FORM FTO-1 Expires 06/30/99 ONB 0651-0027	AUG 2 2 7005 RECORE	09-12- 	111111111 8014		partment of Commerce and Trademark Office PATENT		
TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).							
Submission Type Conveyance Type							
✓ New Assignment Security Agreement							
L Documer		License	Chang	e of Name			
Correctio	on of PTO Error Frame #	Merger	✓ Other	Confirmatory	License		
L	e Document		U.S. Gover		-		
Reel #	Frame #	آگا ا	or Use ONLY by U.S. Go Departmental File		s) cret File		
Conveying	Party(ies)	Mark if addit	•		tached Execution Date		
Name (line 1)	Midwest Research Institute				Month Day Year 07/12/2005		
Name (line 2)		<u> </u>					
Second Party					Execution Date Month Day Year		
Name (line 1)	L						
Name (line 2)							
Receiving Party Mark if additional names of receiving parties attached							
Name (line 1)	United States Department of Energy				If document to be recorded is an assignment and the		
Name (line 2)	receiving party is not domiciled in the United States, an appointment						
Address (line 1)	of a domestic representative is attached. (Designation must be a						
•					separate document from Assignment.)		
Address (line 2)	ne 2)						
Address (line 3)	Washington	D.C. USA		20585			
	City	State/Co	untry	Zip Code			
Domestic Representative Name and Address Enter for the first Receiving Party only.							
Name							
Address (line 1)							
Address (line 2)				CEIVED			
Address (line 3)			— ÇFD	A 2005	·		
Address (line 4)	SEP U 6 2003						
FOR OFFICE USE ONLY							

Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief Information Officer, Washington,
D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20503. See OMB

Mail documents to be recorded with required cover sheet(s) information to:

Commissioner of Patents and Trademarks, Box Assignments, Washington, D.C. 20231

PATENT

REEL: 016957 FRAME: 0397

FORM PTO-1 Expires 06/30/99 OMB 0651-0027	619B	Page 2	U.S. Department of Commerce Patent and Trademark Office PATENT			
Correspond	ent Name and Address	Area Code and Telephone Numb	per 630/252-2042			
Name	Robert J. Fisher					
Address (line 1)	U.S. Department of Energy					
Address (line 2)	Intellecual Property Law Division					
Address (line 3)	9800 S. Cass Ave					
Address (line 4)	Argonne, IL 60439					
Pages	Enter the total number of pagincluding any attachments.	es of the attached conveyance do	cument # 01			
	Number(s) or Patent Num	• '	ark if additional numbers attached			
	he Patent Application Number or the F Itent Application Number(s)	Patent Number (DO NOT ENTER BOTH num P	nbers for the same property). Patent Number(s)			
11/027,156						
If this document i	is being filed together with a new Pate	ent Application, enter the date the patent ap	oplication Month Day Year			
Patent Coop	peration Treaty (PCT)	PCT PCT	PCT			
only	er PCT application number y if a U.S. Application Number not been assigned.	PCT PCT	PCT			
Number of F	Properties Enter the total	number of properties involved.	#			
Fee Amount	t Fee Amount	for Properties Listed (37 CFR 3.41): \$ 0.00			
Method of Payment: Enclosed Deposit Account Deposit Account (Enter for payment by deposit account or if additional fees can be charged to the Deposit Account Number: #						
		Authorization to charge additional fee	s: Yes No 🗸			
Statement a	nd Signature					
To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.						
Brian	J. Lally, Reg. No. 51,911		7 8-15-05			
Nam	e of Person Signing	Signature	Date			
			-			

PATENT REEL: 016957 FRAME: 0398

DOE Docket No.: S-106,934

CONFIRMATORY LICENSE

Application for: High-Efficiency, Monolithic, Multi-Bandgap, Tandem Photovoltaic Energy

Converters

Inventor(s):

Mark W. Wanlass

Serial No.:

11/027,156

Filing Date:

December 30, 2004

Contract No.:

DE-AC36-99GO10337

Contractor:

Midwest Research Institute

The invention identified above is a "Subject Invention" under the above-numbered contract. A copy of the provisions of the above-numbered contract governing patent rights in the Subject Invention at the time the invention was made has been submitted to the U.S. Department of Energy.

The Contractor hereby confirms that under the provisions of the above-numbered contract governing patent rights, it has granted to the Government a nonexclusive, nontransferable, irrevocable, paid-up license to practice or to have practiced for or on behalf of the United States the subject invention throughout the world. This license applies to the invention in the above-identified patent application and any and all divisions or continuations thereof and any resulting patent or reissue patent which may be granted thereon.

It is understood and agreed that this document does not preclude the Government from asserting rights under the provisions of said contract or any other agreement between the Government and the Contractor, or any other rights of the Government with respect to the above-identified invention.

The Contractor hereby grants the Government an irrevocable power to inspect and make copies of the above-identified application.

Signed this 12th day of July, 2005.

Senior Counsel

National Renewable Energy Laboratory 1617 Cole Blvd. Golden, CO 80401

RECORDED: 08/22/2005

PATENT **REEL: 016957 FRAME: 0399**