#### 504307699 04/05/2017

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT4354380

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
JIALIN LI	03/24/2017
PRADEEP K. NANJUNDASWAMY	04/04/2017
SRIKANTH SUNDARARAJAN	03/23/2017
DANAI TENGTRAKOOL	03/21/2017

#### **RECEIVING PARTY DATA**

Name:	INTERNATIONAL BUSINESS MACHINES CORPORATION	
Street Address:	NEW ORCHARD ROAD	
City:	ARMONK	
State/Country:	NEW YORK	
Postal Code:	10504	

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number	
Application Number:	15479726	

#### **CORRESPONDENCE DATA**

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ATTORNEY DOCKET NUMBER: END920160705US1	
NAME OF SUBMITTER: HYE JIN LUCY SONG	
SIGNATURE:	/s/Hye Jin Lucy Song
DATE SIGNED:	04/05/2017
This document serves as an Oath/Declaration (37 CFR 1.63).	

**Total Attachments: 8** source=H0860998#page1.tif

> **PATENT REEL: 041859 FRAME: 0507**

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Title of Invention: CUSTOMER-ASSISTED ITEM RETRIEVAL

As a below named and undersigned inventor, I hereby declare that:		
This declaration is directed to the attached application, or (if following box is checked):		
[ ] United States application or PCT international application numberfiled on		
The above-identified application was made or authorized to be made by me.		
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.		
I have reviewed and understand the contents of the application, including the claims.		
I am aware of the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR Section 1.56.		

Whereas, I ("ASSIGNOR") have made certain inventions, improvements, and discoveries (herein referred to as the "Invention") disclosed in the above-identified patent application and further identified by the IBM Docket Number provided above in the header of this document:

Whereas, International Business Machines Corporation (herein referred to as the "ASSIGNEE"), a corporation of New York having a place of business at Armonk, New York, desires to acquire, and I desire to grant to the ASSIGNEE, my entire worldwide right, title, and interest in and to the Invention and in and to any and all patent applications and patents directed thereto;

Now, therefore, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, I hereby sell or have sold, assign or have assigned, and otherwise transfer or have transferred to the ASSIGNEE, its successors, legal representatives, and assigns, my entire worldwide right, title, and interest in and to the Invention, the above-identified United States patent application, and any and all other patent applications and patents for the Invention which may be applied for or granted therefor in the United States and in all foreign countries and jurisdictions, including all divisions, continuations, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents. In addition, I hereby authorize and request the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the Invention, to the ASSIGNEE, its successors, legal representatives, and assigns, my entire worldwide right, title, and interest in and to the same to be held and enjoyed by the ASSIGNEE, its successors, legal representatives, and assigns to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by me had this Assignment not been made; and I agree to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the Invention and all related patents and applications, in the ASSIGNEE, its successors, legal representatives, and assigns, whenever requested by the ASSIGNEE, its successors, legal representatives, or assigns.

I acknowledge my prior and ongoing obligations to sell, assign, and transfer my rights under this Assignment to the ASSIGNEE and am unaware of any reason why I may not have the full and unencumbered right to sell, assign, and transfer my rights hereby sold, assigned, and transferred, and have

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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.

(1) Legal	Name of Inventor:	Jialin LI		
Signat	ture:	TOY .	Date: <sup>2</sup> /24/2	2017
(2) Legal	Name of Inventor:	Pradeep K. NANJUNDASWAM	'Y	
Signat	ure:		Date:	
(3) Legal	Name of Inventor:	Srikanth SUNDARARAJAN		
Signat	ure:		Date:	
(A) Legal	Name of Inventor	Danai TENGTRAKOOL		
(4) Legal	value of inventor.			
Signati	ure:		Date:	

Disastra n Page 2 of 2

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(1) Legal Name of Inventor: Jialin LI	
Signature:	Date:
(2) Legal Name of Inventor: <b>Pradeep K. NANJUNDASWA</b>	MY
Signature: <u>Myh</u>	Date: <u>04-04-2017</u>
(3) Legal Name of Inventor: Srikanth SUNDARARAJAN	
Signature:	Date:
(4) Legal Name of Inventor: <b>Danai TENGTRAKOOL</b>	
Cianatana	Doto

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(1)	Legal Name of Inventor: Jialin I.I	
	Signature:	Date:
(2)	Legal Name of Inventor: Pradeep K. NANJUNDASWAMY	
	Signature:	Date:
	Legal Name of Inventor: Srikanth SUNDARARAJAN	
	Signature:	Date: <u>03/23/201</u> 7
(4)	Legal Name of Inventor: Danai TENGTRAKOOL	
	Signature:	Date:

(1000000011)Page 2 of 2

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(1)	Legal Name of Inventor; Jialin LI	
	Signature:	Date:
(2)	Legal Name of Inventor: Pradeep K. NANJUNDASWAMY	
	Signature:	Date:
(3)	Legal Name of Inventor: Srikanth SUNDARARAJAN	
	Signature:	Date:
(4)	Legal Name of Inventor: Danai TENGTRAKOOL	
	Signature:	

page 2 of 2

RECORDED: 04/05/2017