PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Paramvir Bahl	07/10/2012
Douglas C. Burger	06/12/2012
Ranveer Chandra	07/12/2012
Matthew G. Dyor	06/18/2012
William Gates	06/25/2012
Pablos Holman	06/12/2012
Roderick A. Hyde	11/26/2012
Muriel Y. Ishikawa	09/14/2012
Jordin T. Kare	07/10/2012
Royce A. Levien	08/30/2013
Richard T. Lord	06/16/2012
Robert W. Lord	06/16/2012
Mark A. Malamud	06/15/2012
Craig J. Mundie	06/12/2012
Nathan P. Myhrvold	06/15/2012
Tim Paek	07/22/2013
John D. Rinaldo Jr.	01/25/2013
Desney S. Tan	06/12/2012
Clarence T. Tegreene	08/02/2012
Charles Whitmer	05/16/2012
Lowell L. Wood Jr.	07/15/2012
Victoria Y.H. Wood	09/09/2012
Lin Zhong	06/18/2012

RECEIVING PARTY DATA

Name:	Elwha LLC
Street Address:	11235 S.E. 6th Street, Suite 200
City:	Bellevue
State/Country:	WASHINGTON
	PATENT

REEL: 031143 FRAME: 0164

Postal Code: 98004		
PROPERTY NUMBERS Total: 1		
Property Type	Number	
Application Number:	13340540	
CORRESPONDENCE DATA		
Fax Number: 4252834820 Correspondence will be sent via US Mail when the fax attempt is unsuccessful. Email: saral@intvenls.com Correspondent Name: The Invention Science Fund Address Line 1: 11235 S.E. 6th Street, Suite 200 Address Line 4: Bellevue, WASHINGTON 98004		
ATTORNEY DOCKET NUMBER:	0711-003-026-000000	
NAME OF SUBMITTER:	S. Craig Rochester	
Signature:	/S. Craig Rochester/	
Date:	09/05/2013	
Total Attachments: 23 source=Executed Assignments#page1.tif source=Executed Assignments#page2.tif source=Executed Assignments#page3.tif source=Executed Assignments#page4.tif source=Executed Assignments#page5.tif source=Executed Assignments#page6.tif source=Executed Assignments#page7.tif source=Executed Assignments#page9.tif source=Executed Assignments#page9.tif source=Executed Assignments#page10.tif source=Executed Assignments#page11.tif source=Executed Assignments#page13.tif source=Executed Assignments#page13.tif source=Executed Assignments#page15.tif source=Executed Assignments#page16.tif source=Executed Assignments#page17.tif source=Executed Assignments#page18.tif source=Executed Assignments#page19.tif source=Executed Assignments#page20.tif source=Executed Assignments#page20.tif source=Executed Assignments#page21.tif source=Executed Assignments#page21.tif source=Executed Assignments#page20.tif		

PATENT REEL: 031143 FRAME: 0165

WHEREAS, I, Paramvir Bahl, (hereinafter referred to as ASSIGNOR), having post office address of 1311 108th Avenue NE, Bellevue, WA 98004 am the joint inventor of an invention entitled "Computational Systems and Methods for Locating a Mobile Device," as described and claimed in the specification for which an application for United States letters patent was filed on December 29, 2011 and assigned Application No. 13/340,540; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited liability corporation of the State of Delaware, having a place of business at 11235 S.E. 6th Street, Suite 200, Bellevue, WA 98004, 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 therefore in the United States and in any and all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR hereby sells, assigns and transfers unto said ASSIGNEE the entire right, title and interest in and to said invention, 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 divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States 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 as fully and entirely as the same would have been held and enjoyed by ASSIGNOR had this assignment, transfer and sale not been made. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR agrees 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 letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

July 10, 2012	Paramer B. S
Date	Paramvir Bahl

WHEREAS, I, Douglas C. Burger, (hereinafter referred to as ASSIGNOR), having post office address of 13615 NE 48th Pl, Bellevue, WA 98005-1113 am the joint inventor of an invention entitled "Computational Systems and Methods for Locating a Mobile Device," as described and claimed in the specification for which an application for United States letters patent was filed on December 29, 2011 and assigned Application No. 13/340,540; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited liability corporation of the State of Delaware, having a place of business at 11235 S.E. 6th Street, Suite 200, Bellevue, WA 98004, 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 therefore in the United States and in any and all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR hereby sells, assigns and transfers unto said ASSIGNEE the entire right, title and interest in and to said invention, 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 divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States 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 as fully and entirely as the same would have been held and enjoyed by ASSIGNOR had this assignment, transfer and sale not been made. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR agrees 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 letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

Nate

Douglas (% Burger,

WHEREAS, I, Ranveer Chandra, (hereinafter referred to as ASSIGNOR), having post office address of 538 Central Way, Apt. #B115, Kirkland, WA 98033 am the joint inventor of an invention entitled "Computational Systems and Methods for Locating a Mobile Device," as described and claimed in the specification for which an application for United States letters patent was filed on December 29, 2011 and assigned Application No. 13/340,540; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited liability corporation of the State of Delaware, having a place of business at 11235 S.E. 6th Street, Suite 200, Bellevue, WA 98004, 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 therefore in the United States and in any and all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR hereby sells, assigns and transfers unto said ASSIGNEE the entire right, title and interest in and to said invention, 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 divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States 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 as fully and entirely as the same would have been held and enjoyed by ASSIGNOR had this assignment, transfer and sale not been made. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR agrees 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 letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

Date (

Dahmoor Chandra

WHEREAS, I, Matthew G. Dyor, (hereinafter referred to as ASSIGNOR), having post office address of 1646 184th Avenue NE, Bellevue, WA 98008 am the joint inventor of an invention entitled "Computational Systems and Methods for Locating a Mobile Device," as described and claimed in the specification for which an application for United States letters patent was filed on December 29, 2011 and assigned Application No. 13/340,540; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited liability corporation of the State of Delaware, having a place of business at 11235 S.E. 6th Street, Suite 200, Bellevue, WA 98004, 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 therefore in the United States and in any and all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR hereby sells, assigns and transfers unto said ASSIGNEE the entire right, title and interest in and to said invention, 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 divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States 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 as fully and entirely as the same would have been held and enjoyed by ASSIGNOR had this assignment, transfer and sale not been made. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR agrees 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 letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

Date

Matthew G. Dvor

WHEREAS, I, William Gates, (hereinafter referred to as ASSIGNOR), having post office address of One Microsoft Way, Redmond, WA 98052-6399 am the joint inventor of an invention entitled "Computational Systems and Methods for Locating a Mobile Device," as described and claimed in the specification for which an application for United States letters patent was filed on December 29, 2011 and assigned Application No. 13/340,540

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited liability corporation of the State of Delaware, having a place of business at 11235 S.E. 6th Street, Suite 200, Bellevue, WA 98004, 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 therefore in the United States and in any and all foreign countries;

WHEREAS, I, Pablos Holman, (hereinafter referred to as ASSIGNOR), having post office address of 2431 7th Avenue West, Seattle, WA 98119 am the joint inventor of an invention entitled "Computational Systems and Methods for Locating a Mobile Device," as described and claimed in the specification for which an application for United States letters patent was filed on December 29, 2011 and assigned Application No. 13/340,540 : and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited liability corporation of the State of Delaware, having a place of business at 11235 S.E. 6th Street, Suite 200, Bellevue, WA 98004, 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 therefore in the United States and in any and all foreign countries;

WHEREAS, I, Roderick A. Hyde, (hereinafter referred to as ASSIGNOR), having post office address of 9915-161st Avenue N.E., Redmond, WA 98052 am the joint inventor of an invention entitled "Computational Systems and Methods for Locating a Mobile Device," as described and claimed in the specification for which an application for United States letters patent was filed on December 29, 2011 and assigned Application No. 13/340,540; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited liability corporation of the State of Delaware, having a place of business at 11235 S.E. 6th Street, Suite 200, Bellevue, WA 98004, 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 therefore in the United States and in any and all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR hereby sells, assigns and transfers unto said ASSIGNEE the entire right, title and interest in and to said invention, 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 divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States 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 as fully and entirely as the same would have been held and enjoyed by ASSIGNOR had this assignment, transfer and sale not been made. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR agrees 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 letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

Hodensk Objecto

WHEREAS, I, Muriel Y. Ishikawa, (hereinafter referred to as ASSIGNOR), having post office address of 1185 Hillcrest Avenue, Livermore, CA 94550-4921 am the joint inventor of an invention entitled "Computational Systems and Methods for Locating a Mobile Device," as described and claimed in the specification for which an application for United States letters patent was filed on December 29, 2011 and assigned Application No. 13/340,540; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited liability corporation of the State of Delaware, having a place of business at 11235 S.E. 6th Street, Suite 200, Bellevue, WA 98004, 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 therefore in the United States and in any and all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR hereby sells, assigns and transfers unto said ASSIGNEE the entire right, title and interest in and to said invention, 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 divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States 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 as fully and entirely as the same would have been held and enjoyed by ASSIGNOR had this assignment, transfer and sale not been made. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR agrees 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 letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

Sotenler 14, 2015

Muriel Y. Ishikawa

WHEREAS, I, Jordin T. Kare, (hereinafter referred to as ASSIGNOR), having post office address of 908 15th Ave. East, Seattle, WA 98112 am the joint inventor of an invention entitled "Computational Systems and Methods for Locating a Mobile Device," as described and claimed in the specification for which an application for United States letters patent was filed on December 29, 2011 and assigned Application No. 13/340,540; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited liability corporation of the State of Delaware, having a place of business at 11235 S.E. 6th Street, Suite 200, Bellevue, WA 98004, 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 therefore in the United States and in any and all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR hereby sells, assigns and transfers unto said ASSIGNEE the entire right, title and interest in and to said invention, 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 divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States 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 as fully and entirely as the same would have been held and enjoyed by ASSIGNOR had this assignment, transfer and sale not been made. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR agrees 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 letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

7/10/2012

Jordin T. Kare

WHEREAS, I, Royce A. Levien, (hereinafter referred to as ASSIGNOR), having post office address of 43 Somerset Road, Lexington, MA 02420-3519 am the joint inventor of an invention entitled "Computational Systems and Methods for Locating a Mobile Device," as described and claimed in the specification for which an application for United States letters patent was filed on December 29, 2011 and assigned Application No. 13/340,540; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited liability corporation of the State of Delaware, having a place of business at 11235 S.E. 6th Street, Suite 200, Bellevue, WA 98004, 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 therefore in the United States and in any and all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR hereby sells, assigns and transfers unto said ASSIGNEE the entire right, title and interest in and to said invention, 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 divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States 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 as fully and entirely as the same would have been held and enjoyed by ASSIGNOR had this assignment, transfer and sale not been made. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR agrees 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 letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

2013-08-30

Date

Royce A Levien

WHEREAS, I, Richard T. Lord, (hereinafter referred to as ASSIGNOR), having post office address of 233 St. Helens Ave., Apt 513, Tacoma, WA 98402-2585 am the joint inventor of an invention entitled "Computational Systems and Methods for Locating a Mobile Device," as described and claimed in the specification for which an application for United States letters patent was filed on December 29, 2011 and assigned Application No. 13/340,540; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited liability corporation of the State of Delaware, having a place of business at 11235 S.E. 6th Street, Suite 200, Bellevue, WA 98004, 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 therefore in the United States and in any and all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR hereby sells, assigns and transfers unto said ASSIGNEE the entire right, title and interest in and to said invention, 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 divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States 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 as fully and entirely as the same would have been held and enjoyed by ASSIGNOR had this assignment, transfer and sale not been made. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR agrees 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 letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

C/1C/20/2

Lichard V. Lord

WHEREAS, I, Robert W. Lord, (hereinafter referred to as ASSIGNOR), having post office address of 1410-41st Ave. East, Seattle, WA 98112 am the joint inventor of an invention entitled "Computational Systems and Methods for Locating a Mobile Device," as described and claimed in the specification for which an application for United States letters patent was filed on December 29, 2011 and assigned Application No. 13/340,540; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited liability corporation of the State of Delaware, having a place of business at 11235 S.E. 6th Street, Suite 200, Bellevue, WA 98004, 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 therefore in the United States and in any and all foreign countries;

6/16/2012	X	
Date	Robert W. Lord	

WHEREAS, I, Mark A. Malamud, (hereinafter referred to as ASSIGNOR), having post office address of Highcastle, 1508 Ninth Avenue West, Seattle, WA 98119 am the joint inventor of an invention entitled "Computational Systems and Methods for Locating a Mobile Device," as described and claimed in the specification for which an application for United States letters patent was filed on December 29, 2011 and assigned Application No. 13/340,540; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited liability corporation of the State of Delaware, having a place of business at 11235 S.E. 6th Street, Suite 200, Bellevue, WA 98004, 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 therefore in the United States and in any and all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR hereby sells, assigns and transfers unto said ASSIGNEE the entire right, title and interest in and to said invention, 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 divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States 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 as fully and entirely as the same would have been held and enjoyed by ASSIGNOR had this assignment, transfer and sale not been made. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR agrees 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 letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

Dato

Mark A. Malamyd

6/15/12

WHEREAS, I, Craig J. Mundie, (hereinafter referred to as ASSIGNOR), having post office address of 1209 38th Avenue East, Seattle, WA 98112-4447 am the joint inventor of an invention entitled "Computational Systems and Methods for Locating a Mobile Device," as described and claimed in the specification for which an application for United States letters patent was filed on December 29, 2011 and assigned Application No. 13/340,540; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited liability corporation of the State of Delaware, having a place of business at 11235 S.E. 6th Street, Suite 200, Bellevue, WA 98004, 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 therefore in the United States and in any and all foreign countries;

Ce/12/12	_ Allundie
Date	Craig J. Mundie

WHEREAS, I, Nathan P. Myhrvold, (hereinafter referred to as ASSIGNOR), having post office address of 11235 S.E. 6th Street, Suite 200, Bellevue, WA 98004 am the joint inventor of an invention entitled "Computational Systems and Methods for Locating a Mobile Device," as described and claimed in the specification for which an application for United States letters patent was filed on December 29, 2011 and assigned Application No. 13/340,540; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited liability corporation of the State of Delaware, having a place of business at 11235 S.E. 6th Street, Suite 200, Bellevue, WA 98004, 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 therefore in the United States and in any and all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR hereby sells, assigns and transfers unto said ASSIGNEE the entire right, title and interest in and to said invention, 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 divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States 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 as fully and entirely as the same would have been held and enjoyed by ASSIGNOR had this assignment, transfer and sale not been made. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR agrees 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 letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

Nathan P. Myhryold

WHEREAS, I, Tim Paek, (hereinafter referred to as ASSIGNOR), having post office address of 21223 SE 35th Way, Sammamish, WA 98075 am the joint inventor of an invention entitled "Computational Systems and Methods for Locating a Mobile Device," as described and claimed in the specification for which an application for United States letters patent was filed on December 29, 2011 and assigned Application No. 13/340,540

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited liability corporation of the State of Delaware, having a place of business at 11235 S.E. 6th Street, Suite 200, Bellevue, WA 98004, 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 therefore in the United States and in any and all foreign countries;

WHEREAS, I, John D. Rinaldo, Jr., (hereinafter referred to as ASSIGNOR), having post office address of 1560-134th Avenue S.E. #301, Bellevue, WA 98005-8030 am the joint inventor of an invention entitled "Computational Systems and Methods for Locating a Mobile Device," as described and claimed in the specification for which an application for United States letters patent was filed on December 29, 2011 and assigned Application No. 13/340,540; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited liability corporation of the State of Delaware, having a place of business at 11235 S.E. 6th Street, Suite 200, Bellevue, WA 98004, 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 therefore in the United States and in any and all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR hereby sells, assigns and transfers unto said ASSIGNEE the entire right, title and interest in and to said invention, 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 divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States 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 as fully and entirely as the same would have been held and enjoyed by ASSIGNOR had this assignment, transfer and sale not been made. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR agrees 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 letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

Date John D. Rinaldo, Jr.

WHEREAS, I, Desney S. Tan, (hereinafter referred to as ASSIGNOR), having post office address of 11514 NE 107th Place, Kirkland, WA 98033 am the joint inventor of an invention entitled "Computational Systems and Methods for Locating a Mobile Device," as described and claimed in the specification for which an application for United States letters patent was filed on December 29, 2011 and assigned Application No. 13/340,540; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited liability corporation of the State of Delaware, having a place of business at 11235 S.E. 6th Street, Suite 200, Bellevue, WA 98004, 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 therefore in the United States and in any and all foreign countries;

12	June	2012	10=-
Date			Desney S. Tan

WHEREAS, I, Clarence T. Tegreene, (hereinafter referred to as ASSIGNOR), having post office address of 10629 NE 17th Street, Bellevue, WA 98004-2834 am the joint inventor of an invention entitled "Computational Systems and Methods for Locating a Mobile Device," as described and claimed in the specification for which an application for United States letters patent was filed on December 29, 2011 and assigned Application No. 13/340,540; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited liability corporation of the State of Delaware, having a place of business at 11235 S.E. 6th Street, Suite 200, Bellevue, WA 98004, 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 therefore in the United States and in any and all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR hereby sells, assigns and transfers unto said ASSIGNEE the entire right, title and interest in and to said invention, 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 divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States 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 as fully and entirely as the same would have been held and enjoyed by ASSIGNOR had this assignment, transfer and sale not been made. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR agrees 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 letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

Date

Clarence T. Tegreene

WHEREAS, I, Charles Whitmer, (hereinafter referred to as ASSIGNOR), having post office address of 15509 Uplands Way S.E., North Bend, WA 98045 am the joint inventor of an invention entitled "Computational Systems and Methods for Locating a Mobile Device," as described and claimed in the specification for which an application for United States letters patent was filed on December 29, 2011 and assigned Application No. 13/340,540; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited liability corporation of the State of Delaware, having a place of business at 11235 S.E. 6th Street, Suite 200, Bellevue, WA 98004, 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 therefore in the United States and in any and all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR hereby sells, assigns and transfers unto said ASSIGNEE the entire right, title and interest in and to said invention, 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 divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States 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 as fully and entirely as the same would have been held and enjoyed by ASSIGNOR had this assignment, transfer and sale not been made. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR agrees 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 letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

5/16/2012

Charles Whitmer

WHEREAS, I, Lowell L. Wood, Jr., (hereinafter referred to as ASSIGNOR), having post office address of 989 112th Avenue NE, #2310, Bellevue, WA 98004 am the joint inventor of an invention entitled "Computational Systems and Methods for Locating a Mobile Device," as described and claimed in the specification for which an application for United States letters patent was filed on December 29, 2011 and assigned Application No. 13/340,540; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited liability corporation of the State of Delaware, having a place of business at 11235 S.E. 6th Street, Suite 200, Bellevue, WA 98004, 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 therefore in the United States and in any and all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR hereby sells, assigns and transfers unto said ASSIGNEE the entire right, title and interest in and to said invention, 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 divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States 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 as fully and entirely as the same would have been held and enjoyed by ASSIGNOR had this assignment, transfer and sale not been made. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR agrees 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 letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

Date

15 July 2012 Lowell L. Wood, Jr.

WHEREAS, I, Victoria Y.H. Wood, (hereinafter referred to as ASSIGNOR), having post office address of 1185 Hillcrest Avenue, Livermore, CA 94550-4921 am the joint inventor of an invention entitled "Computational Systems and Methods for Locating a Mobile Device," as described and claimed in the specification for which an application for United States letters patent was filed on December 29, 2011 and assigned Application No. 13/340,540; and

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited liability corporation of the State of Delaware, having a place of business at 11235 S.E. 6th Street, Suite 200, Bellevue, WA 98004, 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 therefore in the United States and in any and all foreign countries;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR hereby sells, assigns and transfers unto said ASSIGNEE the entire right, title and interest in and to said invention, 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 divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States 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 as fully and entirely as the same would have been held and enjoyed by ASSIGNOR had this assignment, transfer and sale not been made. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR agrees 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 letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

September 9, 2012 Victoria V.H. Wood
Victoria Y.H. Wood

WHEREAS, I, Lin Zhong, (hereinafter referred to as ASSIGNOR), having post office address of 3510 Deal Street, Houston, TX 77025 am the joint inventor of an invention entitled "Computational Systems and Methods for Locating a Mobile Device," as described and claimed in the specification for which an application for United States letters patent was filed on December ; and 29, 2011 and assigned Application No. 13/340,540

WHEREAS, Elwha LLC, (hereinafter referred to as ASSIGNEE), a limited liability corporation of the State of Delaware, having a place of business at 11235 S.E. 6th Street, Suite 200, Bellevue, WA 98004, 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 therefore in the United States and in any and all foreign countries;