PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4991496

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SHAFIQ SHARIFF	08/29/2014
DEREK NORDQUIST	08/29/2014

RECEIVING PARTY DATA

Name:	GROUPON, INC.	
Street Address:	600 W. CHICAGO AVE.	
Internal Address:	SUITE 620	
City:	CHICAGO	
State/Country:	ILLINOIS	
Postal Code:	60654	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15997921

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.

Phone: 704-444-1000

Email: usptomail@alston.com
Correspondent Name: ALSTON & BIRD LLP

Address Line 1: BANK OF AMERICA PLAZA

Address Line 2: 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NORTH CAROLINA 28280-4000

ATTORNEY DOCKET NUMBER: 058407/515584

NAME OF SUBMITTER: RUSSELL P. BLAISE

SIGNATURE: /Russell P. Blaise/

DATE SIGNED: 06/05/2018

Total Attachments: 3

source=ASSIGNMENT#page1.tif source=ASSIGNMENT#page2.tif source=ASSIGNMENT#page3.tif

PATENT 504944749 REEL: 045988 FRAME: 0898

ASSIGNMENT - WORLDWIDE

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor has sold and assigned, and by these presents hereby sells and assigns, unto

GROUPON, INC.

600 West Chicago Avenue Suite 620 Chicago, IL 60654

its successors and assigns, the entire right, title and interest, so far as concerns the United States and the Territories and Possessions thereof and all foreign countries in and to the invention in "METHOD, APPARATUS, AND COMPUTER PROGRAM PRODUCT FOR FORECASTING DEMAND USING REAL TIME DEMAND"

as set f	orth in this United States Patent Application
	executed concurrently herewith executed on Application No. 14/316,245 filed June 26, 2014 Application claims the benefit of Application No. 61/939,193, filed February 12, 2014, and is a Continuation-In-Part of Application No. 13/826,333, filed March 14, 2013, which claims the benefit of Application No. 61/730,046, filed November 26 2012, and claims the benefit of Application No. 61/709,623, filed October 4, 2012, all applications listed above being hereinafter referred to as the "application(s)";

(We hereby authorize and request the Assignee and its attorney (Alston & Bird LLP) to insert above the application number and filing date of said application when known.)

said application for United States Letters Patent, including all divisional, renewal, substitute, continuation, nonprovisionals, continuation-in-parts, and Convention applications based in whole or in part upon said inventions or upon said applications, and any and all Letters Patent and reissues, reexaminations, and extensions of Letters Patent granted for said inventions or upon said applications and every priority right that is or may be predicated upon or arise from said inventions, said applications, and said Letters Patent; said Assignee being hereby authorized to file patent applications in any or all countries on any or all said inventions in the name of the undersigned or in the name of said Assignee or otherwise as said Assignee may deem advisable, under the International Convention or otherwise; the Commissioner of Patents and Trademarks of the United States of America being hereby authorized to issue or transfer all said Letters Patent to said Assignee in accordance herewith; this assignment being under covenant, not only that full power to make the same is had by the undersigned, but also that such assigned right is not encumbered by any grant, license, or other right theretofore given, and that the undersigned will do all acts reasonably serving to ensure that the said inventions, patent applications and Letters Patent shall be held and enjoyed by said Assignee as fully and entirely as the same could have been held and enjoyed by the undersigned if this assignment had not been made, and

> PATENT REEL: 045988 FRAME: 0899

particularly to execute and deliver to said Assignee all lawful documents including petitions, specifications, oaths, assignments, invention disclaimers, declarations, and lawful affidavits in form and substance which may be requested by said Assignee, to furnish said Assignee with all facts relating to said inventions or the history thereof and any and all documents, photographs, models, samples or other physical exhibits which may embody said inventions, and to testify in any proceedings relating to said inventions, patent applications, and/or Letters Patent.

The undersigned hereby grant(s) an authorized representative of Assignee the power to insert in this Assignment any further identification that may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

This Assignment is deemed to be effective at least as early as the earliest priority date.

Date 8/29/2014 Sha	Shoulf fig Shariff
Witness Signature	$\frac{8/29}{Date}$
DEREK WORDQUT87 Witness Name (Printed)	
Witness Signature	Date
Witness Name (Printed)	-

PATENT REEL: 045988 FRAME: 0900 The undersigned hereby grant(s) an authorized representative of Assignee the power to insert in this Assignment any further identification that may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

This Assignment is deemed to be effective at least as early as the earliest priority date.			
8/29 Date	Derek Nordquist	DM5	
1 sharell		8/29/2014	
Witness Signature	Date	,	
SHAFIQ SHARIFF Witness Name (Printed)			
Witness Signature	Date		
Witness Name (Printed)			

PATENT REEL: 045988 FRAME: 0901