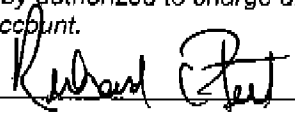


FORM PTO-1595 (modified) (Rev 6-93)	RECORDATION FORM COVER SHEET PATENTS ONLY	U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office
To the Director of the United States Patent and Trademark Office: Please record the attached original documents or copies thereof.		
1. Name of conveying party(ies): 1) William H. ROTTMANN July 15, 2005 2) Marie B. CONNETT December 2, 2004 3) Richard L. FORSTER May 6, 2005 4) Paul SANDERS May 9, 2005 5) Gary ZHANG May 20, 2005 6) Sandra Joanne FITZGERALD May 17, 2005 7) Clare EAGLETON May 19, 2005	2. Name and address of receiving party(ies): ArborGen LLC 180 Westvaco Rd. P.O. Box 840001 Summerville, South Carolina 29404 and Genesis Research and Development Corporation Limited One Fox Street Parnell, Auckland New Zealand	
3. Nature of conveyance: <div style="text-align: center;">ASSIGNMENT</div> Execution Date: <div style="text-align: center;">Please See Above.</div>	Additional name(s) & address(es) attached? NO	
4. Application number(s) or patent number(s): If this is being filed together with a new application, the execution date of the application is: <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> A. Patent Application Number(s): <div style="text-align: center;">10/946,650</div> </div> <div style="width: 45%;"> B. Patent Number(s): </div> </div> <div style="text-align: right; margin-top: 5px;">Additional numbers attached? NO</div>		
5. Name and address of party to whom correspondence concerning document should be mailed: Richard C. Peet FOLEY & LARDNER LLP Washington Harbour 3000 K Street, N.W., Suite 500 Washington, D.C. 20007-5143	6. Total number of applications/patents involved: 1 7. Total fee (37 C.F.R. § 3.41): \$40.00 <div style="text-align: center;">Check Enclosed</div> <div style="text-align: center;"><input checked="" type="checkbox"/> Charge to deposit account</div> 8. Deposit account number: 19-0741	
DO NOT USE THIS SPACE		
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. The Commissioner is hereby authorized to charge any additional recordation fees which may be required in this matter to the above-identified deposit account.</i>		
Richard C. Peet Name of person signing	 Signature	July 15 2005 Date
Total number of pages including cover sheet, attachments, and document: 11		

CH \$40.00 190741 10946650

Atty. Dkt. No. 044463-0348

ASSIGNMENT - WORLDWIDE

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor (hereinafter referred to singly and collectively as "ASSIGNOR") has sold, assigned, and transferred, and by these presents hereby sells, assigns, and transfers, unto

ArborGen, LLC
180 Westvaco Road
P.O. Box 840001
Summerville, SC 29484

(hereinafter referred to as "ASSIGNEE") its successors and assigns, the full and exclusive right, title and interest for the United States, its territories and possessions, and all foreign countries in and to this invention relating to

MODIFICATION OF PLANT LIGNIN CONTENT

as set forth in this United States Patent Application

check one ☐ executed concurrently herewith,
 ☐ executed on _____,
 ☒ Serial No. 10/946,650 , Filed 09/22/2004

as well as in and to (a) all improvements and modifications of the above-identified invention or inventions, (b) the above-identified application and all other applications for Letters Patent of the United States and countries foreign thereto for above-identified invention or inventions and all improvements and modifications thereof, (c) all Letters Patent which may issue from said applications in the United States and countries foreign thereto, (d) all divisions, continuations, reissues, and extensions of said applications and Letters Patent, and (e) the right to claim for any of said applications the full benefits and priority rights under the International Convention and any other international agreement to which the United States adheres; such right, title, and interest to be held and enjoyed by ASSIGNEE, its successors and assigns, to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by ASSIGNOR had this Assignment not been made.

ASSIGNOR HEREBY AUTHORIZES ASSIGNEE to file patent applications in any or all countries on the above-identified invention or inventions in the name of the undersigned or in the name of ASSIGNEE or otherwise as ASSIGNEE may deem advisable under the International Convention or otherwise.

ASSIGNOR HEREBY AUTHORIZES AND REQUESTS the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE as assignee of the entire interest, for the sole use and benefit of ASSIGNEE, its successors and assigns.

Atty. Dkt. No. 044463-0348

ASSIGNOR HEREBY AGREES (a) to communicate to ASSIGNEE, its successors and assigns, or their representative or agents, all facts and information known or available to ASSIGNOR respecting said invention or inventions, improvements, and modifications including evidence for interference, reexamination, reissue, opposition, revocation, extension, or infringement purposes or other legal, judicial, or administrative proceedings, whenever requested by ASSIGNEE; (b) to testify in person or by affidavit as required by ASSIGNEE, its successors and assigns, in any such proceeding in the United States or a country foreign thereto; (c) to execute and deliver, upon request by ASSIGNEE, all lawful papers including, but not limited to, original, divisional, continuation, and reissue applications, renewals, assignments, powers of attorney, oaths, affidavits, and declarations, depositions; and (d) to provide all reasonable assistance to ASSIGNEE, its successors and assigns, in obtaining and enforcing proper title in and protection for said invention or inventions, improvements, and modifications under the intellectual property laws of the United States and countries foreign thereto.

ASSIGNOR HEREBY REPRESENTS AND WARRANTS that ASSIGNOR has the full and unencumbered right to sell, assign, and transfer the interests sold, assigned, and transferred herein, and that ASSIGNOR has not executed and will not execute any document or instrument in conflict herewith.

ASSIGNOR HEREBY GRANTS to the law firm of **Foley & Lardner LLP** the power and authority to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

ASSIGNOR UNDERSTANDS AND AGREES that the attorneys and agents of the law firm of **Foley & Lardner LLP** do not personally represent ASSIGNOR OR ASSIGNOR's legal interests, but instead represent the interests of ASSIGNEE; since said attorneys and agents cannot provide legal advice to ASSIGNOR with respect to this Assignment, ASSIGNOR acknowledges its right to seek its own independent legal counsel.

Atty. Dkt. No. 044463-0348

Executed this 15 day of July, 2005

William H. Rottmann
WILLIAM H. ROTTMANN

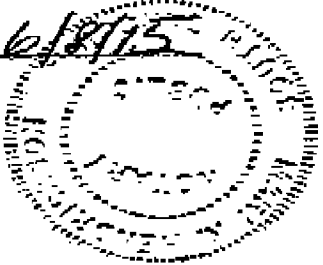
State of South Carolina
County of Berkeley

On this 15th day of July, 2005, before me, a notary public in and for said county, appeared WILLIAM H. ROTTMANN, who is personally known to me to be the same person whose name is subscribed to the foregoing instrument, and he/she acknowledged that he/she signed, sealed, and delivered the said instrument as his/her free and voluntary act for the uses and purposes therein set forth.

Mari K. Hendrickson
Notary Public

My Commission Expires: 6/29/15

(Seal)



Attorney Dkt. No. 044463-0348

WORLDWIDE ASSIGNMENT

WHEREAS, Marie Bernice Connett-Porceddu, of 1021 Blockade Runner, Charleston, South Carolina 29414 (hereinafter referred to as "ASSIGNOR") has invented a certain invention entitled **MODIFICATION OF PLANT LIGNIN CONTENT** (Atty. Dkt. No. 044463-0348) for which an application for United States Letters Patent was filed on September 22, 2004 as U.S. Patent Application No. 10/946,650.

WHEREAS, ArborGen LLC, a limited liability company duly organized and existing under the laws of the State of Delaware, and having its principal place of business at 180 Westvaco Road, Summerville, South Carolina 29484 (hereinafter referred to as "ASSIGNEE") desires to acquire the entire interest therein;

NOW THEREFORE, in consideration of good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNOR has sold, assigned and transferred, and by these presents hereby sells, assigns and transfers, unto ASSIGNEE, its successors and assigns, the full and exclusive right, title, and interest in and to (a) the above-identified invention or inventions and all improvements and modifications thereof, (b) the above-identified application and all other applications for Letters Patent of the United States and countries foreign thereto for the above-identified invention or inventions and all improvements and modifications thereof, (c) all Letters Patent which may issue from said applications in the United States and countries foreign thereto, (d) all divisions, continuations, reissues, and extensions of said applications and Letters Patent, and (e) the right to claim for any of said applications the full benefits and priority rights under the International Convention and any other international agreement to which the United States adheres; such right, title, and interest to be held and enjoyed by ASSIGNEE, its successors and assigns, to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by ASSIGNOR had this Assignment not been made.

ASSIGNOR HEREBY AUTHORIZES AND REQUESTS the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE as assignee of the entire interest, for the sole use and benefit of ASSIGNEE, its successors and assigns.

ASSIGNOR HEREBY AGREES (a) to communicate to ASSIGNEE, its successors and assigns, or their representatives or agents, all facts and information known or available to ASSIGNOR respecting said invention or inventions, improvements, and modifications including evidence for interference, reexamination, reissue, opposition, revocation, extension, or infringement purposes or other legal, judicial, or administrative proceedings, whenever requested by ASSIGNEE; (b) to testify in person or by affidavit as required by ASSIGNEE, its successors and assigns, in any such proceeding in the United States or a country foreign thereto; (c) to execute and deliver, upon request by ASSIGNEE, all lawful papers including, but not limited to, original, divisional, continuation, and reissue applications, renewals, assignments, powers of attorney, oaths, affidavits, declarations, depositions; and (d) to provide all reasonable assistance to ASSIGNEE, its successors and assigns, in obtaining and enforcing proper title in and protection for said invention or inventions, improvements, and

Attorney Dkt. No. 044463-0348


modifications under the intellectual property laws of the United States and countries foreign thereto.

ASSIGNOR HEREBY REPRESENTS AND WARRANTS that ASSIGNOR has the full and unencumbered right to sell, assign, and transfer the interests sold, assigned, and transferred herein, and that ASSIGNOR has not executed and will not execute any document or instrument in conflict herewith.

ASSIGNOR HEREBY GRANTS to the law firm of **Foley & Lardner LLP** the power and authority to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

ASSIGNOR UNDERSTANDS AND AGREES that the attorneys and agents of the law firm of **Foley & Lardner LLP** do not personally represent ASSIGNOR or ASSIGNOR's legal interests, but instead represent the interests of ASSIGNEE; since said attorneys and agents cannot provide legal advice to ASSIGNOR with respect to this Assignment, ASSIGNOR acknowledges its right to seek its own independent legal counsel.

Executed this 2nd day of December, 2004.


Marie Bernice Connett-Porceddu, Ph.D.

State of South Carolina

County of Richland

On this 2nd day of December, 2004, before me, a notary public in and for said county, appeared Marie Bernice Connett-Porceddu, who is personally known to me to be the same person whose name is subscribed to the foregoing instrument, and he/she acknowledged that he/she signed, sealed, and delivered the said instrument as his/her free and voluntary act for the uses and purposes therein set forth.


Notary Public

My Commission Expires: Feb 6th 2006

(Seal)

PATENT APPLICATION

ASSIGNMENT

WHEREAS, we, **Richard L. Forster, Paul Sanders, Gary Zhang, Sandra Joanne Fitzgerald, Clare Eagleton**, have invented the subject matter which is described and claimed in the patent application entitled **MODIFICATION OF PLANT LIGNIN CONTENT**, the specification of which was filed **September 22, 2004** with the U.S. Patent and Trademark Office under **Serial No. 10/946,650**; and

WHEREAS, GENESIS RESEARCH AND DEVELOPMENT CORPORATION LIMITED, a New Zealand corporation, having a place of business at One Fox Street, Parnell, Auckland, New Zealand is desirous of acquiring an interest therein;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we, **Richard L. Forster, Paul Sanders, Gary Zhang, Sandra Joanne Fitzgerald, Clare Eagleton**, hereby sell, assign and transfer to GENESIS RESEARCH AND DEVELOPMENT CORPORATION LIMITED, the full and exclusive right, title and interest in and to said subject matter, patent application, and patent rights throughout the world, including foreign patent priority rights; said subject matter, application and patents in this or any foreign country and all divisions, continuations, reissues, reexamination certificates and extensions of any type, to be held and enjoyed by GENESIS RESEARCH AND DEVELOPMENT CORPORATION LIMITED, for their own use and benefit, and for its successors and assigns to the full end of the term for which patents may be granted in this or any foreign country, as fully and entirely as the same would have been held by us had this assignment and sale not been made, and covenant that we have the full right to do so, and agree that we will communicate to GENESIS RESEARCH AND DEVELOPMENT CORPORATION LIMITED, or their successors and assigns, any facts known to us respecting said patent application and the subject matter described therein, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths, and do everything possible to aid GENESIS RESEARCH & DEVELOPMENT CORPORATION LIMITED, and their successors and assigns to obtain and enforce patent protection for said subject matter in this or any foreign country.


Executed at Auckland, this 6th day of May, 2005.
(City)


Richard L. Forster


Executed at _____, this _____ day of _____, 2005.
(City)

Paul Sanders


Executed at Auckland, New Zealand, this 20th day of May, 2005.
(City)


Gary Zhang

Executed at Auckland, New Zealand, this 17th day of May, 2005.
(City)


Sandra Joanne Fitzgerald

Executed at Auckland, New Zealand, this 19th day of May, 2005.
(City)


Clare Eagleton

PATENT APPLICATION

ASSIGNMENT

WHEREAS, we, **Richard L. Forster, Paul Sanders, Gary Zhang, Sandra Joanne Fitzgerald, Clare Eagleton**, have invented the subject matter which is described and claimed in the patent application entitled **MODIFICATION OF PLANT LIGNIN CONTENT**, the specification of which was filed **September 22, 2004** with the U.S. Patent and Trademark Office under **Serial No. 10/946,650**; and

WHEREAS, GENESIS RESEARCH AND DEVELOPMENT CORPORATION LIMITED, a New Zealand corporation, having a place of business at One Fox Street, Parnell, Auckland, New Zealand is desirous of acquiring an interest therein;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we, **Richard L. Forster, Paul Sanders, Gary Zhang, Sandra Joanne Fitzgerald, Clare Eagleton**, hereby sell, assign and transfer to GENESIS RESEARCH AND DEVELOPMENT CORPORATION LIMITED, the full and exclusive right, title and interest in and to said subject matter, patent application, and patent rights throughout the world, including foreign patent priority rights; said subject matter, application and patents in this or any foreign country and all divisions, continuations, reissues, reexamination certificates and extensions of any type, to be held and enjoyed by GENESIS RESEARCH AND DEVELOPMENT CORPORATION LIMITED, for their own use and benefit, and for its successors and assigns to the full end of the term for which patents may be granted in this or any foreign country, as fully and entirely as the same would have been held by us had this assignment and sale not been made, and covenant that we have the full right to do so, and agree that we will communicate to GENESIS RESEARCH AND DEVELOPMENT CORPORATION LIMITED, or their successors and assigns, any facts known to us respecting said patent application and the subject matter described therein, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths, and do everything possible to aid GENESIS RESEARCH & DEVELOPMENT CORPORATION LIMITED, and their successors and assigns to obtain and enforce patent protection for said subject matter in this or any foreign country.

Executed at _____, this ____ day of _____, 2005.
(City)

Richard L. Forster

Executed at _____, this ____ day of _____, 2005.
(City)

Paul Sanders

Paul Sanders

Executed at Lower Merion, this 9th day of May, 2005.
(City)

Gary Zhang

Executed at _____, this ____ day of _____, 2005.
(City)

Sandra Joanne Fitzgerald

Executed at _____, this ____ day of _____, 2005.
(City)

Clare Eagleton