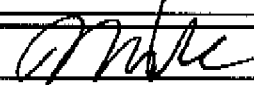
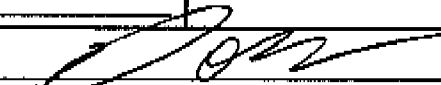


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U.S. DEPARTMENT OF COMMERCE  
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<b>JP</b>	<b>RECORDATION FORM COVER SHEET</b> <b>PATENTS ONLY</b>	<b>S-108,023</b>
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<b>1. Name of conveying party(ies)</b> BATTELLE ENERGY ALLIANCE, LLC  Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>2. Name and address of receiving party(ies)</b> Name: <u>United States Department of Energy</u> Internal Address: _____  Street Address: <u>1000 Independence Ave. S.W.</u>  City: <u>Washington</u>  State: <u>D.C.</u>  Country: <u>USA</u> Zip: <u>20585</u>  Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<b>3. Nature of conveyance/Execution Date(s):</b> Execution Date(s) <u>07/25/2007</u> <input type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Joint Research Agreement <input type="checkbox"/> Government Interest Assignment <input checked="" type="checkbox"/> Executive Order 9424, Confirmatory License <input type="checkbox"/> Other _____	<b>4. Application or patent number(s):</b> <input type="checkbox"/> This document is being filed together with a new application. A. Patent Application No.(s) <u>11/753,214</u>  B. Patent No.(s) _____  Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<b>5. Name and address to whom correspondence concerning document should be mailed:</b> Name: <u>Mark P. Dvorscak</u>  Internal Address: <u>U. S. Dept. of Energy, IPLD</u>  Street Address: <u>9800 S. Cass Ave</u>  City: <u>Argonne</u>  State: <u>IL</u> Zip: <u>60439</u>  Phone Number: <u>630-252-2393</u> Fax Number: <u>630-252-2779</u> Email Address: _____	<b>6. Total number of applications and patents involved:</b> <u>1</u>  <b>7. Total fee (37 CFR 1.21(h) &amp; 3.41) \$</b> _____ <input type="checkbox"/> Authorized to be charged by credit card <input type="checkbox"/> Authorized to be charged to deposit account <input type="checkbox"/> Enclosed <input checked="" type="checkbox"/> None required (government interest not affecting title)  <b>8. Payment Information</b> a. Credit Card Last 4 Numbers _____ Expiration Date _____  b. Deposit Account Number _____  Authorized User Name _____	
<b>9. Signature:</b> <u></u> <u></u> <div style="display: flex; justify-content: space-between;"> <span>Signature</span> <span>Date</span> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <span>Michael J. Dobbs #58,093 Name of Person Signing</span> <div style="text-align: right;">           Total number of pages including cover sheet, attachments, and documents: <span style="border: 1px solid black; padding: 2px 10px; font-size: 1.5em;">2</span> </div> </div>		

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 1460, Alexandria, V.A. 22313-1460

DOE Case No.: S-108,023  
BA-053

**CONFIRMATORY LICENSE**

Application for: IMPEDANCE-ESTIMATION METHODS, MODELING METHODS,  
ARTICLES OF MANUFACTURE, IMPEDANCE-MODELING  
DEVICES, AND ESTIMATED-IMPEDANCE MONITORING  
SYSTEMS  
Inventor(s): John G. Richardson  
Serial No.: 11/753,214  
Filing Date (U.S.): 5/24/2007  
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.

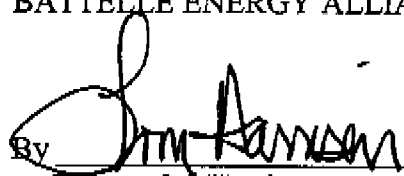
The Contractor hereby confirms that under the provisions of the above-numbered contract governing patent rights, it has granted to the Government a nonexclusive, nontransferable, irrevocable, paid-up license to practice or to have practiced for or on behalf of the United States the Subject Invention 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 25 day of July, 2007.

BATTELLE ENERGY ALLIANCE, LLC

By   
Thomas M. Harrison  
Director, Technology Transfer and Commercialization  
P. O. Box 1625  
Idaho Falls, ID 83415-3805