503750153 03/23/2016

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 |
|----------------------|----------------|
| Usama Zaghloul Heiba | 01/14/2016 |
| Gianluca Piazza | 01/12/2016 |

RECEIVING PARTY DATA

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| City: | PITTSBURGH | |
| State/Country: | PENNSYLVANIA | |
| Postal Code: | 15213 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number | |
|---------------------|----------|--|
| Application Number: | 15003027 | |

CORRESPONDENCE DATA

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using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

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| ATTORNEY DOCKET NUMBER: | 26100-0065001 | |
|-------------------------|-----------------|--|
| NAME OF SUBMITTER: | MARY FLORCZAK | |
| SIGNATURE: | /Mary Florczak/ | |
| DATE SIGNED: | 03/23/2016 | |

Total Attachments: 4

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PATENT REEL: 038081 FRAME: 0665 503750153

Attorney Docket No.: 26100-0065001 / 2014-116

ASSIGNMENT

For valuable consideration, the receipt of which we acknowledge, and intending to be bound legally, we, <u>USAMA ZAGHLOUL HEIBA</u>, and <u>GIANLUCA PIAZZA</u>, each individually assign to <u>CARNEGIE MELLON UNIVERSITY</u>, a University formed under the laws of <u>Pennsylvania</u> and having a principal place of business at <u>5000 Forbes Avenue</u>, <u>Pittsburgh, Pennsylvania 15213</u>, and its successors, transferees, and assignees (collectively the "Assignee"), all of our individual and joint right, title, and interest throughout the world in the subject matter (the "Subject Matter") of a patent application that names us as inventors, is titled "<u>PIEZOELECTRIC NANOELECTROMECHANICAL RELAYS</u>," and was filed in the United States Patent and Trademark Office on January 21, 2016, as application 15/003027 (the "Application") and it's corresponding Provisional Application filed on January 22, 2015, as application 62/125,477.

This Assignment assigns (a) the Application and all other applications that may be made for, and all patents, utility models, design registrations, and other rights of exclusion and inventors' certificates for, any of the Subject Matter (collectively the "Applications and Granted Rights") in every country or region, (b) the right to claim priority based on and the benefit of the filing date of any of the Applications and Granted Rights under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other applicable treaties or conventions, and (c) the right to pursue, collect, and retain in the Assignee's name or otherwise, damages and any other remedies arising from any past, present, or future infringement of the Subject Matter, the Applications and Granted Rights, and any other rights assigned by this Assignment.

We authorize the Assignee to apply for and pursue protection for any or all of the Subject Matter, the Applications and Granted Rights, and any other rights assigned by this Assignment in all countries, regions, and territories of the world, in our names or in the Assignee's name.

We represent and warrant that we have the right and power to make this Assignment and that we have not made and will not make any other assignment that conflicts with this Assignment.

We will communicate to the Assignee (or at the request of the Assignee to other parties) all known facts in any form relating to the Subject Matter, will execute and provide all oaths and

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declarations, statements, testimony, assignments, powers of attorney, applications, and documents, and will perform all other lawful acts necessary or desirable to secure fully to the Assignee the rights, titles, and interests assigned by this Assignment.

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| USAMA ZAGHLOUL HEIBA | Date: | 01/14/2016 |
|---|-------|------------|
| Witnessed by: Signature: DANIEL MILLER | Date: | 1/14/201 |
| Signature: | Date: | 01/14/2016 |

Print Name: VIKRAM THAKAR

Attorney Docket No.: 26100-0065P01 / 2014-116

GIANLUCA PIAZZA

Date: 1/12/2016.

Witnessed by:

Print Name: January Berk

Print Name: __Hoe

Signature: June 120

Date: 1-12-20%

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Assignment Page 4 of 4

RECORDED: 03/23/2016