everything possible to aid the ASSIGNEE, its

successors, legal representatives and assigns, to obtain and enforce proper patent protection for the

Invention in all countries. These provisions are binding upon our heirs, legal representatives,

administrators, and assigns.

CORRESPONDENCE ADDRESS

I hereby direct all correspondence and telephone calls in connection with this application be

addressed to the number associated with the customer number listed below, which is:

Customer No.

23377

Page 3 of 7

PATENT

REEL: 046359 FRAME: 0939

U.S. Patent Appln. No. <u>14/578,786</u> Filing Date <u>December 22, 2014</u> Attorney Docket No. <u>101058.000203</u>

Client Docket No. <u>P17324-US</u>

DECLARATION	
As a below named inventor, I hereby declare that:	
This declaration is directed to:	
the attached application; or	
United States application number 14/578,7	'86 filed on <u>December 22, 2014</u> ; or
PCT international application number	filed on
The above-identified application was made or authoriz	ed to be made by me.
I believe that I am the original inventor or an original jo	pint inventor of a claimed invention in the
I have reviewed and understand the contents of the abduty to disclose to the US Patent & Trademark Office a patentability as defined in 37 CFR 1.56.	
I hereby acknowledge that any willful false statement r USC 1001 by fine or imprisonment of not more than fiv	
Legal name of inventor: ANURAG WINDLASS GUPTA Inventor Signature 7 2 9 5 Date	WITNESSED BY: CAMING Witnesse Signature LOY CAMING Witness (Printed Name)
vale	7/2 a / S

Date

U.S. Patent Appln. No. <u>14/578,786</u> Filing Date December 22, 2014

Attorney Docket No. <u>101058.000203</u>

Client Docket No. <u>P17324-US</u>

DECLARATION	
As a below named inventor, I hereby declare that:	
This declaration is directed to:	
the attached application; or	
☑ United States application number 14/578,	786 filed on <u>December 22, 2014</u> ; or
PCT international application number	filed on
The above-identified application was made or authorized	zed to be made by me.
I believe that I am the original inventor or an original japplication.	oint inventor of a claimed invention in the
I have reviewed and understand the contents of the al	bove-identified application, and acknowledge the
duty to disclose to the US Patent & Trademark Office a	all information known to me to be material to the
patentability as defined in 37 CFR 1.56.	
I hereby acknowledge that any willful false statement	made in this declaration is punishable under 18
USC 1001 by fine or imprisonment of not more than fi	ve (5) years, or both.
Legal name of inventor: TIMOTHY ANDREW RATH	WITNESSED BY:
Inventor Signature	Witness Signature
1/28/2015	Elic Duggen
Date	Witness (Printed Name) 💹
	Jan 28, 2015
	Date

U.S. Patent Appln. No. <u>14/578,786</u> Filing Date <u>December 22, 2014</u> Attorney Docket No. <u>101058.000203</u>

Client Docket No. P17324-US

DECLARATION	
As a below named inventor, I hereby declare that:	
This declaration is directed to:	
the attached application; or	
igstyle igstyle igstyle igstyle United States application number 14/578,7	86 filed on <u>December 22, 2014;</u> or
PCT international application number	filed on
The above-identified application was made or authorize	ed to be made by me.
I believe that I am the original inventor or an original jo application.	int inventor of a claimed Invention in the
I have reviewed and understand the contents of the ab	ove-identified application, and acknowledge the
duty to disclose to the US Patent & Trademark Office a	ll information known to me to be material to the
patentability as defined in 37 CFR 1.56.	
I hereby acknowledge that any willful false statement r	nade in this declaration is punishable under 18
USC 1001 by fine or imprisonment of not more than fiv	e (5) years, or both.
Legal name of inventor: SRINIVASAN SUNDAR RAGHAVAN	WITNESSED BY:
4 Gadan May	
Inventor Signature	Witness Signature
0 2 15 Date	Witness (Printed Name)
	An 21 2010

Date

U.S. Patent Appln. No. <u>14/578,786</u> Filing Date <u>December 22, 2014</u> Attorney Docket No. <u>101058.000203</u>

Client Dacket No. <u>P17324-US</u>

DECLARATION	
As a below named inventor, I hereby declare that:	
This declaration is directed to:	
the attached application; or	
☑ United States application number 14/578,78	36 filed on <u>December 22, 2014</u> ; or
PCT international application number	filed on
The above-identified application was made or authorize	ed to be made by me.
I believe that I am the original inventor or an original jo	int inventor of a claimed Invention in the
application.	
I have reviewed and understand the contents of the abo	ove-identified application, and acknowledge the
duty to disclose to the US Patent & Trademark Office all	I information known to me to be material to the
patentability as defined in 37 CFR 1.56.	
I hereby acknowledge that any willful false statement m	nade in this declaration is punishable under 18
USC 1001 by fine or imprisonment of not more than five	e (5) years, or both.
Legal name of inventor: SANTOSH KALKI	WITNESSED BY:
Inventor Signature	Witness Signature
0//28/2015	ENDAGON
Date	Witness (Printed Name)
	Ja 28 2as
	Date

Page 7 of 7