502366614 05/31/2013

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

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

CONVEYING PARTY DATA

| Name | Execution Date |
|--------------------|----------------|
| Michael S. Nashner | 09/17/2007 |
| Jeffrey Howerton | 09/26/2007 |
| Weixiong Lu | 09/26/2007 |

RECEIVING PARTY DATA

| Name: | Electro Scientific Industries, Inc. | |
|-----------------|-------------------------------------|--|
| Street Address: | 13900 NW Science Park Drive | |
| City: | Portland | |
| State/Country: | OREGON | |
| Postal Code: | 97229 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 13797891 |

CORRESPONDENCE DATA

Fax Number: 2486493338

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 248-649-3333

Email: leighton@youngbasile.com

Correspondent Name: Young Basile Hanlon & MacFarlane, P.C.

Address Line 1: 3001 West Big Beaver Rd.

Address Line 2: Suite 624

Address Line 4: Troy, MICHIGAN 48084

| ATTORNEY DOCKET NUMBER: | ESI-160-D |
|-------------------------|----------------------|
| NAME OF SUBMITTER: | Michelle L. Knight |
| Signature: | /Michelle L. Knight/ |
| Date: | 05/31/2013 |

Total Attachments: 1

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CH \$40,00

PATENT REEL: 030519 FRAME: 0276

ASSIGNMENT

WHEREAS we, Michael S. Nashner of Portland, OR Jeffrey Howerton of Portland OR, and Weixiona Lu of Portland, OR have invented a

PROCESS FOR OPTICALLY TRANSPARENT VIA FILLING

for which we are about to make application for Letters Patent of the United States of America; and

WHEREAS ELECTRO SCIENTIFIC INDUSTRIES, INC., a corporation of the State of Oregon, having its principal place of business at 13900 NW Science Park Drive, Portland OR 97229, desires to acquire the entire right, title and interest in and to said invention.

NOW, THEREFORE, for and in consideration of the sum of One Dollar (\$1.00) and other good and valuable considerations, receipt whereof is hereby acknowledged, we, by these presents do sell, assign, and transfer unto said corporation, its successors and assigns, all right, title and interest in the United States of America and all foreign countries in and to said invention as described in the patent application executed by us ____, 2007, and on the _____ day of _____, 2007 and on the on the day of 2007, and we hereby authorize the law firm of Young Basile Hanlon MacFarlane & Helmholdt, P.C., authorized to prosecute said application, to here insert the filing date and serial number of said application, as soon as it is known, Serial No11/742862filed May 1, 2007, and to any improvements on said invention heretofore or hereafter made while we are in the employ of said corporation, and any divisions or continuations of said application, and all Patents, United States and foreign, granted upon any such applications or for the inventions described therein, and any reexaminations, reissues or extensions of said Patents; and we hereby authorize and request the Commissioner of Patents and Trademarks to issue all Patents on said United States applications to said corporation as assignee thereof.

FOR SAID CONSIDERATIONS, we hereby covenant and agree that we are the owners of the full title herein assigned and have the right to assign the same, and agree that we will communicate to said corporation or its representatives, any facts known to us respecting said invention or inventions and testify in any legal proceedings relating thereto when called upon, and will sign all instruments and documents and render such assistance which in the judgment of said corporation is necessary to yest in it and protect the legal title sought to be assigned.

We authorize and empower the assignee, its successors, assigns and legal representatives or nominees, to invoke and claim for any application for patent or other form of protection for the inventions filed by it or them, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it, and to invoke and claim such right of priority without further written or oral authorization from us.

We hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or like document which may be required in any country for any purpose and more particularly in proof of the right of the assignee or nominee to claim the aforesaid benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any ϕ onvention which may henceforth be substituted for it.

WEIXIONG LU

PATENT REEL: 030519 FRAME: 0277

RECORDED: 05/31/2013