10-29-2003



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U.S. DEPARTMENT OF COMMERCE

RECORDATION FORM COVER SHEET PATENTS ONLY

Patent and Trademark Office Docket No. 100-23400 (P05711)

To the Director of the U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof.				
1.	Name of conveying party(ies):	2. Name and address of receiving party(ies):		
PETER J. HOPPER PHILIPP LINDORFER		Name: NATIONAL SEMICONDUCTOR CORPORATION Address: 2900 Semiconductor Drive, M/S D3-579		
MICHAEL MIAN ROBERT DRURY			5	
		Zip Code: 95051-8090		
Add	litional name(s) of conveying party(ies) attached? ☐ Yes ☑ No	1.53		
3.	Nature of conveyance:		Ξ	
X	Assignment	Additional name(s) & address(es) attached? □ Yes ☑ No		
Exe	ecution Date: October 20, 2003			
4.	Application number(s) or patent number(s): NEW	20181		
If this document is being filed with a new application, the execution date of the application is: October 20, 2003				
	A. Patent Application No.(s):	B. Patent No.(s):		
Additional numbers attached? ☐ Yes ☒ No				
	Name and address of party to whom correspondence concerning	6. Total number of applications and patents involved: 1		
	document should be mailed:	7. Total fee (37 C.F.R. § 3.41): \$40.00		
	Mark C. Pickering, Esq.	7. Total rec (57 C.P.R. § 5.41). \$40.00		
ŀ	Law Offices of Mark C. Pickering P.O. Box 300	⊠ Enclosed		
	P.O. Box 300 Petaluma, CA 94953-0300	Authorized to be charged to deposit account, referencing Attorney Docket No.	;	
	Customer No. 33402	Audilley Docker No.		
		8. Deposit account number:		
The Commissioner is hereby authorized to charge any fees under 37 C.F.R. §1.21 that may be required by this paper, or to credit any overpayment to Deposit Account No. 502305				
	<u> </u>	THIS SPACE		
9.	Statement and signature.			
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 original document.				
	Name: Mark C. Pickering Registration No. 36,239 Date: 10-21-03 Signature			
Total number of pages comprising cover sheet, attachments and document: 4				
Mail documents to be recorded with required cover sheet information to:				
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10/24/2003 KBETEMA1 00000036 10690181

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PATENT REEL: 014626 FRAME: 0413

PATENT

Attorney Docket No. 100-23400 [P05711]

ASSIGNMENT

Title of Invention: Optical Sensor That Measures The Light Output By The Combustion Chamber Of An Internal

Combustion Engine

Asmt4

WHEREAS, WE, <u>PETER J. HOPPER, PHILIPP LINDORFER, MICHAEL MIAN and ROBERT DRURY</u>, hereinafter referred to as "ASSIGNORS", have invented certain new and useful improvements as described and set forth in the below-identified application for United States Letters Patent:

Application Execution Date:	
Filing Date: Herewith	Appln. No.: New
Semiconductor Drive, M/S D3-	L SEMICONDUCTOR CORPORATION, a corporation of the State of Delaware, 2900 -579, Santa Clara, California 95051-8090, hereinafter referred to as "ASSIGNEE", is desirous le and interest in the said invention and application and in any Letters Patent which may be
One Dollar (\$1.00) lawful mone sold, assigned and transferred successors and assigns, all rig Patent, and any Letters Patent throughout the world including reissues, prolongations or external patents.	O ALL WHOM IT MAY CONCERN: Be it known that, for and in consideration of the sum of ey paid to Assignors by Assignee, receipt of which is hereby acknowledged, Assignors has it, and by these presents do sell, assign and transfer unto said Assignee, and Assignee's ght, title and interest in and to the said invention, said application for United States Letters twhich may hereafter be granted on the same in the United States and all countries any divisions, renewals, continuations in whole or in part, substitutions, conversions, ensions thereof, the said interest to be held and enjoyed by said Assignee as fully and een held and enjoyed by said Assigner had this assignment and transfer not been made, to enters Patent.
Assignee in the prosecution of further papers, including applic transfer thereof, and will perfor	that they will, without charge to said Assignee, but at Assignee's expense, cooperate with f said application and/or applications, execute, verify, acknowledge and deliver all such cations for Letters Patent and for the reissue thereof, and instruments of assignment and rm such other acts as Assignee lawfully may request, to obtain or maintain Letters Patent for any and all countries, and to vest title thereto in said Assignee, or Assignee's
IN TESTIMONY WHER below.	EOF, Assignor has hereunto signed his/her name to this assignment on the dates indicated
Dated: 10.70 .6	>3
personally appeared Personally appeared to be the me that he/she/they executed	PETER J. HOPPER LOS before me, 120 Smolyaur Lygy, personally known to me or proved to me on the basis of e person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to the same in his/per/their authorized capacity(ies), and that by his/her/their signature(s) on or the entity upon behalf of which the person(s) acted, executed the instrument.
·	WITNESS my hand and official seal.
	Liza Smolyanifsky Signature of Notary
SEAL	LIZA SMOLYANITSKY Commission # 1435771 Notary Public - California Santa Clara County My Comm. Expires Aug 23, 2007

PATENT REEL: 014626 FRAME: 0414

Rev. 07/17/03

IN TESTIMONY WHEREOF, Assignor has hereunto signe	d his/her name to this assignment on the dates indicated
Dated: 10 20 2003	Plahm Mr
State of California	PHILIPP LINDORFER
County of Sauta clasa	
on October 20, 2003 perfore me, Liz personally appeared Philipp Lindor fer.	a Smolyanitsky.
personally appeared Philip Lindlo fell, satisfactory evidence to be the person(s) whose name(s) is/are some that he/she/they executed the same in his/her/their authorized the instrument the person(s), or the entity upon behalf of which the	bubscribed to the within instrument and acknowledged to discrete described to discrete d
w	ITNESS my hand and official seal.
*******	Liza Smolyanitsky
Commission # 1435771 Notary Public Commission	gnature of Notary
Seal Seal Seal Seal Seal Seal Seal Seal	
IN TESTIMONY WHEREOF, Assignor has hereunto signe below.	d his/her name to this assignment on the dates indicated
Dated: 20/10/2003	MZIM
State of	MICHAEL MIAN
County of South Clara	
on Defaber 20, 2003 before me, 12 personally appeared Michael Mian	a Smalyanitsky
personally appeared Michael Mian, satisfactory evidence to be the person(s) whose name(s) is/are sme that he/she/they executed the same in his/her/their-authorize	subscribed to the within instrument and acknowledged to
the instrument the person(s), or the entity upon behalf of which the	he person(s) acted, executed the instrument.
W	/ITNESS my hand and official seal.
January 1	Liza Smolyanitsky
Commission # 1/2577	ignature of Notary
Santa Clara Count	
My Comm. Expires Aug 23, 2007 SEAL	

-2-

Asmt4

PATENT REEL: 014626 FRAME: 0415

Rev. 07/17/03

Attorney Docket No. 100-23400 [P05711]

IN TESTIMONY WHEREOF, Assignor has hereunto signed his/her name to this assignment on the dates indicated below.

Dated: Salara Clara

On October 10, 2003 before me, 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/sho/they executed the same in his/her/their authorized capacity(ise), 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.

LIZA SMOLYANTSKY
Commission # 1435771
Notary Public - California
Santa Clara County

SEAL

Asmt4 -3-

RECORDED: 10/21/2003

Comm. Expline Aug 23, 2007

PATENT REEL: 014626 FRAME: 0416

Rev. 07/17/03