09-14-2001 101843165 TO THE HONORABLE DIRECTOR OF THE UNITED STATES PATENT	
ORIGINAL DOCUMENTS OR COPY THEREOF. 1. Name of conveying party(ies): (a) Michael D. Camras (b) Michael R. Krames (c) Wayne L. Snyder (d) Frank M. Steranka (e) Robert C. Taber (f) John J. Uebbing (g) Douglas W. Pocius (h) Troy A. Trottier (i) Christopher H. Lowery (j) Gerd O. Mueller (k) Regina B. Mueller-Mach (l) Gloria E. Hofler Additional name(s) of conveying party(ies) attached?	 2. Name and address of receiving party(ies): Name: LUMILEDS LIGHTING US, LLC Street Address: 370 W. Trimble Road City: San Jose CA 95131 Country: USA
3. Nature of Conveyance: Assignment Merger Security Agreement Change of Name Other	Name and address of receiving party(ies): Name: Street Address: Street Address: City: State: Zip: Country: Additional name(s) & address(es) attached? Yes No
 Application number(s) or patent number(s): If this document is being filed together with a new application, th A. Patent Application No.(s) - 09/880,204 Title: Light Emitting Diodes With Improved Light Extraction Efficiency 	B. Patent No.(s)
5. Name and address of party to whom correspondence	bers attached? Yes No 6. Total number of applications and patents involved: 1

Name:

Internal Address:

Street Address:

0<u>1 FC:581</u>

09/1/3/2000 ADDED1

8. Statement and signature.

original document.

Brian D. Ogonowsky

Name of Person Signing

concerning document should be mailed: Brian D. Ogonowsky

SKJERVEN MORRILL MacPHERSON LLP

31,988

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Signature Signature Total number of pages insluding cover sheet, attachments, and documents: 8
PATENT
REEL: 012148 FRAME: 0235

\$40.00

Date

Authorized to be charged to Deposit Account 19-2386

Charge Deposit Account 19-2386 for any additional fees

required for this conveyance and credit deposit account 19-2386

7. Total fee (37 CFR 3.41):

any amounts overpaid

Signature (

 \boxtimes

DO NOT USE THIS SPACE

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the

ASSIGNMENT

For good and valuable consideration, receipt of which is hereby acknowledged, we Michael D. Camras, Michael R. Krames, Wayne L. Snyder, Frank M. Steranka Robert C. Taber, John J. Uebbing, Douglas W. Pocius, Troy A. Trottier, Christopher H. Lowery, Gerd O. Mueller, Regina B. Mueller-Mach, and Gloria E. Hofler hereby sell, assign and transfer to LumiLeds Lighting US, LLC, a Delaware corporation, having a place of business at 370 W. Trimble Road, San Jose, CA 95131, its successors and assigns, the entire right, title and interest throughout the world in our invention in:

LIGHT EMITTING DIODES WITH IMPROVED LIGHT EXTRACTION **EFFICIENCY**

for which we have executed a United States patent application on or about the date of this assignment, and all patent applications and patents of every country for said invention, including divisions, reissues, continuations and extensions thereof, and all rights of priority resulting from the filing of said applications; we authorize the above-named assignee to apply for patents of foreign countries for said invention, and to claim all rights of priority without further authorization from us; we agree to execute all papers useful in connection with said United States and foreign applications, and generally to do everything possible to aid said assignee, their successors, assigns and nominees, at their request and expense, in obtaining and enforcing patents for said invention in all countries; and we request that the United States Patent and Trademark Office issue all patents granted for said invention to the above-named assignee, its successors and assigns.

Executed this 18^{Th} day of <u>June</u>, 2001. <u>Michael D. Camras</u>

State of <u>CA</u>) s County of <u>Santa Clara</u>

On <u>June 18</u> 2001 before me, <u>Kimber 14 M. Wallace</u>, <u>Notary</u> Public personally appeared <u>Michael D. Camtas</u> personally known to me or proved to me on the basis of satisfactory evidence to be the person(X) whose name(s) is(a)e) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(3) on the instrument the person(3), or the entity upon behalf of which the person(3) acted, executed the instrument.



WITNES\$ my hand and official seal.

Kinilahy M. Wallace SIGNATURE OF (NOTARY

Executed this	29 th	day of _	June		_, 2001.	
				Michael R.	Krames	

Michael R. Krames

State of \underline{OA}) SS. County of Santa Clara

On June 29, 2001 before me, <u>Kimberly M. Wallace</u>, Notary Public personally appeared <u>Michael R. Krames</u> personally known to me or proved to me on the basis of satisfactory evidence to be the person() whose name(x) is(a)e) subscribed to the within instrument and acknowledged to me that he/ske/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature (x) on the instrument the person (x), or the entity upon behalf of which the person (x) acted, executed the instrument.



name(x) is(a)(e) subscribed to the within instrument and acknowledged to me that he/s)(e/they executed the same in his/ber/their authorized capacity(is), and that by his/ber/their signature(x) on the instrument the person(x), or the entity upon behalf of which the person(x) acted, executed the instrument.



WITNESS my hand and official seal.

Wallace

SIGNATURE OF NOTARY

&rank M. Stuanba

State of CA) ss. County of Santa Claja

On <u>June 26, 2001</u> before me, <u>Kimberly M. Wallace</u>, <u>Notary Public</u> personally appeared <u>Frank M. Steranka</u> personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is(axe) subscribed to the within instrument and acknowledged to me that he/ske/they executed the same in his/her/their authorized capacity(is), and that by his/her/their signature(x) on the instrument the person(x), or the entity upon behalf of which the person(x) acted, executed the instrument.

WITNESS my hand and official seal. LY M. WALLACE SIGNATURE OF NOTARY My Comm. Biolies Feb 25, 2004 Executed this 25^{-5} day of 10^{-7} Robert C. Taber State of $\frac{(alt fermina)}{(alt fermina)}$ County of the la Clark known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is(are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



WITNESS my hand and official seal.

- Udersin a

SIGNATURE OF NOTAR

Executed this <u>/8</u> day of <u>June</u>, 2001, <u>June</u>, 2001, <u>John J. Uebbing</u>

State of <u>(A</u>)) ss. County of Santa (1d ra

On <u>June 18 2001</u> before me, <u>Kimberly M. Wallace</u>, <u>Notary Public</u> personally appeared <u>John J. Uebbing</u> personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is(a)(e) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(is), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

1. 1 Dallace SIGNATURE OF NOTARY

, 2001.

Douglas W. Pocius

State of (A)) ss. County of Santa Clara

KIMBERLY M. WALLACE

Commission # 1254520

Notary Public - California Santa Clara County My Comm. Expires Feb 25, 2004

Executed this \mathcal{L} day of _

On <u>June 22, 2001</u> before me, <u>Kimberly M. Wallace</u>, <u>Notary Public</u> personally appeared <u>Douglag</u> <u>W. Pocius</u> personally known to me or proved to me on the basis of satisfactory evidence to be the person(x) whose name(x) is(a)(e) subscribed to the within instrument and acknowledged to me that he/s)(e/t)(e) executed the same in his/l)(er/t)(e) ir authorized capacity(i)(x), and that by his/l)(e)(t)(e) signature(x) on the instrument the person(x), or the entity upon behalf of which the person(x) acted, executed the instrument.



WITNESS my hand and official seal.

Kimberly M. Wallace SIGNATURE OF NOTARY

	19th			
Executed this	day of _	Jane	, 2001.	
	11	lug	Lit	-
		10	Troy A. Trottier	W

State of (A)) County of Santa ClarkSS.

On June 19, 2001 before me, Kimberly M. Wallace, Notary Public personally appeared Troy A. Trottier personally known to me or proved to me on the basis of satisfactory evidence to be the person(x) whose name(x) is(a) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(x) on the instrument the person(x), or the entity upon behalf of which the person(x) acted, executed the instrument.





Kimling M. Wallace SIGNATURE OF NOTARY

Executed this <u>A</u> day	of June	<u>()</u> (52001.
		Kind M
		Gerd O. Mueller

State of <u>CA</u>)) ss. County of Santa Clada

On <u>June 28</u>, <u>2001</u> before me, <u>Kimberly M. Wallace</u>, <u>Notary Public</u> personally appeared <u>Gerd O. Mueller</u> personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is(are) subscribed to the within instrument and acknowledged to me that he/ske/th/y executed the same in his/her/th/ir authorized capacity(is), and that by his/her/th/eir signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



known to me or proved to me on the basis of satisfactory evidence to be the perception of the percepti



WITNESS my hand and official seal.

indualy M. Wallace

SIGNATURE OF NOTARY

Executed this $\frac{35}{2}$ day of _	men	, 2001.
	Jonie	E. Hoper)
	Glo	ria E. Hofler

State of Calefornica) SS. County of <u>Sectal</u> (a.)

On <u>July</u> <u>to see</u> before me, <u>July</u> <u>before</u> personally appeared <u>Selection of the flore</u> personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is(are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.



SIGNATURE OF NOTARY