501769958 12/28/2011

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

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

CONVEYING PARTY DATA

| Name | Execution Date |
|-----------------|----------------|
| Scott W. Duncan | 06/01/2011 |
| Hong Lu | 05/23/2011 |

RECEIVING PARTY DATA

| Name: | Luminus Devices, Inc. |
|-----------------|----------------------------|
| Street Address: | 1100 Technology Park Drive |
| City: | Billerica |
| State/Country: | MASSACHUSETTS |
| Postal Code: | 01821 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 13092464 |

CORRESPONDENCE DATA

Fax Number: (617)646-8646 **Phone**: 6176468000

Email: mchiusano@wolfgreenfield.com

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US

Mail.

Correspondent Name: Robert H. Walat
Address Line 1: 600 Atlantic Avenue

Address Line 2: Wolf, Greenfield & Sacks, P.C.

Address Line 4: Boston, MASSACHUSETTS 02210-2206

ATTORNEY DOCKET NUMBER: L0655.70110US01

NAME OF SUBMITTER: Melanie Chiusano

Total Attachments: 3

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> PATENT REEL: 027452 FRAME: 0004

OF \$40.00 15032464

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, I, the undersigned Assignor, hereby:

- 1. Sell, assign and transfer to Luminus Devices, Inc., a Delaware corporation having a place of business at 1100 Technology Park Drive; Billerica, Massachusetts 01821, its successors, assigns and legal representatives, all hereinafter referred to as the Assignee, my entire right, title and interest for the United States and all foreign countries, in and to any and all inventions and designs which are disclosed in the application for United States Letters Patent filed in the United States Patent and Trademark Office on April 22, 2011 under No. 13/092,464, bearing Attorney Docket No. L0655.70110US01, and entitled SELECTIVE WET ETCHING AND TEXTURED SURFACE PLANARIZATION PROCESSES, and in and to the application and all corresponding provisional, non-provisional, divisional, continuing, substitute, renewal, reissue and all other applications for Letters Patent, utility models, industrial designs or similar intellectual property rights which have been or shall be filed in the United States, internationally, and in any foreign country, including but not limited to China, Japan and Korea, on any of the inventions; and in and to all original and reissued patents which have been or shall be issued in the United States or any other jurisdiction on the inventions, including the right to apply for patent rights in each foreign country and all rights to priority, including the right to claim priority for China, Japan and Korea, as well as the right to sue in its own name and recover damages for past infringement of any United States Letters Patent and foreign patent;
- 2. Agree that the Assignee may apply for and receive Letters Patent and utility model and industrial design registrations for the inventions in its own name; and when requested, without charge to but at the expense of the Assignee, I agree to carry out in good faith the intent and purpose of this assignment, by executing all non-provisional, divisional, continuing, substitute, renewal, reissue, and all other patent, utility model and industrial design applications on any and all the inventions, by executing all rightful oaths, assignments, powers of attorney and other papers, by communicating to the Assignee all facts known to me relating to the inventions and the history thereof, and generally by doing everything reasonably possible which the Assignee shall consider desirable for aiding in securing and maintaining proper protection for the inventions and for vesting title to the inventions and all applications for patents and all patents on the inventions, in the Assignee;
- 3. Request the Director of the United States Patent and Trademark Office and non-US patent authorities to issue the Letters Patent to the Assignee;
- 4. Authorize and request Wolf, Greenfield & Sacks, P.C. to supply any missing patent/application identification information or correct any errors in the patent/application identification information provided above, whether discovered prior to or after recordation;
- 5. Covenant with the Assignee that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by me and that full right to convey the same as herein expressed is possessed by me; and
- 6. Appoint Assignee, through its designee, my attorney-in-fact to execute, in my name and on my behalf, any and all documents required to effectuate this Assignment, specifically including, but not limited to, those documents specified above and any necessary corrective assignments.

This instrument is executed under seal and signed under the pains and penalties of perjury under the laws of the United States of America.

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PATENT REEL: 027452 FRAME: 0005

| 6/1/2011 | Scow WIIm |
|--|--|
| Date Inventor: | Scott W. Duncan |
| Address: | 10 Worthen Place |
| | Andover, Massachusetts 01810 |
| Citizenship: | US |
| STATE/COMMONWEALTH OF MUSSachuse | <i>i</i> |
| COUNTY OF WILLIAMS : | 4/12 |
| On this day of twee, 201 personally appeared Scott W. Duncan | , proved to me through satisfactory evidence of ASTIVETS LICENSE. document in my presence and swore or affirmed accurate to the best of (his) (her) knowledge |
| SEAL GAULAN BOL Notary Public | <u>u</u> |
| My commission expires: | |
| CAROL A. MOOR Notary Public Commonwealth of Massar My Commission Expit February 27, 2015 | - - |

| 05/23/2011. | Amornan. |
|--|---|
| Date Inventor: | Hong Lu |
| Address: | 97 Old Sudbury Road |
| | Wayland, Massachusetts 01778 |
| Citizenship: | People's Republic of China |
| STATE/COMMONWEALTH OF. Masachuse COUNTY OF Middlesey: On this 33d day of May, 20 personally appeared Hong Luidentification, which were Description. | bilder, before me, the undersigned notary public, proved to me through satisfactory evidence of |
| to be the person who signed the preceding or attached | |
| to me that the contents of the document are truthful and and belief and acknowledged to me that (he) (she) sign | d accurate to the best of (his) (her) knowledge |
| SEAL GUNDAN OF Notary Public | nory |
| My commission expires: | <u> </u> |

CAROL A. MOORE
Notary Public
Commonwealth of Massachusetts
My Commission Expires
February 27, 2015

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