

FORM PTO-1595 (modified) U.S. DEPARTMENT OF COMMERCE
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PATENTS ONLY

To the Director of the United States Patent and Trademark Office: Please record the attached original documents or copies thereof.

<p>1. Name of conveying party(ies):</p> <p>1) Marie B. CONNETT</p> <p>2) Robert J. Kodrzycki</p> <p>3) Leonard N. BLOKSBERG</p> <p>4) Sarah Jane EMERSON</p> <p>5) Michael J. FROST</p> <p>6) Richard Llewellyn Syndey FORSTER</p> <p>7) Murray Robert GRIGOR</p> <p>8) Iikka HAVUKKALA</p> <p>9) Colleen M. HIGGINS</p> <p>10) Steve LUND</p> <p>11) Andreas MAGUSIN</p> <p>Additional conveying party(ies) NO</p>	<p>2. Name and address of receiving party(ies):</p> <p>ArborGen LLC 180 Westvaco Rd. P.O. Box 840001 Summerville, South Carolina 29404 Genesis Research and Development Corporation Limited One Fox Street Parnell, Auckland, New Zealand</p>
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<p>3. Nature of conveyance: ASSIGNMENT</p> <p>Execution Date: 1) 11/12/2004, 2) 11/15/2004, 3) 11/24/2004, 4) 11/23/2004, 5) 11/25/2004, 6) 11/24/2004, 7) 11/24/2004, 8) 11/24/2004, 9) 11/25/2004 10) 11/29/2004, 11) 12/01/2004</p>	<p>Additional name(s) & address(es) attached? YES</p>
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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:

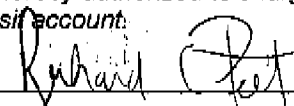
<p>A. Patent Application Number(s): 10/861,910</p>	<p>B. Patent Number(s):</p>
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Additional numbers attached? **NO**

<p>5. Name and address of party to whom correspondence concerning document should be mailed:</p> <p>Richard C. Peet FOLEY & LARDNER LLP Washington Harbour 3000 K Street, N.W., Suite 500 Washington, D.C. 20007-5143</p>	<p>6. Total number of applications/patents involved: 1</p> <p>7. Total fee (37 C.F.R. § 3.41): \$40.00</p> <p>Check Enclosed</p> <p><input checked="" type="checkbox"/> Charge to deposit account</p> <p>8. Deposit account number: 19-0741</p>
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9. Statement and signature:
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.

<p>Richard C. Peet</p>		<p>January 28, 2005</p>
Name of person signing	Signature	Date

Total number of pages including cover sheet, attachments, and document: 14

C/H \$40.00 190741 10861910

Atty. Dkt. No. 044463-0297

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 Rd.
P.O. Box 840001
Summerville, South Carolina 29404

(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

**COMPOSITIONS AND METHODS FOR REGULATING POLYSACCHARIDES OF A
PLANT CELL**

as set forth in this United States Patent Application

check one executed concurrently herewith,
 executed on _____
 Serial No. 10/861,910 Filed June 7, 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.

Atty. Dkt. No. 044463-0297

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 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. 044463-0297

Executed this 12th day of November, 2004.

[Signature]
MARIE B. CONNETT

State of South Carolina
County of Beaufort) ss.

On this 12th day of November, 2004, before me, a notary public in and for said county, appeared MARIE B. CONNETT, 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.

[Signature]
Notary Public
Bruce Woods
My Commission Expires: February 6th 2005

(Seal)

Executed this 15th day of November, 2004.

[Signature]
ROBERT J. KODRZYCKI

State of South Carolina
County of Beaufort) ss.

On this 15th day of November, 2004, before me, a notary public in and for said county, appeared ROBERT J. KODRZYCKI, 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.

[Signature]
Notary Public
Bruce Woods
My Commission Expires: February 6th 2005

(Seal)

PATENT APPLICATION
ASSIGNMENT

WHEREAS, we, **Leonard N. Bloksberg, Sarah Jane Emerson, Michael J. Frost, Richard Llewellyn Sydney Forster, Murray Robert Grigor, Ilkka Havukkala, Colleen M. Higgins, Steven Troy Lund and Andreas Magusin** have invented the subject matter which is described and claimed in the patent application entitled **COMPOSITIONS AND METHODS FOR REGULATING POLYSACCHARIDES OF A PLANT CELL**, the specification of which was filed **June 7, 2004** with the U.S. Patent and Trademark Office under **Serial No. 10/861,910**; 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, **Leonard N. Bloksberg, Sarah Jane Emerson, Michael J. Frost, Richard Llewellyn Sydney Forster, Murray Robert Grigor, Ilkka Havukkala, Colleen M. Higgins, Steven Troy Lund and Andreas Magusin**, 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 patent rights 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 its own use and benefit, and for the use and benefit of 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 its 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

CORPORATION LIMITED and its successors and assigns to obtain and enforce patent protection for said subject matter in this or any foreign country.

Executed at Auckland, this 24 day of November, 2004.
(City)

Leonard N. Bloksberg
Leonard N. Bloksberg

Executed at Auckland, this 23rd day of November, 2004.
(City)

Sarah Jane Emerson
Sarah Jane Emerson

Executed at Auckland, New Zealand this 25th day of November, 2004.
(City)

Michael J. Frost
Michael J. Frost

Executed at Auckland, this 24th day of November, 2004.
(City)

Richard Lewellyn Sydney Forster
Richard Lewellyn Sydney Forster

Executed at Auckland, this 24th day of November, 2004.
(City)

Murray Robert Grigor
Murray Robert Grigor

Executed at Auckland, this 24 day of November, 2004.
(City)

Ilkka Havukkala
Ilkka Havukkala

Executed at AUCKLAND, this 25 day of NOVEMBER, 2004.
(City)

Executed at Auckland, New Zealand this 25th day of November, 2004.
(City)

Colleen Higgins
Colleen Higgins

Executed at _____, this _____ day of _____, 2004.
(City)

Steven Lund

Executed at _____, this _____ day of _____, 2004.
(City)

Andreas Magusin

PATENT APPLICATION
ASSIGNMENT

WHEREAS, we, **Leonard N. Bloksberg, Sarah Jane Emerson, Michael J. Frost, Richard Llewellyn Sydney Forster, Murray Robert Grigor, Ilkka Havukkala, Colleen M. Higgins, Steven Troy Lund and Andreas Magusin** have invented the subject matter which is described and claimed in the patent application entitled **COMPOSITIONS AND METHODS FOR REGULATING POLYSACCHARIDES OF A PLANT CELL**, the specification of which was filed **June 7, 2004** with the U.S. Patent and Trademark Office under **Serial No. 10/861,910**; and

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(City)

Executed at _____, this ____ day of _____, 2004.
(City)

Colleen Higgins

Executed at Vancouver BC, Canada this 29th day of November, 2004.
(City)

Steven J. Lund
Steven Lund

Executed at _____, this ____ day of _____, 2004.
(City)

Andreas Magusin

PATENT APPLICATION
ASSIGNMENT

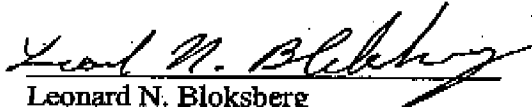
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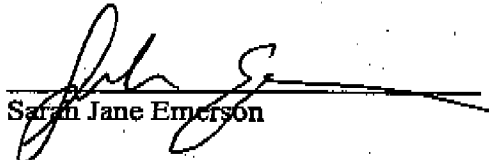
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Leonard N. Bloksberg

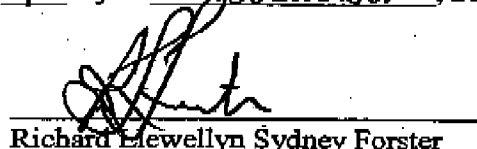
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(City)

Colleen Higgins

Executed at _____, this _____ day of _____, 2004.
(City)

Steven Lund

Executed at NORWICH, this 13th day of DECEMBER, 2004.
(City)

Andreas Magusin
Andreas Magusin