#### 504496713 08/09/2017

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4543416

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

#### **CONVEYING PARTY DATA**

| Name                       | Execution Date |  |
|----------------------------|----------------|--|
| RODERICK ECHOLS            | 07/31/2017     |  |
| RYAN CHARLES KNUDSON       | 07/31/2017     |  |
| TIMOTHY WINTHROP KINGSBURY | 07/30/2017     |  |
| JONATHAN GAITHER KNOX      | 07/31/2017     |  |

#### **RECEIVING PARTY DATA**

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| Internal Address: | #02-01, NEW TECH PARK        |
| City:             | SINGAPORE                    |
| State/Country:    | SINGAPORE                    |
| Postal Code:      | 556741                       |

#### **PROPERTY NUMBERS Total: 1**

| Property Type       | Number   |
|---------------------|----------|
| Application Number: | 15673079 |

#### **CORRESPONDENCE DATA**

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| ATTORNEY DOCKET NUMBER: | RPS920170078USNP(710.563)                                  |
|-------------------------|--|
| NAME OF SUBMITTER:      | KRISTEN M. SALATA  |
| SIGNATURE:              | /Kristen M. Salata/  |
| DATE SIGNED:            | 08/09/2017   |
|                         | This document serves as an Oath/Declaration (37 CFR 1.63). |
|                         | ·  |

**Total Attachments: 6** 

PATENT REEL: 043248 FRAME: 0903

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PATENT REEL: 043248 FRAME: 0904

## DECLARATION (37 C.F.R. 1.63) FOR UTILITY PATENT APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. 1.76) AND ASSIGNMENT

Title of invention: PERFORMING ACTION ON ACTIVE MEDIA CONTENT

| As a below named inventor, I hereby declare that:  |
|--|
| This declaration is directed to the attached application, or (if following box is checked):                        |
| [ ] United States application or PCT international application number  |
| filed on   |
| The above-identified application was made or authorized to be made by me.  |
| I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. |
| I have reviewed and understand the contents of the application, including the claims.                              |
| I am aware of the duty to disclose to the United States Patent and Trademark Office all information                |

Whereas, the undersigned inventor(s) has/have made certain inventions, improvements, and discoveries (herein referred to as the "Invention") disclosed in the above-identified patent application and further identified by the Lenovo Docket Number provided above in the header of this document;

known to me to be material to patentability as defined in 37 CFR Section 1.56.

Whereas, Lenovo (Singapore) Pte. Ltd., a corporation of Singapore, having a place of business at 151, Lorong Chuan, #02-01, New Tech Park, Singapore 556741 (herein referred to as "Lenovo"), desires to acquire, and each undersigned inventor desires to grant to Lenovo, the entire worldwide right, title, and interest in and to the Invention and in and to any and all patent applications and patents directed thereto;

Now, therefore, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned inventor ("ASSIGNOR") hereby sells or has sold, assigns or has assigned, and otherwise transfers or has transferred to Lenovo (the "ASSIGNEE"), its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the Invention, the above-identified United States patent application, and any and all other patent applications and patents for the Invention which may be applied for or granted therefor in the United States and in all foreign countries and jurisdictions, including all divisions, continuations, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents. In addition, each undersigned inventor hereby authorizes and requests the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the Invention, to Lenovo, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by Lenovo, its successors, legal representatives, and assigns to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made; and each undersigned inventor agrees to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the Invention and all related patents

Page 1 of 3

and applications, in Lenovo, its successors, legal representatives, and assigns, whenever requested by Lenovo, its successors, legal representatives, or assigns.

Each undersigned inventor acknowledges their prior and ongoing obligations to sell, assign, and transfer the rights under this Assignment to Lenovo and is unaware of any reason why they may not have the full and unencumbered right to sell, assign, and transfer the rights hereby sold, assigned, and transferred, and has not executed, and will not execute, any document or instrument in conflict herewith. Each undersigned inventor also hereby grants Lenovo, its successors, legal representatives, and assigns, the right to insert in this Assignment any further identification (including, but not limited to, patent Application Number) which may be necessary or desirable for recordation of this Assignment

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

| (i) Legal Name of Inventor: Roderick Echols                                     |                          |
|---|--------------------------|
| Signature: And Make July  | Date: 7/31/17            |
| 2334 Millikan Road, Chapel Hill, NC 27516<br>Inventor Residence Mailing Address | '                        |
| (2) Legal Name of Inventor: Ryan Charles Knudson                                |                          |
| Signature:  5907 Whisperwood Drive, Durham, NC 27713                            | Date: <u>07-3(-2</u> 01) |
| Inventor Residence Mailing Address  |                          |
| (3) Legal Name of Inventor: Timothy Winthrop Kingsbury                          |                          |
| Signature:  | Date:                    |
| 103 Dorchester Pines, Cary, NC 27511  |                          |

(4) Legal Name of Inventor: Jonathan Gaither Knox

Signature;

Jonatha Date: 07/31/2017

417 Downing Glen Drive, Morrisville, NC 27560

Inventor Residence Mailing Address

# DECLARATION (37 C.F.R. 1.63) FOR UTILITY PATENT APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. 1.76) AND ASSIGNMENT

Title of Invention: PERFORMING ACTION ON ACTIVE MEDIA CONTENT

| As a below named inventor, I hereby declare that:  |
|--|
| This declaration is directed to the attached application, or (if following box is checked):  |
| [ ] United States application or PCT international application numberfiled on  |
| The above-identified application was made or authorized to be made by me.  |
| I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.   |
| I have reviewed and understand the contents of the application, including the claims.  |
| I am aware of the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR Section 1.56. |
| Whereas, the undersigned inventor(s) has/have made certain inventions, improvements, and discoveries   |

(herein referred to as the "Invention") disclosed in the above-identified patent application and further identified by the Lenovo Docket Number provided above in the header of this document;

Whereas, Lenovo (Singapore) Ptc. Ltd., a corporation of Singapore, having a place of business at 151, Lorong Chuan, #02-01, New Tech Park, Singapore 556741 (herein referred to as "Lenovo"), desires to acquire, and each undersigned inventor desires to grant to Lenovo, the entire worldwide right, title, and interest in and to the Invention and in and to any and all patent applications and patents directed thereto;

Now, therefore, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned inventor ("ASSIGNOR") hereby sells or has sold, assigns or has assigned, and otherwise transfers or has transferred to Lenovo (the "ASSIGNEE"), its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the Invention, the above-identified United States patent application, and any and all other patent applications and patents for the Invention which may be applied for or granted therefor in the United States and in all foreign countries and jurisdictions, including all divisions, continuations, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents. In addition, each undersigned inventor hereby authorizes and requests the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the Invention, to Lenovo, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by Lenovo, its successors, legal representatives, and assigns to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made; and each undersigned inventor agrees to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the Invention and all related patents

Page Lof 3

and applications, in Lenovo, its successors, legal representatives, and assigns, whenever requested by Lenovo, its successors, legal representatives, or assigns.

Each undersigned inventor acknowledges their prior and ongoing obligations to sell, assign, and transfer the rights under this Assignment to Lenovo and is unaware of any reason why they may not have the full and unencumbered right to sell, assign, and transfer the rights hereby sold, assigned, and transferred, and has not executed, and will not execute, any document or instrument in conflict herewith. Each undersigned inventor also hereby grants Lenovo, its successors, legal representatives, and assigns, the right to insert in this Assignment any further identification (including, but not limited to, patent Application Number) which may be necessary or desirable for recordation of this Assignment

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

| (1) Legal Name of Inventor: Roderick Echols                                     |       |
|---|-------|
| Signature:  | Date: |
| 2334 Millikan Road, Chapel Hill, NC 27516<br>Inventor Residence Mailing Address |       |
| (2) Legal Name of Inventor: Ryan Charles Knudson                                |       |
| Signature:  | Date: |
| 5907 Whisperwood Drive, Durham, NC 27713<br>Inventor Residence Mailing Address  |       |
| (3) Legal Name of Inventor: Timothy Winthrop Kingsbury                          |       |
| Signature: J. H. Mirth, 1892  | Date; |
| 103 Dorchester Pines, Cary, NC 27511  |       |
| Inventor Residence Mailing Address  |       |

Page 2 of 3

| (4) Legal Name of Inventor: Jonathan Gaither Knox                                |       |  |
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PATENT REEL: 043248 FRAME: 0910

**RECORDED: 08/09/2017**