504010572 09/19/2016

PATENT ASSIGNMENT COVER SHEET

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

CONVEYING PARTY DATA

| Name | Execution Date |
|--------------------|----------------|
| RAMAKRISHNA SISTA | 11/17/2009 |
| VAMSEE K. PAMULA | 11/18/2009 |
| VIJAY SRINIVASAN | 12/07/2009 |
| MICHAEL G. POLLACK | 11/18/2009 |
| ALLEN ECKHARDT | 11/17/2009 |

RECEIVING PARTY DATA

| Name: | ADVANCED LIQUID LOGIC, INC. |
|-----------------|-----------------------------|
| Street Address: | 615 DAVIS DRIVE, SUITE 800 |
| City: | MORRISVILLE |
| State/Country: | NORTH CAROLINA |
| Postal Code: | 27560 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 14978935 |

CORRESPONDENCE DATA

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|-------------------------|------------------|
| NAME OF SUBMITTER: | ROSALYN ESPEJO |
| SIGNATURE: | /ROSALYN ESPEJO/ |
| DATE SIGNED: | 09/19/2016 |

Total Attachments: 4

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> PATENT REEL: 039778 FRAME: 0286

PATENT ASSIGNMENT

This Assignment is made by Ramakrishna Sista, of Morrisville, North Carolina; Vamsee K. Pamula, of Durham, North Carolina; Vijay Srinivasan, of Durham, North Carolina; Michael G. Pollack, of Durham, North Carolina; and Allen Eckhardt, of Durham, North Carolina (hereinafter "Assignors"), to Advanced Liquid Logic, Inc., a corporation duly organized and existing under the laws of the State of Delaware having its principal office and place of business at 615 Davis Drive, Suite 800, Morrisville, North Carolina 27560 (hereinafter "Assignee").

WHEREAS, Assignors have invented certain new and useful improvements concerning Manipulation of Beads in Droplets, the invention being described in and identified by an international patent application filed October 17, 2008 as International Patent Application Serial No. PCT/US2008/080264.

AND, WHEREAS, Assignee, desires to acquire the entire right, title, and interest in the application and the invention and improvements on the invention, and in Letters Patent on the same when granted in any and all countries.

NOW, THEREFORE, To Whom It May Concern, be it known that for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignors by these presents do hereby sell, assign, transfer, and convey unto the Assignee, its successors and assigns, the entire right, title, and interest in and to the application and the invention, and in any improvements on the invention previously or in the future made or acquired by Assignors, and to all rights of priority to the same pursuant to the International Convention for the Protection of Industrial Property, and in and to any and all patent applications filed on the invention, and in and to any and all continuations, continuations-in-part, or divisions of any United States or foreign patent application filed on the invention, and in and to any and all Letters Patent of the United States of America and all foreign countries or reissues thereof which may be granted therefor or thereon, for the full end of the term for which said Letters Patent may be granted, the same to be held and enjoyed by said Assignee, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by Assignors if this assignment and sale had not been made.

Attorney File No. 060885-00208,078PCT

Assignors hereby request that said Letters Patent be issued in accordance with this Assignment.

Assignors further warrant and represent that, at the time of the execution and delivery of these presents, Assignors possess their full title to the invention and application above-mentioned, and that they have the unencumbered right and authority to make this assignment.

Assignors further covenant and agree, and likewise bind, their heirs, legal representatives and assigns, to promptly communicate to said Assignee or its representatives any facts known to them relating to said invention, to testify in any interference or legal proceedings involving said invention, to execute any additional papers which may be requested to confirm the right of the Assignee, its representatives, successors and assigns to secure patent or similar protection for said invention in all countries and to vest in the Assignee complete title to the invention and Letters Patent, without further compensation, but at the expense of said Assignee, its successors, assigns and other legal representatives.

| Executed this 17th day of _ | November | _, 2009 |
|-----------------------------|----------|---------|
| laemet Nk | | |
| Ramakrishna Sista | (Seal) | |

Witnessed by:

Date

Name

Attorney File No. 060885-00208.078PCT

| | Executed this day of | Nevember, 2009. |
|---------------------------------|----------------------------------|-----------------|
| | Vamsee K. Pamula | (Seal) |
| Witnessed by: Name Name Name | Off 11/18/007 Date 11/18/09 Date | |
| | ********** | |
| | | |
| | Executed this day of | December, 2009. |
| | W | |
| | Vijay Srimvasan | (Seal) |
| *** | | |
| Witnessed by: Penny Pasliol | 12/2 09 Date 09 | |
| Name () | Date! | |
| Name | ' Date | |
| | *********** | |

Attorney File No. 060885-00208.078PCT

| Executed this 18 day of NoV , 2009 |
|--------------------------------------------------------------------------------|
| Michael G. Pollack (Seal) |
| Witnessed by: Plant as light 11/18/09 Name Date Name Date |
| ************************************** |
| |
| Executed this 17 day of November, 2009 |
| Executed this 17 day of November, 2009 Allen Eckhardt (Seal) |
| Witnessed by: Name Allen Eckhardt (Seal) |
| Allen Eckhardt (Seal) Witnessed by: Pumma ashoff 11/8/04 |
| Allen Eckhardt (Seal) Witnessed by: Name Associated 11809 Name Name Name |

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