

PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT3118413

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
DEBASHIS GHOSH	11/20/2014
LAVERN GILLIARD	11/19/2014
JUSTIN X. HOWE	11/19/2014
RECEIVING PARTY DATA	
Name:	MASTERCARD INTERNATIONAL INCORPORATED
Street Address:	2000 PURCHASE STREET
City:	PURCHASE
State/Country:	NEW YORK
Postal Code:	10577
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	14549997
CORRESPONDENCE DATA	
Fax Number:	(314)612-2307
<i>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.</i>	
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Email:	USpatents@armstrongteasdale.com
Correspondent Name:	DANIEL M. FITZGERALD (21652) ARMSTRONG T
Address Line 1:	7700 FORSYTH BOULEVARD
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ATTORNEY DOCKET NUMBER:	21652-00417
NAME OF SUBMITTER:	DANIEL M. FITZGERALD
SIGNATURE:	/Daniel M. Fitzgerald/
DATE SIGNED:	11/21/2014
Total Attachments: 4	
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PATENT	

ASSIGNMENT

In consideration of One Dollar and other good and valuable consideration, of which I/we acknowledge receipt, I/we,

Debashis Ghosh of **10718 Lederer Ave., Charlotte, NC 28277**
Lavern Gilliard of **258 East 4th Street, Mount Vernon, NY 10553**
Justin X. Howe of **899 Pine Street, San Francisco, CA 94108**

hereby sell and assign to MasterCard International Incorporated (hereinafter referred to as Assignee), a Delaware Corporation, with its principal address at 2000 Purchase Street, Purchase, New York 10577, USA, its successors and assigns my (our) entire respective right(s), title(s) and interest(s) in and to the invention and improvements invented and originated by me/us and described in the non-provisional application for United States Patent currently entitled:

**DETECTING REAL ESTATE VACANCIES USING SATELLITE
IMAGERY**

executed concurrently herewith,

filed on _____, having Serial Number _____

and any and all applications for patent and patents therefrom in any and all countries, including all divisions, continuations, reexaminations and reissues thereof, and all rights of priority resulting from the filing of said United States application, and authorize and request any official whose duty it is to issue patents, to issue any patent on said inventions and improvements resulting therefrom to said Assignee, or its successors or assigns and agree that on request and without further consideration, but at the expense of said Assignee, I/we will communicate to said Assignee or its representatives or nominees any facts known to me/us respecting said inventions and improvements and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, reexamination and reissue applications, make all rightful oaths and generally do everything possible to aid said Assignee, its successors, assigns, and nominees to obtain and enforce proper patent protection for said invention and its improvements in all countries.

INVENTOR 1

Signature: Debshis Ghosh
Debshis Ghosh

Date: 11/20/2014

Witnessed by: _____
Signature

Date: _____

Printed Name of Witness

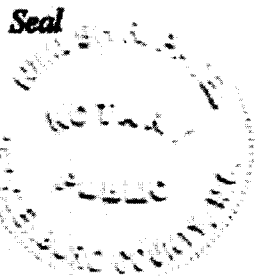
SECTION BELOW IS FOR USE ONLY IF SIGNING IN PRESENCE OF A NOTARY

Debshis Ghosh
Debshis Ghosh

Date: 11/20/2014

STATE OF North Carolina
COUNTY OF Mecklenburg ss.

This 20 day of November, 2014 before me personally appeared the above-named Debshis Ghosh, to me personally known as the individual who executed the foregoing assignment, who acknowledged to me that he/she executed the same of his/her own free will for the purposes therein set forth.

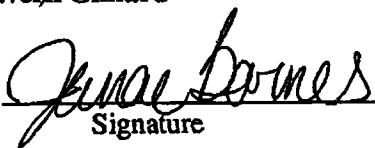


[Signature]
(Notary Public)
Commission Expires 11/17/19

INVENTOR 2

Signature: 
Lavern Gilliard

Date: 11/19/14

Witnessed by: 
Signature

Date: 11/19/14

Jinae Barnes
Printed Name of Witness

INVENTOR 3

Signature: *J. Howe*
Justin X. Howe

Date: 19 Nov 2014

Witnessed by *[Signature]*
Signature

Date: 19 Nov 2014

Steven Oshry
Printed Name of Witness