

## PATENT ASSIGNMENT COVER SHEET

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| <b>SUBMISSION TYPE:</b>   | NEW ASSIGNMENT              |
| <b>NATURE OF CONVEYANCE:</b>  | ASSIGNMENT                  |
| <b>CONVEYING PARTY DATA</b>   |                             |
| <b>Name</b>   | <b>Execution Date</b>       |
| VISWANATHAN SWAMINATHAN   | 10/12/2017                  |
| SAAYAN MITRA  | 10/12/2017                  |
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| <b>City:</b>  | SAN JOSE                    |
| <b>State/Country:</b>   | CALIFORNIA                  |
| <b>Postal Code:</b>   | 95110-2704                  |
| <b>PROPERTY NUMBERS Total: 1</b>  |                             |
| <b>Property Type</b>  | <b>Number</b>               |
| <b>Application Number:</b>  | 15788481                    |
| <b>CORRESPONDENCE DATA</b>  |                             |
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| <b>NAME OF SUBMITTER:</b>   | TRACI M. BURKE              |
| <b>SIGNATURE:</b>   | /TRACI M. BURKE/            |
| <b>DATE SIGNED:</b>   | 10/20/2017                  |
| <b>Total Attachments: 2</b>   |                             |
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| source=ADBS_272550_Executed_Assignment#page2.tif  |                             |

### ASSIGNMENT

WHEREAS, we, Viswanathan Swaminathan and Saayan Mitra ("ASSIGNORS"), are the original and joint inventors of subject matter disclosed and/or claimed in a nonprovisional patent application, the title of which is:

#### EMBEDDING CODEBOOKS FOR RESOURCE OPTIMIZATION

for which we are about to make, or have made, application for Letters Patent of the United States. ASSIGNORS hereby authorize legal representatives of Shook, Hardy & Bacon L.L.P. to insert here in parentheses the Application No. ( 15/788,481 ), and Filing Date ( October 19, 2017 ), when known; and

WHEREAS, ADOBE SYSTEMS INCORPORATED ("ASSIGNEE"), a corporation duly organized under the laws of the State of Delaware, and having its principal place of business at 345 Park Avenue, San Jose, California 95110-2704, USA, is desirous of acquiring an interest in, to and under said invention, said application and any and all Letters Patent which may be granted for or upon said invention in the United States of America and all countries foreign thereto;

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNORS have sold, assigned and transferred, and by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right, title and interest, throughout the world, in, to and under said invention as fully set forth and described in the above-identified application; in, to and under said application; in, to and under any and all refilings, divisions and continuations of said application; in, to and under any and all Letters Patent of the United States of America which may issue from said application, refilings, divisions and continuations; in, to

and under any and all reissues of said Letters Patent of the United States of America; in, to and under any and all applications for Letters Patent upon said invention which may hereafter be filed in any and all countries foreign to the United States of America; in, to and under any and all refilings, divisions and continuations of said foreign-filed applications; in, to and under any and all Letters Patent of countries foreign to the United States of America, which may issue from the said foreign-filed applications, refilings, divisions and continuations; and in, to and under any and all extensions of, and additions to, said Letters Patent of countries foreign to the United States of America, the same to be held and enjoyed by said ASSIGNEE, for its own use and behoof, and for its successors, legal representatives and assigns, to the full end of the term for which said Letters Patent may be granted, and ASSIGNORS do hereby authorize and request the Commissioner of Patents to issue the said Letters Patent in accordance with this assignment.

EXECUTED this 12th day of October, 2017.

Viswanathan Swaminathan  
/\_\_\_\_\_  
Viswanathan Swaminathan

EXECUTED this 12th day of October, 2017.

Saayan Mitra  
/\_\_\_\_\_  
Saayan Mitra