05/10/2017



Form PTO-1595 (Rev. 03-09)
OMB No-0651-0027 (6xp*03/31/2009)
103677241

U.S. DEPARTMENT OF COMMERCE pited States Patent and Trademark Office

PATENTS ONLY	
To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.	
Name of conveying party(ies)	2. Name and address of receiving party(ies)
	Name: NAVY, SECRETARY OF THE UNITED STATES
KENT STATE UNIVERSITY	Internal Address: OF AMERICA
Additional name(s) of conveying party(ies) attached? Yes X No	OFFICE OF NAVAL RESEARCH
3. Nature of conveyance/Execution Date(s):	Street Address: 875 NORTH RANDOLPH STREET
Execution Date(s) 10/21/2011	O/3/NOMINIONEDELLI STREET
Assignment Merger	 .
Security Agreement Change of Name	City: ARLINGTON
Joint Research Agreement	State:VA
Government Interest Assignment	_
Executive Order 9424, Confirmatory License	Country: USA Zip: 22203-1995
Other	Additional name(s) & address(es) attached? Yes X No
4. Application or patent number(s): This document is being filed together with a new application.	
A. Patent Application No.(s)	B. Patent No.(s)
12/727,394	
Additional numbers attached? Yes No	
5. Name and address to whom correspondence	6. Total number of applications and patents
concerning document should be mailed:	involved: 1
Name: CAROL PETROSKY	7. Total fee (37 CFR 1.21(h) & 3.41) \$
Internal Address: OFFICE OF NAVAL RESEARCH	
OFFICE OF COUNSEL	Authorized to be charged to deposit account
Street Address: 875 NORTH RANDOLPH STREET	Enclosed
	None required (government interest not affecting title)
City:arLINGTON	8. Payment Information
State: VA Zip: 22203-1995	
Phone Number: <u>703-696-4008</u>	Dancait Annaumt Number
Fax Number: 703-696-6909	Deposit Account Number
Email Address: <u>CAROL,PETROSKY@NAVY,MIL</u>	Authorized User Name
9. Signature:	a coa h
Signature	05/02/2017 Date
· · · · · · · · · · · · · · · · · · ·	Total number of pages including cover
CAROL PETROSKY Name of Person Signing	sheet, attachments, and documents:

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:

Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

REEL: 042522 FRAME: 0292

KSW. 316 - dir

License to the United States Government

Sign and submit the executed document to the appropriate funding agency (e.g. upload in iEdison).
Invention Title: Energy conversion based on giant flexoelectric effect in bent-core nematic
liquid crystals
nventor(s): John Ernest Harden, James T. Gleeson, Antal I. Jakli, Samuel Sprunt, Peter
Palffy-Muhoray
J.S. Filing/Issue-Date: 03/19/2010
Patent or Application Serial No.: 12/727, 394
Grant/Contract Number(s): <u>DMR0606160</u> , <u>N00014-07-1-0440</u>
Foreign Applications filed/intended in (countries):
The invention identified above is a Subject Invention under 35 U.S.C. 200, et seq., and the Standard Patent Rights clause at 37 CFR 401.14, FAR 52.227-11 or FAR 52.227-12 (if applicable) which are included among the terms of the above dentified grant or contract award from the United State Government. This document is confirmatory of: 1. The nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the invention described in any patent application and in any and all divisions, continuations, and continuations in part, and in any and all patents and re-issues granted thereon throughout the world; and 2. All other rights acquired by the Government by reason of the above identified grant/contract award and the laws and regulations that are applicable to the award.
The Government is hereby granted an irrevocable power to inspect and make copies of the above-identified patent application.
Signed this 21 day of Oct , 20 11.
(Institutional Business Official) August Signature)
Fitle AVP
For KENT STATE UNIVERSITY (Grantee/Contractor Organization)
At Office of Technology Transfer 145 Cartwright Hall PO Box 5190 Kent, OH 44240 US (Business Address)

PATENT REEL: 042522 FRAME: 0293

RECORDED: 05/10/2017