Form PTO-1595 RECC	-23 - 2003 U.S. DEPARTMENT OF COM
(Rev. 03/01)	U.S. Patent and Tradem
Tab settings ⇒ ⇒ ⇒ ▼ ▼ 10	<u>2556544</u> <u>▼ ▼</u>
To the Honorable Commissioner of Patents and Trademar	ks: Please record the attached original documents or copy thereof
1. Name of conveying party(ies): David S.Y. Hsu	2. Name and address of receiving party(ies) The United States of America as Name: represented by the Secretary of the
	Internal Address: CHIEF OF NAVAL RESEARC
Additional name(s) of conveying party(ies) attached? Yes	OFFICE OF COUNSEL
3. Nature of conveyance:	(ATIN: CODE COCCIP)
Assignment Merger	
Security Agreement Change of Name	Street Address: BALLSTON TOWER ONE
Other	800 NORTH QUINCY STREE
Cuiei	City: ARLINGTON State: VA Zip: 222
Execution Date: 6 December 2001	Additional name(s) & address(es) attached? Yes
Application number(s) or patent number(s):	
	plication, the execution date of the application is:
A. Patent Application No.(s) 10/414,573	B. Patent No.(s)
NC 84,645 Additional numbers	attached? Yes xx No
5. Name and address of party to whom correspondenc concerning document should be mailed:	
Name: ASSOCIATE: COUNSEL (PATENTS)	7. Total fee (37 CFR 3.41)\$ 40.00
Internal Address: NAVAL RESEARCH LABORATORY	Enclosed
(ATIN: CODE 1008.2)	Authorized to be charged to deposit account
	8. Deposit account number:
Street Address: 4555 OVERLOOK AVENUE, SW	-
	8. Deposit account number: 50-0281
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Street Address: 4555 OVERLOOK AVENUE. SW City: WASHINGTON State: DC Zip: 20375	50-0281
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Street Address: 4555 OVERLOOK AVENUE, SW City: WASHINGTON State: DC Zip: 20375 DO NOT US 9. Signature. JOHN J. KARASEK Reg. No. 36,182 Name of Person Signing	SE THIS SPACE Signature Date
Street Address: 4555 OVERLOOK AVENUE. SW City: WASHINGTON State: DC Zip: 20375 DO NOT US 9. Signature. JOHN J. KARASEK Reg. No. 36,182 Name of Person Signing Total number of pages including of Managements to be recorded with the process of the pages including of Managements to be recorded with the pages including of Managements to be recorded with the pages including of Managements to be recorded with the pages including of Managements to be recorded with the pages including of Managements to be recorded with the pages including of the pag	50-0281 SE THIS SPACE

PATENT REEL: 014498 FRAME: 0476

ASSIGNMENT

WHEREAS, I/We, David S. T. Esu, of Alexandria, Virginia, while employed by the Government of the United States, have invented certain new and useful improvements in "Low GATE CURRENT FIELD EMITTER" CELL AND ARRAY WITE VERTICAL TEIN-FILM-EDGE EMITTER", identified as Navy Case No. 83,556 and described in application for Letters Patent of the United States of America executed by us; and:

WHEREAS, the Government of the United States, represented by the Secretary of the Navy and hereinafter referred to as the Government, is desirous of acquiring an assignment of the invention disclosed in said application and other rights and benefits herein granted; and

WHEREAS, the conditions under which the invention was made are such as to entitle the Government under Paragraph 1(a) of Executive Order 10096, to the entire right, title and interest therein, including foreign rights; and

WHEREAS, as to foreign rights, it is the policy of the Government to obtain an option to exercise such rights;

NOW, THEREFORE, in consideration of the premises and other good and valuable consideration the receipt of which is hereby acknowledged, I hereby assign and transfer to the Government the entire right, title and interest in and to said invention within the United States of America, its territories and possessions, and the entire right, title and interest in and to said application and continuation, division, or substitution thereof, and such Letters Patent as may issue therefrom and any reissue or extensions thereof, said invention, application and Letters Patent to be held by the Government to the end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me had this assignment not been made.

I/We do hereby also grant unto the Government, the option to take the entire right, title and interest in the invention and all patent applications or other forms of protection thereon in all countries foreign to the United States in which the Government may file, or cause to be filed, applications for Letters Patent or other forms of protection, without payment of any consideration; provided, however, that this grant of an option to take foreign rights in the invention, or applications or other forms of protection thereon, shall have force and effect only as to such applications for which a decision to file in foreign countries is made within eight months of the filing date of any application for United States Letters Patent covering the invention, or within eight months from the declassification of the invention, whichever is later, and that all foreign rights not exercised under the option are left to me subject to a nonexclusive, irrevocable, royalty-free license to the Government in any patent or other form of protection which may issue on said invention in any foreign country, including the power to issue sub-licenses for use in behalf of the Government and/or in furtherance of the foreign policies of the Government.

I/We hereby further agree to make, execute, and deliver to the Government, any and all papers, documents, affidavits, statements, or other instruments that may be necessary in the prosecution of the application and of any continuation, division or substitution of the application, or any application for reissue or extension of said Letters Patent, and to assist the Government in every way in protecting the invention as may be requested, provided that any expense arising through such efforts will be paid by the Government.

IN TESTIMONY WHEREOF, I/We have set my hand and affixed my seal.

David S. Y. Hau

RECORDED: 09/16/2003

DATE: 6 December 0/

PATENT REEL: 014498 FRAME: 0477