

03-20-2000

FORM PTO-1595
1-31-92

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U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

Docket No. 247/184

101293105

To the Honorable Commissioner of Patents and Trademarks. Please receive 3 original documents or copy thereof.

1. Name of conveying party(ies):

Carl F. Edman, Michael J. Heller, Rachel Formosa and
Christian Gurtner

Additional name(s) of conveying party(ies) attached?

☐ Yes ☒ No

2. Name and address of receiving party:

Name: Nanogen, Inc.

Internal Address: _____

City: _____ State: _____ Zip: _____

Street Address: 10398 Pacific Center CourtCity: San Diego State: CA Zip: 92121

3. Nature of conveyance:

☒ Assignment☐ Merger☐ Security Agreement☐ Change of Name☐ Other _____Execution Date: February 7, 2000Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: February 7, 2000A. Patent Application No(s): 09/436,311

B. Patent No(s): _____

Additional numbers attached? ☐ Yes ☒ No

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

Name: David B. Murphy, Esq.Internal Address: LYON & LYON LLP633 West Fifth Street, Suite 4700
Los Angeles, CA 90071-20666. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41):

\$ 40.00

☒ Enclosed☐ Charge this Deposit Account if any additional fee is required8. Deposit Account Number: 12-2475

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9. Statement and signature:

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

David Murphy, Reg No. 31,125Date: March 8, 2000Total number of pages including cover sheet: 7

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

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Commissioner of Patents and Trademarks

Box Assignments

Washington, D.C. 20231

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ASSIGNMENT

WHEREAS, WE, CARL F. EDMAN, a citizen of the United States, residing at 12545-C El Camino Real, San Diego, California 92130; MICHAEL J. HELLER, a citizen of the United States, residing at 1614 Hawk View Drive, Encinitas, California 92024, RICHEL FORMOSA, a citizen of the United States, residing at 764 Tourmaline Street, San Diego, California 92109, and CHRISTIAN GURTNER, a citizen of the United States, residing at 8011 Paseo del Ocaso, (hereinafter referred to as "ASSIGNORS"), have invented and own a certain invention entitled *METHODS AND APPARATUS FOR THE ELECTRONIC, HOMOGENEOUS ASSEMBLY AND FABRICATION OF DEVICES* for which application for Letters Patent of the United States of America has been filed on November 8, 1999, assigned Serial No. 09/436,311; and

WHEREAS, NANOGEN, INC., a corporation organized and existing under and by virtue of the laws of the State of DELAWARE and having its principal place of business at 10398 Pacific Center Court, San Diego, California 92121 (hereinafter referred to as "ASSIGNEE"), is desirous of acquiring the exclusive right, title and interest in, to and under said invention and in, to and under any Patent or similar legal protection to be obtained therefor in the United States of America, its territorial possessions and in any and all countries foreign thereto.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNORS hereby sell, assign, transfer and set over unto the said ASSIGNEE, its successors and assigns, the full and exclusive right, title and interest to said invention and to all Letters Patent or application or similar legal protection, not only in the

United States and its territorial possessions, but in all countries foreign thereto to be obtained for said invention by said application, and to any continuation, division, renewal, substitute or reissue thereof or any legal equivalent thereof in the United States or a foreign country for the full term or terms for which the same may be granted, including all priority rights under the International Convention; and ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent or any legal equivalent thereof to said ASSIGNEE, its successors and assigns, in accordance with this Assignment.

ASSIGNORS hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this Agreement;

ASSIGNORS further covenant that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNORS and will testify as to the same in any interference or litigation related thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents in the United States or in any foreign country, which may be necessary or desirable to carry out the purposes thereof.

WITNESS my hand at San Diego, California, this
7 day of Feb., 2000.

Michael J. Heller
MICHAEL J. HELLER

STATE OF CALIFORNIA)
) ss
COUNTY OF SAN DIEGO)

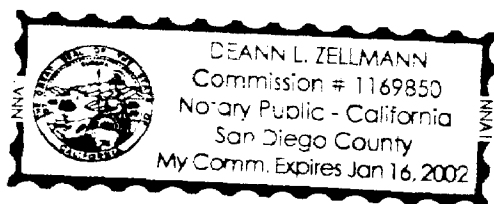
On 2/7/00 before me, DEANN L. ZELLMANN, personally appeared
MICHAEL J. HELLER

☐ personally known to me

- OR -

☒ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s)
is/are subscribed to the within instrument and acknowledged to me that he/she/they executed
the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the
instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the
instrument.

WITNESS my hand and official seal.



Deann L. Zellmann
Notary Public in and for said County and
State

WITNESS my hand at San Diego, California, this

seventh day of February, 2000.

C. G.
CHRISTIAN GURTNER

STATE OF CALIFORNIA)
) ss
COUNTY OF SAN DIEGO)

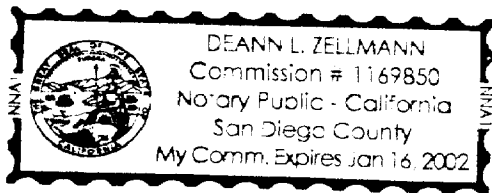
On 2/7/00 before me, DEANN L. ZELLMANN, personally appeared
CHRISTIAN GURTNER

☐ personally known to me

- OR -

☒ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s)
is/~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she/they~~ executed
the same in his/~~her/their~~ authorized capacity(ies), and that by his/~~her/their~~ signature(s) on the
instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the
instrument.

WITNESS my hand and official seal.



Deann L. Zellmann
Notary Public in and for said County and
State

WITNESS my hand at San Diego, California, this

Seventh day of February, 2000.

Rachel Formosa
RACHEL FORMOSA

STATE OF CALIFORNIA)
) ss
COUNTY OF SAN DIEGO)

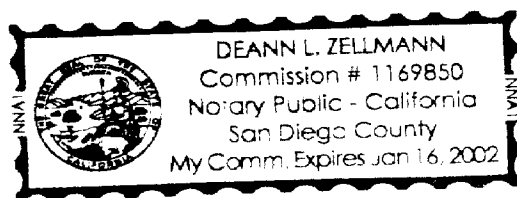
On 2/7/00 before me, DEANN L. ZELLMANN, personally appeared
RACHEL FORMOSA

☐ personally known to me

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the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the
instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the
instrument.

WITNESS my hand and official seal.



Deann L. Zellmann
Notary Public in and for said County and
State

WITNESS my hand at San Diego, California, this
7th day of February, 2000.

Carl F. Edman
CARL F. EDMAN

STATE OF CALIFORNIA)
) ss
COUNTY OF SAN DIEGO)

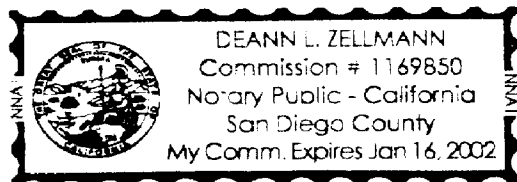
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CARL F. EDMAN

☐ personally known to me

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the same in his/~~her/their~~ authorized capacity(ies), and that by his/~~her/their~~ signature(s) on the
instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the
instrument.

WITNESS my hand and official seal.



Deann L. Zellmann
Notary Public in and for said County and
State