To the Honorable Commiss 1. Name of conveying party 1. Name of conveying party(ies): 1. Name in Abushiki Kaisha Toshiba 1. Name: Kabushiki Kaisha Toshiba 1. Name: Kabushiki Kaisha Toshiba 1. Name: Kabushiki Kaisha Toshiba 2. Additional name(s) of conveying party(ies): 2. Name: Kabushiki Kaisha Toshiba 3. Nature of Conveyance: 2. Assignment 3. Nature of Conveyance: 4. Assignment 5. Change of Name 6. Total applications and patents involved: 1. Name and address of party to whom correspondence concerning document should be mailed: 1. Name and address of party to whom correspondence concerning document should be mailed: 1. Name and address of party to whom correspondence concerning document should be mailed: 1. Name and address of party to whom correspondence concerning document should be mailed: 1. Name and address of party to whom correspondence concerning document should be mailed: 1. Name and address of party to whom correspondence concerning document should be mailed: 1. Name and address of party to whom correspondence concerning document should be mailed: 1. Name and address of receiving party(ies): 1. Name and address of rece			6	(PE)	
1. Name of conveying party Akira SATO, Ichiro TOENO, Masato SAWADA, Hiroshi NISHIMURA, Hideo ETO and Makoto SAITO Additional name(s) of conveyance: Assignment Other Cornected Recordation Form Cover Sheet Reel/Frame 013178/0579, Bar Code Number *102189857A* o correct the 2nd Assignor's name Execution Date: April 26, 2002 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) S. Name and address of party to whom correspondence concerning document should be mailed: Additional numbers attached? □Yes ■No 5. Name and address of party to whom correspondence concerning document should be mailed: 7. Total fee (37 CFR 3.41): \$40.00 Enclosed □ Authorized to be charged to deposit account) DO NOT USE 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 of the original document. C. Irvin McClelland Name of Person Signing Registration Number: 21,124 Registration Number: 21,124 Registration Number: 21,124 Registration Number: 21,124 Do not detach this portion Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231	FORM PTO-1595	7-2002	ET	NOV 0 1 2002	U.S. DEPARTMENT OF COMMER Patent and Trademark Of
Akira SATO, Ichiro TOHNO, Masato SAWADA, Hiroshi NISHMURA, Hide BTO and Makoto SAITO Additional name(s) of conveying party(ics) attached? □Yes ■No 3. Nature of Conveyance: Assignment Scourity Agreement Other: Corrected Recordation Form Cover Sheet RecliFrame 013178/0579, Bar Code Number *102189857A* o correct the 2nd Assignor's name Execution Date: April 26, 2002 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A Patent Application No.(s) 10/214,592 Additional numbers attached? □Yes ■No 5. Name and address of party to whom correspondence concerning document should be mailed: 7. Total fee (37 CFR 3.41): \$40.00 Enclosed □ Authorized to be charged to deposit account) DO NOT USE 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 of the original document. C. Irvin McClelland Name of Person Signing Registration Number: 21,124 Poon to detach this portion Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231	To the Honorable Commiss		ord the	attached original d	ocuments or copy thereof.
Additional name(s) of conveying party(ies) attached? □Yes ■No 3. Nature of Conveyance: ■ Assignment □ Change of Name ■ Other: Corrected Recordation Form Cover Sheet Recl/Frame 013178/0579, Bar Code Number *102189857A* o correct the 2nd Assignor's name Execution Date: April 26, 2002 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) 10/214,592 Additional numbers attached? □Yes ■No 5. Name and address of party to whom correspondence concerning document should be mailed:	1. Name of conveying party 1022	75206	ame ar	nd address of receiv	ving party(ies):
Additional name(s) of conveying party(ies) shacked? □Yes ■No 3. Nature of Conveyance: □ Assignment □ Change of Name □ Other: Corrected Recordation Form Cover Sheet Recl/Frame 013178/0579, Bar Code Number *102189857A* o correct the 2nd Assignor's name Execution Date: April 26, 2002 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) 10/214,592 Additional numbers attached? □Yes ■No 5. Name and address of party to whom correspondence concerning document should be mailed: 22850 DO NOT USE THIS SPACE 9. Statement and signature To the best of my knowledge and bellef, the foregoing information is true and correct and any attached copy is a true of the original document. C. Irvin McClelland Name of Person Signing Registration Number: 21,124 Registration No. 26,803 Total number of pages including this cover sheet: 6 Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231		`	Name:	KABUSHIKI KA	AISHA TOSHIBA
■ Assignment □ Change of Name ■ Other: Corrected Recordation Form Cover Sheet Recl/Frame 013178/0579, Bar Code Number *102189857A* o correct the 2nd Assignor's name Execution Date: April 26, 2002 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) 10/214,592 Additional numbers attached? □Yes ■No 5. Name and address of party to whom correspondence concerning document should be mailed: 22850 6. Total applications and patents involved: 1 7. Total fee (37 CFR 3.41): \$40.00 ■ Enclosed □ Authorized to be charged to deposit account) DO NOT USE 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 of the original document. C. Irvin McClelland Name of Person Signing Registration Number: 21,124 Registration No. 26,803 Total number of pages including this cover sheet: 6 Do not detach this portion Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231	11-1-00		Address:		nome, Minato-ku,
4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) 10/214,592 Additional numbers attached? □Yes ■No 5. Name and address of party to whom correspondence concerning document should be mailed: 7. Total fee (37 CFR 3.41): \$40.00 ■ Enclosed □ Authorized to be charged to deposit account authorized to be charged to deposit account factor of the party of this page if paying by deposit account) DO NOT USE 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 of the original document. C. Irvin McClelland Name of Person Signing Registration Number: 21,124 Registration No. 26,803 Total number of pages including this cover sheet: 6 Do not detach this portion Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks Box Assignments Box Assignments Washington, D.C. 20231	■ Assignment □ Merger □ Security Agreement □ Change of N ■ Other: Corrected Recordation Form Cove Reel/Frame 013178/0579, Bar Code Number o correct the 2nd Assignor's name	er Sheet er *102189857A*			
If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) 10/214,592 Additional numbers attached? □Yes ■No 5. Name and address of party to whom correspondence concerning document should be mailed: 7. Total fee (37 CFR 3.41): \$40.00 ■ Enclosed □ Authorized to be charged to deposit account number: 15-0030 (Attach duplicate copy of this page if paying by deposit account) DO NOT USE 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 of the original document. C. Irvin McClelland Name of Person Signing Registration Number: 21,124 Registration No. 26,803 Total number of pages including this cover sheet: 6 Do not detach this portion Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231		Additional	name(s) and addre	ss(es) attached? □Yes ■N	
A. Patent Application No.(s) 10/214,592 Additional numbers attached? □Yes ■No 5. Name and address of party to whom correspondence concerning document should be mailed: 7. Total fee (37 CFR 3.41): \$40.00 Enclosed □ Authorized to be charged to deposit account (Attach duplicate copy of this page if paying by deposit account) DO NOT USE 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 of the original document. C. Irvin McClelland Name of Person Signing Registration Number: 21,124 Registration No. 26,803 Total number of pages including this cover sheet: 6 Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231	• • • • • • • • • • • • • • • • • • • •				
Additional numbers attached? □Yes ■No 5. Name and address of party to whom correspondence concerning document should be mailed: 7. Total fee (37 CFR 3.41): \$40.00 ■ Enclosed □ Authorized to be charged to deposit accounty 8. Deposit account number: 15-0030 (Attach duplicate copy of this page if paying by deposit account) DO NOT USE 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 of the original document. C. Irvin McClelland Name of Person Signing Registration Number: 21,124 Registration Number: 21,124 Do not detach this portion Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231	1				on is:
5. Name and address of party to whom correspondence concerning document should be mailed: 7. Total fee (37 CFR 3.41): \$40.00 ■ Enclosed □ Authorized to be charged to deposit account account number: 15-0030 (Attach duplicate copy of this page if paying by deposit account) DO NOT USE 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 of the original document. C. Irvin McClelland Name of Person Signing Registration Number: 21,124 Registration No. 26,803 Total number of pages including this cover sheet: 6 Do not detach this portion Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231	· · · · · · · · · · · · · · · · · ·	·			
To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true of the original document. C. Irvin McClelland Name of Person Signing Registration Number: 21,124 Registration Number: 21,124 Registration No. 26,803 Total number of pages including this cover sheet: 6 Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231	Addi	tional numbers atta	ched? □Yes	■No	
22850 Enclosed Authorized to be charged to deposit account			6. Total applications and patents involved: 1		
8. Deposit account number: 15-0030 (Attach duplicate copy of this page if paying by deposit account) DO NOT USE 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 of the original document. C. Irvin McClelland Name of Person Signing Registration Number: 21,124 Registration No. 26,803 Total number of pages including this cover sheet: 6 Do not detach this portion Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231			· · · · · · · · · · · · · · · · · · ·		
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 of the original document. C. Irvin McClelland Name of Person Signing Registration Number: 21,124 Registration No. 26,803 Total number of pages including this cover sheet: 6 Do not detach this portion Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231	22850				
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 of the original document. C. Irvin McClelland Name of Person Signing Registration Number: 21,124 Registration No. 26,803 Total number of pages including this cover sheet: 6 Do not detach this portion Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231		DO NOT USE T		cate copy of this page in	paying by deposit account)
To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true of the original document. C. Irvin McClelland Name of Person Signing Registration Number: 21,124 Total number of pages including this cover sheet: 6 Do not detach this portion Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231	9. Statement and signature			···	
Name of Person Signing Registration Number: 21,124 Registration No. 26,803 Total number of pages including this cover sheet: 6 Do not detach this portion Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231		oregoing informati	ion is true an	nd correct and any	attached copy is a true co
Registration Number: 21,124 Total number of pages including this cover sheet: 6 Do not detach this portion Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231	C. Irvin McClelland	breakt.	Scafett	eyr.	Nov. 1, 2002
Pregistration No. 26,803 Total number of pages including this cover sheet: 6 Do not detach this portion Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231					
Do not detach this portion Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231	Registration Number: 21,124 Registration No. 26,803				
Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231	Total number of pa	iges including this	cover sheet:	6	
Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231					
Commissioner of Patents and Trademarks Box Assignments Washington, D.C. 20231					
Box Assignments Washington, D.C. 20231					
2002 6TON11 00000192 10214592 Washington, D.C. 20231	Comn			emarks	
	2002 GTON11 00000192 10214592				

PATENT REEL: 013454 FRAME: 0761 Atty Docket No.:

226840US3S/tsh

FORM PTO-1595 _1-31-92

104/6	AUU				
To the Honorable Commissioner of Patents and Trademarks. Please					
1. Name of conveying party(ies): Akira SATO, Ichiro TONO, Masato SAWADA, Hiroshi NISHIMURA, Hideo ETO and Makoto SAITO Additional name(s) of conveying party(ies) attached? □Yes ☒No 3. Nature of Conveyance: ☒ Assignment □ Merger □ Security Agreement □ Change of Name □ Other Execution Date: April 26, 2002	2. Name and address of receiving party(ies): Name: KABUSHIKI KAISHA TOSHIBA Address: 1-1 Shibaura 1-chome, Minato-Ku, Tokyo, JAPAN Additional name(s) and address(es) attached? □Yes ☑No				
4. Application number(s) or patent number(s):	592				
If this document is being filed together with a new application, the	execution date of the application is: April 26, 2002				
A. Patent Application No.(s)	B. Patent No.(s)				
Additional numbers attached? □Yes ⊠No					
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total applications and patents involved: 1				
22850	7. Total fee (37 CFR 3.41): \$40.00 ⊠ Enclosed □ Authorized to be charged to deposit account 8. Deposit account number: 15-0030 (Attach duplicate copy of this page if paying by deposit account)				
DO NOT USE TH					
9. Statement and signature					
To the best of my knowledge and belief, the foregoing information copy of the original document.	n is true and correct and any attached copy is a true				
C. Irvin McClelland	MGalland 8/9/62				
Name of Person Signing S	ignature Date				
Registration Number: 21,124					
Total number of pages including this c	over sheet: 3				
Do not detach the	nis portion				
Mail documents to be recorded with required cover sheet information	on-to:				
Commissioner of Patent					
Washington, D	Box Assignments Washington, D.C. 20231				
FC:581 40.00 OP					

PATENT REEL: 013454 FRAME: 0762

U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

ASSIGNMENT

In consideration of value received, I, having a mailing address at c/o Intellectual Property Division, KABUSHIKI KAISHA TOSHIBA, 1-1 Shibaura 1-chome, Minato-ku, Tokyo 105-8001, Japan and a residence as stated below next to my name, the sole inventor (if only one name is listed below) or a joint inventor (if plural inventors are listed below) of an invention described in an application for United States patent entitled:

INK JET HEAD MANUFACTURING METHOD, INK JET HEAD, INK APPLYING APPARATUS, INK APPLYING METHOD, AND ORGANIC ELECTRO LUMINESCENCE DISPLAY APPARATUS AND METHOD OF MANUFACTURING THE SAME

said application having been filed on and assigned Application No. ; sell and assign to KABUSHIKI KAISHA TOSHIBA a corporation of Japan, having a business address at 1-1 Shibaura 1-chome, Minato-Ku, Tokyo, Japan

its successors, assigns or nominees, hereinafter referred to as "Assignee", my entire right, title and interest in and to said invention as disclosed, shown and described in said application for United States patent: (check one)

 \times executed concurrently herewith;

___executed separately herefrom;

and in and to all applications for patent and patents for said invention, in all countries of the world, including all divisions, reissues, continuations, substitutions and extensions thereof and all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property, including rights of priority, resulting from the filing of any of said applications; and I authorize and request any official whose duty is to issue patents, to issue any patent on said invention or resulting therefrom to said Assignee, and I agree that on request and without further consideration, but at the expense of said Assignee, I will communicate to said Assignee or its representatives all facts known to me respecting said invention and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue, or other applications, make all rightful oaths and declarations, and generally do everything possible to aid said Assignee to obtain and enforce proper patent protection for said invension in all countries.

I hereby grant the following law firm the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the Rules of the U.S. Patent and Trademark Office for recordation of this document.

Oblon, Spivak, McClelland, Maier & Neustadt, P.C., Fourth Floor, 1755 Jefferson Davis Highway, Arlington, Virginia 22202

> PATENT REEL: 013454 FRAME: 0763

ASSIGNMENT

Inventor: (Signature)	Date	Residence
-		
- akira Sato	APR. 26. 2002	Yokohama-shi, Japan
Akira Sato		
Ichiro Johno	APR. 26. 2002	Yokohama-shi, Japan
Ichiro Tono		
Masato Sawada	APR. 26.2002	Yokohama-shi, Japan
Masaro Sanaa		
Miroshi Mishimura Hiroshi Nishimura	APR. 26. 2002	Yokohama-shi, Japan
•		
Hideo Eto	APR. 26. 2002	Yokohama-shi, Japan
mueo Eto		
Makoto Saito	APR. 26.2002	Yokohama-shi, Japan
		•

RECORDING OFFICER:

After recording please return to: Oblon, Spivak, McClelland, Maier & Neustadt, P.C.,

Fourth Floor, 1755 Jefferson Davis Highway, Arlington, Virginia 22202

RECORDED: 11/01/2002

PATENT REEL: 013454 FRAME: 0764