

Form PTO 1595  
(Rev. 10/02) PATENTS ONLY  
OMB No. 0651-0027 (exp. 06/30/2005)

### RECORDATION FORM COVER SHEET PATENTS ONLY

U.S. DEPARTMENT OF COMMERCE  
U.S. Patent and Trademark Office

Tab Setting ⇌ ⇌ ⇌ ▼ ▼ ▼ ▼ ▼ ▼ ▼

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

1. Name of conveying party(ies):  
  
Visible Genetics, Inc.  
  
Additional name(s) of conveying party(ies) attached?  Yes  No

2. Name and address of receiving party(ies):  
Name: Bayer HealthCare LLC  
Street Address: 511 Benedict Avenue  
  
City: Tarrytown State: NY Zip: 10591  
Additional name(s) & address(es) attached?  Yes  No

3. Nature of conveyance:  
 Assignment  Merger  
 Security Agreement  Change of Name  
 Other \_\_\_\_\_  
Execution Date (s) April 1, 2003

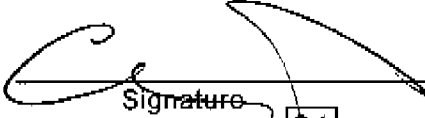
4. Application number(s) or patent number(s):  
If this document is being filed together with a new application, the execution date of the application is: March 24, 2000  
A. Patent Application No.(s)  
See attached Exhibit A  
Additional numbers attached?  Yes  No

B. Patent No.(s)  
See attached Exhibit B

5. Name and address of party to whom correspondence concerning document should be mailed:  
Name: Christopher L. Wight, Reg. No. 31,680  
Street address: Holland & Hart  
555 17<sup>th</sup> Street, Suite 3200  
City: Denver State: CO Zip: 80201

6. Total number of applications and registrations involved: 75  
7. Total fee (37 CFR 3.41) \$3,000.00  
 Enclosed  
 Authorized to be charged to deposit account  
8. Deposit account number:  
08-2623  
(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature.  
*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is true copy of the original document.*  
  
Christopher L. Wight  April 7, 2004  
Name of person signing Signature Date  
Total number of pages comprising cover sheet 24

Mail documents to be recorded with required cover sheet information to:  
Mail Stop Assignments, Commissioner of Patents  
P.O. Box 1450  
Alexandria, VA 22313

CH \$3000.00 082623 09907001

**Exhibit A**  
(Continuation of Cover Sheet No. 4)

**Patent Applications Assigned By Visible Genetics, Inc.  
To Bayer Healthcare LLC**

| <b>Serial No.</b> | <b>Title</b>   | <b>Filing Date</b> |
|-------------------|--|--------------------|
| 09/907,001        | Micro-Electrophoresis Chip for Moving and Separating Nucleic Acids and Other Charged Molecules           | 07/16/01           |
| 10/217,615        | Method, Apparatus and Kits for Sequencing of Nucleic Acid Using Multiple Dyes                            | 08/12/02           |
| 09/147,916        | Method and Apparatus for Alignment of Signals for Use in DNA Base-Calling                                | 03/23/99           |
| 09/818,182        | Method and Kit for Quantification and Nucleic Acid Sequencing of Nucleic Acid Analytes in a Sample       | 03/27/01           |
| 09/065,748        | Method Sequencing of Nucleic Acid Polymers   | 04/24/98           |
| 10/082,546        | Method and Kit for Quantification and Nucleic Acid Sequencing of Nucleic Acid Analytes in a Sample       | 02/25/02           |
| 09/786,105        | Method and Kit for the Characterization of Antibiotic-Resistance Mutations in Mycobacterium Tuberculosis | 02/26/01           |
| 09/536,111        | Method for Alignment of DNA Sequences with Increased Read-Length and Accuracy                            | 03/24/00           |
| 09/802,110        | Method, Compositions and Kit for Detection and Identification of Microorganisms                          | 03/07/01           |
| 09/565,249        | Nucleic Acid Sequencing with Simultaneous Quantification   | 05/05/00           |

| <b>Serial No.</b> | <b>Title</b>   | <b>Filing Date</b> |
|-------------------|--|--------------------|
| 08/766,189        | Method and Kit for HLA Class I Typing  | 12/12/96           |
| 10/212,710        | System and Method for Analyzing Resistance of a Pathogen to One or More Treatments | 08/08/02           |
| 10/177,224        | Method and Apparatus for DNA Sequencing  | 06/21/02           |
| 09/827,432        | Method and Apparatus for Alignment of DNA Sequencing Data Traces                   | 04/06/01           |
| 09/652,331        | Electrophoresis Gel Cassette   | 08/31/00           |
| PCT/US02/06632    | Method and Primers for Evaluating HIV 1 Mutations                                  | 03/05/02           |
| 10/295,964        | Electrophoretic Trace Simulator  | 11/15/02           |

3216339\_1.DOC

3216339\_1.DOC

**PATENT**  
**REEL: 014499 FRAME: 0679**

**Exhibit B**

(Continuation of Cover Sheet No. 4)

**Patents Assigned By Visible Genetics, Inc.  
To Bayer Healthcare LLC**

| <b>Patent No.</b> | <b>Title</b>   | <b>Issue Date</b> |
|-------------------|--|-------------------|
| 5,507,934         | Apparatus for Preparing Gels for Use in Electrophoretic Separations and Similar Applications         | 04/16/96          |
| 5,543,018         | Method and Apparatus for Automated Electrophoresis Using Light Polarization Detector                 | 08/06/96          |
| 5,545,527         | Method for Testing for Mutation in DNA from a Patient Sample   | 08/13/96          |
| 5,550,020         | Method, Reagents and Kit for Diagnosis and Targeted Screening for Retinoblastoma                     | 08/27/96          |
| 5,552,283         | Method, Reagents and Kit for Diagnosis and Targeted Screening for P53 Mutations                      | 09/03/96          |
| 5,599,434         | Electrophoresis Gels and Gel Holders Having Adhesive Affixed Fiber Spacers and Method of Making Same | 02/04/97          |
| 5,618,398         | Electrophoresis Gels and Gel Holders Having Fiber Spacers and Method of Making Same                  | 04/08/97          |
| 5,627,022         | Microgels for Use in Medical Diagnosis and Holders Useful in Fabricating Same                        | 05/06/97          |
| 5,710,628         | Automated Electrophoresis and Fluorescence Detection Apparatus and Method                            | 01/20/98          |
| 5,712,476         | Electrophoresis and Fluorescence Detection Method  | 01/27/98          |

| <b>Patent No.</b> | <b>Title</b>   | <b>Issue Date</b> |
|-------------------|--|-------------------|
| 5,776,737         | Method and Composition for Internal Identification of Samples  | 07/07/98          |
| 5,776,767         | Virtual DNA Sequencer  | 07/07/98          |
| 5,786,142         | Electrophoresis and Fluorescence Detection Method  | 07/28/98          |
| 5,789,168         | Method for Single-Tube Sequencing of Nucleic Acid Polymers   | 08/04/98          |
| 5,795,722         | Method and Kit for Quantification and Nucleic Acid Sequencing of Nucleic Acid Analytes in a Sample         | 08/18/98          |
| 5,830,657         | Method for Single-Tube Sequencing of Nucleic Acid Polymers   | 11/03/98          |
| 5,834,189         | Method for Evaluation of Polymorphic Genetic Sequences, and the Use Thereon in Identification of HLA Types | 11/10/98          |
| 5,853,979         | Method and System for DNA Sequence Determination and Mutation Detection with Reference to a Standard       | 12/29/98          |
| 5,885,431         | Microgels for Use in Medical Diagnosis and Methods of Making and Using Same                                | 03/23/99          |
| 5,888,731         | Method for Identification of Mutations Using Ligation of Multiple Oligonucleotide Probes                   | 03/30/99          |
| 5,888,736         | Method, Compositions and Kit for Detection and Identification of Microorganisms                            | 03/30/99          |
| 5,897,842         | Method and Apparatus for Thermal Cycling and for Automated Sample Preparation with Thermal Cycling         | 04/27/99          |
| 5,900,131         | Method and Apparatus for Automated Electrophoresis Using Light Polarization Detector                       | 05/04/99          |

| <b>Patent No.</b> | <b>Title</b>   | <b>Issue Date</b> |
|-------------------|--|-------------------|
| 5,910,413         | Method and Kit for Amplification, Sequencing and Typing of Classical HLA I Genes                   | 06/08/99          |
| 5,916,747         | Method and Apparatus for Alignment of Signals for Use in DNA Based-Calling                         | 06/29/99          |
| 5,981,186         | Method and Apparatus for DNA-Sequencing Using Reduced Number of Sequencing Mixtures                | 11/09/99          |
| 6,005,663         | Automated Electrophoresis and Fluorescence Detection Apparatus and Method                          | 12/21/99          |
| 6,007,689         | Apparatus for Preparing Gels for Use in Electrophoretic Separations and Similar Applications       | 12/28/99          |
| 6,007,983         | Method and Kit for Evaluation of HIV Mutations   | 12/28/99          |
| 6,013,436         | Compositions and Methods for Diagnosis of Mutations of the von Hippel-Lindau Tumor Suppressor Gene | 01/11/00          |
| 6,014,213         | High Dynamic Range Apparatus for Separation and Detection of Polynucleotide Fragments              | 01/11/00          |
| 6,024,854         | Method and Apparatus for Improving Electrophoresis Resolution                                      | 02/15/00          |
| 6,025,139         | Method for Identification of Mutations Using Ligation of Multiple Oligonucleotide Probes           | 02/15/00          |
| 6,045,993         | Method, Reagent and Kit for Genotyping of Human Papillomavirus                                     | 04/04/00          |

| <b>Patent No.</b> | <b>Title</b>  | <b>Issue Date</b> |
|-------------------|---|-------------------|
| 6,054,036         | Electrophoresis Gels and Gel Holders Having Fiber Spacers and Method of Making Same               | 04/25/00          |
| 6,063,567         | Method, Reagents and Kit for Diagnosis and Targeted Screening for Retinoblastoma                  | 05/16/00          |
| 6,071,726         | Method Reagents and Kit for Diagnosis and Screening for P53 Mutations                             | 06/06/00          |
| 6,083,699         | Method for Bi-Directional Sequence of Nucleic Acid Polymers                                       | 07/04/00          |
| 6,110,339         | Nanofabricated Separation Matrix for Analysis of Biopolymers and Methods of Making and Using Same | 08/29/00          |
| 6,110,344         | Gel-Forming Insert for Electrophoresis Gels   | 08/29/00          |
| 6,136,172         | Gel-Forming Insert for Electrophoresis Gels   | 10/24/00          |
| 6,176,990         | Micro-Electrophoresis Chip for Separating Nucleic Acids and Other Charged Molecules               | 01/23/01          |
| 6,214,555         | Method, Compositions and Kits for Detection   | 04/10/01          |
| 6,225,062         | Method and Kit for Direct Isothermal Sequencing of Nucleic Acids                                  | 05/01/01          |
| 6,228,577         | Method, Reagent and Kit for Genotyping of Human Papillomavirus                                    | 05/08/01          |

| <b>Patent No.</b> | <b>Title</b>   | <b>Issue Date</b> |
|-------------------|--|-------------------|
| 6,261,430         | Micro-Electrophoresis Chip for Moving and Separating Nucleic Acids and Other Charged Molecules | 07/17/01          |
| 6,265,152         | Method and Kit for Evaluation of HIV Mutations   | 07/24/01          |
| 6,270,963         | Method for Testing for Mutations in DNA from a Patient Sample                                  | 08/07/01          |
| 6,303,303         | Method and System for DNA Sequence Determination and Mutation Detection                        | 10/16/01          |
| 6,397,150         | Method and Apparatus for Sequencing of DNA Using an Internal Calibrant                         | 05/28/02          |
| 6,403,303         | Method and Reagents for Testing for Mutations in the BRCA1 Gene                                | 06/11/02          |
| 6,404,907         | Method for Sequencing Nucleic Acids with Reduced Errors  | 06/11/02          |
| 6,413,718         | Method Sequencing of Nucleic Acid Polymers   | 07/02/02          |
| 6,432,634         | Method, Apparatus and Kits for Sequencing of Nucleic Acid Using Multiple Dyes                  | 08/13/02          |
| 6,436,641         | Method and Apparatus for DNA Sequencing  | 08/20/02          |
| 6,440,664         | Apparatus Sequencing of Nucleic Acid Using Multiple Dyes                                       | 08/27/02          |
| 6,503,704         | Method, Reagent and Kit for Genotyping of Human Papillomavirus                                 | 01/07/03          |
| 6,554,987         | Method and Apparatus for Alignment of Signals for Use in DNA Base-Calling                      | 04/29/03          |



**PATENT ASSIGNMENT**

**WHEREAS, VISIBLE GENETICS INC.**, a corporation incorporated under the laws of the Province of Ontario, Canada, having its principal office at 700 Bay Street, Suite 1000, Toronto Ontario, Canada M5G 1Z6 (hereinafter "ASSIGNOR"), is the owner of the United States patents and patent applications and other patents and patent applications listed on Schedules "A" through "T" hereto and any inventions covered thereby (hereinafter referred to as the "Patents"); and

**WHEREAS, BAYER HEALTHCARE LLC**, a limited liability corporation incorporated under the laws of the state of Delaware, having an office at 511 Benedict Avenue, Tarrytown New York, USA 10591 (hereinafter "ASSIGNEE"), is desirous of acquiring the entire right, title and interest in and to the Patents;


**NOW, THEREFORE**, for the sum of ten dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, ASSIGNOR by these presents does hereby sell, assign, transfer and set over unto ASSIGNEE, its successors and assigns, the entire right, title and interest in and to the Patents and in and to all international priority rights relating thereto throughout the world and in and to any continuations, divisions, reissues, reexaminations and extensions thereof along with any and all rights of enforcement with respect thereto including (without limitation) the right to sue for infringement thereof and for recovery of damages or royalties related thereto.

**AND ASSIGNEE** by its execution hereof hereby accepts the within sale, assignment, transfer and setting over.

**AND ASSIGNOR** authorizes and requests the Commissioner of Patents and Trademarks and any other official of any applicable patent office to issue Letters Patent on the Patents, as applicable, and on any and all divisions and continuations thereof, to ASSIGNEE, its successors, legal representatives and assigns, in accordance herewith.

Dated at ~~Tarrytown, New York~~ <sup>Toronto, Ontario</sup> this \_\_\_\_\_ day of \_\_\_\_\_, 2003.

**VISIBLE GENETICS INC.**



By: Thomas G. Tithecott

Title:

**Patent Assignment Schedule A****UNITED STATES PATENTS AND PATENT APPLICATIONS****ISSUED PATENTS**

| US Patent | Title  | Issue Date        |
|-----------|--|-------------------|
| 5,507,934 | Apparatus for preparing gels for use in electrophoretic separations and similar applications               | April 16, 1996    |
| 5,543,018 | Method and apparatus for automated electrophoresis using light polarization detector                       | August 6, 1996    |
| 5,545,527 | Method for testing for mutations in DNA from a patient sample  | August 13, 1996   |
| 5,550,020 | Method, reagents and kit for diagnosis and targeted screening for Retinoblastoma                           | August 27, 1996   |
| 5,552,283 | Method, Reagents and Kit for Diagnosis and Targeted Screening for P53 Mutations                            | September 3, 1996 |
| 5,599,434 | Electrophoresis Gels and Gel Holders Having Adhesive Affixed Fiber Spacers and Method of Making Same       | February 4, 1997  |
| 5,618,398 | Electrophoresis Gels and Gel Holders Having Fiber Spacers and Method of Making Same                        | April 8, 1997     |
| 5,627,022 | Microgels for use in medical diagnosis and holders useful in fabricating same                              | May 6, 1997       |
| 5,710,628 | Automated electrophoresis and fluorescence detection apparatus and method                                  | January 20, 1998  |
| 5,712,476 | Electrophoresis and fluorescence detection apparatus   | January 27, 1998  |
| 5,776,737 | Method and composition for internal identification of samples  | July 7, 1998      |
| 5,776,767 | Virtual DNA sequencer  | July 7, 1998      |
| 5,786,142 | Electrophoresis and fluorescence detection method  | July 28, 1998     |
| 5,789,168 | Method for amplification and sequencing of nucleic acid polymers   | August 4, 1998    |
| 5,795,722 | Method and kit for quantification and nucleic acid sequencing for nucleic acid analytes in a sample        | August 18, 1998   |
| 5,830,657 | Method for Single-tube Sequencing of nucleic acid polymers   | November 3, 1998  |
| 5,834,189 | Method for evaluation of polymorphic genetic sequences, and the use Thereof in identification of HLA Types | November 10, 1998 |
| 5,853,979 | Method and system for DNA sequence determination and mutation detection with reference to a standard       | December 29, 1998 |
| 5,885,431 | Microgels for use in medical diagnosis and methods of making and using same                                | March 23, 1999    |
| 5,888,731 | Method for identification of mutations using ligation  | March 30, 1999    |

|           |  |                   |
|-----------|--|-------------------|
|           | of multiple oligonucleotide probes   |                   |
| 5,888,736 | Method compositions and kit for detection and identification of microorganisms                     | March 30, 1999    |
| 5,897,842 | Method and apparatus for thermal cycling and for automated sample preparation with thermal cycling | April 27, 1999    |
| 5,900,131 | Method and apparatus for automated electrophoresis using light polarization detector               | May 4, 1999       |
| 5,910,413 | Method and kit for amplification, sequencing and typing of classical HLA class I genes             | June 8, 1999      |
| 5,916,747 | Method and apparatus for alignment of signals for use in DNA base calling                          | June 29, 1999     |
| 5,981,186 | Method and Apparatus for DNA-Sequencing Using Reduced Number of Sequencing Mixtures                | November 9, 1999  |
| 6,005,663 | Automated electrophoresis and fluorescence detection apparatus and method                          | December 21, 1999 |
| 6,007,689 | Apparatus for Preparing Gels for Use in Electrophoretic Separations and Similar Applications       | December 28, 1999 |
| 6,007,983 | Method and Kit for Evaluation of HIV Mutations   | December 28, 1999 |
| 6,013,436 | Compositions and Methods for Diagnosis of Mutation in the Von Hippel-Lindau Tumor Suppressor Gene  | January 11, 2000  |
| 6,014,213 | High Dynamic Range Apparatus for Separation and Detection of Polynucleotide Fragments              | January 11, 2000  |
| 6,024,854 | Method and Apparatus for Improving Electrophoresis resolution                                      | February 15, 2000 |
| 6,025,139 | Method for Identification of Mutations Using Ligation of Multiple Oligonucleotide Probes           | February 15, 2000 |
| 6,045,993 | Method, Reagent and Kit for Genotyping of Human Papillomavirus                                     | April 4, 2000     |
| 6,054,036 | Electrophoresis Gels and Gel Holders Having Fiber Spacers and Method of Making Same                | April 25, 2000    |
| 6,063,567 | Method for Diagnosis and Targeted Screening for Retinoblastoma                                     | May 16, 2000      |
| 6,071,726 | Method, reagents and kit for diagnosis and targeted screening for P53 mutations                    | June 6, 2000      |
| 6,083,699 | Method for Bi-directional Sequencing of Nucleic Acid Polymers                                      | July 4, 2000      |
| 6,110,339 | Nanofabricated Separation Matrix for Analysis of Biopolymers and Methods of Making and Using Same  | August 29, 2000   |
| 6,110,344 | Gel-forming Insert for Electrophoresis Gels  | August 29, 2000   |
| 6,136,172 | Gel-Forming Insert For Electrophoresis Gels  | October 24, 2000  |
| 6,176,990 | Micro-electrophoresis Chip for Moving and Separating Nucleic Acids and Other Charged Molecules     | January 23, 2001  |
| 6,214,555 | Method, Compositions and Kit for detection   | April 10, 2001    |
| 6,225,062 | Method and Kit for Direct Isothermal Sequencing of Nucleic Acids                                   | May 1, 2001       |

|           |  |                  |
|-----------|--|------------------|
| 6,228,577 | Method, Reagent and Kit for Genotyping of Human Papillomavirus                       | May 8, 2001      |
| 6,261,430 | Micro- Electrophoresis Chip for Separating Nucleic Acids and Other Charged Molecules | July 17, 2001    |
| 6,265,152 | Method and Kit for Evaluation of HIV Mutations                                       | July 24, 2001    |
| 6,270,963 | Method for Testing for Mutations in DNA From A Patient Sample                        | August 7, 2001   |
| 6,303,303 | Method and system for DNA sequence determination and mutation detection              | October 16, 2001 |
| 6,397,150 | Method and apparatus for sequencing DNA using an internal calibrant                  | May 28, 2002     |
| 6,403,303 | Method and reagents for testing for mutations in the BRCA1 gene                      | June 11, 2002    |
| 6,404,907 | Method for sequencing nucleic acids with reduced errors                              | June 11, 2002    |
| 6,413,718 | Method for sequencing of nucleic acid polymers                                       | July 2, 2002     |
| 6,432,634 | Method, Apparatus and Kits for Sequencing of Nucleic Acids Using Multiple Dyes       | August 13, 2002  |
| 6,436,641 | Method and Apparatus for DNA Sequencing  | August 20, 2002  |
| 6,440,664 | Method, Apparatus and Kits for Sequencing of Nucleic Acids Using Multiple Dyes       | August 27, 2002  |
| 6,503,704 | Method, reagent and kit for genotyping human papillomavirus                          | January 7, 2003  |

### PATENT APPLICATIONS

| Serial No. | Filing Date     | Title  |
|------------|-----------------|--|
| 08/860,158 | Jun 19/1997     | Method and Composition for Internal Identification of Samples for Nucleic Acid Sequencing                |
| 09/907,001 | Jul 16/2001     | Micro- Electrophoresis Chip for Separating Nucleic Acids and Other Charged Molecules                     |
| 10/217,615 | August 12, 2002 | Method, Apparatus and Kits for Sequencing of Nucleic Acids Using Multiple Dyes                           |
| 09/147,916 | Mar 23/1999     | Method and Apparatus for Alignment of Signals for Use in Base Calling                                    |
| 10/032,924 | Dec 26/2001     | Method and Reagents for Testing for Mutations in the Brcal Gene  |
| 09/818,182 | Mar 27/2001     | Method and Kit for Evaluation of HIV Mutations   |
| 09/065,748 | Apr 24/1998     | Method for Sequencing of Nucleic Acid Polymers   |
| 10/082,546 | Feb 25/2002     | Method and Kit for Quantification and Nucleic Acid Sequencing for Nucleic Acid Analytes in A Sample      |
| 09/786,105 | Feb 26/2001     | Method and kit for the characterization of antibiotic resistance mutations in Mycobacterium Tuberculosis |
| 09/536,111 | Mar 24/2000     | Method for alignment of DNA sequences with enhanced accuracy and read length                             |

|                |                      |   |
|----------------|----------------------|---|
| 09/802,110     | Mar<br>07/2001       | Method, Compositions and Kit for Detection of Microorganisms and bi-directional Sequencing of Nucleic Acid Polymers |
| 09/565,249     | May<br>05/2000       | Nucleic Acid Sequencing With Simultaneous quantitation  |
| 08/766,189     | Dec<br>12/1996       | Method and Kit for HLA Class I Typing   |
| 10/212,710     | Aug<br>8/2002        | System and method for analyzing Resistance of a Pathogen to One or More Treatments                                  |
| 10/177,224     | July 21,<br>2002     | Method and apparatus for DNA sequencing   |
| 09/827,432     | Apr<br>06/2001       | Method and Apparatus for Alignment of DNA Sequencing Data Traces  |
| 09/652,331     | Aug<br>31/2000       | Electrophoresis Gel Cassette  |
| PCT/US02/06632 | Mar<br>5/2002        | Method for Evaluating HIV-1 Mutations   |
| 10/295,964     | November<br>15, 2002 | Electrophoretic trace simulator   |

**Patent Assignment Schedule B****AUSTRALIAN PATENTS AND PATENT APPLICATIONS****ISSUED PATENTS**

| Reg. No. | Title  | Issue Date        |
|----------|--|-------------------|
| 690795   | Method for testing for mutations in DNA From a patient sample  | July 7, 1995      |
| 719685   | Virtual DNA sequencer  | August 31, 2000   |
| 691062   | Microgels for medical diagnosis and methods of making and using same                                       | August 20, 1998   |
| 695871   | Apparatus for preparing gels for use in electrophoretic separations and similar applications               | December 10, 1998 |
| 703564   | Apparatus for preparing gels for use in electrophoretic separations and similar applications               | March 25, 1999    |
| 700410   | Method and system for DNA sequence determination and mutation detection                                    | April 22, 1999    |
| 702083   | Microelectrophoresis chip for moving and separating nucleic acids and other charged molecules              | May 27, 1999      |
| 704962   | Method for identification of mutations using ligation of multiple oligonucleotide probes.                  | May 13, 1999      |
| 710328   | Electrophoresis gels and gel holders having fiber spacers and method of making same                        | January 20, 2000  |
| 705355   | Electrophoresis gels and gel holders having adhesive affixed fiber spacers and method of making same       | August 26, 1999   |
| 718670   | Method for evaluation of polymorphic genetic sequences, and the use thereof in identification of HLA types | August 3, 2000    |
| 698921   | Nanofabricated separation matrix for analysis of biopolymers and methods of making and using same.         | February 25, 1999 |

**PATENT APPLICATIONS**

| Application No. | Filing Date | Title  |
|-----------------|-------------|--|
| 93493/98        | Sep 28/1998 | Method and kit for evaluation of HIV mutations |
| 57935/00        | Sep 13/2000 | Method and kit for evaluation of HIV mutations |

**Patent Assignment Schedule C****UNITED KINGDOM PATENTS AND PATENT APPLICATIONS****PATENT APPLICATIONS**

| Appl. No.  | Filing Date        | Title   |
|------------|--------------------|---|
| 95943490.3 | Not available      | Method for testing for mutations in DNA from a patient sample |
| 0023049.0  | September 20, 2000 | Method and kit for evaluation of HIV mutations                |
| 2377272A   | April 12, 2001     | Method and apparatus for DNA sequencing                       |

**ISSUED PATENTS**

| Reg. No. | Title   | Issue Date        |
|----------|---|-------------------|
| 2304411B | Method reagents and kit for diagnosis and targeted screening for Retinoblastoma                               | February 10, 1999 |
| 2311370B | Provision of internal identification to a sample comprising a target nucleic acid, prior to sequence analysis | December 2, 1998  |



**Patent Assignment Schedule D****EUROPEAN PATENT OFFICE PATENTS AND PATENT APPLICATIONS****ISSUED PATENTS**

| Reg. No.  | Title  | Issue Date     |
|-----------|--|----------------|
| 0789841B1 | Apparatus for Preparing Gels for Use in Electrophoretic Separations and Similar Applications               | May 3, 2000    |
| 0835442B1 | Method and System for DNA Sequence Determination and Mutation Detection                                    | March 10, 1999 |
| 0847449B1 | Method for Identification of Mutations Using Ligation of Multiple Oligonucleotide Probes.                  | May 17, 2000   |
| 0870059B1 | Method for Evaluation of Polymorphic Genetic Sequences, and the Use Thereof in Identification of HLA Types | April 17, 2002 |
| 0896632B1 | Method Compositions and Kit for Detection and Identification of Microorganisms                             | June 26, 2002  |

**PATENT APPLICATIONS**

| App. No.   | Filing Date        | Title   |
|------------|--------------------|---|
| 95943490.3 | July 7, 1995       | Method for testing for mutations in DNA from a patient sample                                       |
| 96940962.2 | December 12, 1996  | Virtual DNA sequencer   |
| 95939836.3 | October 31, 1995   | Microgels for use in medical diagnosis and methods of making and using same                         |
| 95926644.6 | July 7, 1995       | Method, reagents and kit for diagnosis and targeted screening for P53 Mutations                     |
| 95943037.2 | December 12, 1995  | Automated electrophoresis and fluorescence detection apparatus                                      |
| 96921542.5 | June 7, 1996       | Micro-electrophoresis Chip for Moving and Separating Nucleic Acids and Other Charged Molecules      |
| 96940960.6 | May 29, 1998       | Electrophoresis Gels and Gel Holders Having Fiber Spacers and Method of Making Same                 |
| 00201823.2 | December 12, 1996  | Electrophoresis Gels and Gels Holders Having Fiber Spacers and Methods of Making Same               |
| 97922519.0 | April 29, 1997     | Method for amplification and sequencing of nucleic acid   |
| 97922520.8 | April 29, 1997     | Method for Single- Tube Sequencing of Nucleic Acid Polymers.  |
| 98910551.5 | March 18, 1998     | Method and kit for quantification and nucleic acid sequencing for nucleic acid analytes in a sample |
| 98910550.7 | March 18, 1998     | High Dynamic Range Apparatus for Separation and Detection of Polynucleotide Fragments               |
| 98944941.8 | September 28, 1998 | Method and Evaluation of HIV Mutations  |
| 98947253.5 | October 9, 1998    | Method and Kit for amplification, sequencing and typing of Classical HLA Class I Genes              |
| 99955301.9 | November 16, 2000  | Method, reagent and kit for genotyping of human Papillomavirus                                      |
| 99926212.4 | June 25, 1999      | Method for Sequencing nucleic acids with reduced errors   |

|            |                |  |
|------------|----------------|--|
| 99957813.1 | June 20, 2001  | Method and Kit for the characterization of antibiotic resistance mutations in mycobacterium tuberculosis |
| 1280935    | April 12, 2001 | Method and apparatus for DNA sequencing  |

**Patent Assignment Schedule E****GERMAN PATENTS AND PATENT APPLICATIONS****ISSUED PATENTS**

| Reg. No. | Title  | Issue Date   |
|----------|--|--------------|
| 69516714 | Apparatus for preparing gels for use in electrophoretic separations and similar applications | July 6, 2001 |

**PATENT APPLICATIONS**

| Application No.    | Filing Date       | Title   |
|--------------------|-------------------|---|
| 95943490.3         | Not available     | Method for Testing for Mutations in DNA From A Patient Sample                             |
| 19581886.5         | December 14, 1995 | Method and Composition for Internal Identification of Samples for Nucleic Acid Sequencing |
| 69601720.2-08      | June 28, 1996     | Method and System for DNA Sequence Determination and Mutation Detection                   |
| 697 13<br>599.3-08 | May 24, 2002      | Determination of Nucleic Acid Sequences and Diagnostic Applications Thereof               |
| 19917871.2         | April 20, 1999    | Method for Sequencing Nucleic Acid Polymers   |

**Patent Assignment Schedule F****CHINESE PATENTS**

| Reg. No.      | Title   | Issue Date        |
|---------------|---|-------------------|
| ZL 95195939.5 | Microgels for use in medical diagnosis and methods of making and using same | December 10, 1999 |

**Patent Assignment Schedule G****JAPANESE PATENT APPLICATIONS**

| Application No. | Filing Date | Title  |
|-----------------|-------------|--|
| 8-506838        | Jul 07/1995 | Method for testing for mutations in DNA from a patient sample  |
| 8-514875        | Oct 31/1995 | Microgels for Medical Diagnosis and Methods of Making and Using Same                                       |
| 514781/96       | Oct 31/1995 | Apparatus for Preparing Gels for Use in Electrophoretic Separations and Similar Applications               |
| 519158/96       | Dec 12/1995 | Automated electrophoresis and fluorescence detection apparatus   |
| 505254/97       | Jun 28/1996 | Method and System for DNA Sequence Determination and Mutation Detection                                    |
| 503274/97       | Jun 07/1996 | Micro-electrophoresis chip for moving and separating nucleic acids and other charged molecules             |
| 510612/97       | Aug 26/1996 | Method for Identification of Mutations Using Ligation of Multiple Oligonucleotide Probes.                  |
| 09-521569       | Dec 12/1996 | Electrophoresis Gels and Gel Holders Having Fiber Spacers and Method of Making Same                        |
| 09-521570       | Dec 12/1996 | Electrophoresis Gels and Gel Holders Having Adhesive Affixed Fiber Spacers and Method of Making Same       |
| 523796/97       | Dec 19/1996 | Method for evaluation of polymorphic genetic sequences, and the use thereof in identification of HLA types |
| 503252/97       | Jun 07/1996 | Nanofabricated Separation Matrix for Analysis of Biopolymers and Methods of Making and Using Same.         |
| 2000-513978     | Mar 24/2000 | Method and Kit for Evaluation of HIV Mutations   |
| 2000-516060     | Apr 10/2000 | Method and kit for amplification, sequencing and typing of classical HLA class I genes                     |
| 2000-552310     | Nov 27/2000 | Method, reagent and kit for genotyping of human Papillomavirus   |
| 2000-588389     | Jun 15/2001 | Method and Kit for the characterization of antibiotic-resistance mutations in Mycobacterium Tuberculosis   |

**Patent Assignment Schedule H****FRENCH PATENT APPLICATIONS**

| Application No. | Filing Date      | Title  |
|-----------------|------------------|--|
| 0012980         | October 11, 2000 | Method and Kit for Evaluation of HIV Mutation  |
| 9905162         | April 23, 1999   | Method for Sequencing of Nucleic Acid Polymers |

**Patent Assignment Schedule I****CANADIAN PATENT APPLICATIONS**

| <b><u>Appl. No.</u></b> | <b><u>Filing Date</u></b> | <b><u>Title</u></b>  |
|-------------------------|---------------------------|--|
| 2,191,233               | July 7/1995               | Method for testing for mutations in DNA from a patient sample  |
| 2,194,696               | July 7/1995               | Method for Diagnosis and Targeted Screening for Retinoblastoma   |
| 2,240,378               | Dec<br>12/1996            | Virtual DNA Sequencer  |
| 2,202,914               | Oct<br>31/1995            | Microgels for Medical Diagnosis and Methods of Making and Using Same                                       |
| 2,194,697               | July 7/1995               | Method, Reagents and Kit for Diagnosis and Targeted Screening for P53 Mutations                            |
| 2,207,488               | December<br>12/1995       | Automated Electrophoresis and Fluorescence Detection Apparatus   |
| 2,225,385               | Jun<br>28/1996            | Method and System for DNA Sequence Determination and Mutation Detection                                    |
| 2,222,628               | June 7,<br>1996           | Micro-electrophoresis Chip for Moving and Separating Nucleic Acids and Other Charged Molecules             |
| 2,239,988               | December<br>12, 1996      | Electrophoresis Gels and Gel Holders Having Fiber Spacers and Method of Making Same                        |
| 2,239,982               | December<br>12, 1996      | Electrophoresis Gels and Gel Holders Having Adhesive Affixed Fiber Spacers and Method of Making Same       |
| 2,239,896               | December<br>19, 1996      | Method for evaluation of polymorphic genetic sequences, and the use thereof in identification of HLA types |
| 2,253,278               | Apr<br>29/1997            | Method for amplification and sequencing of nucleic acid  |
| 2,251,809               | April 16,<br>1997         | Method, Apparatus and Kits for Sequencing of Nucleic Acids Using Multiple Dyes.                            |
| 2,259,314               | June 26,<br>1997          | Method and Apparatus for Alignment of Signals for Use in Base Calling                                      |
| 2,252,588               | April 29,<br>1997         | Method for single-tube sequencing of nucleic acid polymers   |
| 2,252,487               | April 29,<br>1997         | Method Compositions and Kit for Detection and Identification of Microorganisms                             |
| 2,284,888               | March 18,<br>1998         | High Dynamic Range Apparatus for Separation and Detection of Polynucleotide Fragments                      |
| 2,302,201               | September<br>28, 1998     | Method and kit for evaluation of HIV mutations   |
| 2,317,789               | September<br>14, 2000     | Method and kit for evaluation of HIV mutations   |
| 2,302,810               | October 09,<br>1998       | Method and Kit for Amplification, Sequencing and Typing of Classical HLA Class I Genes                     |
| 2,324,978               | May 27,                   | Method, reagent and kit for genotyping of human Papillomavirus   |

|           | 1999                 |  |
|-----------|----------------------|--|
| 2,266,755 | March 25,<br>1999    | Method for sequencing of nucleic acid polymers   |
| 2,321,821 | June 25,<br>1999     | Method for sequencing nucleic acids with reduced errors  |
| 2,354,234 | December<br>10, 1999 | Method and Kit for the Characterization of Antibiotic Resistance Mutations In Mycobacterium Tuberculosis |
| 2,373,044 | May 8,<br>2000       | Nucleic acid sequencing with simultaneous quantitation   |
| 2,406,618 | April 12,<br>2001    | Method and apparatus for DNA sequencing  |