### PATENT ASSIGNMENT

### Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE:      | NEW ASSIGNMENT |  |
|-----------------------|----------------|--|
| NATURE OF CONVEYANCE: | ASSIGNMENT     |  |

### **CONVEYING PARTY DATA**

| Name                  | Execution Date |
|-----------------------|----------------|
| Ju H. Bae             | 05/01/2008     |
| Christopher H. Howson | 04/30/2008     |
| Won IL Lee            | 05/26/2008     |
| Jonathan P. Munson    | 04/30/2008     |
| Young J. Tak          | 05/26/2008     |

#### **RECEIVING PARTY DATA**

| Name:           | International Business Machines Corporation |  |  |  |
|-----------------|---|--|--|--|
| Street Address: | New Orchard Road                            |  |  |  |
| City:           | Armonk                                      |  |  |  |
| State/Country:  | NEW YORK                                    |  |  |  |
| Postal Code:    | 10504                                       |  |  |  |

| Name:           | Institute For Information Technology Advancement |  |  |
|-----------------|--|--|--|
| Street Address: | Yuseong-gu                                       |  |  |
| City:           | Daejeon  |  |  |
| State/Country:  | KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF           |  |  |

#### PROPERTY NUMBERS Total: 1

| Property Type       | Number   |
|---------------------|----------|
| Application Number: | 12487999 |

### **CORRESPONDENCE DATA**

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PATENT REEL: 022850 FRAME: 0096 12487999

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ATTORNEY DOCKET NUMBER: YOR920070551US2 (21707Z)

NAME OF SUBMITTER: Steven Fischman

Total Attachments: 6
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(Joint-IBM Docket YOR920070551US1)

# Assignment

Whereas, we

Inventor and City

Ø6 15:19 FROM:LOTUS KOREA

(1) Ju H. Bae

of Seoul,

Country of Korea

(2) Christopher H. Howson

of Sleepy Hollow,

County of Westchester

and State of New York

(3) Won IL Lee

of Seoul.

Country of Kores

(4) Jonathan P. Munson

of Putnam Valley,

County of Putnam

and State of New York

(5) Young J. Tak

of Seoul. Country of Korea

have invented certain improvements in

### TITLE SCALABLE ACQUISITION OF TELEMETRY DATA FROM INSTRUMENTED SYSTEMS ENITITIES OVER A WIRELESS NETWORK

and executed, respectively, a United States patent application therefor on

DATES THAT

-2008, (2)

INVENTORS SIGNED THE 2008, (4) 2008.

2008, and

DECLARATION

Whereas INTERNATIONAL BUSINESS MACHINES CORPORATION, a corporation of New York, having a place of business at Armonk, New York 10504 (hereinafter called IBM) and INSTITUTE FOR INFORMATION TECHNOLOGY ADVANCEMENT, an agency of the Ministry of Information and Communication of the Republic of Korea, having a place of business at Yuseong-gu in the province of Daejeon, Korea (hereinafter called IITA) each desires to acquire an undivided right, title, and interest in the said application and invention, and to any United States and foreign patents to be obtained therefor,

Now therefore, for a valuable consideration, receipt of which is hereby acknowledged, we, the above named, hereby sell, assign, and transfer to IBM and IITA (and to their respective successors and essigns) as joint owners and not as owners in common, in accordance with the terms of the intellectual Property Agreement dated May 15, 2004 between IBM Korea, Inc. and IITA, the entire right, title and interest in the said application and invention therein disclosed for the United States and foreign countries, and in all foreign countries, and all rights of priority resulting from the filing of said United States application, and we request the Commissioner of Patents to issue any Letters Patent granted upon the inventions set forth in said application to IBM and IITA (and to their respective successors and assigns) in joint ownership; and we hereby agree that IBM and IITA may jointly apply for foreign Letters Patent on said invention and we will execute all papers necessary in connection with the United States and foreign applications when called upon to do so by IBM and IITA.

We hereby agree that this assignment agreement shall be construed in accordance with the laws of the State of New York.

(Joint-IBM Docket YOR920070551US1)

Signed SIGNATURE CITY (1) at DATE on 2008, Bae INVENTOR FIRST NAME MIDDLE INITIAL LAST NAME Signed CITY (2) at DATE on SIGNATURE Howson INVENTOR Christopher 2008, FIRST NAME MIDDLE INITIAL LAST NAME Signed SIGNATURE CITY (3) at DATE on INVENTOR Won Lee 2008. ΙL FIRST NAME MIDDLE INITIAL LAST NAME Signed SIGNATURE CITY (4) at Munson INVENTOR DATE 2008. Jonathan FIRST NAME MIDDLE INITIAL LAST NAME Signed SIGNATURE CITY (5) at DATE on Tak INVENTOR Young 2008, FIRST NAME MIDDLE INITIAL LAST NAME

# Assignment

Whereas, we

Inventor and City

(1) Ju H. Bae of Seoul.

Country of Korea

(2) Christopher H. Howson County of Westchester

of Sleepy Hollow, and State of New York

(3) Won IL Lee of Seoul.

Country of Korea

(4) Jonathan P. Munson County of Putnam

of Putnam Valley, and State of New York

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April 30 Agril 30 DATES THAT 2008, (2) (1)INVENTORS 2008, and

(3)2008, (4) SIGNED THE (5)

DECLARATION

Whereas INTERNATIONAL BUSINESS MACHINES CORPORATION, a corporation of New York, having a place of business at Armonk, New York 10504 (hereinafter called IBM) and INSTITUTE FOR INFORMATION TECHNOLOGY ADVANCEMENT, an agency of the Ministry of Information and Communication of the Republic of Korea, having a place of business at Yuseong-gu in the province of Daejeon, Korea (hereinafter called IITA) each desires to acquire an undivided right, title, and interest in the said application and invention, and to any United States and foreign patents to be obtained therefor.

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We hereby agree that this assignment agreement shall be construed in accordance with the laws of the State of New York.

Signed CITY (1) at SIGNATURE DATE 2008, Ju Bae INVENTOR on FIRST NAME MIDDLE INITIAL LAST NAME Signed, CITY (2) at Haw thorne, NY DATE on April 30 20 Christopher H. 2008, Howson INVENTOR FIRST NAME MIDDLE INITIAL LAST NAME Signed CITY (3) at DATE on SIGNATURE Won 2008, INVENTOR Lee FIRST NAME MIDDLE INITIAL LAST NAME Signed, CITY (4) at DATE FIRST NAME MIDDLE INITIAL LAST NAME Signed CITY (5) at SIGNATURE DATE on Young INVENTOR 2008, FIRST NAME MIDDLE INITIAL LAST NAME

### Assignment

Whereas, we

Inventor and City

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of Seoul,

Country of Korea

(2) Christopher H. Howson County of Westchester of Sleepy Hollow, and State of New York.

(3) Won IL Lee " 💲

of Seoul,

Country of Korea

(4) Jonathan P. Munson County of Putnam of Putnam Valley, and State of New York

(5) Young J. Tak

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have invented certain improvements in

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and executed, respectively, a United States patent application therefor on

DATES THAT INVENTORS

(1) (3) 26 May (5) 26 May 2008, (2) 2008, (4)

2008, 2008, and

SIGNED THE (5) 26. Way

2008.

Whereas INTERNATIONAL BUSINESS MACHINES CORPORATION, a corporation of New York, having a place of business at Armonk, New York 10504 (hereinafter called IBM) and INSTITUTE FOR INFORMATION TECHNOLOGY ADVANCEMENT, an agency of the Ministry of Information and Communication of the Republic of Korea, having a place of business at Yuseong-gu in the province of Daejeon, Korea (hereinafter called IITA) each desires to acquire an undivided right, title, and interest in the said application and invention, and to any United States and foreign patents to be obtained therefor.

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We hereby agree that this assignment agreement shall be construed in accordance with the laws of the State of New York.

| CITY<br>DATE | Signed<br>(1) at       | on    |      | 2008, | Ju<br>FIRST NAME          | H.<br>MIDDLE INITIAL  | SIGNATURE Bae INVENTOR LAST NAME          |
|--------------|------------------------|-------|------|-------|---------------------------|-----------------------|---|
| CITY<br>DATE | Signed<br>(2) at<br>on |       |      | 2008, | Christopher<br>FIRST NAME | H.<br>MIDDLE INITIAL  | SIGNATURE<br>Howson INVENTOR<br>LAST NAME |
| CITY<br>DATE | Signed<br>(3) at<br>on | 26, M | lay  | 2008, | Won HANE                  | IL Lee MIDDLE INITIAL | SIGNATURE<br>Lee INVENTOR<br>LAST NAME    |
| CITY<br>DATE | Signed<br>(4) at       | on    |      | 2008, | Jonathan<br>FIRST NAME    | P.<br>MIDDLE INITIAL  | SIGNATURE<br>Munson INVENTOR<br>LAST NAME |
| CITY<br>DATE | Signed<br>(5) at<br>on | ab. M | louf | 2008, | Young FIRST NAME          | MJU MIDDLE INITIAL    | SIGNATURE Tak INVENTOR LAST NAME          |

Parameter States

**RECORDED: 06/19/2009** 

PATENT REEL: 022850 FRAME: 0103

 $\tilde{T} = (\mathbf{q}_{ij} - \mathbf{q}_{ij})^T \mathbf{A} \mathbf{A} + \cdots + (\mathbf{q}_{ij} + \mathbf{q}_{ij})^T \mathbf{A}$