

03-22-1999



Form 6-93

100990959

Commerce Patent and Trademark Office

MRD 3-17-99

To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof.

1. Name of conveying party:

Molecular Tool, Inc.



Additional name(s) of conveying party attached? yes no

2. Name and address of receiving party(ies):

Name: Orchid Biocomputer, Inc.

Street Address: 201 Washington Road

City: Princeton State: NJ Zip Code: 088543

Country: U.S.A.

Additional name(s) & address(es) attached? yes no

3. Nature of Conveyance:

- Assignment
- Security Agreement
- Other _____
- Merger
- Change of Name

Execution Date(s): September 11, 1998

4. Application number: Attached Schedule A and Application No 09/135 569

If this document is being filed together with a new application, the execution date of the application is

A. Patent Application No(s).

B. Patent No(s).

Additional numbers attached? yes no

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: HOWREY & SIMON

Internal Address: Jeffrey I. Auerbach

Street Address: Box No. 34
1299 Pennsylvania Ave, N.W.

City: Washington State: D.C. Zip Code: 20004-2402

6. Total number of applications and patents involved 20

7. Total fee (37 C.F.R. § 3.41).....\$ 800.00

Enclosed

Authorized to be charged to Deposit Account

8. Deposit Account Number: 08-3038

03/19/1999 DMG:YEM 00000124 09135569

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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.

Jeffrey I. Auerbach
Name of Person Signing
Registration No. 32,680

Signature

3/16/99
Date

Total number of pages including cover sheet, attachments and document 2

OMB NO. 0651-0011 (exp.4/94)

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

PATENT
REEL: 9827 FRAME: 0127

Schedule A

Patents and Patent Applications

Patent Application	Patent or Application No.
Method for Generating Single-Stranded DNA Molecules	5518900
PCT	US94/00771
Australia	674211
Canada	2153898
Europe	94/907855.4
Japan	516386/94
Method for the Immobilization of Nucleic Acid Molecules	5610287
PCT	US94/14096
Australia	682741
Canada	2155634
Europe	95/904282.1
Ligase Polymerase-Mediated Genetic bit Analysis of Single Nucleotide Polymorphisms and its Use in Genetic Analysis	5,679,524
PCT	US95/01639
Australia	18,407/95
Canada	2,182,517
Europe	95/10213.8
Japan	520829/95
Automatic Genotype Determination	5762876
PCT	US94/14836
Australia	14442/95
Canada	2,177,720
Europe	95/906094.8
Japan	7-517621
Method for Determining Nucleotide Identity through Primer Extension	07/664,837
PCT	US92/01905
Australia	660,173
Canada	2,105,060
Europe	92/908554.6
Finland	933870

Patent Application	Patent or Application No.
Japan	4-508312
Norway	933136
Method for Determining Nucleotide Identity through Extension of Immobilized Primer	07/775,786
Method and Reagent for Determining Specific Nucleotide Variations	08/465,322
Method for Determining the Nucleotide Sequence of a Polynucleotide PCT	08/616,906 US97/03701
Covalent Attachment of Nucleic Acid Molecules onto Solid-Phases via Disulfide Bonds PCT	08/812,010 US9804114
Attachment of Unmodified Nucleic Acids to Silanized Solid Phase Surfaces PCT	08/870,010 US98/11662
Methods for the Detection of Multiple Single Nucleotide Polymorphisms in a Single Reaction PCT	08/881,845 Not yet assigned
Single Nucleotide Polymorphisms and Their Use in Genetic Analysis – Continuation PCT	08/971,344 US94/12632
Canada	2,175,695
Europe	95/005208
Ligase Polymerase-Mediated Genetic bit Analysis of Single Nucleotide Polymorphisms and its Use in Genetic Analysis-Continuation	08/929,101
Covalent Attachment of Nucleic Acid Molecules onto Solid-Phases via Disulfide Bonds-Continuation-in-Part	08/975,862
DeNovo or “Universal” Sequencing Array	08/976,427
Single Nucleotide Polymorphisms of the Uncoupling Protein-2 (UCP2) Gene	09/012,218
Automatic Genotype Determination-Divisional	09/088,820
Nucleotide Analogues with 3'-Pro-Fluorescent Fluorophores in Nucleic Acid Sequence Analysis	09/095,648
Polymerase Signaling Assay (PSA)	09/097,791
Gene Pen Devices for Array Printing	09/109,915
In-line Complete Spectral Fluorescent Imaging of Nucleic Acid Molecules	Not yet assigned

TRADOCS: 1123466.5 (_2v#051.doc)

ASSIGNMENT OF PATENTS

WHEREAS, Molecular Tool, Inc. (hereafter "Assignor"), a Delaware corporation having a principal place of business at Johns Hopkins Bayview Research Campus, Alpha Center, 5210 Eastern Avenue, Baltimore, Maryland 21224, is the owner of the United States patents (the "Patents") and the patent applications (the "Patent Applications") set forth on Schedule A attached hereto, and the inventions described in and claimed therein (the "Inventions"), and,

WHEREAS, Orchid Biocomputer, Inc. (hereafter "Assignee"), a Delaware corporation having a principal place of business at 201 Washington Road, Princeton, New Jersey 08543, is desirous of acquiring the entire right, title and interest of Assignor in and to said Patents, Patent Applications and Inventions.

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, BE IT KNOWN, that for good and valuable consideration, the receipt of which is hereby acknowledged, Assignor has sold, assigned, transferred and conveyed and by these presents does hereby sell, assign, transfer and convey, unto said Assignee, its successors and assigns, its entire right, title and interest in and to the Patents and Patent Applications as set forth and described in Schedule A attached hereto, and the Inventions, and all divisions, continuations, continuations-in-part and renewals of such Patents and Patent Applications and all Patents of the United States which may be granted on such Patent Applications, and Inventions, and all reissues, re-examinations and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for an invention described in any of the foregoing Patents or Patent Applications in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said Patent Applications under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for the Inventions in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; together with all claims for damages by reason of past infringement, with the right to sue for, and collect the same for the use of Assignee, its successors and assigns.

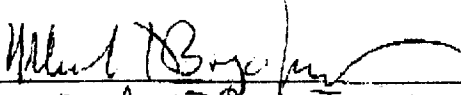
Assignor hereby authorizes and requests the Commissioner of Patents and Trademarks of the United States, and any official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the Assignee, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

Assignor hereby covenants and agrees that it has full right to convey the entire interest herein assigned, and that it has not executed, and will not execute, any agreement in conflict herewith.

This Assignment is effective as of this 11th day of September, 1998.


IN WITNESS WHEREOF, Assignor has caused these presents to be signed by a duly authorized officer.

MOLECULAR TOOL, INC., Assignor

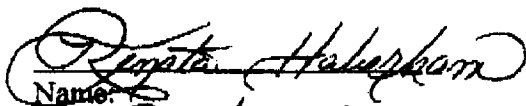
By: 
Name: Michael T. Boyce
Title: President

Witnesses:

Signature:


Name: Karen Monaker

Signature:


Name: Renata Haberkam

To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof.

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3. Nature of Conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other _____ Execution Date(s): September 11, 1998	

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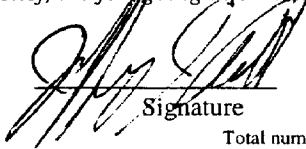
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5. Name and address of party to whom correspondence concerning document should be mailed: Name: HOWREY & SIMON Internal Address: Jeffrey I. Auerbach Street Address: Box No. 34 1299 Pennsylvania Ave, N.W. City: Washington State: D.C. Zip Code: 20004-2402	6. Total number of applications and patents involved <p style="text-align: center;"><u>20</u></p> 7. Total fee (37 C.F.R. § 3.41).....\$ <u>800.00</u> <input checked="" type="checkbox"/> Enclosed <input checked="" type="checkbox"/> Authorized to be charged to Deposit Account 8. Deposit Account Number: 08-3038
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9. Statement and signature.

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Jeffrey I. Auerbach Name of Person Signing Registration No. 32,680	 _____ Signature	<u>3/16/99</u> _____ Date
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OMB NO. 0651-0011 (exp. 4/94)

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