JX ASSIGNMENTS	111 1 100	100		DO NOT USE	FOR TRADEMARKS			
08-07-2001								
SIR: PLEASE RECORD THE ATTACHED ORIC								
1. NAME OF CONVEYING PARTY(IES) (ASSIC 101802002 1. Research Development Corporation of Japan 2.								
3.	3. $(4.)$							
5. 6. 7. 8.								
ADDITIONAL NAME(S) OF CONVEYING PARTY(IES) ATTACHED? TYES NO								
	2. PARTY(IES) (ASSIGNEE(S)) RECEIVING INTEREST:							
NAME: Japan Science an	d Lechnology Corp	oration						
ADDRESS: 4-1-8, Honma	achí, Kawaguchi-shi	, Saitama-ken, Japa	an					
ADDITIONAL NAME(S) &			S ⊠NO					
 NATURE OF CONVEY (Submit berewith only) 			e copies of same Assigi	ment signed by differe	ent inventors is one			
document)								
⊠ASSIGNMENT OF □ORIGINAL		PART INTE	REST EXEC	DATE: October 1, 19	96			
CHANGE OF NAM	E VERIFIE	D TRANSLATION						
SECURITY MER			-WITH: (NOTE: IF DAT	ES ON DECLARATIO	ΝΑΝΓ			
ASSIGNMENT DIFFER S		ION II TIEED HERE	EWITH: (NOTE: III DAT		N AND			
4.5 APPL. NO.(S) OR PA	T NO (S) OTHER	ANDITIONAL	SHEET(S) attached2	VEC MINO				
				YES ⊠NO	4 4 12 17 (5 12 12 12 12 12 12 12 12 12 12 12 12 12			
A. PAT. APP. NO.(S) series code/serial no	M#	1st INVENTOR if not in item 1	B. PATENT NO(S)	M#	1st INVENTOR if not in item 1			
A. PAT. APP. NO.(S) series code/serial no	M#	1st INVENTOR if not in item 1	B. PATENT NO(S) 5,278,433	M# 258594	1st INVENTOR if not in item 1 MANABE et al.			
A. PAT. APP. NO.(S)	M# arty to Whom Corre	1st INVENTOR if not in item 1 spondence	B. PATENT NO(S)	M# 258594 _VED:	if not in item 1			
A. PAT. APP. NO.(S) series code/serial no Name & Address of Paconcerning Document Pillsbury Winthrop LLP	M# arty to Whom Corre t Should be Mailed:	1st INVENTOR if not in item 1 spondence	B. PATENT NO(S) 5,278,433 6. NUMBER INVOI APPLNS <u>0</u> + PA 7. AMOUNT OF FEE	M# 258594 LVED: TS 1 = TOTAL ENCLOSED: (Code:	if not in item 1 MANABE et al. 1			
A. PAT. APP. NO.(S) series code/serial no 5. Name & Address of Pacconcerning Document Pillsbury Winthrop LLP Intellectual Property Green	M# arty to Whom Corre t Should be Mailed:	1st INVENTOR if not in item 1 spondence	5,278,433 6. NUMBER INVOLAPPLNS <u>0</u> + PA	M# 258594 LVED: TS 1 = TOTAL ENCLOSED: (Code:	if not in item 1 MANABE et al. 1			
A. PAT. APP. NO.(S) series code/serial no 5. Name & Address of Pacconcerning Document Pillsbury Winthrop LLP Intellectual Property Great 1600 Tysons Boulevard	M# arty to Whom Corre t Should be Mailed:	1st INVENTOR if not in item 1 spondence	B. PATENT NO(S) 5,278,433 6. NUMBER INVO APPLNS <u>0</u> + PA 7. AMOUNT OF FEE	M# 258594 LVED: TS 1 = TOTAL ENCLOSED: (Code:	if not in item 1 MANABE et al. 1			
A. PAT. APP. NO.(S) series code/serial no 5. Name & Address of Paconcerning Document Pillsbury Winthrop LLP Intellectual Property Gro 1600 Tysons Boulevard McLean, VA 22102	M# arty to Whom Corre t Should be Mailed:	1st INVENTOR if not in item 1 spondence	5,278,433 6. NUMBER INVOLAPPLNS 0 + PA 7. AMOUNT OF FER ABOVE TOTAL x	M# 258594 VED: TS 1 = TOTAL E ENCLOSED: (Code : \$40 = \$40	if not in item 1 MANABE et al. 1 581)			
A. PAT. APP. NO.(S) series code/serial no 5. Name & Address of Paconcerning Document Pillsbury Winthrop LLP Intellectual Property Gro 1600 Tysons Boulevard McLean, VA 22102 5.5ATTY DKT:	m# erty to Whom Corre t Should be Mailed:	1st INVENTOR if not in item 1 spondence	5,278,433 6. NUMBER INVOLAPPLNS 0 + PA 7. AMOUNT OF FEI ABOVE TOTAL x 8. IF ABOVE FEE IS INSUFFICIENCY T	M# 258594 VED: TS 1 = TOTAL E ENCLOSED: (Code : \$40 = \$40 MISSING OR INADEQUO DEPOSIT ACCOUNT	if not in item 1 MANABE et al. 1 581) ATE CHARGE NUMBER: 03-3975			
A. PAT. APP. NO.(S) series code/serial no 5. Name & Address of Paconcerning Document Pillsbury Winthrop LLP Intellectual Property Gro 1600 Tysons Boulevard McLean, VA 22102 5.5ATTY DKT: P 258594	m# erty to Whom Corre t Should be Mailed: oup	1st INVENTOR if not in item 1 spondence	B. PATENT NO(S) 5,278,433 6. NUMBER INVOI APPLNS 0 + PA 7. AMOUNT OF FEI ABOVE TOTAL x 8. IF ABOVE FEE IS INSUFFICIENCY T UNDER ORDER NO	M# 258594 LVED: TS 1 = TOTAL ENCLOSED: (Code : \$40 = \$40 MISSING OR INADEQUODEPOSIT ACCOUNT 31317	if not in item 1 MANABE et al. 1 581) ATE CHARGE NUMBER: 03-3975 258594			
A. PAT. APP. NO.(S) series code/serial no 5. Name & Address of Paconcerning Document Pillsbury Winthrop LLP Intellectual Property Gro 1600 Tysons Boulevard McLean, VA 22102 5.5ATTY DKT:	m# erty to Whom Corre t Should be Mailed: oup	1st INVENTOR if not in item 1 spondence	5,278,433 6. NUMBER INVOLAPPLNS 0 + PA 7. AMOUNT OF FEI ABOVE TOTAL x 8. IF ABOVE FEE IS INSUFFICIENCY T	M# 258594 VED: TS 1 = TOTAL E ENCLOSED: (Code : \$40 = \$40 MISSING OR INADEQUO DEPOSIT ACCOUNT	if not in item 1 MANABE et al. 1 581) ATE CHARGE NUMBER: 03-3975			
A. PAT. APP. NO.(S) series code/serial no 5. Name & Address of Pacconcerning Document Pillsbury Winthrop LLP Intellectual Property Gro 1600 Tysons Boulevard McLean, VA 22102 5.5ATTY DKT: P 258594 MATTER NO.	m# erty to Whom Corre t Should be Mailed: oup	1st INVENTOR if not in item 1 spondence	B. PATENT NO(S) 5,278,433 6. NUMBER INVOI APPLNS 0 + PA 7. AMOUNT OF FEI ABOVE TOTAL x 8. IF ABOVE FEE IS INSUFFICIENCY T UNDER ORDER NO	M# 258594 LVED: TS 1 = TOTAL ENCLOSED: (Code : \$40 = \$40 MISSING OR INADEQUODEPOSIT ACCOUNT 31317	if not in item 1 MANABE et al. 1 581) ATE CHARGE NUMBER: 03-3975 258594			
A. PAT. APP. NO.(S) series code/serial no 5. Name & Address of Paconcerning Document Pillsbury Winthrop LLP Intellectual Property Gro 1600 Tysons Boulevard McLean, VA 22102 5.5ATTY DKT: P 258594	m# erty to Whom Corre t Should be Mailed: oup	1st INVENTOR if not in item 1 spondence	B. PATENT NO(S) 5,278,433 6. NUMBER INVOLAPPLNS 0 + PA 7. AMOUNT OF FEIT ABOVE TOTAL x 8. IF ABOVE FEE IS INSUFFICIENCY TUNDER ORDER NO dup. sheet not required	M# 258594 VED: TS 1 = TOTAL E ENCLOSED: (Code: \$40 = \$40 MISSING OR INADEQU O DEPOSIT ACCOUNT 31317 CLIENT NO.	if not in item 1 MANABE et al. 1 581) ATE CHARGE NUMBER: 03-3975 258594			
A. PAT. APP. NO.(S) series code/serial no 5. Name & Address of Pacancerning Document Pillsbury Winthrop LLP Intellectual Property Gra 1600 Tysons Boulevard McLean, VA 22102 5.5ATTY DKT: P 258594 MATTER NO. 9.	m# arty to Whom Corre t Should be Mailed: oup F99 CL	1st INVENTOR if not in item 1 spondence	B. PATENT NO(S) 5,278,433 6. NUMBER INVOLAPPLNS 0 + PA 7. AMOUNT OF FEIT ABOVE TOTAL x 8. IF ABOVE FEE IS INSUFFICIENCY TOUNDER ORDER NO dup. sheet not required 10. Total number of cover sheet, attachm	M# 258594 LVED: TS 1 = TOTAL E ENCLOSED: (Code : \$40 = \$40 MISSING OR INADEQU O DEPOSIT ACCOUNT 31317 CLIENT NO.	if not in item 1 MANABE et al. 1 581) ATE CHARGE NUMBER: 03-3975 258594			
A. PAT. APP. NO.(S) series code/serial no 5. Name & Address of Pacconcerning Document Pillsbury Winthrop LLP Intellectual Property Gre 1600 Tysons Boulevard McLean, VA 22102 5.5ATTY DKT: P 258594 MATTER NO.	m# earty to Whom Corre t Should be Mailed: oup F99 CL	1st INVENTOR if not in item 1 spondence	B. PATENT NO(S) 5,278,433 6. NUMBER INVOLAPPLNS 0 + PA 7. AMOUNT OF FEIT ABOVE TOTAL X 8. IF ABOVE FEE IS INSUFFICIENCY TOUNDER ORDER NO dup. sheet not required	M# 258594 LVED: TS 1 = TOTAL E ENCLOSED: (Code : \$40 = \$40 MISSING OR INADEQU O DEPOSIT ACCOUNT 31317 CLIENT NO.	if not in item 1 MANABE et al. 1 581) ATE CHARGE NUMBER: 03-3975 258594 MATTER NO.			
A. PAT. APP. NO.(S) series code/serial no 5. Name & Address of Pacconcerning Document Pillsbury Winthrop LLP Intellectual Property Gre 1600 Tysons Boulevard McLean, VA 22102 5.5ATTY DKT: P 258594 MATTER NO.	m# earty to Whom Corre t Should be Mailed: oup F99 CL Signature	1st INVENTOR if not in item 1 spondence	B. PATENT NO(S) 5,278,433 6. NUMBER INVOLAPPLNS 0 + PA 7. AMOUNT OF FEIT ABOVE TOTAL x 8. IF ABOVE FEE IS INSUFFICIENCY TOUNDER ORDER NO dup. sheet not required 10. Total number of cover sheet, attachm	M# 258594 LVED: TS 1 = TOTAL E ENCLOSED: (Code : \$40 = \$40 MISSING OR INADEQU O DEPOSIT ACCOUNT 31317 CLIENT NO.	if not in item 1 MANABE et al. 1 581) ATE CHARGE NUMBER: 03-3975 258594 MATTER NO.			
A. PAT. APP. NO.(S) series code/serial no 5. Name & Address of Paconcerning Document Pillsbury Winthrop LLP Intellectual Property Gra 1600 Tysons Boulevard McLean, VA 22102 5.5ATTY DKT: P 258594 MATTER NO. 9. Attorney: Reg. No. Gregory P. E. 41646	erty to Whom Corre t Should be Mailed: oup F99 CL Signature Brummett	1st INVENTOR if not in item 1 spondence 0-175-USdiv IENT REF.	5,278,433 6. NUMBER INVOLAPPLNS 0 + PA 7. AMOUNT OF FEIT ABOVE TOTAL x 8. IF ABOVE FEE IS INSUFFICIENCY TOTAL TOT	M# 258594 VED: TS 1 = TOTAL E ENCLOSED: (Code : \$40 = \$40 MISSING OR INADEQUO DEPOSIT ACCOUNT 31317 CLIENT NO. pages including this lents and document er sheet)	if not in item 1 MANABE et al. 1 581) ATE CHARGE NUMBER: 03-3975 258594 MATTER NO.			
A. PAT. APP. NO.(S) series code/serial no 5. Name & Address of Paconcerning Document Pillsbury Winthrop LLP Intellectual Property Gro 1600 Tysons Boulevard McLean, VA 22102 5.5ATTY DKT: P 258594 MATTER NO. 9. Attorney: Gregory P. E.	arty to Whom Corre t Should be Mailed: oup F99 CL Signature Brummett TEL: (703)	1st INVENTOR if not in item 1 spondence 3-175-USdiv IENT REF.	B. PATENT NO(S) 5,278,433 6. NUMBER INVOLAPPLNS 0 + PA 7. AMOUNT OF FEIT ABOVE TOTAL x 8. IF ABOVE FEE IS INSUFFICIENCY TUNDER ORDER NO dup. sheet not required 10. Total number of cover sheet, attachm (do not file dup. Cover Sheet) Date: July 17, 200 FAX: (703)	M# 258594 VED: TS 1 = TOTAL E ENCLOSED: (Code : \$40 = \$40 MISSING OR INADEQU O DEPOSIT ACCOUNT 31317 CLIENT NO. Dages including this lients and document er sheet) 01 905-2500	if not in item 1 MANABE et al. 1 581) ATE CHARGE NUMBER: 03-3975 258594 MATTER NO.			
A. PAT. APP. NO.(S) series code/serial no 5. Name & Address of Paconcerning Document Pillsbury Winthrop LLP Intellectual Property Gra 1600 Tysons Boulevard McLean, VA 22102 5.5ATTY DKT: P 258594 MATTER NO. 9. Attorney: Reg. No. Gregory P. E. 41646	arty to Whom Corre t Should be Mailed: oup F99 CL Signature Brummett TEL: (703)	1st INVENTOR if not in item 1 spondence 3-175-USdiv IENT REF.	5,278,433 6. NUMBER INVOLAPPLNS 0 + PA 7. AMOUNT OF FEIT ABOVE TOTAL x 8. IF ABOVE FEE IS INSUFFICIENCY TOTAL TOT	M# 258594 VED: TS 1 = TOTAL E ENCLOSED: (Code : \$40 = \$40 MISSING OR INADEQU O DEPOSIT ACCOUNT 31317 CLIENT NO. Dages including this lients and document er sheet) 01 905-2500	if not in item 1 MANABE et al. 1 581) ATE CHARGE NUMBER: 03-3975 258594 MATTER NO.			

The PTO did not receive the following

30198862_1.DOC

DATERIT

171-1147 3/

PARTY(IES) (ASSIGNEE(S)) RECEIVING INTEREST (CON'T):

2) NAME:

Kabushiki Kaisha Toyota Chuo Kenkusho

ADDRESS:

41-1, Aza Yokomichi, Oaza Nagakute, Nagakute-cho, Aichi-gun, Aichi-ken, Japan

3) NAME:

Nagoya University

ADDRESS:

Furo-cho, Chikusa-ku, Nagoya-shi, Aichi-ken, Japan

4) NAME:

Research Development Corporation of Japan

ADDRESS:

5-2, Nagata-cho, 2-chome, Chiyada-ku, Tokyo, Japan

PATENT REEL: 012036 FRAME: 0134

USA Patent Appln. Sole or Joint

ASSIGNMENT

In	consideration	of	the	sum	of	ten	Dollars	(\$10.00)	and	other	good	and
valual	ble consideratio	on p	aid t	o eac	h of	the	undersig	ned, to w	it:		•	

Katsuhide Manabe 5) Norikatsu Koide Insert Name(s) 2) Akira Mabuchi 6) Shiro Yamazaki of Inventor(s) 3) Hisaki Kato 7) Masafumi Hashimoto Michinari Sassa Isamu Akasaki 8)

the receipt and sufficiency of which are hereby acknowledged by the undersigned who at the request of, hereby sell(s), assign(s) and transfer(s) unto:

(1) TOYODA GOSEI CO., LTD. Representative Director: Zenjiro Hase

insert Name of Assignee and Address 1, Nagahata, Ochiai, Haruhi-cho, Nishikasugai-gun, Aichi-ken, Japan

(2)KABUSHIKI KAISHA TOYOTA CHUO KENKUSHO President: Hidetake Morimoto

41-1, Aza Yokomichi, Oaza Nagakute, Nagakute-cho, Aichi-gun, Aichi-ken, Japan

(3)NAGOYA UNIVERSITY President: Satio Hayakawa

Furo-cho, Chikusa-ku, Nagoya-shi, Aichi-ken, Japan

(4) RESEARCH DEVELOPMENT CORPORATION OF JAPAN President: Nobuhisa Akabane

5-2, Nagata-cho, 2-chome, Chiyada-ku, Tokyo, Japan

(hereinafter designated "ASSIGNEE") the entire right, title and interest for the United States of America as defined in 35 U.S.C. 100, in and to the invention known as

Title of Invention

LIGHT-EMITTING SEMICONDUCTOR DEVICE USING GALLIUM NITRIDE GROUP COMPOUND

for which an application for Letters Patent of the United States of America has been executed even date herewith by the undersigned, and in and to any and all divisions, continuations, substitutes, and reissues thereof; and all resulting patents; and the undersigned hereby authorize(s) and request(s) the United States Commissioner of Patents and Trademarks to issue said Letters Patent to the said ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives; the undersigned agree(s) that the attorneys of record in said application shall hereafter act on behalf of said ASSIGNEE;

AND the undersigned hereby agree(s) to testify and execute any papers for ASSIGNEE, its successors, assigns and legal representatives, deemed essential by ASSIGNEE to ASSIGNEE'S full protection and title in and to the invention hereby transferred.

Please sign concurrently with Declaration

Signed on the details) indicated baside our signatures

W	itti peciaration Signed on the day	te(s) indicated beside our sigi	natures.
	INVENTOR(S)	DATE SIGNED	WITNESS(ES)
1)	Katsuhide Manage	April 10, 1991	I Kasuryy
	Name: Katsuhide Manabe		
2)	akira Mabuchi	April 10, 1991	7. Kasursa
	Name: Akira Mabuchi		
3)	Hisaki Kato	April 10, 1991	J. Kasursa
	Name: Hisaki Kato		
4)	michinari Sasa	April 10, 1991	J Kasuya .
	Name: Michinari Sassa		
5)	Moriheten Korde	April 10, 1991	J. Kasınja
	ime: Norikatsu Koide		N V- man
6)	Shiro yamaraki	April 10, 1991	J. Rasingy
	Name: Shiro Yamazaki		1
7)	Masafumi Kashimoto	April 10, 1991	_ massar
	Name: Masafumi Hashimoto		2/2/1
8)	Name: Isamu Akasaki	April 10, 1991	gd. 9 disamater
1	Name: Isamu Akasaki		

RECORDED: 07/17/2001

PATENT REEL: 012036 FRAME: 0135