

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT | | | | | | | | |
|---|--------------------------------------|---------------|----------------|---------------------|------------|----------------|------------|------------------|------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT | | | | | | | | |
| CONVEYING PARTY DATA | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Vahid Tarokh</td> <td>10/31/2003</td> </tr> <tr> <td>Yang-Seok Choi</td> <td>10/31/2003</td> </tr> <tr> <td>Siavash Alamouti</td> <td>10/31/2003</td> </tr> </tbody> </table> | | Name | Execution Date | Vahid Tarokh | 10/31/2003 | Yang-Seok Choi | 10/31/2003 | Siavash Alamouti | 10/31/2003 |
| Name | Execution Date | | | | | | | | |
| Vahid Tarokh | 10/31/2003 | | | | | | | | |
| Yang-Seok Choi | 10/31/2003 | | | | | | | | |
| Siavash Alamouti | 10/31/2003 | | | | | | | | |
| RECEIVING PARTY DATA | | | | | | | | | |
| Name: | Vivato, Inc. | | | | | | | | |
| Street Address: | 12610 E. Mirabeau Parkway, #900 | | | | | | | | |
| City: | Spokane | | | | | | | | |
| State/Country: | WASHINGTON | | | | | | | | |
| Postal Code: | 99216 | | | | | | | | |
| PROPERTY NUMBERS Total: 1 | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13085335</td> </tr> </tbody> </table> | | Property Type | Number | Application Number: | 13085335 | | | | |
| Property Type | Number | | | | | | | | |
| Application Number: | 13085335 | | | | | | | | |
| CORRESPONDENCE DATA | | | | | | | | | |
| Fax Number: | (858)314-1501 | | | | | | | | |
| Phone: | 858 314-1535 | | | | | | | | |
| Email: | tbarnett@mintz.com | | | | | | | | |
| <i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i> | | | | | | | | | |
| Correspondent Name: | Carl Kukkonen @ Mintz Levin | | | | | | | | |
| Address Line 1: | 3580 Carmel Mountain Road, Suite 300 | | | | | | | | |
| Address Line 4: | San Diego, CALIFORNIA 92130 | | | | | | | | |
| ATTORNEY DOCKET NUMBER: | 43273-507C02US | | | | | | | | |
| NAME OF SUBMITTER: | Carl A. Kukkonen, III | | | | | | | | |
| Total Attachments: 3 source=Assignment_ Inventors_to_Vivato,_ Inc#page1.tif source=Assignment_ Inventors_to_Vivato,_ Inc#page2.tif source=Assignment_ Inventors_to_Vivato,_ Inc#page3.tif | | | | | | | | | |

OP \$40.00 13085335

Attorney Docket No. MN1-004US
Serial No. (if known) _____

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial Number
Filing Date
Inventorship
Applicant
Attorney's Docket No.

Not Yet Assigned
Executed Concurrently Herewith
Tarokh et al
Microsoft Corporation
MN1-004US

Title: Complementary Beamforming Methods and Apparatuses

PATENT ASSIGNMENT

PARTIES TO THE ASSIGNMENT

Assignor(s):

Vahid Tarokh
157 Pleasant Street Apt 305
Cambridge, MA 02139

Yang-Seok Choi
22809 East Country Vista Drive, Apt. 438
Liberty Lake, WA 99019

Siavash Alamouti
2123 West 1st Ave, Apt 3
Spokane, WA 99204

Assignee:

Vivato Inc.
12610 E. Mirabeau Parkway, #900
Spokane, WA 99216

AGREEMENT

WHEREAS, ASSIGNOR(S) (listed above) are inventor(s) of an invention entitled "Complementary Beamforming Methods and Apparatuses," as described and claimed in the specification forming part of an application for United States letters patent referenced above;

WHEREAS, Vivato, Inc. (hereinafter referred to as ASSIGNEE), a corporation of the State of Washington having a place of business at 12610 E. Mirabeau Parkway, #900, Spokane, WA 99216, 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 therefor in the United States and in any and all foreign countries;

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S) hereby sell, assign and transfer unto 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 for their use and benefit and of their successors and assigns as fully and entirely as the same would have been held and enjoyed by ASSIGNOR(S) had this assignment, transfer and sale not been made. ASSIGNOR(S) hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR(S) agree 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 said letters patent, or for the purpose of protecting title to said invention or letters patent therefor.

10/31/03
Date

Vahid Tarokh
Vahid Tarokh

Attorney Docket No. MN1-004US
Serial No. (if known) _____

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S) hereby sell, assign and transfer unto 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 for their use and benefit and of their successors and assigns as fully and entirely as the same would have been held and enjoyed by ASSIGNOR(S) had this assignment, transfer and sale not been made. ASSIGNOR(S) hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR(S) agree 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 said letters patent, or for the purpose of protecting title to said invention or letters patent therefor.

Date

10/31/03

Date

10.31.03

Date

Vahid Tarokh



Yang-Seok Choi



Siavash Alamouti