PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
Robert F. Karlicek Jr	07/08/2009
Paul Panaccione	07/06/2009
Rashmi Kumar	08/03/2009

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:	12341918

CORRESPONDENCE DATA

Fax Number: (617)646-8646

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

Phone: 617-646-8000

Email: epoole@wolfgreenfield.com

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

Address Line 2: Wolf, Greenfield, & Sacks, P.C.
Address Line 4: Boston, MASSACHUSETTS 02210

ATTORNEY DOCKET NUMBER:	L0655.70085US01	

NAME OF SUBMITTER: Robert H. Walat

Total Attachments: 12

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PATENT REEL: 024363 FRAME: 0569 P \$40.00 1234191

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PATENT REEL: 024363 FRAME: 0570

<u>ASSIGNMENT</u>

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

- 1. Sell, assign and transfer to Luminus Devices, Inc., a Delaware corporation having a place of business at 1100 Technology Park Drive, Billerica, MA 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 December 22, 2008 under Serial No. 12/341,918, bearing Attorney Docket No. L0655.70085US01, and entitled LIGHT-EMITTING DEVICES, and in and to said application and all 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 on any of said 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 said inventions, including the right to apply for patent rights in each foreign country and all rights to priority;
- 2. Agree that said Assignee may apply for and receive Letters Patent and utility model and industrial design registrations for said inventions in its own name; and when requested, without charge to but at the expense of said 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 said inventions, by executing all rightful oaths, assignments, powers of attorney and other papers, by communicating to said Assignee all facts known to me relating to said inventions and the history thereof, and generally by doing everything reasonably possible which said Assignee shall consider desirable for aiding in securing and maintaining proper protection for said inventions and for vesting title to said inventions and all applications for patents and all patents on said inventions, in said Assignee;
- Request the Honorable Director of the United States Patent and Trademark Office to issue said Letters Patent to said 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; and
- 5. Covenant with said 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.

This instrument is executed under seal.

Date Date	Inventor:	Rashmi Kumar
	Address:	8033 Belton Circle Mechanicsville, VA 23116
	Citizenship:	India
THE TAX HE CAN THE COLUMN TAX THE CO		:
STATE/COMMONWEALTH OF		
COUNTY OF	:	
	on this day of	f, 20, under the pains and penaltie ca.
SEALNotary Public		
My commission expires		

Kaelonh Je.

July 8,2009 Date 7

Inventor:

Robert F. Karlicek, Jr.

Address:

4 Buttercup Lane

Chelmsford, MA 01824

Citizenship: US

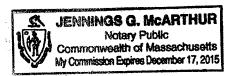
STATE/COMMONWEALTH OF Massachuse HS:

COUNTY OF Middlesex :

On this the day of July, 2009, before me, the undersigned notary public, personally appeared hobert FKarlicek Jr., proved to me through satisfactory evidence of identification, which were mp onvers living to be the person who signed the preceding or attached document in my presence and swore or affirmed to me that the contents of the document are truthful and accurate to the best of (his) (her) knowledge and belief and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose.

SEAL Stury of McCather

My commission expires <u>December 17</u>, 2015



Docket No.	LOGGE	プロハタム	LISO1

Page 4 of 4

Date	Inventor:	Paul Panaccione
	Address:	67 Purchase Street Newburyport, MA 01950
	Citizenship:	US
STATE/COMMONWEALTH OF	1114114	:
On this day of, 20, proved to	_, before me, the und me through satisfac	dersigned notary public, personally appeared story evidence of identification, which were sed the preceding or attached document in my
presence and swore or affirmed to best of (his) (her) knowledge and be	me that the contents	of the document are truthful and accurate to the led to me that (he) (she) signed it voluntarily for its
stated purpose.		

-1685493.1

PATENT

ASSIGNMENT

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

- 1. Sell, assign and transfer to Luminus Devices, Inc., a Delaware corporation having a place of business at 1100 Technology Park Drive, Billerica, MA 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 December 22, 2008 under Serial No. 12/341,918, bearing Attorney Docket No. L0655.70085US01, and entitled LIGHT-EMITTING DEVICES, and in and to said application and all 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 on any of said 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 said inventions, including the right to apply for patent rights in each foreign country and all rights to priority;
- 2. Agree that said Assignee may apply for and receive Letters Patent and utility model and industrial design registrations for said inventions in its own name; and when requested, without charge to but at the expense of said 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 said inventions, by executing all rightful oaths, assignments, powers of attorney and other papers, by communicating to said Assignee all facts known to me relating to said inventions and the history thereof, and generally by doing everything reasonably possible which said Assignee shall consider desirable for aiding in securing and maintaining proper protection for said inventions and for vesting title to said inventions and all applications for patents and all patents on said inventions, in said Assignee;
- 3. Request the Honorable Director of the United States Patent and Trademark Office to issue said Letters Patent to said 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; and
- 5. Covenant with said 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.

This instrument is executed under seal.

Date	Inventor:	Rashmi Kumar
Date	mventor.	Nasilili Naliai
· ·	Address:	8033 Belton Circle Mechanicsville, VA 23116
	Citizenship:	India
STATE/COMMONWEALTH OF		<u> </u>
COUNTY OF	 :	
Sworn to and subscribed before me of perjury under the laws of the Unite	on this day of ed States of Americ	, 20, under the pains and penalties a.
SEALNotary Public	·	
My commission expires		

-1685493.1

PATENT REEL: 024363 FRAME: 0576

Date	Inventor:	Robert F. Karlicek, Jr.
	Address:	4 Buttercup Lane Chelmsford, MA 01824
	Citizenship:	US
STATE/COMMONWEALTH OF		•
COUNTY OF	:	
proved t	o me through satisfac	dersigned notary public, personally appeared ctory evidence of identification, which were ned the preceding or attached document in my
presence and swore or affirmed to	me that the contents	of the document are truthful and accurate to the ged to me that (he) (she) signed it voluntarily for it
SEAL Notary Public		
My commission expires		

7/6/09

Date

Inventor:

Paul Panaccione

Address:

67 Purchase Street Newburyport, MA 01950

Citizenship: US

STATE/COMMONWEALTH OF MASSACHUSETTS

COUNTY OF MIDDLESEX

On this day of July, 2009 before me, the undersigned notary public, personally appeared from Faul coafe, proved to me through satisfactory evidence of identification, which were mass bares and swore or affirmed to me that the contents of the document are truthful and accurate to the best of (his) (her) knowledge and belief and acknowledged to me that (he) (she) signed it voluntarily for its stated purpose.

My commission expires <u>9110</u>

DAVID MONTAGUE APPLETON Notary Public Commonwealth of Massachusetts

My Commission Expires September 10, 2015

Page 1 of 4

ASSIGNMENT

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

- 1. Sell, assign and transfer to Luminus Devices, Inc., a Delaware corporation having a place of business at 1100 Technology Park Drive, Billerica, MA 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 December 22, 2008 under Serial No. 12/341,918, bearing Attorney Docket No. L0655.70085US01, and entitled LIGHT-EMITTING DEVICES, and in and to said application and all 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 on any of said 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 said inventions, including the right to apply for patent rights in each foreign country and all rights to priority;
- 2. Agree that said Assignee may apply for and receive Letters Patent and utility model and industrial design registrations for said inventions in its own name; and when requested, without charge to but at the expense of said 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 said inventions, by executing all rightful oaths, assignments, powers of attorney and other papers, by communicating to said Assignee all facts known to me relating to said inventions and the history thereof, and generally by doing everything reasonably possible which said Assignee shall consider desirable for aiding in securing and maintaining proper protection for said inventions and for vesting title to said inventions and all applications for patents and all patents on said inventions, in said Assignee;
- 3. Request the Honorable Director of the United States Patent and Trademark Office to issue said Letters Patent to said 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; and
- 5. Covenant with said 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.

This instrument is executed under seal.

08/03/09

Inventor:

Sworm to and subscribed before me on this 3 day of and 2009 under the pains and penalties of America.

NOTARY SEAL OF MICHAEL STATE OF WISHINGTON STATE OF WISHINGTON

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REEL: 024363 FRAME: 0580

Date	Inventor:	Robert F. Karlicek, Jr.
	Address:	4 Buttercup Lane Chelmsford, MA 01824
	Citizenship:	us
STATE/COMMONWEALTH OF	1	:
COUNTY OF	<u> </u> :	
, proved to	me through satisfac he person who sign	dersigned notary public, personally appeared story evidence of identification, which were ted the preceding or attached document in my of the document are truthful and accurate to the
		ed to me that (he) (she) signed it voluntarily for its

Docket No. L0655.70085US01

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stated purpose.

SEAL

Notary Public

My commission expires

PATENT REEL: 024363 FRAME: 0581

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Docket No. L0655.70085US01

Date	Inventor:	Paul Panaccione	
	Address:	67 Purchase Street Newburyport, MA 01950	
	Citizenship:	US	
STATE/COMMONWEALTH OF COUNTY OF, 20, 20, proved to	: . before me, the un	dersigned notary public, personally appeared ctory evidence of identification, which were	
presence and swore or affirmed to r	the person who sigr ne that the contents	ned the preceding or attached document in my of the document are truthful and accurate to the ged to me that (he) (she) signed it voluntarily for it	
SEALNotary Public			

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RECORDED: 05/11/2010

PATENT REEL: 024363 FRAME: 0582