TRADEMARK ASSIGNMENT

Electronic Version v1.1
Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	Joinder to Security Agreement

CONVEYING PARTY DATA

Name	Formerly	Execution Date	Entity Type
Telecommunication Systems, Inc.		07/06/2012	CORPORATION: MARYLAND
Solvern Innovations, Inc.		07/06/2012	CORPORATION: MARYLAND
Network in Motion, Inc.		07/06/2012	CORPORATION: DELAWARE
microDATA GIS, Inc.		07/06/2012	CORPORATION: VERMONT
microDATA, LLC		07/06/2012	LIMITED LIABILITY COMPANY: MARYLAND

RECEIVING PARTY DATA

Name:	Silicon Valley Bank
Street Address:	303 Tasman Drive
Internal Address:	HG 150
City:	Santa Clara
State/Country:	CALIFORNIA
Postal Code:	95054
Entity Type:	CORPORATION: CALIFORNIA

PROPERTY NUMBERS Total: 1

Property Type	Number	Word Mark
Registration Number:	2518149	SPATIAL MSAG

CH $40.00 2518149

CORRESPONDENCE DATA

Fax Number: 3026365454

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.

Phone: 800-927-9801 x2348
Email: jpaterso@cscinfo.com
Correspondent Name: Corporation Service Company
Address Line 1: 1090 Vermont Avenue NW, Suite 430
Address Line 4: Washington, DISTRICT OF COLUMBIA 20005

ATTORNEY DOCKET NUMBER:	278730
NAME OF SUBMITTER:	Jean Paterson
Signature:	/jep/
Date:	07/17/2012

Total Attachments: 10
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JOINDER, ASSUMPTION AND SECOND AMENDMENT TO INTELLECTUAL PROPERTY SECURITY AGREEMENT

Effective Date: July 6, 2012

This **JOINDER, ASSUMPTION AND SECOND AMENDMENT TO INTELLECTUAL PROPERTY SECURITY AGREEMENT** (this "**Second Amendment**"), dated as of July 6, 2012, is by and among, (a) **SILICON VALLEY BANK**, as administrative agent and collateral agent (collectively, in such capacities, "**Agent**") for its own benefit and the benefit of the other Secured Parties (as defined in the Loan Agreement referred to below), and (b) **TELECOMMUNICATION SYSTEMS, INC.**, a Maryland corporation ("**TCS**"), **SOLVERN INNOVATIONS, INC.**, a Maryland corporation ("**Solvern**"), **NETWORKS IN MOTION, INC.**, a Delaware corporation ("**NIM**"), **microDATA GIS, INC.**, a Vermont corporation ("**microDATA GIS**"), and **microDATA, LLC**, a Maryland limited liability company ("**microDATA LLC**", and together with TCS, Solvern, NIM and microDATA GIS, jointly and severally, individually and collectively, referred to as "**Grantor**"), each with a principal place of business located at 275 West Street, Suite 400, Annapolis, Maryland 21401. microDATA LLC and microDATA GIS are collectively referred to herein as "**New Grantor**".

RECITALS

WHEREAS, reference is made to a certain Loan and Security Agreement, dated as of December 31, 2009 (as amended, modified, supplemented or restated and in effect from time to time, the "**Loan Agreement**"), by and among Agent, the several banks and other financial institutions or entities parties to the Loan Agreement ("**Lenders**"), TCS, Solvern, and NIM (TCS, Solvern, and NIM are hereinafter referred to jointly and severally, individually and collectively, as "**Existing Grantor**").

WHEREAS, pursuant to the terms of the Loan Agreement and a certain Intellectual Property Security Agreement dated as of December 31, 2009, as amended by a Joinder, Assumption and First Amendment to Intellectual Property Security Agreement dated as of March 4, 2011 (collectively, as further amended, modified, supplemented or restated and in effect from time to time, the "**IP Security Agreement**"), by and between Agent and Existing Grantor, Existing Grantor has granted to Agent, for the ratable benefit of the Secured Parties, a security interest in certain Copyrights, Trademarks, Patents, and Mask Works (as each term is described in the IP Security Agreement) to secure the Obligations of Existing Grantor under the Loan Agreement.

WHEREAS, (i) TCS recently created microDATA LLC; and (ii) microDATA LLC acquired all of the issued and outstanding shares of capital stock of microDATA GIS.

WHEREAS, pursuant to the terms of a certain Consent, Joinder, Assumption and Fourth Amendment to Loan and Security Agreement, dated as of July 6, 2012, by and among Agent, Lenders, Existing Grantor and New Grantor (the "**Loan Agreement Joinder**"), each New Grantor became a co-Borrower under the Loan Documents and granted to Agent, for the ratable benefit of the Secured Parties, a continuing pledge and security interest in and to the assets of each such New Grantor.

WHEREAS, in furtherance and as confirmation of the security interest granted by each New Grantor to Agent, for the ratable benefit of the Secured Parties, under the Loan Agreement Joinder, Agent and Lenders have required that, among other things, each New Grantor execute and deliver to Agent this Second Amendment and join in the execution of, and become a party to, the IP Security Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing recitals and other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, and intending to be legally bound, the parties hereto agree as follows:

1. Definitions. Capitalized terms used but not defined in this Second Amendment shall have the meanings given to them in the IP Security Agreement or, if not used therein, in the Loan Agreement.

2. Joinder and Assumption. Each undersigned New Grantor is a direct or indirect Subsidiary of TCS. Each New Grantor hereby joins the IP Security Agreement, and agrees to comply with and be bound by all of the terms, conditions and covenants of the IP Security Agreement, as if such New Grantor were originally named as a "Grantor" therein. Without limiting the generality of the preceding sentence, each New Grantor hereby assumes and agrees to perform all present and future liabilities and obligations of Existing Grantor under the IP Security Agreement. All references in the IP Security Agreement to "Grantor" shall be deemed to refer to and include each New Grantor.

3. Grant of Security Interest. To secure the payment and performance in full of all of the Obligations, each New Grantor hereby grants to Agent, for the ratable benefit of the Secured Parties, a security interest in all of such New Grantor's right, title and interest in, to and under the Intellectual Property Collateral (as more particularly described on Exhibit A attached hereto) owned by such New Grantor, whether now owned or existing or hereafter created, acquired, or arising, and wherever located. Each New Grantor further covenants and agrees by its execution hereof that it shall execute all such instruments and take all such actions that are reasonably required by Agent in order to grant a valid, perfected security interest to Agent in the Intellectual Property Collateral (subject only to Permitted Liens). Each New Grantor hereby authorizes Agent to file this Second Amendment with the United States Patent and Trademark Office, without notice to any New Grantor, in order to perfect or protect Agent's interest or rights hereunder.

4. Amendments to IP Security Agreement. The provisions of the IP Security Agreement are hereby amended as follows:

(a) Exhibit B to the IP Security Agreement is hereby supplemented to include the Patents owned by each New Grantor, as more particularly described on Exhibit B attached hereto.

(b) Exhibit C to the IP Security Agreement is hereby supplemented to include the Trademarks owned by each New Grantor, as more particularly described on Exhibit C attached hereto.

5. Integration. This Second Amendment represents the entire agreement about this subject matter and supersedes prior negotiations or agreements. All prior agreements, understandings, representations, warranties, and negotiations between the parties about the subject matter of this Second Amendment merge into this Second Amendment.

6. Prior Agreement. The IP Security Agreement is hereby ratified and reaffirmed and, except as expressly amended, modified and supplemented hereby, the IP Security Agreement is and shall remain in full force and effect. This Second Amendment is not a novation and the terms and conditions of this Second Amendment shall be in addition to and supplemental to all terms and conditions set forth in the IP Security Agreement. In the event of any conflict or inconsistency between this Second Amendment and the terms of the IP Security Agreement, the terms of this Second Amendment shall be controlling, but the IP Security Agreement shall not otherwise be affected or the rights therein impaired.

7. Counterparts. This Second Amendment may be executed in any number of counterparts and all of such counterparts taken together shall be deemed to constitute one and the same instrument.

8. Ratification of IP Security Agreement. Grantor hereby ratifies, confirms, and reaffirms all terms and conditions of the IP Security Agreement and confirms all security or other collateral granted to Agent, for the ratable benefit of the Secured Parties, thereunder.

9. Choice of Law. Section 12 of the Loan Agreement is hereby incorporated by reference, in its entirety.

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This Second Amendment is executed as of the date first written above.

NEW GRANTOR:

microDATA GIS, INC.

By: _____
Name: Thomas M. Brandt, Jr.
Title: Manager

microDATA, LLC

By: _____
Name: Thomas M. Brandt, Jr.
Title: Manager

EXISTING GRANTOR:

TELECOMMUNICATION SYSTEMS, INC.

By: _____
Name: Thomas M. Brandt, Jr.
Title: Senior Vice President and Chief Financial Officer

SOLVERN INNOVATIONS, INC.

By: _____
Name: Thomas M. Brandt, Jr.
Title: Treasurer

NETWORKS IN MOTION, INC.

By: _____
Name: Thomas M. Brandt, Jr.
Title: Senior Vice President, Chief Financial Officer and Treasurer

[Signature Page to Joinder, Assumption and Second Amendment to Intellectual Property Security Agreement]

AGENT:

SILICON VALLEY BANK

By: Jennie T. Barrett
Name: Jennie T. Barrett
Title: Vice President

[Signature Page to Joinder, Assumption and Second Amendment to Intellectual Property Security Agreement]

EXHIBIT A – INTELLECTUAL PROPERTY COLLATERAL

The Intellectual Property Collateral consists of all of each New Grantor's right, title and interest in and to the following personal property owned by such New Grantor:

1. Any and all copyright rights, copyright applications, copyright registrations and like protections in each work or authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret, now or hereafter existing, created, acquired or held (collectively, the "**Copyrights**");

2. All patents, patent applications and like protections including, without limitation, improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same, including, without limitation, the patents and patent applications set forth on Exhibit B attached hereto (collectively, the "**Patents**");

3. Any trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Grantor connected with and symbolized by such trademarks, including, without limitation, those set forth on Exhibit C attached hereto (collectively, the "**Trademarks**");

4. All mask works or similar rights available for the protection of semiconductor chips, now owned or hereafter acquired (collectively, the "**Mask Works**");

5. Any and all claims for damages by way of past, present and future infringements of any of the rights included above, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the intellectual property rights identified above;

6. All licenses or other rights to use any of the Copyrights, Patents, Trademarks, or Mask Works and all license fees and royalties arising from such use to the extent permitted by such license or rights;

7. All amendments, extensions, renewals and extensions of any of the Copyrights, Trademarks, Patents, or Mask Works; and

8. All proceeds and products of the foregoing, including, without limitation, all payments under insurance or any indemnity or warranty payable in respect of any of the foregoing.

EXHIBIT B – PATENTS

Owner	Title	Registration Number	Registration Date	Filing Date
microDATA GIS, Inc	System and method for enhanced 9-1-1 address development, maintenance and call routing using road access zones	6,529,722	3/4/03	6/18/99

EXHIBIT C – TRADEMARKS

Owner Name	Mark	Registration Number	Registration Date	Expiration Date
microDATA GIS, Inc.	SPATIAL MSAG	2518149	12/11/01	12/21/21

Additional names of conveying parties

Solvern Innovations, Inc., a Maryland corporation

Networks in Motion, Inc., a Delaware corporation

microDATA GIS, Inc., a Vermont corporation

microDATA, LLC, a Maryland limited liability company