FORM PTO-1595 (Rev. 6-93)	12-05	5-2000	U.S. DEPARTMENT OF COMMERC
OMB No. 0651-0011 (exp. 4/94)			Patent and Trademark Offic
Tab settings ⇔⇔ ▼	i imerini ilah masat sana alia	ow strat lucti andi alam intelal	* 10.3 L'm DD
To the Honorable Commissioner of Paten	IS BLE HELDINGING. 1	38749	ed original documents or copy thereof,
1. Name of conveying party(ies): Banahalli R. Ratna Ranganathan Shashidhar Hawad Naciri Gregory P. Crawford Additional name(s) of conveying party(ies) attached?		2. Name and address of receiving party(ies) Name: The United States of America as represented by the Secretary of the Navy Internal Address: CHIEF OF NAVAL RESEARCH DFFICE OF COUNSEL	
3. Nature of conveyance:			(ATTN: CODE OOCCIP)
☑ Assignment □	Merger	Street Address:_	BALLSTON TOWER ONE
☐ Security Agreement ☐	Change of Name		800 NORTH QUINCY STREET
Other		City: ARLINGTO	N State: VA ZIP:22217
Execution Date: 08-11-00; 08-11-00; 08-11-00; 08-27-00; 08-11-00		Additional name(s) & address(es) attached? Yes No	
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) 08/489,920 NC# 77,007		B. Patent No.(s)	
Additional numbers attached? ☐ Yes ☒ No			
Name and address of party to whom correspondence concerning document should be mailed:		6. Total number of applications and patents involved:	
Name: ASSOCIATE COUNSEL (PATENT	rs)	7. Total fee (37 CFF	R 3.41)\$ 40.00
Internal Address: NAVAL RESEARCH LABORATORY		☐ Enclosed	
(ATTN: CODE 1008.2)	· .	Authorized to	be charged to deposit account
Street Address: 4555 OVERLOOK AVENU	JE, S.W.	8. Deposit account	number: 50–0281
City: WASHINGTON, DC State: ZIP: 20375 2/04/2000 DNGUYEN 00000196 500281 08489920		(Attach duplicate copy of this page if paying by deposit account)	
FC:581 40.00 CH) DO NOT USE THIS SPACE			
9. Statement and signature. To the best of my knowledge and belief, the foregoing information is trace and correct and any attached copy is a true copy of the original document. JOHN J. KARASEK Reg. No. 36, 182 Name of Person Signing Signature			
Total number of pages including cover sheet, attachments, and document:			
Mail documents to be recorded with required cover sheet information to:			

ASSIGNMENT

WHEREAS, We, Banahalli R. Ratna, Ranganathan Shashidhar, Jawad Naciri, Gregory Crawford, Joel Schnur, while employed by the Government of the United States, have invented certain new and useful improvements in "FERROELECTRIC AND ELECTROCLINIC LIQUID CRYSTAL MATERIALS WITH SUB-AMBIENT TEMPERATURE STABILITY, BROAD OPERATION RANGE, AND FAST DYNAMIC RESPONSE", identified as Navy Case No. 77,007 and described in application for Letters Patent of the United States of America U.S. Application Serial No. filed on ; 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, we hereby assign and transfer to the Government the entire rights, 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 any 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 do hereby also grant unto the Government, the option to take the entire rights, 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 filed in foreign countries 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 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 have set my hand and affixed my seal.

8(11) oo

(Date)

(Face) (Date)

Danahalli B. Batna

Ranganathan Shashidhar

Jøel Schnur

PATENT REEL: 011289 FRAME: 0392

RECORDED: 10/25/2000