

**PATENT ASSIGNMENT**

Electronic Version v1.1  
 Stylesheet Version v1.1

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	Order Releasing Security Agreements and Authorizing Assignment

**CONVEYING PARTY DATA**

Name	Execution Date
Portside Growth & Opportunity Fund	06/24/2009

**RECEIVING PARTY DATA**

<b>Name:</b>	Elitech Holding B.V.
<b>Street Address:</b>	Van Rensselaerweg 4 (6956 AV)
<b>City:</b>	Spankeren
<b>State/Country:</b>	NETHERLANDS

**PROPERTY NUMBERS Total: 93**

Property Type	Number
Patent Number:	5565322
Patent Number:	5849489
Patent Number:	6162603
Patent Number:	6416953
Patent Number:	6911310
Patent Number:	5787032
Patent Number:	5835404
Patent Number:	6067246
Patent Number:	6385080
Patent Number:	5605662
Patent Number:	5929208
Patent Number:	6017696
Patent Number:	6238624
Patent Number:	7172864
Patent Number:	7314708
Patent Number:	5632957

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Patent Number:	6582660
Patent Number:	5849486
Patent Number:	7101661
Patent Number:	6051380
Patent Number:	6518022
Patent Number:	6287517
Patent Number:	6099803
Patent Number:	6726880
Patent Number:	6225059
Patent Number:	6068818
Patent Number:	6540961
Patent Number:	6254827
Patent Number:	6315953
Patent Number:	6821729
Patent Number:	6331274
Patent Number:	7425308
Patent Number:	7241419
Patent Number:	7858034
Patent Number:	6423271
Patent Number:	6375899
Patent Number:	6638482
Patent Number:	6048690
Patent Number:	6652808
Patent Number:	6569382
Patent Number:	7060224
Patent Number:	6706473
Patent Number:	6824740
Patent Number:	6071394
Patent Number:	6280590
Patent Number:	6989086
Patent Number:	6403367
Patent Number:	7172896
Patent Number:	7857957
Patent Number:	6780584
Patent Number:	7300757

Patent Number:	6887362
Patent Number:	7686934
Patent Number:	7314542
Patent Number:	5965452
Patent Number:	6258606
Patent Number:	6682936
Patent Number:	6867048
Patent Number:	7045097
Patent Number:	7101717
Patent Number:	7150997
Patent Number:	7601301
Patent Number:	7267751
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Patent Number:	6838053
Patent Number:	6960298
Patent Number:	7270850
Patent Number:	7597932
Patent Number:	7687103
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Patent Number:	6395493
Patent Number:	6753148
Patent Number:	6468742
Patent Number:	7582421
Patent Number:	7601493
Patent Number:	6379897
Patent Number:	6492122
Patent Number:	6531302
Patent Number:	6326173
Patent Number:	7070961
Patent Number:	6238868
Patent Number:	6864071
Patent Number:	6309833
Patent Number:	6589742
Patent Number:	7135283

Patent Number:	7828954
Patent Number:	6013166
Patent Number:	6488832
Patent Number:	6284117
Application Number:	11726520
Application Number:	11401713
Application Number:	11852826

**CORRESPONDENCE DATA**

Fax Number: (214)661-6876  
*Correspondence will be sent via US Mail when the fax attempt is unsuccessful.*  
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Address Line 2: Suite 6000  
Address Line 4: Dallas, TEXAS 75202

ATTORNEY DOCKET NUMBER: 136520.00005

NAME OF SUBMITTER: Sara K. Borrelli

**Total Attachments: 73**

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IN THE UNITED STATES BANKRUPTCY COURT  
FOR THE DISTRICT OF DELAWARE

In re: ) Chapter 11  
NANOGEN, INC. et al.,<sup>1</sup> )  
Debtors. ) Case No. 09-11696 (KJC)  
 ) (Jointly Administered)  
 )  
 ) Related to Docket No. 3

**ORDER (I) AUTHORIZING AND APPROVING (A) THE SALE OF SUBSTANTIALLY ALL OF THE DEBTORS' ASSETS FREE AND CLEAR OF ALL LIENS, CLAIMS AND ENCUMBRANCES AND (B) THE ASSUMPTION AND ASSIGNMENT OF EXECUTORY CONTRACTS AND UNEXPIRED LEASES, AND FIXING OF CURE AMOUNTS; AND (II) GRANTING RELATED RELIEF**

Upon the motion dated May 13, 2009 (the "Sale Motion") of the above-captioned debtors and debtors in possession (collectively, the "Debtors") seeking, inter alia, entry of an order or orders authorizing and approving: (a) the sale of the Debtors' Purchased Assets<sup>2</sup> free and clear of all liens, claims and encumbrances to Financiere Elitech SAS ("Elitech", sometimes referred to herein, together with its affiliates, subsidiaries, successors and permitted assigns, including, as applicable BCC, as "Buyer") pursuant to the terms of the Asset Purchase Agreement dated May 13, 2009, as amended May 29, 2009 and June 19, 2009 *and all exhibits and schedules thereto* (the "Purchase Agreement"); and (b) the assumption and assignment of the executory contracts, license agreements and unexpired leases *collectively,* to be assumed by the applicable Debtor and assigned to the Buyer or, to the extent applicable, BCC in connection with the foregoing sales; and this Court having entered an order dated May 28, 2009 (the "Bid Procedures Order") approving the bid procedures attached as Exhibit 1 thereto, the "Bid Procedures") authorizing the Debtors to conduct, and approving the terms and

<sup>1</sup> The Debtors in these cases, along with the last four digits of each Debtor's federal tax identification number, are: Nanogen, Inc. (9621), Epoch Biosciences, Inc. (1592), and Nanotronics, Inc. (9618). Addresses for the Debtors can be found in the Debtors' petitions, which are presently available at <http://www.bmcgroup.com/>.

<sup>2</sup> Capitalized terms not otherwise defined herein shall have the meanings ascribed to them in the Purchase Agreement and the Sale Motion.

conditions of, the Auction and Bid Procedures to consider higher and better offers for the Debtors' assets, establishing a date for the Auction and approving, inter alia, (a) the Bid Procedures in connection with the Auction; (b) the form and manner of notice of the Auction and Bid Procedures; (c) procedures relating to certain executory contracts and unexpired leases, including notice of proposed cure amounts; and (d) the Break-Up Fee and the Expense Reimbursement; and the Court having established the date of the sale hearing (the "Sale Hearing"); and the Court having jurisdiction to consider the Sale Motion and the relief requested therein in accordance with 28 U.S.C. §§ 157(b)(2) and 1334; and after consideration of the Sale Motion, the relief requested therein, and the responses thereto, if any, this being a core proceeding in accordance with 28 U.S.C. § 157(b); and the appearance of all interested parties and all responses and objections, if any, to the Sale Motion having been duly noted in the record of the Sale Hearing; and upon the record of the Sale Hearing, and all other pleadings in these cases, including the Sale Motion; and it appearing that there is good cause for the relief requested in the Sale Motion, and such relief is in the best interests of the Debtors, their estates, their creditors and all other parties in interest; and after due deliberation sufficient cause appearing therefore;

IT IS HEREBY FOUND, DETERMINED AND CONCLUDED THAT:<sup>3</sup>

A. Jurisdiction. The Court has jurisdiction over this matter and over the property of the Debtors and their estates, including the property to be sold, transferred or conveyed pursuant to the Purchase Agreement, pursuant to 28 U.S.C. §§ 157 and 1334. This is a core proceeding pursuant to 28 U.S.C. § 157(b)(2). Venue of these cases and the Sale Motion is proper in this District and this Court pursuant to 28 U.S.C. §§ 1408 and 1409.

B. Statutory Predicates. The statutory predicates for the relief sought in the Sale Motion and the basis for the approvals and authorizations herein are (i) sections 105, 363, 365, 1123, 1141 and 1146 of chapter 11 of title 11 of the United States Code (as amended, the "Bankruptcy Code") and (ii) Rules 2002, 6004, 6006 and 9014 of the Federal Rules of Bankruptcy Procedure (the "Bankruptcy Rules").

C. Final Order. This Order when entered constitutes a final and appealable order within the meaning of 28 U.S.C. § 158(a). Notwithstanding Bankruptcy Rules 6004(h) and 6006(d), the parties may consummate the transactions provided for under the terms and conditions of the Purchase Agreement immediately upon entry of this Order.

D. Retention of Jurisdiction. It is necessary and appropriate for the Court to retain jurisdiction to, among other things, interpret and enforce the terms and provisions of this Order and the Purchase Agreement, and to adjudicate, if necessary, any and all disputes relating in any way to the transactions provided for under the terms and conditions of the Purchase Agreement.

E. The Petition Date. On May 13, 2009 (the "Petition Date"), each of the Debtors filed voluntary petitions under chapter 11 of the Bankruptcy Code. Since the Petition Date, the Debtors have continued in possession and management of their businesses and properties as debtors in possession pursuant to Bankruptcy Code §§ 1107(a) and 1108.

F. Time is of the Essence. Time is of the essence in consummating the sale. In order to maximize the value of the Purchased Assets, it is essential that the sale of the Purchased Assets occur within the time constraints set forth in the Purchase Agreement. Accordingly, there is cause to lift the stays contemplated by Bankruptcy Rules 6004 and 6006.

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(continued...)

<sup>3</sup> The findings and conclusions set forth herein constitute the Court's findings of fact and conclusions of law pursuant to Bankruptcy Rule 7052, made applicable to this proceeding pursuant to



G. Notice of the Sale Motion. As evidenced by the affidavits of service and publication filed with the Court, (i) proper, timely, adequate and sufficient notice of the Sale Motion, the Auction, and the Sale Hearing (including due and proper notice of the assumption, assignment and sale of each Assumed Contract to each non-debtor party under each such Assumed Contract) have been provided in accordance with sections 102(1) and 363(b) of the Bankruptcy Code, Bankruptcy Rules 2002, 6004, 6006, 9006, 9007, 9008 and 9014, the local rules of this Court, the procedural due process requirements of the United States Constitution, and in compliance with the Bid Procedures Order; (ii) such notice was good and sufficient and appropriate under the particular circumstances; and (iii) no other or further notice of the Sale Motion, the Auction, the Sale Hearing, the assumption and assignment of the Assumed Contracts, or of the entry of this Order is necessary or shall be required.

H. Actual written notice of the Sale Motion, the Auction, and the Sale Hearing (including due and proper notice of the assumption, assignment and sale of each Assumed Contract to each non-debtor party under each such Assumed Contract) and a reasonable opportunity to object or be heard regarding the requested relief has been afforded to all interested persons and entities, including, (i) the creditors holding the 20 largest unsecured claims against the Debtors' estates; (ii) all entities that claim any interest in or lien on the Purchased Assets; (iii) all parties to the Assumed Contracts which the Debtors seek to assume and assign to the Buyer pursuant to this Order; (iv) all governmental taxing authorities that have, or as a result of the sale may have, claims, contingent or otherwise, against the Debtors; (v) all parties that filed requests for notices under Bankruptcy Rules 2002 and/or 9010(b); (vi) all interested governmental, pension, and environmental entities; (vii) the Office of the United States Trustee; (viii) Portside

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(continued...)

Bankruptcy Rule 9014.

Growth & Opportunity Fund, as collateral agent (the "Prepetition Agent") for the holders of the Bridge Notes (as defined herein), and as collateral agent for the holders of the 9.75% Convertible Notes (collectively, the "Lenders"); (ix) all entities that within the past 12 months have expressed to the Debtors an interest in purchasing the Purchased Assets; and (x) all equity security holders of the Debtors. Other parties interested in bidding on the Purchased Assets were provided, upon request, sufficient information to make an informed judgment on whether to bid on the Purchased Assets.

I. The Notice of Auction and Sale was published in The USA Today on June 4, 2009. Such publication notice was sufficient and proper notice to any other interested parties, including those whose identities are unknown to the Debtors.

J. Compelling Circumstances for Immediate Sale. The Debtors have demonstrated a sufficient basis and the existence of exigent circumstances requiring them to enter into the Purchase Agreement, sell the Purchased Assets and assume and assign the Assumed Contracts under sections 363, 365, 1123 and 1141 of the Bankruptcy Code, and such actions are appropriate exercises of the Debtors' business judgment and in the best interests of the Debtors, their estates and their creditors, in that:

K. Elitech Bid. In order to make a single bid for all of the Debtors' assets, Elitech has entered into an agreement with The Bay City Capital Fund V, L.P. (together with its affiliated entities, "BCC") pursuant to which BCC will finance a portion of the Purchase Price and receive concurrently (as an assignee of Elitech under the Purchase Agreement) and/or immediately subsequent to the Sale: (a) title to certain of the Purchased Assets; (b) license to use certain of the Purchased Assets; and (c) assignment of certain executory contracts and unexpired

leases of the Debtors. Notwithstanding the foregoing, Elitech remains obligated to pay the full amount of the Purchase Price for the Purchased Assets.

L. Good Faith. Neither the Buyer nor BCC is an "insider" or "affiliate" of the Debtors (as such terms are defined in the Bankruptcy Code). The Buyer is a purchaser in good faith,<sup>4</sup> as that term is used in the Bankruptcy Code and court decisions thereunder, and is entitled to the protections of section 363(m) of the Bankruptcy Code. The Purchase Agreement was negotiated and entered into in good faith, based upon arm's length bargaining, and without collusion or fraud of any kind. The sales process and Auction were conducted in accordance with the Bid Procedures Order and in good faith within the meaning of section 363(m) of the Bankruptcy Code. Neither the Debtors nor the Buyer (or BCC) have engaged in any conduct that would prevent the application of section 363(m) or cause the application of or implicate section 363(n) of the Bankruptcy Code to the Purchase Agreement or to the consummation of the sale transaction and transfer of the Purchased Assets to Buyer and Assumed Contracts to Buyer and BCC. The Buyer (together with BCC) is entitled to all the protections and immunities of section 363(m). The Buyer and BCC will be acting in good faith within the meaning of section 363(m) in closing the transactions pursuant to the terms and conditions of the Purchase Agreement any time after the entry of this Order, including immediately after its entry. The Court has found that the Buyer (together with BCC) has acted in good faith in all respects in connection with these chapter 11 cases and the transactions under the Purchase Agreement in that, among other things: (i) the Buyer (together with BCC) recognized that the Debtors were free to negotiate with any other party that expressed interest in purchasing their assets; (ii) the Buyer (together with BCC) agreed to subject its bid to the competitive bidding procedures set

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<sup>4</sup> To the extent BCC as a subsequent purchaser from Elitech of certain assets of Debtors could be deemed a purchaser under section 363 of the Bankruptcy Code, BCC is also a purchaser in good faith.

forth in the Bid Procedures Order; (iii) neither the Buyer nor BCC induced, caused, or required the commencement of the Debtors' chapter 11 cases; (iv) all payments to be made by Buyer and other agreements or arrangements entered into by Buyer with the Debtors in connection with the Purchase Agreement have been disclosed; and (v) the negotiation and execution of the Purchase Agreement and all other aspects of the transactions contemplated thereby were conducted in good faith and at arms' length.

M. In the absence of a stay pending appeal, the Buyer and BCC will be acting in good faith, pursuant to section 363(m) of the Bankruptcy Code, in closing the transactions contemplated by the Purchase Agreement at any time after the entry of this Order and cause has been shown as to why this Order should not be subject to the stay provided by Bankruptcy Rules 6004(h) and 6006(d).

N. No Collusion. Neither the Buyer nor BCC has violated section 363(n) of the Bankruptcy Code by any action or inaction. The sale price to be paid by Buyer was not limited by an agreement among potential bidders at such sale. The transactions under the Purchase Agreement may not be avoided, and no damages may be assessed against the Buyer, BCC or any other party under section 363(n) of the Bankruptcy Code or any other applicable bankruptcy or non-bankruptcy law.

O. Bid Procedures Fair. The Bid Procedures set forth in the Bid Procedures Order were non-collusive, substantively and procedurally fair to all parties and were the result of arms length negotiations between the Debtors and the Buyer.

P. The Debtors and their professionals have complied, in good faith, in all respects with the Bid Procedures Order as demonstrated by (i) the testimony and other evidence proffered or adduced at the Sale Hearing and (ii) the representations of counsel made on the record at the

Sale Hearing. Through marketing efforts and a competitive sale process conducted in accordance with the Bid Procedures Order, the Debtors (i) afforded interested potential purchasers a full, fair and reasonable opportunity to qualify as bidders and submit their highest or otherwise best offer to purchase the Debtors' Purchased Assets, (ii) provided potential purchasers, upon request, sufficient information to enable them to make an informed judgment on whether to bid on the Purchased Assets, (iii) considered any bids submitted on or before the Bid Deadline, and (iv) conducted the Auction on June 23, 2009.

Q. Marketing Efforts Leading to Sale. Prior to the Auction, the Debtors, and their financial advisors and investment bankers, Cowen & Company, LLC ("Cowen") and Seven Hills Partners LLC ("Seven Hills"), diligently and in good faith marketed the Purchased Assets that are subject to the Purchase Agreement to secure the highest and best offer therefor by, among other things, delivering offering materials to potential purchasers, inviting the potential purchasers to meet with the Debtors' management, Cowen, Seven Hills and other of the Debtors' professionals; and providing each of the potential purchasers with the opportunity to conduct extensive due diligence and bid for the Purchased Assets in accordance with the Bid Procedures.

R. Auction. The Auction was held in New York, New York on June 23, 2009 in accordance with the Bid Procedures Order.

S. Highest and Best Offer. At the conclusion of the Auction, the Debtors announced that, after consultation with the Lenders, they had determined that the offer submitted by the Buyer in the Purchase Agreement was the highest and best offer and that the Buyer is the Successful Bidder for the Purchased Assets in accordance with the Bid Procedures Order. The Bid Procedures obtained the highest value for the Purchased Assets for the Debtors and their estates.

T. The offer of the Buyer, upon the terms and conditions set forth in the Purchase Agreement, including the form and total consideration to be realized by the Debtors pursuant to the Purchase Agreement, (i) is the highest and best offer received by the Debtors for the Purchased Assets; (ii) is fair and reasonable; (iii) is in the best interests of the Debtors' creditors and estates; (iv) constitutes full and adequate consideration and reasonably equivalent value for the Purchased Assets; and (v) will provide a greater recovery for the Debtors' creditors and other interested parties than would be provided by any other practical and available alternative. The Debtors' determination that the Purchase Agreement constitutes the highest and best offer for the Purchased Assets constitutes a valid and sound exercise of the Debtors' business judgment.

U. The Purchase Agreement and the transactions thereunder are not being entered into to escape liability for the estates' debts. The Debtors' estates are unable to satisfy all of the Debtors' debts.

V. No Fraudulent Transfer. The total consideration provided by the Buyer for the Purchased Assets is the highest and best offer received by the Debtors, and the Purchase Price constitutes reasonably equivalent value, fair consideration and fair value under the Bankruptcy Code, the Uniform Fraudulent Transfer Act and any other applicable laws of the United States, any state, territory or possession, or the District of Columbia the Purchased Assets.

W. Validity of Transfer. Prior to the transactions contemplated under the Purchase Agreement, the Purchased Assets are property of the Debtors' estates and title thereto is vested in the Debtors' estates.

X. The Debtors have full corporate power and authority to execute the Purchase Agreement and all other documents contemplated thereby, and the sale of the Purchased Assets has been duly and validly authorized by all necessary corporate authority by the Debtors to

consummate the transactions contemplated by the Purchase Agreement. No consents or approvals, other than as may be expressly provided for in the Purchase Agreement, are required by the Debtors to consummate such transactions.

Y. The Debtors have advanced sound business reasons for seeking to enter into the Purchase Agreement and to sell and/or assume, assign and sell the Purchased Assets and the Assumed Contracts, as more fully set forth in the Sale Motion and as demonstrated at the Sale Hearing, and it is a reasonable exercise of the Debtors' business judgment to sell and assign the Purchased Assets and the Assumed Contracts and to consummate the transactions contemplated by the Purchase Agreement. Notwithstanding any requirement for approval or consent by any person, the transfer of the Purchased Assets to the Buyer and to the extent applicable to BCC, and the assumption, assignment and sale of the Assumed Contracts to the Buyer and to the extent applicable to BCC is a legal, valid and effective transfer of the Purchased Assets and any Assumed Contracts. And upon such transfer, the Buyer and BCC, as applicable, shall have good and indefeasible title to all the Purchased Assets subject solely to the valid right of first refusal set forth in the Amended and Restated Operating Agreement of Pharmacogenetics Diagnostic Laboratory LLC ("PDL Agreement") of Dr. Roland Valdes, Dr. Mark Linder, and/or Metcyte Business Lab LLC (collectively, the "PDL Parties") to purchase the Pharmacogenetics Diagnostic Laboratory LLC ("PDL") ownership interest ("PDL Right") owned by the Debtors..

Z. The terms and conditions of the Purchase Agreement, including the consideration to be realized by the Debtors pursuant to the Purchase Agreement, are fair and reasonable, and the transactions contemplated by the Purchase Agreement are in the best interests of the Debtors, the Debtors' estates, their creditors and other parties in interest.

AA. Section 363(f) is Satisfied. Except as otherwise provided in the Purchase Agreement, the Purchased Assets shall be sold free and clear of all of the following (collectively, the "Encumbrances") other than Permitted Liens: mortgages, security interests, conditional sale or other retention agreements, pledges, liens (as that term is defined in section 101(37) of the Bankruptcy Code), claims (as that term is defined in section 101(5) of the Bankruptcy Code), obligations, guaranties, debts, obligations, rights, contractual commitments, interests (other than the PDL Right of the PDL Parties which is addressed in Paragraph 27 of this Order), judgments, demands, easements, charges, encumbrances, defects, options, rights of first offer, negotiation, or refusal, other encumbrances, Liens (as defined in the Purchase Agreement), and restrictions of any kind or nature whether imposed by agreement, understanding, law, equity, or otherwise, including, without limitation (i) encumbrances that purport to give any party a right or option to effect any forfeiture, modification or termination of any Debtor or of the Buyer or BCC in the Purchased Assets or (ii) in respect of taxes, in each case accruing, arising, or relating to a period prior to the Closing. All such Encumbrances, other than Permitted Liens, shall attach to the consideration to be received by the Debtors in the same priority and subject to the same defenses and avoidability, if any, as before the Closing, and Buyer would not enter into the Purchase Agreement to purchase the Purchased Assets otherwise.

BB. The transfer of the Purchased Assets to Buyer and BCC will be a legal, valid and effective transfer of the Purchased Assets, and, except as may otherwise be provided in the Purchase Agreement, shall vest Buyer and BCC with all right, title and interest of the Debtors to the Purchased Assets free and clear of any and all Encumbrances other than Permitted Liens. Except as specifically provided in the Purchase Agreement or this Order, neither the Buyer nor



BCC shall assume or become liable for any Encumbrances, other than Permitted Liens, relating to the Purchased Assets being sold by the Debtors.

CC. The transfer of the Purchased Assets to the Buyer and BCC free and clear of all Encumbrances other than Permitted Liens will not result in any undue burden or prejudice to any holders of any Encumbrances as all such Encumbrances of any kind or nature whatsoever shall attach to the net proceeds of the sale of the Purchased Assets received by the Debtors in the order of their priority, with the same validity, force and effect which they now have as against the Purchased Assets and subject to any claims and defenses the Debtors or other parties may possess with respect thereto. All persons having Encumbrances, other than holders of Permitted Liens, of any kind or nature whatsoever against or in any of the Debtors or the Purchased Assets shall be forever barred, estopped and permanently enjoined from pursuing or asserting such Encumbrances against the Buyer, any of its assets, property, successors or assigns, or the Purchased Assets.

DD. The Debtors may sell the Purchased Assets free and clear of all Encumbrances, other than Permitted Liens, of any kind or nature whatsoever because, in each case, one or more of the standards set forth in section 363(f) of the Bankruptcy Code has been satisfied. Those (i) holders of Encumbrances, other than holders of Permitted Liens, and (ii) non-debtor parties, who did not object or who withdrew their objections to the sale of the Purchased Assets and the Sale Motion, are deemed to have consented pursuant to section 363(f)(2) of the Bankruptcy Code. Those holders of Encumbrances who did object fall within one or more of the other subsections of section 363(f) and are adequately protected by having their Encumbrances, if any, attach to the proceeds of the sale of the Purchased Assets ultimately attributable to the property against or

in which they claim or may claim any Encumbrances, with such Encumbrances being subject to treatment as prescribed in the Debtors' plan or by separate order of this Court.

EE. Not selling the Purchased Assets free and clear of all Encumbrances, other than Permitted Liens, would adversely impact the Debtors' estates, and the sale of Purchased Assets other than free and clear of all Encumbrances, other than Permitted Liens, would result in substantially less value to the Debtors' estates.

FF. Neither the Buyer nor BCC shall have any obligations with respect to any Liabilities of the Debtors other than the Assumed Liabilities and its obligations under the Purchase Agreement.

GG. Cure under Assumed Contracts; Adequate Assurance of Future Performance. The Debtors and the Buyer have, to the extent necessary, satisfied the requirements of section 365 of the Bankruptcy Code. Pursuant to the terms and subject to the conditions of this Order and the Purchase Agreement, the Debtors shall, within the time period and pursuant to the terms set forth in the Purchase Agreement, (i) cure or provide adequate assurance of cure of any undisputed existing default prior to the Closing under any of the assigned Assumed Contracts, within the meaning of section 365(b)(1)(A) of the Bankruptcy Code and (ii) provide compensation or adequate assurance of compensation to any party other than the Debtors for any undisputed actual pecuniary loss to such party resulting from an undisputed default prior to the Closing under any of the assigned Assumed Contracts, within the meaning of section 365(b)(1)(B) of the Bankruptcy Code. The Buyer and BCC have demonstrated adequate assurance of future performance with respect to the Assumed Contracts, within the meaning of section 365(b)(1)(C) of the Bankruptcy Code. The Assumed Contracts are assignable to the Buyer and BCC notwithstanding any provisions contained therein to the contrary pursuant to section 365(f) of the

Bankruptcy Code, and, to the extent a non-debtor party to any Assumed Contract has failed timely to object to the assumption and assignment of its respective Assumed Contract, including an executory contract, license agreement or unexpired lease respecting a non-exclusive license of intellectual property, any such party shall be deemed to consent to the assumption and assignment thereof to the Buyer or BCC, as applicable, pursuant to section 365(c)(1)(B). The assumption and assignment of the Assumed Contracts pursuant to the terms of this Order is integral to the Purchase Agreement and is in the best interests of the Debtors, their estate, creditors and other parties in interest, and represents the exercise of sound and prudent business judgment by the Debtors.

HH. No Successor Liability. The transactions contemplated under the Purchase Agreement do not amount to a consolidation, merger or de facto merger of the Buyer or BCC and the Debtors and/or the Debtors' estates, there is no substantial continuity between the Buyer or BCC and the Debtors, there is no continuity of enterprise between the Debtors and the Buyer or BCC, neither the Buyer nor BCC is a mere continuation of the Debtors or their estates, and neither the Buyer nor BCC, nor any successor or assignee thereof constitutes a successor to the Debtors or their estates.

II. Except as expressly set forth in the Purchase Agreement, the transfer of the Purchased Assets to the Buyer and assumption and assignment to Buyer and BCC of the Assumed Contracts and the Assumed Liabilities by Buyer do not and will not subject the Buyer or BCC or any of their successors, assigns, affiliates or subsidiaries to any liability by reason of such transfer under (i) the laws of the United States, any state, territory, or possession thereof, or the District of Columbia, based in whole or part on, directly or indirectly, including without limitation, any theory of antitrust, environmental, products liability, successor or transferee

liability, labor law, de facto merger, or substantial continuity or (ii) any employment contract, understanding or agreement, including without limitation collective bargaining agreements, employee pension plans, or employee welfare or benefit plans.

JJ. Miscellaneous. The sale of the Purchased Assets outside of a plan of reorganization pursuant to the Purchase Agreement neither impermissibly restructures the rights of the Debtors' creditors nor impermissibly dictates the terms of a plan of liquidation or reorganization for the Debtors. The sale does not constitute a sub rosa chapter 11 plan.

NOW, THEREFORE, BASED UPON ALL OF THE FOREGOING, IT IS HEREBY ORDERED, ADJUDGED AND DECREED THAT:

1. The relief requested in the Sale Motion is granted in its entirety, subject to the terms and conditions contained herein.
2. All objections, responses, and requests for continuance concerning the Sale Motion are resolved in accordance with the terms of this Order and as set forth in the record of the Sale Hearing. To the extent any such objection, response or request for continuance was not otherwise withdrawn, waived, or settled, it, and all reservations of rights contained therein, is overruled and denied on the merits.
3. Notice of the Sale Hearing was fair and adequate under the circumstances and complied in all respects with section 102(1) of the Bankruptcy Code and Bankruptcy Rules 2002, 6004 and 6006.
4. Approval of Sale. The sale of the Purchased Assets, the terms and conditions of the Purchase Agreement (including all schedules and exhibits affixed thereto), the bid by the Buyer and the transactions contemplated thereby be, and hereby are, authorized and approved in all respects.

5. The sale of the Purchased Assets and the consideration provided by the Buyer under the Purchase Agreement is fair and reasonable and shall be deemed for all purposes to constitute a transfer for reasonably equivalent value and fair consideration under the Bankruptcy Code and any other applicable law.

6. The Buyer (together with BCC) is hereby granted and is entitled to all of the protections provided to a good faith buyer under section 363(m), including with respect to the transfer of the Designated Contracts as part of the sale of the Purchased Assets pursuant to section 365 and this Order.

7. The Debtors hereby are authorized and directed to fully assume, perform under, consummate and implement the terms of the Purchase Agreement together with any and all additional instruments and documents that may be reasonably necessary or desirable to implement and effectuate the terms of the Purchase Agreement, this Order and sale of the Purchased Assets contemplated thereby, including, without limitation, deeds, assignments, stock powers and other instruments of transfer, and to take all further actions as may reasonably be requested by the Buyer or BCC for the purpose of assigning, transferring, granting, conveying and conferring to the Buyer or, as applicable, BCC, or reducing to possession any or all of the Purchased Assets or Assumed Liabilities and the assumption and assignment of the Assumed Contracts, as may be necessary or appropriate to the performance of the Debtors' obligations as contemplated by the Purchase Agreement, without any further corporate action or orders of this Court. The Buyer shall have no obligation to proceed with the Closing of the Purchase Agreement until all conditions precedent to its obligations to do so have been met, satisfied or waived. The Buyer may consummate the transactions under the Purchase Agreement at any time after the entry of this Order (including immediately thereafter) by waiving all closing conditions

set forth in the Purchase Agreement that have not been satisfied and by proceeding to close such transactions, without any notice to the Court, any pre-petition or post-petition creditor of the Debtors or any other party in interest.

8. The Debtors and each other person or entity having duties or responsibilities under the Purchase Agreement, any agreements related thereto or this Order, and their respective directors, officers, employees, members, agents, representatives, and attorneys, are authorized and empowered, subject to the terms and conditions contained in the Purchase Agreement, to carry out all of the provisions of the Purchase Agreement and any related agreements; to issue, execute, deliver, file, and record, as appropriate, the documents evidencing and consummating the Purchase Agreement, and any related agreements; to take any and all actions contemplated by the Purchase Agreement, any related agreements or this Order; and to issue, execute, deliver, file, and record, as appropriate, such other contracts, instruments, releases, indentures, mortgages, deeds, bills of sale, assignments, leases, or other agreements or documents and to perform such other acts and execute and deliver such other documents, as are consistent with, and necessary or appropriate to implement, effectuate, and consummate, the Purchase Agreement, any related agreements and this Order and the transactions contemplated thereby and hereby, all without further application to, or order of, the Court or further action by their respective directors, officers, employees, members, agents, representatives, and attorneys, and with like effect as if such actions had been taken by unanimous action of the respective directors, officers, employees, members, agents, representatives, and attorneys of such entities. The secretary or any assistant secretary of the Debtors shall be, and hereby is, authorized to certify or attest to any of the foregoing actions (but no such certification or attestation shall be required to make any such action valid, binding, and enforceable). The Debtors are further authorized and

empowered to cause to be filed with the secretary of state of any state or other applicable officials of any applicable governmental units any and all certificates, agreements, or amendments necessary or appropriate to effectuate the transactions contemplated by the Purchase Agreement, any related agreements and this Order, including amended and restated certificates or articles of incorporation and by-laws or certificates or articles of amendment, and all such other actions, filings, or recordings as may be required under appropriate provisions of the applicable laws of all applicable governmental units or as any of the officers of the Debtors may determine are necessary or appropriate. The execution of any such document or the taking of any such action shall be, and hereby is, deemed conclusive evidence of the authority of such person to so act. Without limiting the generality of the foregoing, this Order shall constitute all approvals and consents, if any, required by the corporation laws of the State of Delaware and all other applicable business corporation, trust, and other laws of the applicable governmental units with respect to the implementation and consummation of the Purchase Agreement, any related agreements and this Order, and the transactions contemplated thereby and hereby.

9. Effective as of the Closing, (a) the sale of the Purchased Assets by the Debtors to the Buyer or, as applicable, BCC shall constitute a legal, valid and effective transfer of the Purchased Assets notwithstanding any requirement for approval or consent by any person and shall vest Buyer with all right, title and interest of the Debtors in and to the Purchased Assets, free and clear of all Claims, Liens, Encumbrances and interests of any kind, in each case other than Permitted Liens, pursuant to section 363(f) of the Bankruptcy Code, and (b) the assumption of any Assumed Liabilities by the Buyer shall constitute a legal, valid and effective delegation of any Assumed Liabilities to the Buyer and shall divest the Debtors of all liability with respect to any Assumed Liabilities.

10. The sale of the Purchased Assets is not subject to avoidance, and no damages may be assessed against the Buyer or BCC or any other party, pursuant to section 363(n).

11. Transfer of Purchased Assets. Except to the extent specifically provided in the Purchase Agreement, upon the closing, pursuant to section 1141(c) of the Bankruptcy Code, the Debtors shall be, and hereby are, authorized, empowered, and directed, pursuant to sections 105, 363(b), 1123 and 1141, to sell the Purchased Assets to the Buyer or, as applicable, BCC. The sale of the Purchased Assets shall vest Buyer or, as applicable, BCC with all right, title and interest of the Debtors to the Purchased Assets free and clear of any and all Encumbrances and other liabilities and claims, in each case other than Permitted Liens, whether secured or unsecured, choate or inchoate, filed or unfiled, scheduled or unscheduled, noticed or unnoticed, recorded or unrecorded, contingent or noncontingent, liquidated or unliquidated, matured or unmatured, disputed or undisputed, or known or unknown, whether arising prior to or subsequent to the Petition Date, whether imposed by agreement, understanding, law, equity or otherwise, with all such Encumbrances and other liabilities and claims to attach only to the proceeds of the sale (if any) with the same priority, validity, force, and effect, if any, as they now have in or against the Purchased Assets, subject to all claims and defenses the Debtors may possess with respect thereto. Following the Closing Date, no holder of any Encumbrance, other than a holder of a Permitted Lien, in the Purchased Assets shall interfere with the Buyer's, BCC's, or any successors' or assigns' use and enjoyment of the Purchased Assets based on or related to such Encumbrance, or any actions that the Debtors may take in their chapter 11 cases and no person shall take any action to prevent, interfere with or otherwise enjoin consummation of the transactions contemplated in or by the Purchase Agreement or this Order. To the extent provided for in the Purchase Agreement, any and all of the Debtors' security deposits, or other security



held by landlords, lessors and other counterparties to the contracts, leases, and licenses that are to be assumed and assigned under the Purchase Agreement are being transferred and assigned to, and shall be the property of, the Buyer or BCC, as applicable, from and after the Closing, which transfer and assignment of security deposits, other deposits, or security shall satisfy in full the requirements of section 365(l) of the Bankruptcy Code for all contracts, leases, and licenses assumed and assigned pursuant to this Order or the Purchase Agreement.

12. The provisions of this Order authorizing the sale of the Purchased Assets free and clear of Encumbrances, other than Assumed Liabilities and other than Permitted Liens, shall be self-executing, and neither the Debtors, the Buyer nor BCC shall be required to execute or file releases, termination statements, assignments, consents, or other instruments in order to effectuate, consummate and implement the provisions of this Order. However, the Debtors and the Buyer, and each of their respective officers, employees, agents, successors and assigns are hereby authorized and empowered to take all actions and execute and deliver any and all documents and instruments that either the Debtors or the Buyer deem necessary or appropriate to implement and effectuate the terms of the Purchase Agreement and this Sale Order. Moreover, effective as of the Closing, the Buyer, BCC and their respective successors and assigns, including BCC, shall be designated and appointed the Debtors' true and lawful attorney and attorneys, with full power of substitution, in the Debtors' name and stead, on behalf and for the benefit of the Buyer, its successors and assigns, to demand and receive any and all of the Purchased Assets and to give receipts and releases for and in respect of the Purchased Assets, or any part thereof, and from time to time to institute and prosecute in the Debtors' name, for the benefit of the Buyer, BCC and their respective successors and assigns, any and all proceedings at law, in equity or otherwise, which the Buyer, BCC and their respective successors and assigns,

may deem proper for the collection or reduction to possession of any of the Purchased Assets, and to do all acts and things with respect to the Purchased Assets which the Buyer, BCC and their respective successors and assigns, shall deem desirable. The foregoing powers are coupled with an interest and are and shall be irrevocable by the Debtors.

13. On or before the Closing Date, all parties holding Encumbrances, other than Permitted Liens, of any kind are authorized and directed to execute such documents and take all other actions as may be necessary to release any Encumbrances of any kind against the Purchased Assets, as such Encumbrances may have been recorded or may otherwise exist. If any person or entity that has filed financing statements or other documents or agreements evidencing any Encumbrances in or against the Purchased Assets shall not have delivered to the Debtors prior to the Closing after request therefor, in proper form for filing and executed by the appropriate parties, termination statements, instruments of satisfaction, or releases of all such Encumbrances that the person or entity has with respect to the Purchased Assets, the Debtors are hereby authorized to execute and file such statements, instruments, releases and other documents on behalf of the person or entity with respect to such Purchased Assets prior to the Closing, and the Buyer, BCC or their respective successors and assigns are authorized to file such documents after Closing.

14. To the greatest extent available under applicable law, the Buyer, BCC or their respective successors and assigns shall be authorized, as of the Closing Date, to operate under any license, permit, registration and governmental authorization or approval of the Debtors with respect to the Purchased Assets, and all such licenses, permits, registrations and governmental authorizations and approvals are deemed to have been, and hereby are, directed to be transferred to the Buyer, BCC or their respective successors and assigns as of the Closing Date.

15. All of the Debtors' interests in the Purchased Assets to be acquired by the Buyer under the Purchase Agreement shall be, as of the Closing Date and upon the occurrence of the Closing, transferred to and vested in the Buyer. Upon the occurrence of the Closing, this Order shall be considered and constitute for any and all purposes a full and complete general assignment, conveyance and transfer of the Purchased Assets under the Purchase Agreement and/or a bill of sale or assignment transferring good and marketable, indefeasible title and interest in the Purchased Assets.

16. Except as expressly provided in the Purchase Agreement, the Buyer is not assuming nor shall it or any affiliate, subsidiary, successor or assignee of Buyer be in any way liable or responsible, as a successor or otherwise, for any liabilities, debts, or obligations of the Debtors in any way whatsoever relating to or arising from the Debtors' ownership or use of the Purchased Assets prior to the consummation of the transactions contemplated by the Purchase Agreement, or any liabilities calculable by reference to the Debtors or their operations or the Purchased Assets, or relating to continuing or other conditions existing on or prior to consummation of the transactions contemplated by the Purchase Agreement, which liabilities, debts, and obligations are hereby extinguished insofar as they may give rise to liability, successor or otherwise, against Buyer or any affiliate, subsidiary, successor, or assignee of the Buyer.

17. Except as otherwise provided in the Purchase Agreement, on the Closing Date, each of the Debtors' creditors is authorized and directed to execute such documents and take all other actions as may be necessary to release their respective interests or Claims against the Purchased Assets, if any, as may have been recorded or may otherwise exist.

18. Except as otherwise expressly provided in the Purchase Agreement, all persons or entities, presently or on or after the Closing Date, in possession of some or all of the Purchased

Assets, are directed to surrender possession of the Purchased Assets to the Buyer or, as applicable, BCC on the Closing Date or at such time thereafter as the Buyer may request.

19. Assumed Contracts. Subject to the terms of the Purchase Agreement and the occurrence of the Closing Date, the assumption by the Debtors of the Assumed Contracts and the sale and assignment of such agreements to the Buyer or, as applicable BCC, as provided for or contemplated by the Purchase Agreement hereby is authorized and approved pursuant to sections 363, 365, 1123(a)(5)(D) and 1141(c) of the Bankruptcy Code.

20. The Assumed Contracts shall be deemed valid and binding and in full force and effect and assumed by the Debtors and sold and assigned to the Buyer and, as applicable, to BCC at the Closing, pursuant to sections 363 and 365 of the Bankruptcy Code, subject only to (a) the payment of all cures required to assume and assign the Assumed Contracts to the Buyer and BCC as provided in this Order and the Purchase Agreement; and (b) the Buyer's and BCC's right to exclude certain Purchased Assets from the definition of Purchased Assets as permitted under the terms of the Purchase Agreement. To the extent the Buyer or BCC excludes any Assumed Contracts from the definition of Assumed Contracts as permitted under the Purchase Agreement, the Debtors shall file a revised schedule to the Purchase Agreement with the Court and provide proper and adequate notice thereof.

21. Upon the Closing, in accordance with sections 363 and 365, the Buyer or BCC shall be fully and irrevocably vested in all right, title and interest of each Assumed Contract. The Debtors shall cooperate with, and take all actions reasonably requested by, the Buyer to effectuate the foregoing.

22. Pursuant to sections 365(b)(1)(A) and (B), pursuant to the terms and subject to the conditions of this Order and the Purchase Agreement, and within the time period provided and

the terms set forth in the Purchase Agreement, the Debtors shall pay or cause to be paid to the non-debtor parties to any Assumed Contracts the requisite Cure Costs, if any, set forth in the notice served by the Debtors on each of the parties to the Assumed Contracts, except to the extent that a cure amount was amended on the record of the Sale Hearing (the "Cure Costs"), following the assumption and assignment thereof. The Cure Costs are hereby fixed at the amounts set forth in the notice served by the Debtors, or the amounts set forth on the record of the Sale Hearing, as the case may be, and the non-debtor parties to the Assumed Contracts are forever bound by such Cure Costs.

23. All defaults or other obligations under the Assumed Contracts arising prior to the Closing (without giving effect to any acceleration clauses or any default provisions of the kind specified in section 365(b)(2) of the Bankruptcy Code) shall be deemed cured by payment of the Cure Costs.

24. Any provision in any Assumed Contract that purports to declare a breach, default or payment right as a result of an assignment or a change of control in respect of the Debtors is unenforceable, and all Assumed Contracts shall remain in full force and effect, subject only to payment of the appropriate Cure Cost, if any. No sections or provisions of any Assumed Contract that purport to provide for additional payments, penalties, charges, or other financial accommodations in favor of the non-debtor third party to the Assumed Contracts shall have any force and effect with respect to the sale transaction and assignments authorized by this Order, and such provisions constitute unenforceable anti-assignment provisions under section 365(f) of the Bankruptcy Code and/or are otherwise unenforceable under section 365(e) of the Bankruptcy Code, and no assignment of any Assumed Contract pursuant to the terms of the Purchase Agreement shall in any respect constitute a default under any Assumed Contract. To the extent a

non-debtor party to any Assumed Contract has failed timely to object to the assumption and assignment of its respective Assumed Contract, including an executory contract, license agreement or unexpired lease respecting a non-exclusive license of intellectual property, any such party shall be deemed to consent to the assumption and assignment thereof to the Buyer pursuant to section 365(c)(1)(B). To the extent the consent of any non-debtor third party to an Assumed Contract is required to permit the assumption and assignment of any Assumed Contracts which is or contains a non-exclusive license of intellectual property, and the non-debtor party to such Assumed Contract has timely entered an objection to the assumption and assignment thereof, such consent has been obtained or will be obtained prior to Closing. Except as otherwise set forth herein, the Buyer, BCC (to the extent applicable) and their respective successors and assigns shall enjoy all of the rights and benefits under each such Assumed Contract as of the applicable date of assumption and assignment without the necessity of obtaining each such non-debtor party's written consent to the assumption or assignment thereof.

25. The Buyer and BCC have satisfied all requirements under sections 365(b)(1) and 365(f)(2) of the Bankruptcy Code to provide adequate assurance of future performance under the Assumed Contracts.

26. The Debtors and their estates shall be relieved of any liability for any breach of any of the Assumed Contracts occurring from and after Closing, pursuant to and in accordance with sections 365(k).

27. The ownership units in PDL owned by the Debtors are subject to the PDL Right of the PDL Parties. To permit the PDL Parties to exercise this right, the Buyer shall notify the PDL Parties, in writing, of the amount of the Purchase Price under the Purchase Agreement allocated to the Debtors' ownership interest ("Allocation Notice") in PDL within 30 days of the

entry of this Order. Within ten (10) days after the Buyer provides the PDL Parties with the Allocation Notice, the PDL Parties may file an objection to the amount set forth in the Allocation Notice and the Court shall hold a hearing to determine if the allocation is unreasonable and if the Court so determines, to set an allocation price. The PDL Parties shall have thirty (30) days after the later of the Allocation Notice or resolution of an objection to the amount set forth therein; to purchase the Debtors ownership interest in PDL under the PDL Right. If such payment is not made to the Buyer within this time limit, the PDL Parties' PDL Right shall lapse.

28. Additional Provisions. Each and every federal, state, and local governmental agency or department is hereby directed to accept any and all documents and instruments necessary and appropriate to consummate the transactions contemplated by the Purchase Agreement and this Order.

29. Neither the Buyer nor any of its affiliates, subsidiaries, successors or assigns has assumed and none is otherwise obligated for any of the Debtors' liabilities other than the Assumed Liabilities as set forth in the Purchase Agreement, and the Buyer has not purchased any of the Retained Assets, as set forth in Section 2.3 of the Purchase Agreement (the "Retained Assets"). Consequently, all persons, Governmental Units (as defined in sections 101(27) and 101(41) of the Bankruptcy Code) and all holders of Encumbrances based upon or arising out of liabilities retained by the Debtors are hereby enjoined from taking any action against any of the Buyer or BCC or their respective affiliates, subsidiaries, successors or assigns or the Purchased Assets to recover any Encumbrance or on account of any liabilities of the Debtors other than Assumed Liabilities pursuant to the Purchase Agreement. All persons holding or asserting any Encumbrance in the Retained Assets are hereby enjoined from asserting or prosecuting such Encumbrance or cause of action against any of the Buyer or BCC or their respective affiliates,

subsidiaries, successors or assigns or the Purchased Assets for any liability associated with the Retained Assets.

30. None of the Buyer or its affiliates, subsidiaries, successors or assigns is a "successor" to the Debtors or their estates by reason of any theory of law or equity, and the Buyer and its affiliates, subsidiaries, successors and assigns shall not assume, nor be deemed to assume, or in any way be responsible for any liability or obligation of any of the Debtors and/or their estates including, but not limited to, any bulk sales law, successor liability or similar liability except as otherwise expressly provided in the Purchase Agreement. Neither the purchase of the Purchased Assets by the Buyer, its affiliates, its subsidiaries, its successors or its assigns nor the fact that the Buyer, its affiliates, its subsidiaries, its successors or its assigns are using any of the Purchased Assets previously operated by the Debtors, will cause the Buyer or any of its affiliates, its subsidiaries, its successors or its assigns to be deemed a successor in any respect to the Debtors' businesses within the meaning of any foreign, federal, state or local revenue, pension, ERISA, tax, labor, employment, environmental, or other law, rule or regulation (including without limitation filing requirements under any such laws, rules or regulations), or under any products liability law or doctrine with respect to the Debtors' liability under such law, rule or regulation or doctrine, or under any product warranty liability law or doctrine with respect to the Debtors' liability under such law, rule or regulation or doctrine, and the Buyer, its affiliates, its subsidiaries, its successors or its assigns shall have no liability or obligation on account of any of the foregoing.

31. Buyer, its affiliates, its subsidiaries, its successors and its assigns shall have no liability or obligation under the WARN Act (29 U.S.C. §§ 210 et seq.) or the Comprehensive Environmental Response Compensation and Liability Act, or any foreign, federal, state or local



labor, employment, or environmental law by virtue of the Buyer's purchase of the Purchased Assets or assumption of the Assumed Liabilities.

32. Except to the extent expressly included in the Assumed Liabilities or the Permitted Liens, pursuant to sections 105, 363, 1123(a)(5)(D) and 1141(c) of the Bankruptcy Code, all persons and entities, including, but not limited to, the Debtors, all debt security holders, equity security holders, the Debtors' employees or former employees, governmental, tax and regulatory authorities, lenders, parties to or beneficiaries under any benefit plan, any claimant asserting a products liability claim, trade and other creditors asserting or holding an Encumbrance of any kind or nature whatsoever against, in or with respect to any of the Debtors or the Purchased Assets (whether legal or equitable, secured or unsecured, matured or unmatured, contingent or non-contingent, senior or subordinated), arising under or out of, in connection with, or in any way relating to the Debtors, the Purchased Assets (including the terms and provisions of, or any transactions arising under, any Assumed Contract), the operation of the Debtors' businesses prior to the Closing Date or the transfer of the Purchased Assets to the Buyer, shall be forever barred, estopped, and permanently enjoined from (a) asserting, prosecuting or otherwise pursuing such Encumbrance or other liability against the Buyer or any affiliate, subsidiary, successor or assign thereof and each of their respective current and former members, officers, directors, managed funds, investment advisors, attorneys, employees, partners, affiliates and representatives (each of the foregoing in its individual capacity), or the Purchased Assets, or (b) otherwise taking any action to challenge or contest the validity or enforceability of any Assumed Contract or any transaction thereunder. For the avoidance of doubt, the foregoing shall not prevent the Debtors, their estates, successors or permitted assigns

from pursuing claims, if any, against the Buyer and/or its successors and assigns in and only in accordance with the terms of the Purchase Agreement.

33. Subject to the terms of the Purchase Agreement, the Purchase Agreement and any related agreements may be waived, modified, amended, or supplemented by agreement of the Debtors, Lenders and the Buyer, without further action or order of the Court; provided, however, that any such waiver, modification, amendment, or supplement is not material and substantially conforms to, and effectuates, the Purchase Agreement and any related agreements; provided further that any waiver, modification, amendment or supplement to (a) the Purchase Agreement to the extent relating to any Liens contemplated by the Drug Royalty Agreements or (b) the proviso at the end of the first sentence of section 2.2 of the Purchase Agreement, shall in either case be deemed material.

34. No bulk sale law or any similar law of any state or other jurisdiction shall apply in any way to the sale and the transactions contemplated by the Purchase Agreement.

35. The failure specifically to include any particular provisions of the Purchase Agreement or any related agreements in this Order shall not diminish or impair the effectiveness of such provision, it being the intent of the Court, the Debtors and the Buyer that the Purchase Agreement and any related agreements are authorized and approved in their entirety with such amendments thereto as may be made by the parties in accordance with this Order prior to Closing. To the extent any provisions of this Order conflict with the terms and conditions of the Purchase Agreement, the terms and conditions of the Purchase Agreement shall govern and control. Except as otherwise expressly provided herein, nothing in this Order shall alter or amend the Purchase Agreement and the obligations of the Debtors and Buyer thereunder.

36. This Order and the Purchase Agreement shall be binding upon and govern the acts of all persons and entities, including without limitation, the Debtors and the Buyer, their respective successors and permitted assigns, including, without limitation, any chapter 11 trustee hereinafter appointed for the Debtors' estates or any trustee appointed in a chapter 7 case if these cases are converted from chapter 11, all creditors of any Debtor (whether known or unknown), filing agents, filing officers, title agents, recording agencies, secretaries of state, and all other persons and entities who may be required by operation of law, the duties of their office or contract to accept, file, register, or otherwise record or release any documents or instruments or who may be required to report or insure any title in or to the Purchased Assets. All Encumbrances, other than Permitted Liens, against the Debtors' estates of record as of the Closing shall forthwith be removed and stricken as against the Purchased Assets, without further order of the Court or act of any party. Upon Closing, the entities listed above in this paragraph are authorized and directed to strike all such recorded Encumbrances against the Purchased Assets as provided for herein from their records, official and otherwise. Each and every federal, state, and local governmental agency, unit, or department are hereby directed to accept this Order as sole and sufficient evidence of the transfer of title of the Purchased Assets to the Buyer, and such agency, unit, or department may rely upon this Order in consummating the transactions contemplated by the Purchase Agreement.

37. Within two (2) days after the Closing, the Debtors are hereby authorized and directed to distribute the Purchase Price, to the extent and in the manner set forth herein, pursuant to and in accordance with Section 4.2(b) of the Purchase Agreement and the terms of the Final Order (I) Authorizing Use of Cash Collateral, (II) Granting Adequate Protection, and (III) Modifying the Automatic Stay (the "Final Cash Collateral Order"), including paragraph 9

thereof; and in (A)(i)(a) the various Securities Purchase Agreements dated August 14, 2008 by and between Nanogen and certain investors (the "Initial Bridge Securities Agreements"), and (b) the Securities Purchase Agreement dated August 14, 2008 by and between Nanogen and Buyer (the "Elitech Bridge Securities Agreement" and, together with the Initial Bridge Securities Agreements, the "Bridge Securities Agreements"); (ii) those certain senior secured convertible bridge notes referred to in the Bridge Securities Agreements (the "Bridge Notes"); (iii) the Second Lien Security Agreement dated August 14, 2008 between Nanogen and the Prepetition Agent; (iv) the Security Agreement dated August 14, 2008 between Epoch and Nanotronics and the Prepetition Agent, as payment for amounts due and owing to the holders of the Bridge Notes; and in (B)(i) the various Second Amendment and Exchange Agreements dated as of August 14, 2008 (as amended, supplemented, restated, or otherwise modified prior to the Petition Date, the "Second Exchange Agreement"), (ii) those certain amended and restated 9.75% senior secured convertible notes referred to in the Second Exchange Agreement as the Amended Exchanged Notes (the "Amended Secured Notes"), (iii) those certain 9.75% senior secured convertible notes referred to in the Second Exchange Agreement as the Additional Exchanged Notes (the "Additional Secured Notes", and, together with the Amended Secured Notes, the "New Secured Notes"), (iv) the Amended and Restated Security Agreement dated as of August 14, 2008 by and between Nanogen and the Prepetition Agent, as payment for amounts due and owing the holder of the New Secured Notes. Except for amounts to be segregated and set aside pursuant to clauses (i) and (ii) below, distribution of the Purchase Price shall be made as follows:

- (a) First, the portion of the Purchase Price relating to the assets of the U.S. subsidiaries of Nanogen shall be applied (A) first, to satisfy the obligations of Nanogen (and Epoch/Nanotronics under that certain Guaranty dated August 14, 2008) to the Initial

Bridge Note Holders under the Initial Bridge Notes, and (B) second, to satisfy the obligations of Nanogen (and Epoch/Nanotronics under that certain Guaranty dated August 14, 2008) to Elitech under the Additional Bridge Note (which allocation, if any, shall take the form of a credit bid, as described in Section 4.1 of the Purchase Agreement);

(b) Second, the portion of the Purchase Price relating to the NAD Quotas (as defined in the APA) shall be applied (A) first, to satisfy the obligations of Nanogen (and Epoch/Nanotronics under that certain Guaranty dated August 14, 2008) to the Initial Bridge Note Investors under the Initial Bridge Notes, if any, and (B) second, to satisfy the obligations of Nanogen (and Epoch/Nanotronics under that certain Guaranty dated August 14, 2008) to Elitech under the Additional Bridge Note (which allocation, if any, shall take the form of a credit bid, as described Section 4.1 of the Purchase Agreement), and (C) third, to satisfy the obligations of Nanogen to the Holders under the 9.75% Convertible Notes; and

(c) Third, the portion of the Purchase Price relating to the assets of Nanogen other than the NAD Quotas shall be applied (A) first, to satisfy the obligations of Nanogen to the Holders under the 9.75% Convertible Notes, if any, and (B) second, to satisfy the obligations of Nanogen (and Epoch/Nanotronics under that certain Guaranty dated August 14, 2008) to Elitech and the Initial Bridge Note Holders in respect of the Buyer Bridge Note and the Investor Bridge Notes, if any, each as applicable, which shall be applied pro rata among any such remaining obligations to Investors and Buyer.

Pending distribution of the Purchase Price, the Debtors shall not commingle the Purchase Price with any of the Debtors' assets and shall establish from the Purchase Price the following accounts:

(i) the Debtors shall deposit \$638,750.00 in cash from the Purchase Price, an amount sufficient to satisfy, in full, all Cure Costs of the Assumed Contracts not otherwise paid on or prior to the closing of the transactions under the Purchase Agreement, in a separate account (the "Cure Cost Account"). No funds from the Cure Cost Account shall be distributed without prior order of the Court; provided however, that in the event any Cure Cost for an Assumed Contract is undisputed or settled, such Cure Cost may be distributed without further order of this Court.; and,

(ii) the Debtors shall deposit \$2,137,950.00 in cash from the Purchase Price and \$586,077.00 in cash constituting Cash Collateral other than Purchase Price, each as set forth in the Approved Budget and Detailed Budget, an aggregate amount sufficient to cover, fulfill and satisfy any expenses or other obligations of the Debtors or otherwise mandated or directed by any prior Order of this Court, including the Carve-Out(s) as set forth and defined in paragraph 12 of the Final Cash Collateral Order (the "Reserve Account") and to pay in full the Prepetition GE Capital Obligations.

Within ten (10) days following (a) the resolution of any objections or disputes concerning the Cure Costs, and (b) the completion and satisfaction of any monetary post-Closing obligations under the Purchase Agreement, the Debtors shall remit the balance of the Cure Cost Account and the Reserve Account, if any, to the Prepetition Agent on behalf of the Lenders.

38. Any amounts that become payable by the Debtors to Buyer pursuant to the Purchase Agreement shall (a) constitute administrative expenses of the Debtors' estates under

sections 503(b) and 507(a)(1) of the Bankruptcy Code, and (b) be paid by the Debtors in the time and manner provided by the Purchase Agreement, all without further Court order and notwithstanding any Encumbrances against the Debtors' estates.

39. Notwithstanding anything to the contrary herein, the Debtors shall not assume and assign any contract or license to which the United States is a party, nor shall the Purchase Agreement effect any purported transfer thereof, unless and until the United States consents to the assignment. All rights of recoupment, if any, of the United States are unaffected by this Order and are fully preserved.

40. The provisions of this Order are non-severable and mutually dependent.

41. For purposes of Section 363(b)(1) of the Bankruptcy Code, the Debtors have not, in connection with offering a product or service, disclosed to one or more individuals a policy prohibiting the transfer of "personally identifiable information" (as defined in 11 U.S.C. section 101(41A)) about individuals to persons that are not affiliated with the Debtors.

42. Nothing in any order of this Court or contained in any plan of reorganization or liquidation confirmed in the Cases, or in any subsequent or converted cases of the Debtors under chapter 7 or chapter 11 of the Bankruptcy Code, shall conflict with or derogate from the provisions of the Purchase Agreement or the terms of this Order.

43. Notwithstanding Bankruptcy Rules 6004, 6006 and 7062, this Order shall be effective and enforceable immediately upon entry and its provisions shall be self-executing. In the absence of any person or entity obtaining a stay pending appeal, the Debtors and the Buyer are free to close under the Purchase Agreement at any time, subject to the terms of the Purchase Agreement. If, in the absence of any person or entity obtaining a stay pending appeal, the Debtors and the Buyer close under the Purchase Agreement, the Buyer shall be deemed to be

acting in "good faith" and the Buyer, its affiliates, subsidiaries, successors and assigns shall be entitled to the protections of section 363(m) of the Bankruptcy Code as to all aspects of the transactions under and pursuant to the Purchase Agreement if this Order or any authorization contained herein is reversed or modified on appeal.

44. This Court shall retain jurisdiction even after the closing of these chapter 11 Cases to:

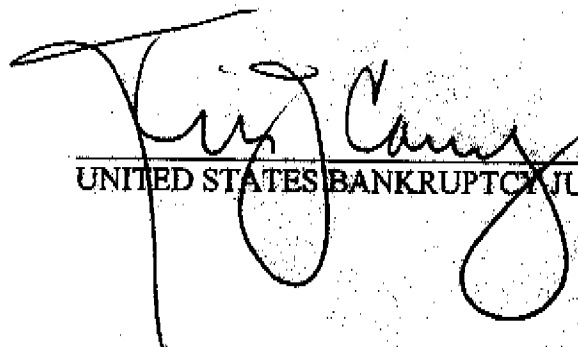
- a. interpret, implement, and enforce the terms and provisions of this Order, the Bid Procedures Order, and the Purchase Agreement, all amendments thereto and any waivers or consents thereunder and each of the agreements executed in connection therewith in all respects;
- b. decide any disputes concerning this Order, the Purchase Agreement, or the rights and duties of the parties hereunder or thereunder or any issues relating to the Purchase Agreement and this Order including, but not limited to, the interpretation of the terms, conditions and provisions hereof and thereof, the status, nature and extent of the Purchased Assets and any Assumed Contracts and all issues and disputes arising in connection with the relief authorized herein, inclusive of those concerning the transfer of the assets free and clear of all Encumbrances other than Permitted Liens;
- c. protect the Buyer or, as applicable, BCC, or any of the Assumed Contracts or Purchased Assets, against any of the Encumbrances, other than Permitted Liens, as provided herein including, without limitation, to enjoin the commencement or continuation of any action seeking to impose successor liability or bulk sale liability;



- d. enter orders in aid or furtherance of the transactions contemplated by the Purchase Agreement or to ensure the peaceful use and enjoyment of the Assumed Contracts or the Purchased Assets by the Buyer, BCC and their successors and assigns;
- e. compel delivery of all Purchased Assets to the Buyer;
- f. adjudicate any and all remaining issues concerning the Debtors' right and authority to assume and assign the Assumed Contracts and the rights and obligations of the Debtors and the Buyer, BCC or any of their successors and assigns with respect to such assignment and the existence of any default under any such Assumed Contract;
- g. adjudicate any and all disputes concerning alleged pre-Closing Encumbrances, other than Permitted Liens, in and to the Purchased Assets including without limitation the extent, validity, enforceability, priority, and nature of any and all such alleged Encumbrances;
- h. adjudicate any and all disputes relating to the Debtors' right, title, or interest in the Purchased Assets and the proceeds thereof; and
- i. re-open the Debtors' chapter 11 Cases to determine any of the foregoing.

Dated: Wilmington, Delaware

June 24, 2009

  
UNITED STATES BANKRUPTCY JUDGE

## PATENT ASSIGNMENT AGREEMENT

This Patent Assignment Agreement (the "Agreement") is made as of July 2, 2009, by and among Nanogen, Inc., a Delaware corporation ("Nanogen"), Epoch Biosciences, Inc., a Delaware corporation and wholly-owned subsidiary of Nanogen ("Epoch"), Nanotronics, Inc., a California corporation and wholly-owned subsidiary of Nanogen ("Nanotronics" and, collectively with Nanogen and Epoch, the "Assignors" and each an "Assignor"), and Elitech Holding B.V., a corporation organized and existing under the laws of The Netherlands ("Assignee").

### PRELIMINARY STATEMENTS

A. Pursuant to that certain Asset Purchase Agreement (the "Purchase Agreement") dated as of May 13, 2009, as amended, by and among Assignors and Financière Elitech SAS, a *société par actions simplifiée* formed under the laws of France ("Elitech"), Assignors have agreed to transfer and assign unto Elitech all of Assignors' right, title and interest in and to certain assets and contracts of Assignors, and Assignee has agreed to assume certain obligations of Assignors.

B. Pursuant to notice delivered to Assignors dated June 29, 2009, Elitech designated Assignee as the Affiliate to receive all of the Purchased Intellectual Property not related to the Point of Care Business to be transferred to Elitech under the Purchase Agreement.

C. Pursuant to the terms and conditions of this Agreement and the Purchase Agreement, Assignors desire to assign to Assignee all of Assignors' right, title and interest in, to and under all the United States and foreign patent rights owned by Assignors, including those listed on Exhibit A attached hereto and incorporated herein by reference (all of the foregoing being referred to herein as the "Patents"), and Assignee desires to accept such assignment.

D. Capitalized terms used but not otherwise defined in this Agreement shall have the respective meanings ascribed to them in the Purchase Agreement.

### AGREEMENT

The parties, intending to be legally bound, agree as follows:

1. Assignment. Assignors hereby sell, assign, transfer, convey and deliver to Assignee all of Assignors' right, title and interest in, to and under the Patents in the United States and all jurisdictions outside the United States, including the right to apply for letters patent in any and all such jurisdictions based on said Patents, and including all divisionals, renewals, substitutes, continuations, continuations-in-part, reexaminations, reissues, extensions, and convention applications or patents based upon such Patents, and any and all letters patent that may issue thereon, in any and all such jurisdictions, to the full end of the term or terms for which said letters patent may be issued, and every priority right that may be predicated upon the foregoing, the same to be held and enjoyed by Assignee for its own use and benefit and for the

use and benefit of its successors and assigns to be used as fully and entirely as said rights would have been held and enjoyed by Assignors if this assignment had not been made.

2. Authorization. Assignors hereby authorize the Commissioner of Patents and Trademarks of the United States and other empowered officials of the United States Patent and Trademark Office and/or the appropriate empowered officials in relevant jurisdictions outside the United States to record the transfer of the Patents to Assignee as purchaser and assignee of Assignors' entire right, title and interest in, to and under the Patents, and to issue to Assignee all letters patent and other items referred to above which may issue with respect to the Patents, in accordance with this Assignment.

3. Choice of Law. This Agreement will be governed by and construed under the laws of the State of Delaware, without regard to conflicts of laws principles that would require the application of any other law.

4. Subject to Purchase Agreement; Modification. This Agreement is being executed pursuant to the Purchase Agreement, and is subject to the terms and conditions contained therein. This Agreement may not be changed, modified, discharged or terminated in any manner other than by a written agreement signed by the parties to this Agreement or their respective successors and assigns.

5. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original but all of which together will constitute one and the same instrument.

6. Disclaimer by Assignors. Assignors and Assignee agree that this Agreement has been prepared solely by Assignee, and Assignors make no representation, and expressly disclaim any warranties or representations regarding the Patents, or this Assignment, including those relating to their validity, enforceability, effectiveness, or whether they will be accepted or approved by the U.S. Patent Office.


7. Due Diligence by Assignee. Assignee hereby represents and agrees that it has performed its own independent investigation of the Patents being assigned pursuant to this Agreement, and that it understands and agrees that such assignment is made on an "AS IS" basis by Assignors, without any representations or warranties of any kind, all of which Assignee has fully disclaimed and waived.

***[SIGNATURE PAGE FOLLOWS]***


The parties have executed and delivered this Agreement as of the date indicated in the first sentence of this Agreement.

**ASSIGNORS:**

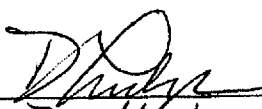
NANOGEN, INC.  
a Delaware corporation

By:   
Name: David Ludvigsson  
Title: President + COO

EPOCH BIOSCIENCES, INC.  
a Delaware corporation

By:   
Name: David Ludvigsson  
Title: President

NANOTRONICS, INC.  
a California corporation

By:   
Name: David Ludvigsson  
Title: Director

**ASSIGNEE:**

ELITECH HOLDING BV  
a Netherlands company

By: \_\_\_\_\_  
Pierre Debais, President

The parties have executed and delivered this Agreement as of the date indicated in the first sentence of this Agreement.

**ASSIGNORS:**

NANOGEN, INC.  
a Delaware corporation

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

EPOCH BIOSCIENCES, INC.  
a Delaware corporation

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

NANOTRONICS, INC.  
a California corporation

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

**ASSIGNEE:**

ELITECH HOLDING BV  
a Netherlands company

By: \_\_\_\_\_  
Pierre Debials, President

EXHIBIT A

PATENTS

Immunodiagnosics

	<b>Title</b>	<b>App/Patent No.</b>	<b>Filing/Issuance Dates</b>	<b>Status</b>	<b>Source</b>
81	2132.014US Biopolymer Marker Indicative of Disease State Having a Molecular Weight of 1845 Daltons	US 6,627,607	Filed 4/30/01 Issued 9/30/03	Abandoned Granted to 4/30/2021	Syn X In back file room
82	2132.108US Complement C3 Precursor Biopolymer Markers Predictive of Type II Diabetes	US 7,097,989	Filed 11/23/01 Issued 8/29/06	Abandoned Granted to 11/23/2021	Syn X In back file room
83	2132.110US Protein Biopolymer Markers Predictive of Type II Diabetes	US 7,125,678	Filed 11/23/01 Issued 10/24/06	Abandoned Granted to 11/23/2021	Syn X In back file room
84	2132.027US Biopolymer Marker Indicative of Disease State Having a Molecular Weight of 1097 Daltons	US 6,677,303	Filed 4/30/01 Issued 1/13/04	Abandoned Granted to 4/30/2021	Syn X In back file room
85	2132.051US Biopolymer Marker Indicative of Disease State Having a Molecular Weight of 2753 Daltons	US 7,087,435	Filed 4/30/01 Issued 8/8/06	Abandoned Granted to 4/30/2021	Syn X In back file room
86	2132.050US Biopolymer Marker Indicative of Disease State Having a Molecular Weight of 2753 Daltons	US 6,620,787	Filed 4/30/01 Issued 9/16/03	Abandoned Granted to 4/30/2021	Syn X In back file room
87	2132.052US Biopolymer Marker Indicative of Disease State Having a Molecular Weight of 2937 Daltons	US 6,620,786	Filed 4/30/01 Issued 9/16/03	Abandoned Granted to 4/30/2021	Syn X In back file room
88	<b>Title</b> 2132.101US Apolipoprotein Biopolymer	<b>App/Patent No.</b> US 7,314,762	<b>Filing/Issuance Dates</b> Filed 11/21/01	<b>Status</b> Abandoned	<b>Source</b> Syn X

**PATENT**

**REEL: 025690 FRAME: 0582**



98	Patients Exhibiting Mild Cognitive Impairment 2132.133US A Method for Retarding or Precluding Alzheimer's Dementia	US 7,014,854	Filed 12/30/02 Issued 3/21/06	(parent 2132.077US) Abandoned Granted to 12/30/2022 Syn X In back file room
99	2132.077US Method for Determining the Presence of Monomeric Brain Associated Human Glutamine Synthetase	US 7,101,680	Filed 10/4/01 Issued 9/5/06	Syn X In back file room
100	2132.084 IG Lambda Biopolymer Markers Predictive of Alzheimers Disease	US 7,026,129	Filed 11/23/01 Issued 4/11/06	Syn X In back file room
101	2132.088US Protein Biopolymer Markers Indicative of Alzheimer's Disease	US 7,074,576	Filed 11/23/01 Issued 7/11/06	Syn X In back file room
102	2132.092US Fibronectin Precursor Biopolymer Markers Indicative of Alzheimer's Disease	US 7,179,605	Filed 11/23/01 Issued 2/20/07	Syn X In back file room
103	2132.095US IG Heavy Chain, IG Kappa, IG Lambda Biopolymer Markers Predictive of Alzheimer's Disease	US 7,179,606	Filed 11/23/01 Issued 2/20/07	Syn X In back file room
104	2132.023US Process for Differential Diagnosis of Alzheimer's Dementia and Device Therefor	US 6,451,547	Filed 4/25/01 Issued 9/17/02	Syn X In back file room
	<b>Title</b>	<b>App/Patent No.</b>	<b>Filing/Issuance Dates</b>	<b>Status</b>
105	2132.040US Biopolymer Marker Indicative of Disease State Having a Molecular Weight of 1562 Daltons	MISCELLANEOUS MOLECULAR WEIGHT MARKERS US 7,314,717	Filed 4/30/01 Issued 1/1/08	Abandoned Granted to 4/30/2021 Syn X In back file room
106	2132.124US Amino Acid Sequence Pattern	US 6,891,154	Filed 8/30/02	Abandoned Syn X

PATENT

REEL: 025690 FRAME: 0584



Matching	Issued 5/10/05	Granted to	In back file room
107	2132.030US Biopolymer Marker Indicative of Disease State Having a Molecular Weight of 2753 Daltons	US 7,294,688	8/30/2022
108	2132.029US Biopolymer Marker Indicative of Disease State Having a Molecular Weight of 1211 Daltons	US 7,049,397	Abandoned
109	2132.028US Biopolymer Marker Indicative of Disease State Having a Molecular Weight of 1206 Daltons	US 6,627,608	Granted to 4/30/01
110	2132.031US Biopolymer Marker Indicative of Disease State Having a Molecular Weight of 1350 Daltons	US 6,890,763	Abandoned
111	2132.034US Biopolymer Marker Indicative of Disease State Having a Molecular Weight of 1449 Daltons	US 6,602,855	Granted to 5/30/2025
112	2132.037US Biopolymer Marker Indicative of Disease State Having a Molecular Weight of 1521 Daltons	US 6,693,080	Abandoned
113	2132.045US Biopolymer Marker Indicative of Disease State Having a Molecular Weight of 1865 Daltons	US 6,617,308	Granted to 4/30/2021
114	2132.046US Biopolymer Marker Indicative of Disease State Having a Molecular Weight of 1896 Daltons	US 6,703,366	Abandoned
115	2132.048US Biopolymer Marker Indicative of Disease State Having a Molecular Weight of 2021 Daltons	US 6,756,476	Granted to 4/30/2021
116	2132.035US Biopolymer Marker Indicative	US 6,627,606	Abandoned

**Title**

**App/Patent No.**

**Filing/Issuance Dates**

**Status**

**Source**

**PATENT**

117	of Disease State Having a Molecular Weight of 1465 Daltons	US 6,599,877	Filed 4/30/01 Issued 7/29/03	Granted to 4/30/2021 Abandoned Granted to 4/30/2021 Abandoned Granted to 4/30/2021	In back file room Syn X In back file room Syn X In back file room
118	2132.025US Biopolymer marker Indicative of Disease State Having a Molecular Weight of 1020 Daltons	US 6,593,298	Filed 4/30/01 Issued 7/15/03	Abandoned Granted to 4/30/2021	Syn X In back file room

**Real Time PCR**

184	17682A-006000US 137 Covalently Linked Oligonucleotide Minor Groove Binder Conj	US 5,801,155	Filed 04/03/95 Issued 09/01/98	Granted	Epoch Townsend
185	17682A-006000AT 137-EP Covalently Linked Oligonucleotide Minor Groove Binder Conjugates	EP 0819133	Filed 04/03/96 Issued 01/02/08	Granted - Austria, Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, UK, Switzerland/Liechtenstein	Epoch Townsend
186	17682A-006001JP 137-JP Covalently Linked Oligonucleotide Minor Groove Binder	JP 531051/1996 JP2002527040T2	Filed 04/03/96	Pending	Epoch Townsend

187	Conjugates 17682-006001CN 137-CN Covalently Linked Oligonucleotide Minor Groove Binder Conjugates	CN 200410055897.4 CN1187363C	Filed 04/03/96	Pending	Epoch Townsend
188	<b>Title</b> 17682 <sup>a</sup> -006000CN 137-CN Covalently Linked Oligonucleotide Minor Groove Binder Conjugates	<b>App/Patent No.</b> CN ZL96194421.8	<b>Filing/Issuance Dates</b> Filed 04/03/96 Granted 2/2/05	<b>Status</b> Granted	<b>Source</b> Epoch Townsend
189	17682A-006000CA 137-CA Covalently Linked Oligonucleotide Minor Groove Binder Conjugates	CA2223678	Filed 04/03/96	Allowed 1/6/09	Epoch Townsend
190	17682A-006000AU 137AU Covalently Linked Oligonucleotide Minor Groove Binder Conjugates	AU 716108	Filed 04/03/96 Issued 02/17/02	Granted	Epoch Townsend
191	17682A-004010JP 137A-PCT-JP Improved Hybridization and Mismatch Discrimination Using Oligonucleotides Conjugated to Minor Groove Binders	JP2000-542342	Filed 04/05/99	Pending	Epoch Townsend
192	17682A-004010CA 137A-PCT-CA Hybridization and Mismatch Discrimination Using Oligonucleotides Conjugated to Minor Groove Binders	CA2329135	04/05/99	Pending	Epoch Townsend
193	17682A-004000US 137A Improved Hybridization and Mismatch Discrimination Using Oligonucleotides Conjugated to Minor Groove Binders	US 6,312,894	Filed 04/03/98 Issued 11/06/01	Granted	Epoch Townsend
194	17682A-004010EP 137A-PCT-EP Hybridization And Mismatch Discrimination Using Oligonucleotides Conjugated To Minor Groove Binders	EP 99916391.8	Filed 04/05/99	Pending, Being valid in France, Germany,	Epoch Townsend

PATENT

REEL: 025690 FRAME: 0587

						Italy, Sweden, Switzerland and UK (2/11/09)	Source
	Title	App/Patent No.	Filing/Issuance Dates	Status	Epoch		Townsend
195	17682A-004010US 137A1 Hybridization and Mismatch Discrimination Using Oligonucleotides Conjugated to Minor Groove Binders	US 6,492,346	Filed 08/16/00 Issued 12/10/02	Granted	Epoch		Townsend
196	17682A-004020US 137A2 Hybridization and Mismatch Discrimination Using Oligonucleotides Conjugated to Minor Groove Binders	US 6,884,584	Filed 04/22/02 Issued 04/26/05	Pending	Epoch		Townsend
197	17682A-004040US 137A4 Hybridization and Mismatch Discrimination Using Oligonucleotides Conjugated to Minor Groove Binders	US 11/784,539 2009/0048427	Filed 04/06/07	Pending, should issue by 6/15/09	Epoch		Townsend
198	17682A-004050US 137-A5 Hybridization and Mismatch Discrimination Using Oligonucleotides Conjugated to Minor Groove Binders	US 12/172,999 US-2009-0048427-A1	Filed 07/14/08	Published	Epoch		Townsend
199	17682A-004010AU 137A-PCT-AU Hybridization and Mismatch Discrimination Using Oligonucleotides Conjugated to Minor Groove Binders	AU 763948	Filed 04/05/96 Issued 08/07/03	Granted	Epoch		Townsend
200	17682A-006010US 137B Oligonucleotide-Minor Groove Binder Conjugates	US 6,084,102	Filed 08/27/98 Issued 07/04/00	Granted	Epoch		Townsend
201	17682A-003500US 137C Covalently Linked Oligonucleotide Minor Groove Binder Conjugates	US 6,426,408	Filed 02/18/00 Issued 07/30/02	Granted	Epoch		Townsend
202	17682A-003510US 137D Covalently Linked	US 6,486,308	Filed 12/18/00	Granted	Epoch		

PATENT

REEL: 025690 FRAME: 0588

Oligonucleotide Minor Groove Binder  
Conjugates

Issued 11/26/02

Townsend

	<b>Title</b>	<b>App/Patent No.</b>	<b>Filing/Issuance Dates</b>	<b>Status</b>	<b>Source</b>
203	17682A-005010US 156 Negatively Charged Minor Groove Binders	US 10/507,267	Filed 04/21/03	Pending	Epoch Townsend
	<b>FLUORS/QUENCHERS</b>				
204	17682A-007310US 157A Compounds and Methods for Fluorescent Labeling	US 6,972,339	Filed 12/21/01	Granted	Epoch Townsend
205	17682A-007310EP 157-PCT-EP Compounds And Methods For Fluorescent Labeling	EP 02768821.7	Issued 12/06/05 Filed 09/06/02	Pending Published	Epoch Townsend
206	17682A-007340EP 157B-EP Compounds and Methods for Fluorescent Labeling	EP 07756934.1	Filed 02/13/07	Pending Published	Epoch Townsend
207	17682-007340CA 157B-CA Compounds And Methods For Fluorescent Labeling	CA 2642360	Filed 02/13/07	Pending	Epoch Townsend
208	17682A-007340JP Compounds And Methods For Fluorescent Labeling	JP 2008-555459	Filed 02/13/07	Pending	Epoch Townsend
209	17682A-007340IN 157B-IN Compounds And Methods For Fluorescent Labeling	IN 4917/CHENP/2008	Filed 02/13/07	Pending	Epoch Townsend
210	17682A-007320US Compounds and Methods for Fluorescent Labeling	US 7,112,684	Filed 12/22/04 Issued 09/01/06	Granted	Epoch Townsend
211	17682A-007330US 157B Compounds and Methods for Fluorescent Labeling	US 11/127,040 2005/0277144	Filed 05/10/05	Pending	Epoch Townsend
212	17682A-007340US 157B Compounds and Methods for Fluorescent Labeling	US 11/357,750 2006/0204990	Filed 02/17/06	Pending	Epoch Townsend
213	17682A-008510US 163Compounds and Methods for Fluorescent Labeling (Long Linker Fluorophores)	US 10/975,042 2005/0159606	Filed 10/25/04	Pending, should issue by 6/15/09	Epoch Townsend
214	17682A-008800US 164 Phosphonated Fluorescent Xanthenes Dyes	US 11/202,635 2007/0172832	Filed 8/12/05	Pending Published	Epoch Townsend
215	17682A-008810CA Phosphonated Fluorescent Dyes And Conjugates	CA 2577053	Filed 8/12/05	Pending	Epoch Townsend

**PATENT**

**REEL: 025690 FRAME: 0589**

	Title	App/Patent No.	Filing/Issuance Dates	Status	Source
216	17682A-008820CA, 164A/CA Phosphonated Fluorescent Dyes And Conjugates	CA 2642747	Filed 2/20/07	Pending	Epoch Townsend
217	17682A-008820EP, 164A Phosphonated Fluorescent Dyes And Conjugates	EP 07751231.7	Filed 2/20/07	Pending	Epoch Townsend
218	17682A-008800EP Phosphonated Fluorescent Dyes And Conjugates	EP 05786453.0	Filed 8/12/05	Pending	Epoch Townsend
219	17682A-008810EP 164EP Phosphonated Fluorescent Dyes And Conjugates	EP 2007-525859	Filed 8/12/05	Published	Epoch Townsend
220	17682A-008820JP 164A Phosphonated Fluorescent Dyes And Conjugates	JP 2008-556399	Filed 2/20/07	Published	Epoch Townsend
221	17682A-008820US 164A Phosphonated Fluorescent Dyes and Conjugates	US 11/360,040 2006/0199955	Filed 02/21/06	Pending	Epoch Townsend
222	17682A-008830US 164A1 Phosphonylated Fluorescent Dyes and Conjugates	US 11/937,448 2008/0207887	Filed 11/08/07	Pending	Epoch Townsend
223	17682A-010110US 171 Amide-Substituted Xanthene Dyes	US 12/244,712 US-2009-0093612-A1	Filed 10/02/08	Published	Epoch Townsend
224	17682A-010110PCT 171 Amide-Substituted Xanthene Dyes	PCT/US2008/078540 WO 2009/046165	Filed 10/02/08 Pub. 4/9/09	Published	Epoch Townsend
225	17682A-0068000US 151 Fluorescent Quenching Detection Reagents And Methods	US 6,727,356	Filed 12/08/99	Granted	Epoch Townsend
226	17682A-006810US 151 Fluorescent Quenching Detection Reagents And Methods	US 6,790,945	Issued 04/27/04 Filed 06/06/01	Granted	Epoch Townsend
227	17682A-006820US 151A1 Fluorescent Quenching Detection Reagents And Methods	US 6,653,473	Issued 09/14/04 Filed 02/26/02	Granted	Epoch Townsend
228	17682A-006841EP 151A PCT EP Fluorescent Quenching Detection Reagents And Methods	EP 0273792.7	Issued 11/25/03 Filed 06/05/02	Pending	Epoch Townsend
229	17682A-006800JP 151-PCT-JP Fluorescent Quenching Detection Reagents And Methods	JP2001-544376	Filed 12/08/00	Published	Epoch Townsend

**Title**

**App/Patent No.**

**Filing/Issuance Dates**

**Status**

**Source**

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230	17682A-006800CA	151-PCT-CA Fluorescent Quenching Detection Reagents And Methods	CA2396795	Filed 12/08/00	Pending	Epoch Townsend
231	17682A-006800EP	151-PCT-EP Fluorescent Quenching Detection Reagents And Methods	EP 00984069.5	Filed 12/08/00	Pending	Epoch Townsend
232	17682A-006841US	151-A3 Fluorescent Quenching Detection Reagents And Methods	US 11/338,866	Filed 01/23/2006	Published	Epoch Townsend
233	17682A-006830US	151-B Fluorescent Quenching Detection Reagents And Methods	2006/0292589 US 6,699,975	Filed 03/07/02 Issued 03/02/04	Pending	Epoch Townsend
<b>MODIFIED BASES</b>						
234	17682A-005100US	116E Crosslinking Oligonucleotides	US RE38,416	Filed 11/04/94	Granted	Epoch Townsend
235	17682A-005500CA	116-CA Crosslinking Oligonucleotides	CA 1338379	Issued 10/20/98 Filed 09/27/89	Granted	Epoch Townsend
236	17682A-006100US	138 Selective Binding Complementary Oligonucleotides	US 5,912,340	Issued 06/11/96 Filed 10/04/95	Granted	Epoch Townsend
237	17682A-004100US	146 Oligonucleotides Containing Pyrazolo[3,4-D]Pyrimidines for Hybridization and Mismatch Discrimination	US 6,127,121	Issued 06/15/99 Filed 04/03/98	Granted	Epoch Townsend
238	17682A-004110US	146A Oligonucleotides containing pyrazolo[3,4-D] pyrimidines for hybridization and mismatch discrimination	US 6,485,906	Filed 11/01/99 Issued 11/26/02	Granted	Epoch Townsend
239	17682A-004100AU	146-AU Oligonucleotides containing pyrazolo[3,4-D] pyrimidines for hybridization and mismatch discrimination	AU 759944	Filed 4/5/99 Issued 8/21/03	Granted	Epoch Townsend
240	17682A-004100EP	146EP Oligonucleotides Containing Pyrazolo[3,4-D]Pyrimidines For Hybridization And Mismatch Discrimination	EP 1068358	Filed 04/05/99 Issued 03/15/06	Granted-Germany, France	Epoch Townsend
241	17682A-004100JP	146JP Oligonucleotides containing pyrazolo[3,4-D] pyrimidines for	App/Patent No. JP 2000-542486	Filing/Issuance Dates Filed 04/05/99	Status Pending	Source Epoch Townsend

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242	hybridization and mismatch discrimination 17682A-004100CA 146-CA Oligonucleotides Containing Pyrazolo[3,4-D]Pyrimidines For Hybridization And Mismatch Discrimination	CA2327547	Filed 04/05/99	Pending Allowed	Epoch Townsend
243	17682A-004130US 146B Oligonucleotides containing pyrazolo[3,4-D] pyrimidines for hybridization and mismatch discrimination	US 11/970,445 2003/0143602	Filed 01/07/08	Pending	Epoch Townsend
244	17682A-003610US 152A Modified Oligonucleotides for Mismatch Discrimination	US 6,949,367	Filed 03/01/00	Granted	Epoch Townsend
245	17682A-003620US 152B Modified Oligonucleotides for Mismatch Discrimination	US 7,045,610	Issued 09/27/05 Filed 02/28/01	Granted	Epoch Townsend
246	17682A-003621EP 152A-PCT-EPO Modified oligonucleotides for mismatch discrimination	EP 08075235.5	Issued 05/16/06 Filed 03/01/01	Pending Published Pending	Epoch Townsend Epoch Townsend
247	17682A-003620CA 152A-PCT-CA Modified Oligonucleotides for Mismatch Discrimination	CA2401781	Filed 03/01/01	Pending	Townsend Epoch
248	17682A-003620JP 152B-PCT-JP Modified Oligonucleotides for mismatch discrimination	JP2001-563645	Filed 03/01/01	Pending	Epoch Townsend
249	17682A-003620EP 152A-PCT-EPO Modified Oligonucleotides For Mismatch Discrimination	EP 01916372.4	Filed 03/01/01	Pending Published	Epoch Townsend
250	17682A-003622EP 152A-PCT EPO Modified Oligonucleotides For Mismatch Discrimination	EP08075233.0	Filed 03/01/01	Pending	Epoch Townsend
251	17682A-003623EP 152A-PCT EPO Modified Oligonucleotides For Mismatch Discrimination	EP 08075234.8	Filed 03/01/01	Pending	Epoch Townsend
252	17682A-003621US 152B1 Tm Leveling Methods	US 7,368,549	Filed 04/19/05	Granted	Epoch Townsend
253	17682A-003630US 152B Tm Leveling Methods	US 6,683,173	Issued 05/06/08 Filed 12/21/01	Granted	Epoch Townsend
254	<b>Title</b> 17682A-003650US 152C1 Tm Leveling Methods	<b>App/Patent No.</b> US 10/672,429 2005/0075491	<b>Filing/Issuance Dates</b> Issued 01/27/04 Filed 09/26/03	<b>Status</b> Pending Published	<b>Source</b> Epoch Townsend
255	17682A-003640US 152D Systems and Methods for Predicting Oligonucleotide	US 10/176,972 2003/0235822	Filed 06/18/03	Pending	Epoch Townsend

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256	Melting Temperatures (TmS) 17682A-003640EP 152D-PCT-EP Systems And Methods For Predicting Oligonucleotide Melting Temperatures (TmS)	EP 03760477.4	Filed 06/18/03	Pending Published	Epoch Townsend
257	17682A-003640JP 152D-PCT-JP Systems and Methods for Predicting Oligonucleotide Melting Temperatures (TmS)	JP2004-513894	Filed 06/18/03	Pending Published	Epoch Townsend
258	17682A-003640CA 152D-PCT-CA Systems And Methods For Predicting Oligonucleotide Melting Temperatures (TmS)	CA2490466AA	Filed 06/18/03	Pending	Epoch Townsend
259	17682A-004300US 153 Non-Aggregating, Non-Quenching Oligomers Comprising Nucleotide Analogues; Methods Of Synthesis And Use Thereof	US 6,660,845	Filed 11/23/99 Issued 12/09/03	Granted	Epoch Townsend
260	17682A-004300EP 153 Non-Aggregating, Non-Quenching Oligomers Comprising Nucleotide Analogues; Methods Of Synthesis And Use Thereof	EP 00980769.4	Filed 11/21/00	Pending Published	Epoch Townsend
261	17682A-004300JP 153 Non-Aggregating, Non-Quenching Oligomers Comprising Nucleotide Analogues; Methods Of Synthesis And Use Thereof	JP 2001-539925	Filed 11/21/00	Pending	Epoch Townsend
262	17682A-004300CA 153 Non-Aggregating, Non-Quenching Oligomers Comprising Nucleotide Analogues; Methods Of Synthesis And Use Thereof	App/Patent No. CA2392033	Filing/Issuance Dates Filed 11/21/00	Status Pending	Source Epoch Townsend
263	17682A-004310US 153 Non-Aggregating, Non-Quenching Oligomers Comprising	US 6,972,328	Filed 11/04/03 Issued 12/06/05	Granted	Epoch Townsend

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264	Nucleotide Analogues; Methods Of Synthesis And Use Thereof 17682A-004320US 153A Non-Aggregating, Non-Quenching Oligomers Comprising Nucleotide Analogues, Methods of Synthesis And Use Thereof	US 11/129,003 2005/0239121-A1	Filed 5/13/05	Abandoned Published	Epoch Townsend
265	17682A-007400US 154 Process For The Synthesis Of Pyrazolopyrimidines	US 6,962,991	Filed 07/31/01 Issued 11/08/05	Granted	Epoch Townsend
266	17682A-007400EP Process For The Synthesis Of Pyrazolopyrimidines	EP 02766251.9	Filed 09/05/02	Pending Published	Epoch Townsend
<b>LINKERS</b>					
267	17682A-005422US 114B Solid Support for Synthesis of 3'-Tailed Oligonucleotides.	US 5,419,966	Filed 07/12/93 Issued 05/30/95	Granted	Epoch Townsend
268	17682A-005422JP 114B-JP Solid Support for Synthesis of 3'-Tailed Oligonucleotides.	JP 3256539	Filed 08/28/91 Issued 1/30/01	Granted	Epoch Townsend
269	17682A-005423JP 114B-JP-DIV Solid Support for Synthesis of 3'-Tailed Oligonucleotides.	JP 3284127	Filed 08/28/91 Issued 03/01/02	Granted	Epoch Townsend
270	17682A-005410US 114-D Trifunctional Intermediates for Preparing 3'-Tailed Oligonucleotides.	US 5,512,667	Filed 02/03/93 Issued 04/30/96	Granted	Epoch Townsend
271	17682A-005410JP 114-D JP Trifunctional Intermediates for Preparing 3'-Tailed Oligonucleotides.	JP 3284127	Filed 08/28/91 Issued 05/20/02	Granted	Epoch Townsend
<b>ATTACHMENT CHEMISTRY</b>					
272	17682A-006700US 150 Attachment of Oligonucleotides to Solid Supports Through Schiff Base Type Linkages for Capture and Detection of Nucleic Acids	US 6,339,147	Filed 07/29/99 Issued 01/15/02	Granted	Epoch Townsend
273	17682A-006710US 150A Attachment of Oligonucleotides to Solid Supports Through Schiff Base Type Linkages for Capture and	US 6,548,652	Filed 02/09/01 Issued 04/15/03	Granted	Epoch Townsend

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274	Detection of Nucleic Acids. 17682A-006720US 150B Attachment of Oligonucleotides to Solid Supports Through Schiff Base Type Linkages for Capture and Detection of Nucleic Acids.	US 6,441,159	Filed 02/09/01 Issued 08/27/02	Granted	Epoch Townsend
<b>AMPLIFICATION DETECTION</b>					
275	17682A-007910US 159 Abasic Site Endonuclease Assay	US 7,252,940	Filed 8/20/2003 Issued 08/07/07	Granted	Epoch Townsend
276	17682A-007910EP 159PCT-EP Abasic Site Endonuclease Assay	EP 03759194.8	Filed 08/20/03	Pending	Epoch Townsend
277	17682A-007910JP 159PCT-JP Abasic Site Endonuclease Assay	JP 2004-529748	Filed 08/20/03	Pending Published	Epoch Townsend
278	17682A-007910CA Abasic Site Endonuclease Assay	CA2494993	Filed 08/20/03	Pending	Epoch Townsend
279	17682A-007920US 157 Abasic Site Endonuclease Assay	7,553,643 US 11/432,763 2007/0141586	Filed 05/10/06 Issued 6/30/09	Pending Allowed	Epoch Townsend
280	17682A-007930US 159 Abasic Site Endonuclease Assay	US 11/770,659 2008/0166782	Filed 06/28/07 Filed 06/26/07	Pending Published	Epoch Townsend
281	17682A-009410US 165 Method for Generating Target Nucleic Acid (Isothermal Endonuclease Assay)	US 11/768,418 US-2009-0092967-A1	Filed 06/26/07	Published	Epoch Townsend
282	<b>Title</b> 17682A-009410PCT Methods For Generating Target Nucleic Acid Sequences	<b>App/Patent No.</b> WO08002920A2 PCT/US2007/072136	<b>Filing/Issuance Dates</b> Filed 06/26/07	<b>Status</b> Abandoned	<b>Source</b> Epoch Townsend
283	17682A-007220US Real-time Linear Detection Probes: Sensitive 5'-Minor Groove Binder- Containing DNA Probes for PCR Analysis	US 7,205,105	Filed 06/06/02 Issued 04/17/07	Granted	Epoch Townsend
284	17682A-007220EP 158A-PCT-EP Real-Time Linear Detection Probes: Sensitive 5'-Minor Groove Binder-Containing Probes For Pcr Analysis	EP 02787009.6	Filed 12/10/02	Pending	Epoch Townsend

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285	17682A-007220JP	158A-PCT-JP Real-time Linear Detection Probes: Sensitive 5'-Minor Groove Binder-Containing DNA Probes for PCR Analysis	JP 2003-562312	Filed 12/10/02	Pending Published	Epoch Townsend
286	17682A-007220CA	158A-PCT0CA Real-Time Linear Detection Probes: Sensitive 5'-Minor Groove Binder-Containing Probes For Pcr Analysis	CA 2473960	Filed 12/10/02	Pending	Epoch Townsend
287	17682A-007221US	158A Real-time Linear Detection Probes: Sensitive 5'-Minor Groove Binder-Containing DNA Probes for PCR Analysis	US 7,485,442	Filed 06/19/06 Issued 2/3/09	Granted	Epoch Townsend
288	17682A-007222US	158A Real-time Linear Detection Probes: Sensitive 5'-Minor Groove Binder-Containing DNA Probes for PCR Analysis	US 12/343,435	Filed 12/23/08	Pending	Epoch Townsend
289	17682A-008410US	161 Fluorescent ProbesContaining 5'-Minor Groove Binder, Fluorophore and Quenching Moieties and Methods of Use Thereof	US 7,381,818	Filed 10/27/04 Issued 06/03/08	Granted	Epoch Townsend
290	17682A-008411US	161A Fluorescent Probes for DNA Detection by Hybridization with Improved Sensitivity and Low Background	App/Patent No. US 12/047,101 2008/0293586	Filing/Issuance Dates Filed 03/12/08	Status Pending Published	Source Epoch Townsend
291	17682A-008410EP	161 Fluorescent Probes for DNA Detection by Hybridization with Improved Sensitivity and Low Background	EP04817540.0	Filed 10/27/04	Pending	Epoch Townsend
292	17682A-008410US	161 Fluorescent Probes for DNA Detection by Hybridization with Improved Sensitivity and Low Background	CA2542768	Filed 10/27/04	Pending	Epoch Townsend
293	17682A-008410JP	161 Fluorescent Probes for DNA Detection by Hybridization with	JP2006-538554	Filed 10/27/04	Pending Published	Epoch Townsend

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294	Improved Sensitivity and Low Background 17682A-008710US 166 Amplification Methods	US 7,319,022	Filed 8/11/05	Granted	Epoch Townsend
295	17682A-00871US 166A Amplification Methods	US 11/958,895	Issued 01/15/08	Pending	Epoch
296	17682A-008710CA 166 Amplification Methods	US 2008-0248474-A1 CA 2576381	Filed 12/18/07	Published	Townsend
297	17682A-008710EP 166 Amplification Methods	EP 05785367.3	Filed 08/11/05	Pending	Epoch
298	17682A-008710JP 166 Amplification Methods	JP 2007-525843	Filed 08/11/05	Published	Townsend
299	17682A-009110US 168-A Improved Primer- Based Amplification Methods	US 11/423,399 2007/0048758	Filed 06/09/05	Pending	Epoch
300	17682A-009110EP 168EP-A Improved Primer-Based Amplification Methods	EP06772720.6	Filed 06/09/06	Published	Townsend
301	17682A-009110CA 168-A Improved Primer- Based Amplification Methods	CA2611507	Filed 06/09/06	Pending	Epoch
302	<b>Title</b> 17682A-009110JP 168 Improved Primer- Based Amplification Methods	<b>App/Patent No.</b> JP 2008-515978	<b>Filing/Issuance Dates</b> Filed 06/09/06	<b>Status</b> Pending	<b>Source</b> Epoch
303	17682A-004200US 148 Hybridization- triggered fluorescent detection of nucleic acids	US 6,472,153	Filed 10/26/99	Published	Townsend
304	17682A-004210US 148 (PARENT) Hybridization-triggered fluorescent detection of nucleic acids	US 6,951,930	Issued 10/29/02 Filed 08/21/02	Granted	Epoch
305	17682a-004220US 148 (PARENT) Hybridization-triggered fluorescent detection of nucleic acids	US 7,297,495	Issued 10/04/05 Filed 10/03/05	Granted	Townsend
306	17682A-010000US Minor Groove Binder - Energy Transfer Oligonucleotides and Methods of Their Use	US 11/929,884	Filed 10/30/07	Pending	Epoch Townsend

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307	17628A-010010PCT Minor Groove Binder-Energy Transfer Oligonucleotides and Methods for Their Use	PCT/US2008/081570	Filed 10/29/08	Pending	Epoch Townsend
308	17682A-008310US 162 Single Nucleotide Polymorphism Analysis of Highly Polymorphic Target Sequences	US 7,348,146	Filed 9/29/04 Issued 03/25/08	Granted	Epoch Townsend
309	17682A-008311US 162 Single Nucleotide Polymorphism Analysis of Highly Polymorphic Target Sequences	US 12/020,908 2005/0118623	Filed 01/28/08	Pending	Epoch Townsend
310	17682A-008310EP 162 Single Nucleotide Polymorphism Analysis of Highly Polymorphic Target Sequences	EP 04789416.7	Filed 09/30/04	Pending Published	Epoch Townsend
311	17682A-008310CA 162 Single Nucleotide Polymorphism Analysis of Highly Polymorphic Target Sequences	CA2540551	Filed 09/30/04	Pending	Epoch Townsend

Title	App/Patent No.	Filing/Issuance Dates	Status	Source
312	17682A-008310JP 162 Single Nucleotide Polymorphism Analysis of Highly Polymorphic Target Sequences	JP2006-534123	Pending Published	Epoch Townsend

**PHARMACEUTICALS**

313	17682A-005800US 132 Oligonucleotides Containing N-Methyl Thiolated Bases Having Antiviral Activity	US 5,652,359	Filed 12/02/93 Issued 07/02/97	Granted	Epoch Townsend
314	17682A-006300US 140 Oligonucleotide-Cyclopropylpyrrolindole Conjugates as Sequence Specific Hybridization and Crosslinking Agents for Nucleic Acids	US 5,659,022	<i>Filed</i> 1/5/96	Granted	Epoch Townsend
315	17682A-006200US 118B Crosslinking Oligonucleotides	US 5,849,482	Issued 8/19/97 Filed 6/7/95 Issued 12/15/98	Granted	Epoch Townsend
316	17682A-003800US 118C Targeted Mutagenesis in Living Cells Using Modified	US 5,935,830	Filed 3/26/97 Issued 8/10/99	Granted	Epoch Townsend

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325	Nanoparticles 101EP Self-Addressable Self-Assembling Microelectronic Systems and Devices for Molecular Biological Analysis and Diagnostics	EP 0727045	Filed 10/26/94 Issued 12/19/01	Granted- Spain, France, UK, Italy, Sweden Granted	O'Melveny Nanogen O'Melveny
326	101C1US Method for Electronic Synthesis of Polymers	US 5,929,208	Filed 10/4/96 Issued 7/27/99	Granted	Nanogen O'Melveny
327	102US Methods for Electronic Stringency Control for Molecular Biological Analysis and Diagnostics	US 6,017,696	Filed 7/7/94 Issued 1/25/00	Granted	Nanogen O'Melveny
	<b>Title</b>	<b>App/Patent No.</b>	<b>Filing/Issuance Dates</b>	<b>Status</b>	<b>Source</b>
328	102AU Self-Addressable Self Assembling Microelectronic Systems and Devices for Molecular Biological Analysis and Diagnostics	AU 708677	Filed 7/5/95 Issued 1/25/99	Abandoned NC Granted	Nanogen O'Melveny
329	102D1AUSelf-Addressable Self Assembling Microelectronic Systems and Devices for Molecular Biological Analysis and Diagnostics	AU 746974	Filed 10/21/99 Issued 8/22/02	Abandoned NC Granted	Nanogen O'Melveny
330	102CA Self-Addressable Self-Assembling Microelectronic Systems and Devices for Molecular Biological Analysis and Diagnostics	CA 2,169,852	Filed 7/5/95 Issued 9/23/08	Granted	Nanogen O'Melveny
331	102GB Self-Addressable Self-Assembling Microelectronic Systems and Devices for Molecular Biological Analysis and Diagnostics	GB 0717749	Filed 7/5/95 Issued	Granted	Nanogen O'Melveny
332	102C1US Methods for Transport in Molecular Biological Analysis and Diagnostics	US 6,238,624	Fled 10/4/96 Issued 5/29/01	Granted	Nanogen O'Melveny
333	102C2US Methods for Electronically- Controlled Enzymatic Reactions	US 7,172,864	Filed 11/24/00 Issued 2/6/07	Granted	Nanogen O'Melveny
334	102C5US Self-Addressable Self Assembling Microelectronic Systems and Devices for Molecular Biological Analysis and Diagnostics	US 11/702,353	Filed 2/5/07	Pending	Nanogen O'Melveny

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335	101C2US Self-Addressable Self Assembling Microelectronic Systems and Devices for Molecular Biological Analysis and Diagnostics	US 7,314,708	Filed 8/4/98 Issued 1/1/08	Granted	Nanogen O'Melveny
336	101C3US Methods for Electronic Synthesis of Polymers	US 09/358,788	Filed 7/22/99	Pending	Nanogen O'Melveny
337	101C4US Self-Addressable Self Assembling Microelectronic Systems and Devices for Molecular Biological Analysis and Diagnostics	US 11/963,317	Filed 12/21/07	Pending	Nanogen O'Melveny
338	103US Molecular Biological Diagnostic Systems Including Electrodes	US 5,632,957	Filed 9/9/94 Issued 5/27/97	Granted	Nanogen O'Melveny
339	103AU Automated Molecular Biological Diagnostic System	App/Patent No. AU 702773	Filed 9/6/95	Status Granted	Source Nanogen
340	103EP Automated Molecular Biological Diagnostic System	EP0871888	Issued 6/17/99 Filed 9/6/95	Granted-	O'Melveny Nanogen
341	103C1US Control System for Active Programmable Electronic Microbiology System	US 6,582,660	Issued 7/10/02 Filed 5/20/97 Issued 6/24/03	Germany Granted	O'Melveny Nanogen O'Melveny
342	104US Methods for Hybridization Analysis Utilizing Electrically Controlled Hybridization	US 5,849,486	Filed 9/27/95 Issued 12/15/98	Granted	Nanogen O'Melveny
343	104AU Methods for Hybridization Analysis Utilizing Electrically Controlled Hybridization	AU 723134	Filed 9/6/96 Issued 11/30/00	Granted	Nanogen O'Melveny
344	104C1 Methods for Fingerprinting Utilizing an Electronically Addressable Array	US 6,245,508	Filed 8/27/98 Issued 6/12/01	Abandoned NC Granted	Nanogen O'Melveny
345	104C2US Apparatus for Active Programmable Matrix Devices	US 7,101,661	Filed 6/20/00 Issued 9/5/06	Granted	Nanogen O'Melveny
346	104C3US Apparatus and Methods for Active Programmable Matrix Devices	US 11/505,679 US-2007-0054299-A1	Filed 8/17/06	Published	Nanogen O'Melveny
347	105US Methods for Electronic Fluorescent Perturbation for Analysis and Electronic Perturbation Catalysis for Synthesis	US 6,048,690	Filed 5/14/97 Issued 4/11/00	Granted	Nanogen O'Melveny
348	105C3US Methods for Electronic Fluorescent	US-2007-0055453-A1	Filed 12/08/05	Abandoned	Nanogen

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REEL: 025690 FRAME: 0601

349	Perturbation for Sequence Analysis 106US Methods and Procedures for Molecular Biological Analysis and Diagnostics	US 6,051,380	Filed 12/5/97	Published Granted	O'Melveny Nanogen
350	106HK Self-Addressable Self-Assembling Microelectronic Integrated Systems, Component Devices, Mechanisms, Methods and Procedures for Molecular Biological Analysis and Diagnostics	HK 1034519	Issued 4/18/00 Filed 12/01/98 Issued 12/22/06	Abandon in due course Granted	O'Melveny Nanogen O'Melveny
351	<b>Title</b> 106C1US Method for Enhancing the Hybridization Efficiency of Target Nucleic Acids Using a Self-Addressable, Self- Assembling Microelectronic Device	<b>App/Patent No.</b> US 6,518,022	<b>Filing/Issuance Dates</b> Filed 11/22/99 Issued 2/11/03	<b>Status</b> Granted	<b>Source</b> Nanogen O'Melveny
352	106C3US Self-Addressable Self-Assembling Microelectronic Integrated Systems, Component Devices, Mechanisms, Methods and Procedures for Molecular Biological Analysis and Diagnostics	US 11/726,520 US-2007-0178516-A1	Filed 3/22/07	Published	Nanogen O'Melveny
353	107US Electronic Systems, Component Devices, Mechanisms, Methods, and Procedures for Macroscopic and Microscopic Molecular Biological Reactions, Analyses and Diagnostics	US 6,780,584	Filed 9/27/00 Issued 8/24/04	Granted	Nanogen O'Melveny
354	107D1US Electronic Systems and Component Devices for Macroscopic and Microscopic Molecular biological Reaction, Analyses, and Diagnostics	US 7,300,757	Filed 8/23/04 Issued 11/27/07	Granted	Nanogen O'Melveny
355	220C1US Self-Organizing Molecular Photonic Structures Based on Chromophore-and- Fluorophore-Containing Polynucleotides and	<b>PHOTONICS</b> US 5,532,129	Filed 5/27/94 Issued 7/2/96	Granted	Nanogen O'Melveny

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REEL: 025690 FRAME: 0602

356	Methods of Their Use 221US Hybridization of Polynucleotides Conjugated with Chromophores and Fluorophores to Generate Donor-to-Donor Energy Transfer System	US 5,565,322	Filed 5/5/94 Issued 10/15/96	Granted	Nanogen O'Melveny
357	<b>Title</b> 221C1US Hybridization of Polynucleotides Conjugated with Chromophores and Fluorophores to Generate Donor-to-Donor Energy Transfer System	<b>App/Patent No.</b> US 5,849,489	<b>Filing/Issuance Dates</b> Filed 8/23/96 Issued 12/15/98	<b>Status</b> Granted	<b>Source</b> Nanogen O'Melveny
358	221C2US Hybridization of Polynucleotides Conjugated with Chromophores and Fluorophores to Generate Donor-to-Donor Energy Transfer System	US 6,162,603	Filed 7/28/98 Issued 12/19/00	Granted	Nanogen O'Melveny
359	221C3US Hybridization of Polynucleotides Conjugated with Chromophores and Fluorophores to Generate Donor-to-Donor Energy Transfer System	US 6,416,953	Filed 11/28/00 Issued 7/9/02	Granted	Nanogen O'Melveny
360	221C4US Hybridization of Polynucleotides Conjugated with Chromophores and Fluorophores to Generate Donor-to-Donor Energy Transfer System	US 6,911,310	Filed 10/9/01 Issued 6/28/05	Granted	Nanogen O'Melveny
361	221C5US Hybridization of Polynucleotides Conjugated with Chromophores and Fluorophores to Generate Donor-to-Donor Energy Transfer System	US 11/170,514	Filed 6/28/05	Pending	Nanogen O'Melveny
362	220EP Hybridization of Polynucleotides Conjugated with Chromophores and Fluorophores to Generate Donor-to-Donor Energy Transfer System	EP0620822	Filed 11/6/92 Issued 5/30/01	Granted- Germany, Spain, France, UK,	Nanogen O'Melveny

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	Optimization of Electronic Transportation and Hybridization Reactions		Issued 3/30/06		O'Melveny
374	241JP Methods and Materials for Optimization of Electronic Transportation and Hybridization Reactions	JP 2007-533704	Filed 9/23/05	Pending	Nanogen O'Melveny
	<b>Title</b>	<b>App/Patent No.</b>	<b>Filing/Issuance Dates</b>	<b>Status</b>	<b>Source</b>
		<b>FIRST GENERATION MICRO-ARRAY DEVICES</b>			
375	250US Multiplexed Active Biologic Array	US 5,965,452	Filed 7/9/96	Granted	Nanogen
376	250CN Multiplexed Active Biologic Array	CN 97196197.2	Issued 10/12/99 Filed 06/24/97	Abandoned	O'Melveny Nanogen
377	250KR Multiplexed Active Biologic Array	KR 545275	Issued 05/05/04 Filed 6/24/97	NC Granted Abandoned	O'Melveny Nanogen
378	250NZ Multiplexed Active Biologic Array	NZ 333947	Issued Filed 6/24/97	NC Granted Abandoned	O'Melveny Nanogen
379	250C1US Multiplexed Active Biologic Array	US 6,258,606	Issued 3/8/01 Filed 7/30/99	NC Granted Granted	O'Melveny Nanogen
380	250C2US Addressable Biologic Electrode Array	US 6,682,936	Issued 7/10/01 Filed 7/10/01	Granted	O'Melveny Nanogen
381	250C3US Multiplexed Active Biologic Array	US 6,867,048	Issued 1/27/04 Filed 5/7/02	Granted	O'Melveny Nanogen
382	250C4US Biologic Electrode Array with Integrated Optical Detector	US 7,045,097	Issued 3/15/05 Filed 5/7/02	Granted	O'Melveny Nanogen
383	250C5US Addressable Biologic Electrode Array	US 7,101,717	Issued 5/16/06 Filed 1/23/04	Granted	O'Melveny Nanogen
384	250C6US Multiplexed Active Biologic Array	US 7,150,997	Issued 9/5/06 Filed 3/15/05	Granted	O'Melveny Nanogen
385	250C7US Multiplexed Active Biologic Array	US 11/639,688 US-2007-0095671-A1	Issued 12/19/06 Filed 12/15/06	Published	O'Melveny Nanogen
386	251US Advanced Active Electronic Devices for Molecular Biological Analysis and	US 6,099,803	Filed 2/20/98 Issued 8/8/00	Granted	O'Melveny Nanogen O'Melveny

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387	Diagnosics 251C1US Electronic Device for Performing Active Biological Operations and Methods of Using Same	US 6,726,880	Filed 6/16/00 Issued 4/27/04	Granted	Nanogen O'Melveny
388	<b>Title</b> 252US Advanced Active Electronic Devices Including Collection Electrodes for Molecular Biological Analysis and Diagnostics	<b>App/Patent No.</b> US 6,225,059	<b>Filing/Issuance Dates</b> Filed 1/29/00 Issued 5/1/01	<b>Status</b> Granted	<b>Source</b> Nanogen O'Melveny
389	253US Multicomponent Devices for Molecular Biological Analysis and Diagnostics	US 6,068,818	Filed 1/29/99 Issued 5/30/00	Granted	Nanogen O'Melveny
390	253C1US Multicomponent Devices for Molecular Biological Analysis and Diagnostics	US 6,540,961	Filed 3/21/00 Issued 4/1/03	Granted	Nanogen O'Melveny
391	254US Method for Fabricating Multi-Component Devices for Molecular Biological Analysis and Diagnostics	US 6,254,827	Fled 1/29/99 Issued 7/3/01	Granted	Nanogen O'Melveny
392	255US Devices for Molecular Biological Analysis and Diagnostics Including Waveguides	US 6,315,953	Filed 1/29/99 Issued 11/13/01	Granted	Nanogen O'Melveny
393	255C1US Devices for Molecular Biological Analysis and Diagnostics Including Waveguides	US 6,821,729	Filed 9/12/01 Issued 11/23/04	Granted	Nanogen O'Melveny
394	256US Advanced Active Circuits and Devices for Molecular Biological Analysis and Diagnostics	US 6,331,274	Filed 1/29/99 Issued 12/18/01	Granted	Nanogen O'Melveny
395	256AU Advanced Active Devices and Methods for Molecular Biological Analysis and Diagnostics	AU 742960	Filed 02/11/99 Issued 5/2/02	Abandoned NC Granted	Nanogen O'Melveny
396	256D1US Systems and Methods for the Active Electronic Control of Biological Reactions	US 7,425,308	Filed 5/4/01 Issued 9/16/08	Granted	Nanogen O'Melveny
397	256D2US Circuits for the Control of Output Current in an Electronic Device for	US 7,241,419	Filed 5/4/01 Issued 7/10/07	Granted	Nanogen O'Melveny

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Performing Active Biological Operations

	Title	App/Patent No.	Filing/Issuance Dates	Status	Source
398	256D2C1US Circuits for the Control of Output Current in an Electronic Device for Performing Active Biological Operations	US 11,775,724 US-2008-0019872-A1	Filed 7/10/07	Published	Nanogen O'Melveny
<b>SECOND GENERATION MICRO-ARRAY DEVICES</b>					
399	260US Programmable Multiplexed Active Biologic Array	US 7,267,751	Filed 8/20/02 Granted 9/11/07	Granted	Nanogen O'Melveny
400	260C1US Programmable Multiplexed Active Biologic Array	US 2008-0110755A1	Filed 9/10/07	Published	Nanogen O'Melveny
<b>ANCILLARY DEVICES</b>					
401	270US Scanning Optical Detection System	US 6,309,601	Filed 5/1/97	Abandoned	Nanogen
402	271US Laminated Assembly for Active Bioelectronic Device	US 6,287,517	Issued 10/30/01 Filed 12/4/96	Granted Granted	O'Melveny Nanogen
403	271C1US Laminated Assembly for Active Bioelectronic Device	US 6,423,271	Issued 9/11/01 Filed 3/16/00	Granted	O'Melveny Nanogen
404	272US Stacked, Reconfigurable Microlaboratory	US 6,309,602	Issued 7/23/02 Filed 12/2/98	Granted Abandoned,	O'Melveny Nanogen
405	273US Electrophoretic Buss for Transport of Charged Materials in a Multi-Chamber System	US 6,375,899	Issued 10/30/01 Filed 12/2/98	Granted Granted	O'Melveny Nanogen
406	274US System Including Functionally Separated Regions in Electrophoretic System	US 6,319,472	Issued 4/23/02 Filed 12/2/98	Abandoned	O'Melveny Nanogen
407	275US Apparatus and Method for Real-time Configuration and Analysis in Detection System	US 6,638,482	Issued 11/20/01 Filed 12/2/98	Granted Granted	O'Melveny Nanogen
408	276US Integrated Portable Biological Detection System	US 6,403,367	Issued 10/28/03 Filed 12/22/99	Granted	O'Melveny Nanogen
409	276C1US Integrated Portable Biological Detection System	US 7,172,896	Issued 6/11/02 Filed 6/5/02 Issued 2/6/07	Granted	O'Melveny Nanogen O'Melveny

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	<b>Title</b>	<b>App/Patent No.</b>	<b>Filing/Issuance Dates</b>	<b>Status</b>	<b>Source</b>
410	276C2US Integrated Portable Biological Detection System	US2008-0047832-A1	Filed 2/5/07	Published	Nanogen
411	276AU Integrated Portable Biological Detection System	AU 2590/00	Filed 12/22/99 Issued	Abandoned NC Granted	O'Melveny Nanogen
412	276NZ Integrated Portable Biological Detection System	NZ 512087	Filed 12/22/99 Issued 9/8/03	Abandoned NC Granted	O'Melveny Nanogen
<b>PERMEATION LAYERS</b>					
413	280US Inorganic Permeation Layer for Micro-Electric Device	US 6,306,348	Filed 7/15/99	Abandoned	Nanogen
414	280AU Inorganic permeation Layer for Micro-Electric Device	AU 769715	Issued 10/23/01 Filed 1/30/02	Granted Abandoned	O'Melveny Nanogen
415	281US Biomolecular Attachment Sites on Microelectronic Arrays and Methods Thereof	US 09/410,368	Issued 5/20/04 Filed 9/30/99	NC Granted Abandoned	O'Melveny Nanogen
416	281C1US Biomolecular Attachment Sites on Microelectronic Arrays and Methods Thereof	US 11/777,919	Filed 7/13/07	Pending Published	O'Melveny Nanogen
417	281JP Biomolecular Attachment Sites on Microelectronic Arrays and Methods Thereof	US-2009-0069198-A1 JP 2001-526285	Filed 4/1/02	Pending	O'Melveny Nanogen
418	282US Methods for Molding and Grafting Highly Uniform Polymer Layers onto Electronic Microchips	US 6,524,517	Filed 12/15/99 Issued 2/25/03	Granted	Nanogen O'Melveny
419	283US Permeation Layer Attachment Chemistry and Method	US 6,303,082	Filed 12/15/99 Issued 10/16/01	Granted	Nanogen O'Melveny
420	283AU Permeation Layer Attachment Chemistry and Method	AU 43025/01	Filed 6/25/02	Abandoned NC Granted	Nanogen O'Melveny
421	283D1US Platinum Silicide Permeation Layer Attachment Chemistry and Method	US 6,838,053	Issued 1/20/05 Filed 8/3/01	Granted	Nanogen O'Melveny
422	284US Mesoporous Permeation Layers for Use on Active Electronic Matrix Devices	US 6,960,298	Issued 1/4/05 Filed 12/10/01 Issued 11/1/05	Granted	Nanogen O'Melveny
	<b>Title</b>	<b>App/Patent No.</b>	<b>Filing/Issuance Dates</b>	<b>Status</b>	<b>Source</b>

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423	284C1US Mesoporous Permeation Layers for Use on Active Electronic Matrix Devices	US 7,270,850	Filed 3/16/05 Issued 9/18/07	Granted	Nanogen O'Melveny
424	284C2US Mesoporous Permeation Layers for Use on Active Electronic Matrix Devices	US 11,855,374 US 2008-0063794-A1	Filed 9/14/07	Published	Nanogen O'Melveny
425	286US Compositions and Methods for Preserving Permeation Layers for Use on Active Electronic Matrix Devices	US 11,846,187 US 2008-00699962-A1	Filed 8/28/07	Published	Nanogen O'Melveny
426	286PCT Compositions and Methods for Preserving Permeation Layers for Use on Active Electronic Matrix Devices	PCT/US07/77188	Filed 8/30/07	Abandoned Pending	Nanogen O'Melveny
<b>SINGLE TANDEM REPEATS</b>					
427	300US Methods and Apparatus for Determination of Length Polymorphisms in DNA	US 6,207,373	Filed 2/25/98 Issued 3/27/01	Granted	Nanogen O'Melveny
428	300EP Methods and Apparatus for Determination of Length Polymorphisms in DNA	EP 1056887	Filed 08/25/00 Issued 05/31/06	Granted, France, Germany, Italy	Nanogen O'Melveny
429	300C1US Methods and Apparatus for Determination of Length Polymorphisms in DNA	US 6,395,493	Filed 8/24/00 Issued 5/28/02	Granted	Nanogen O'Melveny
430	300C2US Methods and Apparatus for Determination of Length Polymorphisms in DNA	US 6,753,148	Filed 2/28/02 Issued 6/22/04	Granted	Nanogen O'Melveny
<b>SINGLE NUCLEOTIDE POLYMORPHISMS</b>					
431	312US Methods for Determination of Single Nucleic Acid Polymorphisms Using a Bioelectronic Microchip	US 6,468,742	Filed 4/12/99 Issued 10/22/02	Granted	Nanogen O'Melveny
432	312AU Methods for Determination of Single Nucleic Acid Polymorphisms Using a	App/Patent No. AU 769929	Filing/Issuance Dates Filed 3/28/00 Issued	Status Abandoned NC Granted	Source Nanogen O'Melveny

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433	Bioelectronic Microchip 312C1US Methods for Determination of Single Nucleic Acid Polymorphisms Using a Bioelectronic Microchip	US 2003-0073122-A1	Filed 9/16/02	Pending	Nanogen O'Melveny
434	312C2US Methods and Apparatus for Screening and Detecting Multiple Genetic Mutations	US 10/627,950	Filed 7/24/03	Pending	Nanogen O'Melveny
<b>GENE EXPRESSION</b>					
435	320US Improved Methods for Gene Expression Monitoring on Electronic Microarrays	US 6,379,897	Filed 11/9/00 Issued 4/30/02	Granted	Nanogen O'Melveny
436	320D2US Improved Quantitative Analysis Methods on Active Electronic Microarrays	US 6,492,122	Filed 10/10/01 Issued 12/10/02	Granted	Nanogen O'Melveny
<b>STRAND DISPLACEMENT AMPLIFICATION</b>					
437	331US Anchored Strand Displacement Amplification on an Electronically Addressable Microchip	US 6,531,302	Filed 4/12/99 Issued 3/11/03	Will let go abandoned but granted till 5/12/10	Nanogen O'Melveny
438	332US Electronically Mediated Nucleic Acid Amplification in Nasba	US 6,326,173	Filed 4/12/99 Issued 12/4/01	Abandoned Granted	Nanogen O'Melveny
439	332C1US Electronically Mediated Nucleic Acid Amplification in NASBA	US 7,070,961	Filed 10/9/01 Issued 7/4/06	Granted	Nanogen O'Melveny
440	333US Multiplex Amplification and Separation of Nucleic Acid Sequences Using Ligation-Dependant Strand Displacement Amplification and Bioelectronic Chip Technology	US 6,238,868	Filed 4/12/99 Issued 5/29/01	Granted	Nanogen O'Melveny
<b>Table Headers:</b>					
	<b>Title</b>	<b>App/Patent No.</b>	<b>Filing/Issuance Dates</b>	<b>Status</b>	<b>Source</b>
441	333D1US Multiplex Amplification and Separation of Nucleic Acid Sequences Using Ligation-Dependant Strand Displacement	US 6,864,071	Filed 5/25/01 Issued 3/8/05	Granted	Nanogen O'Melveny

	Amplification and Bioelectronic Chip Technology								
442	335US Multiplex Amplification and Separation of Nucleic Acid Sequences on a Bioelectronic Microchip Using Asymmetric Structures	US 6,309,833	Filed 4/12/99 Issued 10/30/01	Abandoned Granted	Nanogen O'Melveny				
443	335D1US Multiplex Amplification and Separation of Nucleic Acid Sequences on a Bioelectronic Microchip Using Asymmetric Structures	US 6,589,742	Filed 9/17/01 Issued 7/8/03	Granted	Nanogen O'Melveny				
444	37610-519001US Methods for Rapid, Single-Step Strand Displacement Amplification of Nucleic Acids	US11/838,024 0096257	Filed 8/13/07	Published	Nanogen O'Melveny				
445	376210-519001EP Methods for Rapid, Single-Step Strand Displacement Amplification of Nucleic Acids	EP	Filed 2/9/09	Pending	Nanogen O'Melveny				
446	340US Topoisomerase Type II Gene Polymorphisms and Their Use in Identifying Drug Resistance and Pathogenic Strains of Microorganisms	US 7,135,283	Filed 11/17/98 Issued 11/14/06	Granted	Nanogen O'Melveny				
447	37610-520C01US Method for Detecting Large Mutations/Duplications Using Control Amplification Comparisons to Paralogous Genes	US 12/118,312 US-2009-0087846-A1	Filed 5/9/08	Published	Nanogen O'Melveny				
	<b>Title</b>	<b>App/Patent No.</b>	<b>Filing/Issuance Dates</b>	<b>Status</b>	<b>Source</b>				
448	401US Methods and Apparatus for the Electronic, Homogeneous Assembly and Fabrication of Devices	US 6,569,382	Filed 11/8/99 Issued 5/27/03	Granted	Nanogen O'Melveny				
449	401CA Methods and Apparatus for the	CA 2,389,314	Filed 4/24/02	Pending	Nanogen				

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450	Electronic, Homogeneous Assembly and Fabrication of Devices	EP 976960.5-2004	Filed 4/26/02	Published	Nanogen O'Melveny
451	401EP Methods and Apparatus for the Electronic, Homogeneous Assembly and Fabrication of Devices	JP 2001-537462	Filed 5/8/02	Pending	Nanogen O'Melveny
452	400US Methods for the Electronic Assembly and Fabrication of Devices	US 6,652,808	Filed 12/6/96 Issued 11/25/03	Granted	Nanogen O'Melveny
453	401C2US Methods for the Electronic, Homogeneous Assembly and Fabrication of Devices	US 11/401,713	Filed 4/11/06	Pending	Nanogen O'Melveny
454	400D1JP Affinity Based Self-Assembly Systems and Devices for Photonic and Electronic Application	JP 2007-203204	Filed 8/3/07	Pending	Nanogen O'Melveny
455	401C1US Methods for the Electronic, Homogeneous Assembly and Fabrication of Devices	US 7,060,224	Filed 1/6/03 Issued 6/13/06	Granted	Nanogen O'Melveny
456	402US Systems and Devices for Photoelectrophoretic Transport and Hybridization of Oligonucleotides	US 6,706,473	Filed 1/24/00 Issued 3/16/04	Granted	Nanogen O'Melveny
457	402C1US Systems and Devices for Photoelectronic Transport and Hybridization of Oligonucleotides	App/Patent No. US 10/772,744	Filing/Issuance Dates Filed 2/4/04	Status Pending	Source Nanogen O'Melveny
458	403CA Nanoscale Electronic Detection System	CA 2567114	Filed 5/27/05	Abandoned	Nanogen
459	403EP Nanoscale Electronic Detection System	EP05804857.0	Filed 5/27/05	Pending Abandoned Pending	O'Melveny Nanogen O'Melveny

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460	403JP	Nanoscale Electronic Detection System	JP 2007-515461	Filed 5/27/05	Pending	Nanogen O'Melveny
461	403KR	Nanoscale Electronic Detection System	KR 10-2006-7027434	Filed 12/27/06	Pending	Nanogen O'Melveny
462	406US	Electrode Based Patterning of Thin Film Self-Assembled Nano-Particles	US 11/233,486 US 2007-0138042-A1	Filed 9/21/05	Published	Nanogen O'Melveny
463	910US	System and Method for Searching and Processing Databases Comprising Named Annotated Text Strings	<b>MICRO ELECTROPHORESIS</b> US 6,249,784	Filed 5/19/99 Issued 6/19/01	Abandoned NC Granted	Nanogen O'Melveny
464	920C1US	Method for Reducing the Linear Dimension Necessary for High Resolution Electrophoretic Separation	US 6,013,166	Filed 4/27/94 Issued 1/11/00	Granted	Nanogen O'Melveny
465	920C2US	Method for Reducing the Linear Dimension Necessary for High Resolution Electrophoretic Separation	US 6,488,832	Filed 8/12/99 Issued 12/3/02	Granted	Nanogen O'Melveny
466	930US	Deoxyribonucleic Acid (DNA) Optical Storage Using Non-Radiative Energy Transfer Between a Donor Group, an Acceptor Group and a Quencher Group	<b>OPTICAL MEMORY</b> US 5,787,032	Filed 6/10/94 Issued 7/28/98	Granted	Nanogen O'Melveny
467	930JP	Deoxyribonucleic Acid (DNA) Optical Storage Using Non-Radiative Energy Transfer Between a Donor Group, an Acceptor Group and a Quencher Group	App/Patent No. JP 4026847	Filing/Issuance Dates Filed 6/7/95 Issued 10/19/07	Status Granted	Source Nanogen O'Melveny
468	930C1US	Optical Storage Device Utilizing Non-Radiative Energy Transfer	US 5,835,404	Filed 8/5/97 Issued 11/10/98	Granted	Nanogen O'Melveny
469	930C2US	DNA Optical Storage	US 6,067,246	Filed 8/5/98 Issued 5/23/00	Granted	Nanogen O'Melveny
470	930C3US	DNA Optical Storage	US 6,385,080	Filed 5/9/00	Granted	Nanogen

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Issued 5/7/02

Miscellaneous

471	054468-5005US Microstructure Apparatus and Method for Separating Differently Charged Molecules Using an Applied Electric Field	US 6,942,778	Filed 11/28/00 Issued 9/13/05	Abandoned NC Granted	Nanogen Morgan Lewis
472	054468-5005US01 Microstructure Apparatus and Method for Separating Differently Charged Molecules Using an Applied Electric Field	US 11/175,195	Filed 7/7/05	Published	Nanogen Morgan Lewis
473	8004US Isolation of Nucleic Acid Molecules Using Modified Solid Supports	US 12/221,750	Filed 8/5/08	Pending	Nanogen K&L/Gates
474	8004PC Isolation of Nucleic Acids Molecules Using Modified Solid Supports	PCT/US08/09427	Filed 8/5/08	Pending	Nanogen K&L/Gates
475	950US Apparatus and Method for Removing Small Molecules and Ions from Low Volume Biological Samples	US 6,284,117	Filed 12/22/99 Issued 9/4/01	Granted	Nanogen O'Melveny
476	37610-511001US Counter-Centrifugal Force Device	US 12/233,935	Filed 9/19/08	Pending	Nanogen Mintz Levin
477	<b>Title</b> 37610-511001PCT Counter-Centrifugal Force Device	<b>App/Patent No.</b> US2008-007087	<b>Filing/Issuance Dates</b> Filed 9/19/08	<b>Status</b> Pending	<b>Source</b> Nanogen
478	Method of Extraction of Nucleic Acids and Extraction Solution to be Used in Such Method	IT 1308663	Filed 12/1/99	Granted	Mintz Levin Amplimedical Spa
479	Use of DMT Group and Method to Reveal or Separate Molecules Marked with DMT Group	IT 1307060	Issued 1/9/02 Filed 11/5/99	Published	Amplimedical Spa
480	37610-510001US Fluidic Volume Dispense Verification Tool	US 11/948,627 2008-0233009	Filed 11/30/07	Published	Nanogen Mintz Levin
481	37610-510001PCT Fluidic Volume Dispense Verification Tool	US2007/086055 WO2008/070548	Filed 11/30/07	Published	Nanogen Mintz Levin

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