# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT5678575

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
RAJU BALAKRISHNAN	12/05/2017
RAJESH GIRISH PAREKH	12/12/2018
GUOXIAN ZHANG	06/02/2015
PRASHANT GAURAV	06/04/2015

### **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:	15083422

### **CORRESPONDENCE DATA**

Fax Number: (704)444-1111

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: patent-mail@alston.com **Correspondent Name:** ALSTON & BIRD LLP

101 S TRYON ST, SUITE 4000 Address Line 1: BANK OF AMERICA PLAZA Address Line 2:

Address Line 4: CHARLOTTE, NORTH CAROLINA 28280-4000

ATTORNEY DOCKET NUMBER:	058407/475802
NAME OF SUBMITTER:	CHRISTOPHER G. ARANGUREN
SIGNATURE:	/Christopher G. Aranguren/
DATE SIGNED:	08/21/2019
	This document serves as an Oath/Declaration (37 CFR 1.63).

**PATENT** REEL: 050112 FRAME: 0972

505631769

# Total Attachments: 10 source=475802 EXECUTED Dec-Assignments (ALL)#page1.tif source=475802 EXECUTED Dec-Assignments (ALL)#page2.tif source=475802 EXECUTED Dec-Assignments (ALL)#page3.tif source=475802 EXECUTED Dec-Assignments (ALL)#page4.tif source=475802 EXECUTED Dec-Assignments (ALL)#page5.tif source=475802 EXECUTED Dec-Assignments (ALL)#page6.tif source=475802 EXECUTED Dec-Assignments (ALL)#page7.tif source=475802 EXECUTED Dec-Assignments (ALL)#page8.tif source=475802 EXECUTED Dec-Assignments (ALL)#page9.tif source=475802 EXECUTED Dec-Assignments (ALL)#page9.tif

PATENT REEL: 050112 FRAME: 0973

# DECLARATION AND ASSIGNMENT FOR PATENT AND DESIGN APPLICATIONS

Title of	A SYM A TO A TYPE A A A SYM A A A A SYM A A A A A A A A A A A A A A A A A A A
A 88282 833	APPARATUS AND METHOD FOR ENHANCED MESSAGE
3	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
3 Samerayan dili ame	All the first transfer and transfer an
invention	TARGETING
because the second second second second	A A A A A A A A A A A A A A A A A A A

## I. DECLARATION

As the below named inventor, I, hereinafter referred to as the undersigned, hereby declare that:

This declaration is directed to:

	the attached application, or
	United States Application or PCT International Application No. 15/083 422 filed on
Ø	March 29, 2016; Application claims priority from Application No. 62/140,025, filed March 30, 2015 and 62/140,030 filed March 30, 2015, all applications listed above being hereinafter
	referred to as the "application(s)";

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 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.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

### II. ASSIGNMENT

Whereas, I have invented certain new and useful improvements in the application identified above; and

Whereas,

Groupon, Inc. 600 W. Chicago Ave, Suite 620 Chicago, Illinois 60654

hereinafter referred to as Assignee, is desirous of acquiring the entire right, title, and interest in and to said invention as described in the application identified above, and in and to any and all Letters Patent which shall be granted therefor in the United States of America and all foreign countries;

Now, therefore, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned has sold and assigned, and by these presents hereby sells and assigns, unto said assignee 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 identified above, including said application for United States Letters Patent, all divisional, renewal, substitute, continuation, nonprovisionals, continuation-inparts, 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 particularly to execute and deliver to said Assignce 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.

This Assignment is deemed to be effective at least as early as March 30, 2015.

LEGAL NAME OF INVENTOR

(Signatu

(Signature) Date: 12/05/2012

M. A. Torm (ELANGOVAN MADHIVANAN)

Witness

Witness

MARHYAN CHALASANI

### DECLARATION AND ASSIGNMENT FOR PATENT AND DESIGN APPLICATIONS

Title of	APPARATUS AND METHOD FOR ENHANCED MESSAGE
Invention	TARGETING

### I. DECLARATION

As the below named inventor, I, hereinafter referred to as the undersigned, hereby declare that:

This declaration is directed to:

the attached application, or

United States Application or PCT International Application No. 15/083,422 filed on March 29, 2016;

Application claims priority from Application No. 62/140,025, filed March 30, 2015 and 62/140,030 filed March 30, 2015, all applications listed above being hereinafter referred to as the "application(s)";

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 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.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

Page 1 of 3

### II. ASSIGNMENT

Whereas, I have invented certain new and useful improvements in the application identified above; and

Whereas,

Groupon, Inc. 600 W. Chicago Ave, Suite 620 Chicago, Illinois 60654

hereinafter referred to as Assignee, is desirous of acquiring the entire right, title, and interest in and to said invention as described in the application identified above, and in and to any and all Letters Patent which shall be granted therefor in the United States of America and all foreign countries;

Now, therefore, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned has sold and assigned, and by these presents hereby sells and assigns, unto said assignee 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 identified above, including said application for United States Letters Patent, all divisional, renewal, substitute, continuation, nonprovisionals, continuation-inparts, 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 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.

LEGAL NAME OF INVENTOR			
/ Rajesle Girisle Parekle / Inventor Name: Rajesh Girish Parekh	(Signature)	Date: 12/12/2018	

This Assignment is deemed to be effective at least as early as March 30, 2015.

# DECLARATION AND ASSIGNMENT FOR PATENT AND DESIGN APPLICATIONS

	FORTAIENT AND DESIGNATE
Title of	Apparatus And Method For Enhanced Message Targeting
Invention	ATTAICHTOSTAINS TOTAICHT

As the below named inventor, I, hereinafter referred to as the undersigned, hereby declare that:

This declaration is directed to:

the attached application, or United States Application or PCT International Application No. <u>62/140,025</u> , filed on
03/30/2015; Application claims priority from Application No, filed, all applications listed above being hereinafter referred to as the "application(s)";

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 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.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

Whereas, I have invented certain new and useful improvements in the application identified above; and

Whereas,

### GROUPON, INC.

600 West Chicago Avenue, Suite 620 Chicago, IL 60654

hereinafter referred to as Assignee, is desirous of acquiring the entire right, title, and interest in and to said invention as described in the application identified above, and in and to any and all Letters Patent which shall be granted therefor in the United States of America and all foreign countries;

Now, therefore, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned has sold and assigned, and by these presents hereby sells

Page 1 of 2

and assigns, unto said assignee 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 identified above, including said application for United States Letters Patent, all divisional, renewal, substitute, continuation, nonprovisionals, continuation-inparts, 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 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.

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

LEGAL NAME OF INVENTOR

Inventor: Guoxian Zhang

(Signature) Date: 06/02/2015

Witness Name (Printed)

Baolei L.

Shih-Hao Cang Witness Name (Printed)

# DECLARATION AND ASSIGNMENT FOR PATENT AND DESIGN APPLICATIONS

	TORTALEM THE DESIGN THE EXECUTE OF THE
Title of	Apparatus And Method For Enhanced Message Targeting
Invention	APPARATOS AND METHOD I OK ENHANCED MESSAGE TAKGETIKO

As the below named inventor, I, hereinafter referred to as the undersigned, hereby declare that:

This declaration is directed to:

the attached application, or
United States Application or PCT International Application No. 62/140,025, filed on 03/30/2015;

Application claims priority from Application No. \_\_\_\_, filed \_\_\_\_, all applications listed above being hereinafter referred to as the "application(s)";

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 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.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

Whereas, I have invented certain new and useful improvements in the application identified above; and

Whereas,

### GROUPON, INC.

600 West Chicago Avenue, Suite 620 Chicago, IL 60654

hereinafter referred to as Assignee, is desirous of acquiring the entire right, title, and interest in and to said invention as described in the application identified above, and in and to any and all Letters Patent which shall be granted therefor in the United States of America and all foreign countries;

Now, therefore, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned has sold and assigned, and by these presents hereby sells

Page 1 of 2

and assigns, unto said assignee 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 identified above, including said application for United States Letters Patent, all divisional, renewal, substitute, continuation, nonprovisionals, continuation-inparts, 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 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.

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

LEGAL NAME OF INVENTOR

Prashunt Ginnau (Signature)

Date: \_\_\_\_\_

Inventor: Prashant Gaurav

Witness

SUSHANT WASON 06/04/2015
Witness Name (Printed)

Witness Name (Printed)