


Form <b>PTO-1595</b> (Rev. 03/01)	<b>RECORDATION FORM COVER SHEET</b>	U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office
<b>PATENTS ONLY</b>		
OMB No. 0651-0027 (exp. 5/31/2002)		
To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.		
<p>1. Name of conveying party(ies): <b>JAW Enterprises, Inc.</b></p> <p>Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>2. Name and address of receiving party(ies) Name: <u>Battelle Memorial Institute</u></p> <p>Internal Address: _____</p> <p>_____</p> <p>Street Address: <u>505 King Avenue</u></p> <p>_____</p> <p>City: <u>Columbus</u> State: <u>Ohio</u> Zip: <u>43201</u></p> <p>Additional name(s) &amp; address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	
<p>3. Nature of conveyance:</p> <p><input type="checkbox"/> Assignment <input type="checkbox"/> Merger</p> <p><input checked="" type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name</p> <p><input type="checkbox"/> Other _____</p> <p>Execution Date: <u>March 21, 2003</u></p>		
<p>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: _____</p> <p>A. Patent Application No.(s) <u>06/778,345; 07/007,168</u></p> <p>B. Patent No.(s) <u>4,828,581; 5,494,653</u></p> <p>Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>		
<p>5. Name and address of party to whom correspondence concerning document should be mailed:</p> <p>Name: <u>Katherine A. Seaman</u></p> <p>Internal Address: <u>Parker Hudson</u></p> <p>_____</p> <p><u>Rainer &amp; Dobbs LLP</u></p> <p>_____</p> <p>Street Address: <u>285 Peachtree Center Ave NE</u></p> <p>_____</p> <p><u>1500 Marquis Two Tower</u></p> <p>_____</p> <p>City: <u>Atlanta</u> State: <u>GA</u> Zip: <u>30303</u></p>	<p>6. Total number of applications and patents involved: <span style="border: 1px solid black; padding: 0 2px;">4</span></p> <p>7. Total fee (37 CFR 3.41).....\$ <u>160.00</u></p> <p><input checked="" type="checkbox"/> Enclosed</p> <p><input type="checkbox"/> Authorized to be charged to deposit account</p> <p>8. Deposit account number: _____</p> <p>(Attach duplicate copy of this page if paying by deposit account)</p>	
<b>DO NOT USE THIS SPACE</b>		
<p>9. Statement and signature. <i>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.</i></p> <p><u>Katherine A. Seaman</u> <span style="margin-left: 200px;"></span> <span style="float: right;"><u>January 15, 2004</u></span></p> <p>Name of Person Signing <span style="margin-left: 200px;">Signature</span> <span style="float: right;">Date</span></p> <p>Total number of pages including cover sheet, attachments, and documents: <span style="border: 1px solid black; padding: 0 2px;">10</span></p>		

OP \$160.00 06778345

Mall documents to be recorded with required cover sheet information to:  
Commissioner of Patents & Trademarks, Box Assignments  
Washington, D.C. 20231

**PATENT SECURITY AGREEMENT**

This **PATENT SECURITY AGREEMENT** (this "Agreement") is made this 21 day of March, 2003, between **BATTELLE MEMORIAL INSTITUTE**, an Ohio corporation having an office at 505 King Avenue, Columbus, Ohio 43201, ("Lender"), and **JAW ENTERPRISES, LLC**, a Delaware limited liability company having its principal place of business at One Riverside, Suite 800, 4401 Northside Parkway, Atlanta, GA 30327-3057 (the "Company").

**Recitals:**

Pursuant to an Order Granting Debtor's Motion for an Order (1) Authorizing the Sale of Substantially All of the Debtor's Assets and Granting Other Relief; (2) Approving the Assumption and Assignment of Executory Contracts and Unexpired Leases; and (3) Approving Compromise of Claims entered by the United States Bankruptcy Court for the Northern District of Georgia, Atlanta Division (the "Order"), on February 21, 2003 in the Chapter 11 bankruptcy case of Future Energy Resources Corporation ("Debtor"), having Case No. 02-73027, an objection to the sale of Debtor's assets filed by Lender has been resolved by the Court by ordering that the Debtor pay Lender an amount of \$80,000 from the proceeds of the sale of its assets, to the Company and that the Company execute a Secured Promissory Note in favor of Lender dated the date hereof in the original principal amount of \$105,159 (the "Note") in connection with such purchase of assets to satisfy Debtor's remaining obligations to Lender.

In connection with the execution of the Note and the purchase by the Company of the assets of Debtor, Lender has agreed to execute a quitclaim bill of sale in favor of Company, in accordance with the terms of the Order, to convey to the Company the Lender's interests in various patents and licensing agreements; provided, that, as security for the Note, the Order permits Lender to retain a security interest in the patents and licensing agreements until the Note is indefeasibly paid in full.

Lender is willing to enter into the above transactions, provided that the Company executes this Agreement.

NOW, THEREFORE, for Ten Dollars (\$10.00) in hand paid and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company hereby agrees with Lender as follows:

1. In addition to such other terms as are elsewhere defined herein, the following terms shall have the following meanings for the purposes of this Agreement:

"Event of Default" shall mean any of the following events: (i) Company shall fail to pay any amounts due under the Note on the due date thereof and such failure shall continue unremedied for a period of five (5) days (whether due at stated maturity, on demand, upon acceleration or otherwise); (ii) any representation, warranty or other written statement to Lender by Company proves to have been false or misleading in any

material respect when made or furnished; (iii) Company shall fail or neglect to perform, keep or observe any covenant in the Note, this Agreement or any other documents with Lender on the date that Company is required to perform, keep or observe such covenant and such failure shall continue unremedied for a period of twenty (20) days after written notice thereof shall have been delivered to the Company by the Lender; (iv) any bankruptcy or other insolvency proceeding shall be commenced by or against Company, and such bankruptcy or insolvency proceeding has not been dismissed within thirty (30) days; or (v) any security interest or lien shall be created, arise or occur with respect to any of the Patent Collateral, which lien or security interest shall not have been released within thirty (30) days after written notice thereof shall have been delivered to the Company by the Lender.

"Person" shall mean any natural person, sole proprietorship, corporation, partnership, limited liability company, joint venture, business trust, other business entity, or any governmental unit, agency, bureau or political subdivision.

"UCC" shall mean the Uniform Commercial Code, as in effect from time to time in the State of Georgia.

2. To secure the prompt payment and performance of all of the indebtedness and other obligations of the Company under the Note (the "Obligations"), the Company hereby grants, assigns and pledges to Lender, a continuing security interest in and lien upon all of the following property of the Company, whether now existing or hereafter created or acquired (the "Patent Collateral"):

(a) the entire right, title and interest of the Company in and to the patent applications and patents listed in Exhibit A attached hereto (as the same may be amended from time to time), and all re-issues, divisions, continuations, renewals, extensions and continuations-in-part thereof, including, without limitation, the right to sue for past, present and future infringements and rights corresponding thereto throughout the world (all of the foregoing being herein collectively referred to as the "Patents"); and

(b) All proceeds of the foregoing (such as, by way of example, license royalties and proceeds of infringement suits).

3. The Company covenants with and warrants to Lender that:

(a) The Patents are subsisting and have not been adjudged invalid or unenforceable, in whole or in part;

(b) The Company is now and shall continue to be the sole and exclusive owner of the entire and unencumbered right, title and interest in and to each of the Patents, free and clear of any liens;

(c) The Company has the unqualified right to enter into this Agreement and perform its terms and, to the extent it deems reasonably necessary, has entered and will enter into written agreements with each of its present and future

employees, agents and consultants which will enable it to comply with the covenants herein contained; and

(d) The Company has used, and will continue to use for the duration of this Agreement, proper statutory notice in connection with its use of the Patents and has made, and will continue to make, all appropriate filings with the United States Patent and Trademark Office to maintain the Patents in existence, including, without limitation, filing all necessary documents with the United States Patent and Trademark Office for each Patent to maintain it without loss of protection therefor.

4. Until all of the Obligations have been satisfied in full and the Note has been cancelled, the Company shall not enter into any license agreement relating to any of the Patents with any Person except non-exclusive licenses to customers of the Company in the regular and ordinary course of the Company's business as presently conducted and for reasonable and customary compensation, and shall not become a party to any agreement with any Person that is inconsistent with the Company's obligations under this Agreement.

5. If, before the Obligations shall have been satisfied in full, the Company shall obtain rights to any new patentable inventions, or become entitled to the benefit of any patent application or patent for any reissue, division, continuation, renewal, extension or continuation-in-part of any Patent or any improvement on any Patent, the provisions of paragraph 2 shall automatically apply thereto and the Company shall give to Lender prompt notice thereof in writing.

6. The Company irrevocably authorizes and empowers Lender to modify this Agreement by amending Exhibit A to include any future patents and patent applications within the definition of Patents under paragraph 2 or paragraph 5 hereof. Lender agrees to provide the Company with a copy of any such amendment to the Agreement within three (3) days of the date of such amendment.

7. The Company hereby grants to Lender, and its employees and the right upon prior notice to the Company, and subject only to any obligations of confidentiality to which the Company, its employees and agents are then subject with respect thereto, to visit the Company's plants and facilities at which any patented inventions are located or which manufacture, inspect or store products made under any of the Patents and to inspect the products and quality control records relating thereto at reasonable times during regular business hours.

8. Upon and at any time after the occurrence of an Event of Default, Lender shall have, in addition to all other rights and remedies given it by this Agreement, all rights and remedies under applicable law and all rights and remedies of a secured party under the UCC. Without limiting the generality of the foregoing, upon and at any time after the occurrence of an Event of Default, Lender may immediately, without demand of performance and without other notice (except as described in the next sentence, if required by applicable law) or demand whatsoever to the Company, each of which the Company hereby expressly waives, and without advertisement (except as otherwise provided by applicable law), collect directly any payments due the Company in respect of the Patent Collateral, or sell at public or private sale or otherwise realize upon the whole or from time to time any of the Patent Collateral, or any interest which

the Company may have therein. The Company hereby agrees that ten (10) days notice to the Company of any public or private sale or other disposition of any of the Patent Collateral shall be reasonable notice; provided, however, that no notice shall be required hereunder if not otherwise required by applicable law. At any such sale or disposition, Lender may, to the extent permitted by applicable law, purchase the whole or any part of the Patent Collateral sold, free from any right of redemption on the part of the Company, which right the Company hereby waives and releases. After deducting from the proceeds of such sale or other disposition of the Patent Collateral all costs and expenses incurred by Lender in enforcing its rights hereunder (including, without limitation, all attorneys' fees), Lender shall apply the remainder of such proceeds to the payment of the Obligations. Any remainder of the proceeds after payment in full of the Obligations shall be paid over to the Company. If any deficiency shall arise, the Company of the Obligations shall remain liable to Lender therefor.

9. The Company hereby makes, constitutes and appoints Lender, and any officer or agent of Lender as Lender may select, as the Company's true and lawful attorney-in-fact, with full power to do any or all of the following if an Event of Default shall occur and be continuing: to endorse the Company's name on all applications, documents, papers and instruments necessary for Lender to continue the maintenance of or to use the Patents, or to grant or issue any exclusive or nonexclusive license under the Patents to any other Person, or to assign, pledge, convey or otherwise transfer title in or dispose of any Patent Collateral to any other Person. The Company hereby ratifies all that such attorney shall lawfully do or cause to be done by virtue hereof. This power of attorney, being coupled with an interest, shall be irrevocable until all of the Obligations shall have been satisfied in full and the Note shall have been cancelled.

10. At such time as all of the Obligations shall have been satisfied finally and in full and the Note shall have been cancelled, Lender shall execute and deliver to the Company, without representation, warranty or recourse and at the Company's expense, all lien releases and other instruments which the Company may request in order to terminate Lender's security interest in the Patent Collateral, subject to any disposition thereof which may have been made by Lender pursuant to the terms of this Agreement. Such lien releases and other instruments shall be delivered within three (3) days of payment in full of the Obligations and request of such lien releases and instruments by the Company.

11. Any and all fees, costs and expenses, of whatever kind or nature, (including, without limitation, reasonable attorneys' fees and legal expenses) incurred by Lender in connection with the preparation of this Agreement and any other documents relating hereto and the consummation of this transaction, the filing or recording of any documents (including, without limitation, all taxes in connection therewith) with the United States Patent and Trademark Office or in other public offices, the payment or discharge of any taxes, counsel fees, maintenance fees or liens, or otherwise, in protecting, maintaining and preserving any Patent Collateral or in defending or prosecuting any actions or proceedings arising out of or related to any Patent Collateral, shall be borne and paid by the Company (it being the intent of the Company and Lender that the Company shall be responsible for the payment of all sums, fees, costs and expenses, including, without limitation, all maintenance fees payable with respect to the Patents) or, if paid by Lender in its sole discretion, shall be reimbursed by the Company to Lender **on demand** by Lender and until so paid shall be added to the principal amount of the

Obligations and shall bear interest at the highest per annum rate in effect from time to time under the Note. Notwithstanding the foregoing, in no event shall the Company be obligated to pay any fees, costs or expenses (including, without limitation, reasonable attorneys' fees and legal expenses) incurred by Lender pursuant to this Section 11 to the extent such fees, costs or expenses exceed Two Thousand Dollars (\$2,000). Lender shall provide the Company in writing an accounting of such fees, costs and expenses in reasonable detail.

12. The Company shall use its best efforts to detect any infringers of the Patents and shall notify Lender in writing of infringements detected. The Company shall have the duty through counsel reasonably acceptable to Lender, to prosecute diligently any patent application for a Patent pending as of the date of this Agreement or thereafter until the Obligations shall have been paid in full and the Note cancelled, to make application on unpatented but patentable inventions (subject to Company's reasonable discretion in the regular and ordinary course of the Company's business as presently conducted, or, during the existence of an Event of Default, promptly upon Lender's request), to file and prosecute opposition and cancellation proceedings, to file and prosecute lawsuits to protect the Patents and to do any and all acts which are deemed necessary or desirable by Lender to preserve and maintain all rights in patent applications for the Patents. Any expenses incurred in connection with such an application or proceedings shall be borne by the Company. The Company shall not abandon any pending patent application or patent, without the prior written consent of Lender.

13. Notwithstanding anything to the contrary contained in paragraph 2 hereof, Lender shall have the right, but shall in no way be obligated, to bring suit in its own name to enforce the Patents and any license hereunder, or to defend any suit or counterclaim in its own name to protect any Patents or license hereunder, in either of which events the Company shall at the request of Lender do any and all lawful acts (including bringing suit) and execute any and all proper documents required by Lender in aid of such enforcement or defense and the Company shall promptly, upon demand, reimburse and indemnify Lender for all costs and expenses incurred by Lender in the exercise of its rights under this paragraph 13.

14. If the Company fails to comply with any of its obligations hereunder, then to the extent permitted by applicable law, Lender may do so in the Company's name or in Lender's name, in Lender's sole discretion, but at the Company's expense, and the Company agrees to reimburse Lender in full for all reasonable expenses, including, without limitation, reasonable attorneys' fees, incurred by Lender in prosecuting, defending or maintaining the Patents or Lender's interest therein pursuant to this Agreement.

15. No course of dealing between the Company and Lender, nor any failure to exercise, nor any delay in exercising, on the part of Lender, any right, power or privilege hereunder or under the Note shall operate as a waiver thereof; nor shall any single or partial exercise of any right, power or privilege hereunder or thereunder preclude any other or future exercise thereof or the exercise of any other right, power or privilege.

16. All of Lender's rights and remedies with respect to the Patent Collateral, whether established by this Agreement or the Note, or by any other agreements or by applicable law, shall be cumulative and may be exercised singularly or concurrently.

17. The provisions of this Agreement are severable, and if any clause or provision shall be held invalid and unenforceable, in whole or in part, in any jurisdiction, the same shall be deemed severed herefrom and shall not in any manner affect such clause or provisions in any other jurisdiction, or any other clause or provision of this Agreement in any jurisdiction.

18. This Agreement, together with the Note and the quitclaim bill of sale, constitutes and expresses the entire understanding of the parties hereto with respect to the subject matter hereof, and supercedes all prior agreements and understandings, inducements or conditions, whether express or implied, oral or written. This Agreement is subject to modification only by writing signed by the parties, except as provided in paragraph 6 hereof.

19. The benefits and burdens of this Agreement shall inure to the benefit of and be binding upon the successors and assigns of Lender and upon the successors and permitted assigns of the Company. The Company shall not assign its rights or delegate its rights or assign its duties hereunder without the prior written consent of Lender.

20. The Company hereby waives notice of Lender's acceptance hereof.

21. This Agreement shall be governed by and construed in accordance with the internal laws of the State of Georgia.

22. To the fullest extent permitted by applicable law, the Company and Lender each waives the right to trial by jury in any action, suit, proceeding or counterclaim of any kind arising out of or related to this Agreement or the Patent Collateral.

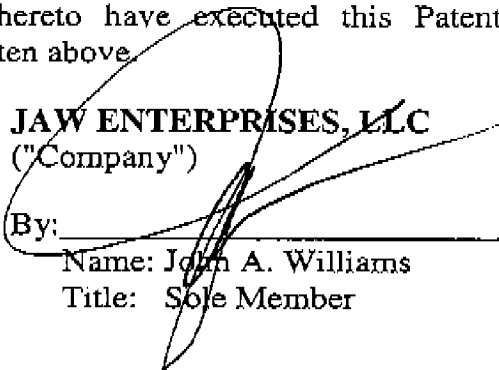
23. The Company hereby authorizes Lender to file one or more financing statements naming JAW Enterprises, LLC (or any derivations thereof or any tradenames disclosed by us to you), as debtor and Battelle Memorial Institute, as secured party, in the jurisdiction or jurisdictions deemed necessary or appropriate by Lender to perfect Lender's security interest in the Patent Collateral without obtaining the signature of the Company and without any additional consent or authorization from the Company.

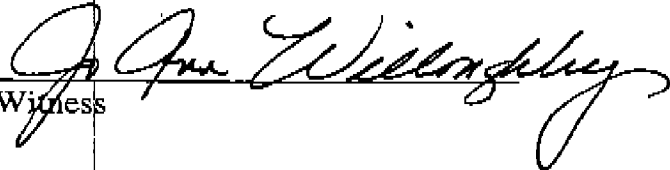
24. This Agreement may be executed in two or more counterparts, each of which will be deemed an original, but all of which together shall constitute one and the same instrument.

[Signatures will commence on following page]

IN WITNESS WHEREOF, the parties hereto have executed this Patent Security Agreement under seal on the day and year first written above.

**JAW ENTERPRISES, LLC**  
("Company")

By:   
Name: John A. Williams  
Title: Sole Member

  
Witness

Accepted:

**BATTELLE MEMORIAL INSTITUTE**  
("Lender")

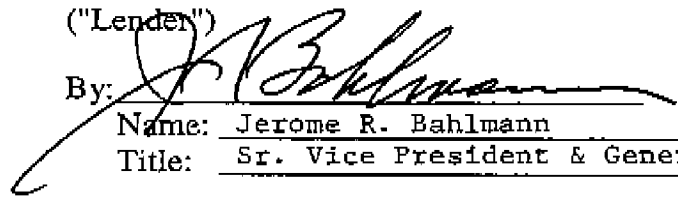
By:   
Name: Jerome R. Bahlmann  
Title: Sr. Vice President & General Counsel



EXHIBIT A

COUNTRY	SERIAL#	PATENT#
<b>LOW INLET GAS VELOCITY HIGH THROUGHOUT BIOMASS GASIFIER</b>		
UNITED STATES	07/115,463	4,828,581
AUSTRIA	86905659.8	239589
AUSTRALIA	6400286	591714
BELGIUM	86905659.8	239589
CANADA	518454	1,271,634
SWITZERLAND	86905659.8	239589
GERMANY	86905659.8	P3670507.1
EUROPEAN PATENT	86905659.8	239589
FRANCE	86905659.8	239589
UNITED KINGDOM	86905659.8	239589
ITALY	86905659.8	239589
JAPAN	504942/86	2059090
LUXEMBOURG	86905659.8	239589
NETHERLANDS	86905659.8	239589
SWEDEN	86905659.8	239589
UNITED STATES	06/778,345	
UNITED STATES	07/007,168	
WIPO	PCT/US86/01922	WO 87/0171
<b>METHOD FOR HOT GAS CONDITIONING</b>		
UNITED STATES	08/113,167	5,494,653
AUSTRIA	96907899.7	883569
BELGIUM	96907899.7	883569
CANADA	2,247,528	
SWITZERLAND	96907899.7	883569
GERMANY	96907899.7	883569
EUROPEAN PATENT	96907899.7	883569
FRANCE	96907899.7	883569
UNITED KINGDOM	96907899.7	883569
ITALY	96907899.7	883569
LUXEMBOURG	96907899.7	883569
NETHERLANDS	96907899.7	883569
SWEDEN	96907899.7	883569
WIPO	PCT/US96/02651	