Fonn PTO-I595 (Rev. 07/05) OMB No. 0651-0027 (exp. 6/30/2008)			U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office	
JP	PATENTS ONLY S-112,450			
To the Director of the U.S. Patent an	d Trademark Office: Plea	se record the attached docu	ments or the new address(es) below.	
1. Name of conveying party(ies)		2. Name and addres	2. Name and address of receiving party(ies)	
Battelle Energy Alliance, LL0	3		Name: United States Department of Energy	
		Internal Address:	10100 · · · · · · · · · · · · · · · · ·	
Additional name(s) of conveying party(ies) a	attached? Yes 🗸 N	ol		
3. Nature of conveyance/Execution Date(s):			00 Independence Ave., S.W	
Execution Date(s) 12/04/2007	-	.		
Assignment	Merger		1111	
Security Agreement	Change of Name	City: Washington		
Joint Research Agreement		State: D,C,		
Government Interest Assignme		Country: USA	Zip: 20585	
Executive Order 9424, Confirm Other	atory License	•		
4. Application or patent number(-t. This		Idress(es) attached? Yes No	
A. Patent Application No.(s)	3): Linis	document is being filed B. Patent No.(s)	d together with a new application.	
11/855,071		Di l'alleris rençe,		
,				
	5 2 222			
5. Name and address to whom co	Additional numbers att		11 - 41	
concerning document should be	mailed:	6. Total number of ap involved: 1	pplications and patents	
Name: Mark P. Dvorso	cak	7. Total fee (37 CFR	1 01/h) 2 2 /ll) \$	
Internal Address: U.S. Dept. of I	Energy, IPLD_		charged by credit card	
		l ——	charged to deposit account	
Street Address: 9800 S. Cass	Δνα	Enclosed	unaigue te deposit accoun-	
] ==	overnment interest not affecting title)	
City: Argonne		8. Payment Informat	tion	
· · -	60439		st 4 Numbers	
Phone Number: 630-252-2393	,UU-KII-7	Ex	piration Date	
Fax Number: 630-252-2779		b. Deposit Account	t Number	
Email Address:		Authorized User	r Name	
9. Signature:			17/10/1	
Signature Date				
Michael J. Dol		· Total num	nber of pages including cover	
Name of Pe	erson Signing	sheet, at	ttachments, 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

PATENT REEL: 020329 FRAME: 0769

DOE Case No.: S-112,450

BA-232

CONFIRMATORY LICENSE

Application for: HEAT EXCHANGER AND ASSOCIATED METHODS

Inventor(s): Terry Donald Turner; Bruce Malcolm Wilding

Serial No.: 11/855,071 Filing Date (U.S.): 9/13/2007

DOE Contract No.: DE-AC07-05ID14517

Contractor: Battelle Energy Alliance, LLC

The invention identified above is a "Subject Invention" under the above-numbered contract with Battelle Energy Alliance, LLC. 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 License 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 Au day of December, 2007.

BATTELLE ENERGY ALLIANCE, LLC

Thomas M. Harrison

Director, Technology Transfer and Commercialization

P. O. Box 1625

Idaho Falls, ID 83415-3805

PATENT REEL: 020329_{*}FRAME; 07739 ***