

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT												
NATURE OF CONVEYANCE:	ASSIGNMENT												
CONVEYING PARTY DATA													
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Edward Arthur Calt Jr.</td> <td>11/21/2012</td> </tr> <tr> <td>Herbert Graham Tull IV</td> <td>11/21/2012</td> </tr> <tr> <td>Stanley Sylvester Toporek</td> <td>11/21/2012</td> </tr> </tbody> </table>		Name	Execution Date	Edward Arthur Calt Jr.	11/21/2012	Herbert Graham Tull IV	11/21/2012	Stanley Sylvester Toporek	11/21/2012				
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<table border="1"> <tr> <td>Name:</td> <td>Integrated BioChem, LLC</td> </tr> <tr> <td>Street Address:</td> <td>3221 Blue Ridge Road</td> </tr> <tr> <td>Internal Address:</td> <td>Suite 105</td> </tr> <tr> <td>City:</td> <td>Raleigh</td> </tr> <tr> <td>State/Country:</td> <td>NORTH CAROLINA</td> </tr> <tr> <td>Postal Code:</td> <td>27612</td> </tr> </table>		Name:	Integrated BioChem, LLC	Street Address:	3221 Blue Ridge Road	Internal Address:	Suite 105	City:	Raleigh	State/Country:	NORTH CAROLINA	Postal Code:	27612
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CORRESPONDENCE DATA													
Fax Number: 8887371649 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i> Phone: 919-342-4882 Email: jsadler@olivelawgroup.com Correspondent Name: Bentley J. Olive Address Line 1: 125 South Edinburgh Drive Address Line 2: Suite 100 Address Line 4: Cary, NORTH CAROLINA 27511													
ATTORNEY DOCKET NUMBER:	227/2-US-PCT												
NAME OF SUBMITTER:	Bentley J. Olive												

OP \$80.00 13493119

Total Attachments: 5

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PATENT

REEL: 029335 FRAME: 0184

PATENT

Atty. Docket No.: 227/2

ASSIGNMENT

WHEREAS, We, Edward Arthur Calt, Jr., City of Raleigh, State of North Carolina; Herbert Graham Tull, IV, City of Cary, State of North Carolina; and Stanley Sylvester Toporek, City of Raleigh, State of North Carolina; (hereinafter "Assignor"), have invented certain new and useful improvements in PROCESS OF MANAGED ECOSYSTEM FERMENTATION, for which Application for a U. S. Patent was made on June 11, 2012, as Serial No. 13/493,119, and for which Application for a Patent Cooperative Treaty International Patent was also made on June 11, 2012, as Serial No. PCT/US2012/041852; both of which claim the benefit of U.S. Provisional Application Serial No. 61/495,183 filed June 9, 2011.

AND, WHEREAS, Integrated BioChem, LLC, a corporation duly organized and existing under the laws of the State of North Carolina, having its principal office and place of business at 3221 Blue Ridge Road, Suite 105, Raleigh, North Carolina 27612, (hereinafter "Assignee"), is desirous of acquiring an interest therein.

NOW, THEREFORE, To Whom It May Concern, be it known that for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor has sold and by these presents does hereby sell, assign, transfer, and convey unto the Assignee, its successors and assigns, his entire right, title, and interest in and to the invention and application, including the right to sue for past infringements, provided any such rights exist, and in and to any and all domestic and foreign patent applications filed on the invention, and in and to any and all continuations, continuations-in-part, or divisions thereof, and in and to any and all Letters Patent of the United States of America, and all foreign countries or reissues thereof which may be granted therefor or thereon, for the full end of the term for which said Letters Patent may be granted, together with his right to claim the priority of said application in all foreign countries in accordance with the International Convention, the same to be held and enjoyed by said Assignee, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by Assignor if this assignment and sale had not been made.

PATENT

REEL: 029335 FRAME: 0185

Atty. Docket No.: 227/2

Assignor hereby requests that said Letters Patent be issued in accordance with this assignment.

Assignor further covenants and agrees that, at the time of the execution and delivery of these presents, Assignor possesses full title to the invention and application above-mentioned, and that he has the unencumbered right and authority to make this assignment.

Assignor further covenants and agrees, and likewise binds his heirs, legal representatives and assigns, to promptly communicate to said Assignee or its representatives any facts known to him relating to said invention, to testify in any interference or legal proceedings involving said invention, to execute any additional papers which may be requested to confirm the right of the Assignee, its representatives, successors and assigns to secure patent or similar protection for the said invention in all countries and to vest in the Assignee complete title to the said invention and Letters Patent, without further compensation, but at the expense of said Assignee, its successors, assigns and other legal representatives.

-----Signature page follows-----

Atty. Docket No.: 227/2

Executed this 21 day of November, 2012.

By: Edward Arthur Calt, Jr.
Edward Arthur Calt, Jr.

State of NC

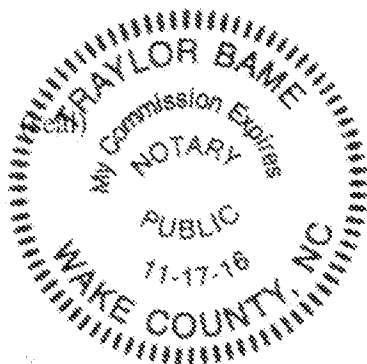
County of WAKE

On NOV 21 2012, before me, TRAYLOR BAME,
(date) (notary)

personally appeared, EDWARD ARTHUR CALT JR,
(Signer(s))

personally known to me or proved to me on the basis of satisfactory evidence to be the person(s)
whose name(s) is/are subscribed to the within instrument and acknowledged to me that
he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their
signature(s) on the instrument the person(s) or the entity upon behalf of which the person(s)
acted, executed the instrument

WITNESS my hand and official seal



Traylor Bame
(notary signature)

Executed this 21 day of November, 2012.

By: [Signature]
Herbert Graham Tull, IV

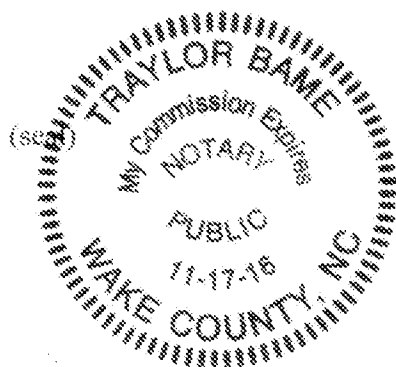
State of NC

County of WAKE

On Nov 21 2012, before me, TRAYLOR BAME,
(date) (notary)
personally appeared, HERBERT GRAHAM TULL IV,
(Signer(s))

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acted, executed the instrument

WITNESS my hand and official seal



[Signature]
(notary signature)

Executed this 21 day of Nov, 2012.

By: Stanley Sylvester Toporek
Stanley Sylvester Toporek
Stanley Sylvester Toporek

State of NC

County of WAKE

On 11/21/12, before me, TRAYLOR BAME,
(date) (notary)
personally appeared, STANLEY SYLVESTER TOPOREK,
(Signer(s))

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