503109375 12/19/2014

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3155983

| | Name | Execution Date | |
|-----------------------|----------------|----------------|--|
| CONVEYING PARTY DATA | | | |
| NATURE OF CONVEYANCE: | ASSIGNMENT | | |
| SUBMISSION TYPE: | NEW ASSIGNMENT | | |

| BRIAN BULKOWSKI | 06/02/2003 |
|-----------------|------------|
| CAROLYN WALES | 05/12/2003 |
| SAM HSU | 06/16/2003 |
| JAMES HELMAN | 06/18/2003 |
| JOSEPH DECKER | 06/17/2003 |
| BROCK WAGENAAR | 06/19/2003 |
| MARK VICKERS | 05/12/2003 |

RECEIVING PARTY DATA

| Name: | LIBERATE TECHNOLOGIES |
|-----------------|-----------------------|
| Street Address: | 2 CIRCLE STAR WAY |
| City: | SAN CARLOS |
| State/Country: | CALIFORNIA |
| Postal Code: | 94070-6200 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 13852355 |

CORRESPONDENCE DATA

| Fax Number: | (202)824-3001 | | |
|---|---|--|--|
| 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. | | | |
| Phone: | 202 824-3000 | | |
| Email: | bwptopat@bannerwitcoff.com, dwityak@bannerwitcoff.com | | |
| Correspondent Name: | BANNER & WITCOFF, LTD. | | |
| Address Line 1: | 1100 13TH STREET NW, SUITE 1200 | | |
| Address Line 4: | WASHINGTON, D.C. 20005 | | |
| | | | |

| DATE SIGNED: | 12/19/2014 |
|-------------------------|-----------------|
| SIGNATURE: | /Adam R. Banes/ |
| NAME OF SUBMITTER: | ADAM R. BANES |
| ATTORNEY DOCKET NUMBER: | 007412.02384 |

Total Attachments: 4

PATENT

REEL: 034556 FRAME: 0087

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| source=Assignment 1#page3.tif |
| source=Assignment 1#page4.tif |

WHEREAS, We, Brian BULKOWSKI, Carolyn WALES, Sam HSU, James HELMAN, Joseph DECKER, Brock WAGENAAR and Mark VICKERS referred to as "ASSIGNORS", have invented certain new and useful improvements, as described and set forth in the below-identified application for United States Letters Patent:

Title of Invention: Method and Apparatus for Transmitting Data in a Data Stream

U.S. Patent Application No. <u>10/407,090</u> filed <u>April 2, 2003</u>

WHEREAS, <u>Liberate Technologies</u>, hereinafter referred to as "ASSIGNEE", is desirous of acquiring the entire right, title, and interest in the said invention and application and in any Letters Patent which may be granted with regard to the same;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for One Dollar (\$1.00) and other good and valuable consideration, ASSIGNORS□ have sold, assigned, and transferred, and by these presents does sell, assign, and transfer unto the said ASSIGNEE, and ASSIGNEE'S successors and assigns, all right, title, and interest in and to said invention, said application for United □States Letters Patent and any Letters Patent which may be hereafter granted on the same in the United States and all countries throughout the world, including any divisions, renewals, continuations in whole or part, substitutions, conversions, reissues, revivals, prolongation, or extensions thereof, said interest to be held and enjoyed by said ASSIGNEE□ as fully and exclusively as it would have been held and enjoyed by said ASSIGNORS had this assignment and transfer not been made, for all time. □

ASSIGNORS further agree that they will, without charge to said ASSIGNEE□, but at ASSIGNEE'S □ expense, cooperate with ASSIGNEE in the prosecution of said application and/or applications, execute, verify, acknowledge, and deliver all such further papers, including applications for Letters Patent and for the reissue thereof, and instruments of assignment and transfer thereof, and will perform such other acts as ASSIGNEE□ may lawfully request, to obtain or maintain Letters Patent for said invention and improvement in any and all countries, and to vest title thereto in said ASSIGNEE□, or ASSIGNEE'S successors and assigns. □

IN TESTIMONY WHEREOF, ASSIGNORS have hereunto signed their names to the assignment on the date indicated below. $\Box_{\mathcal{A}}$

Brian BULKØWSKI Carolyn WALES Sam HSU DATE James HELMAN Joseph DECKER DATE DATE Brock WAGENAAB 5.12.03 DATE VICKERS

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Brian BULKOWSKI

Carolyn WALES

Sam HSt James KELMAN

Joseph DECKER

Brock WAGENAAB Mark VICKERS

DATE

DATE

DATE

<u>5.12.03</u> DATE

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Brian BULKØWSKI

Carolyn WALES

Sam HSU

James HELMAN Sept-DECKER

Brock WAGENAAE

Mark VICKERS

| 6/2/2003 | |
|-----------|--|
| DATE | |
| 5/12/2003 | |

DATE

DATE

DATE DATE

DATE

5.12.03 DATE

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Brian BULKØWSKI Carolyn WALES DATE Sam HSU DATE James HELMAN DATE Joseph DECKER DATE 6/19/03 Brock W AGENAAB 5.12.03 Mark VICKERS DATE