

Exhibit B

UNITED STATES DISTRICT COURT
DISTRICT OF NEW MEXICO

STC.UNM,

Plaintiff,

v.

INTEL CORPORATION,

Defendant.

Civil No. 10-CV-01077-RB-WDS

DECLARATION OF KEVIN W. BIEG IN RESPONSE TO THE COURT'S
LETTER TO THE PARTIES OF MAY 18, 2012 REQUESTING
DEVELOPMENT OF THE FACTUAL RECORD REGARDING SANDIA
CORPORATION'S OWNERSHIP INTEREST IN PATENT '321

I, Kevin W. Bieg, declare as follows:

1. I am a Senior Counsel employed by Sandia Corporation. I have personal knowledge of the matters set forth below and am competent to testify.
2. Sandia Corporation is a Delaware corporation and operator of Sandia National Laboratories under Contract Number DE-AC04-94AL8500 for the U.S. Department of Energy (DOE), with principal offices located in Albuquerque, New Mexico and other offices located in Livermore, California.
3. Sandia Corporation also does business as (d/b/a) Sandia National Laboratories. Any representations to the contrary are mistaken. Doing business under the name Sandia National Laboratories does not create a legal entity distinct from Sandia Corporation.
4. Sandia Corporation filed a Fictitious Business Name Statement stating that it is doing business as Sandia National Laboratories in December 20, 2007 in Alameda County, California, as required by Cal. BPC. Code § 17900. Attached hereto as Exhibit I is a copy of the Fictitious Business Name Statement File No. 404845. The State of New Mexico does not require a business to register an assumed business name.
5. Sandia National Laboratories is a federally registered trademark owned by the DOE. Attached hereto as Exhibits 2 and 3 are copies of the registration serial numbers

76674753 and 76674754 with the U.S. Patent and Trademark Office (USPTO). The DOE has given permission to Sandia Corporation to use the Sandia National Laboratories trademark for the duration of Sandia Corporation's contract with the DOE for the management and operation of Sandia National Laboratories.

6. Sandia Corporation is the real party in interest for the 20 patents identified in Vogt Dec. Ex. 7. The underlying inventor assignments for these patents identify Sandia Corporation as the assignee. The Recordation Cover Sheets used to transmit the assignment to the USPTO for these patents identifies the receiving party as Sandia National Laboratories. I believe the reason for this is that the Recordation Cover Sheet asks for a mailing address, and the addressee on the Sandia website is given as Sandia National Laboratories. <http://www.sandia.gov/contact-us/index.html>

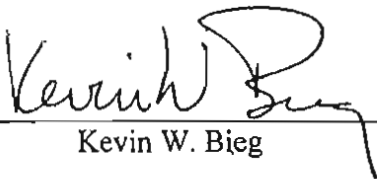
7. In June 1996, Bruce Draper, an employee of Sandia Corporation, mistakenly assigned his rights in the U.S. Patent Application SN 08/123,543 (the parent application of the invention disclosed and claimed in the continuation patent application SN 08/490,101 that issued as U.S. patent no. 5,705,321 - the '321 patent) to the University of New Mexico, as identified in Ferrall Dec. Ex. X. In October 1996, the University of New Mexico corrected the mistake by assigning Draper's interest in the U.S. Patent Application SN 08/123,543 to Sandia National Laboratories as identified in Ferrall Dec. Ex. Y. Because doing business under the name Sandia National Laboratories does not create a legal entity distinct from Sandia Corporation, the October 1996 assignment from the University of New Mexico to Sandia National Laboratories effectively operated to transfer ownership rights in the '321 patent to Sandia Corporation.

8. The Atomic Energy Act, 42 USC § 5908, is an automatic vesting statute that gives the Government title to inventions made or conceived in the course of or under Sandia's contract with DOE by operation of law (see *Bd. Of Trs. of the Leland Stanford Jr. Univ. v. Roche Molecular Sys., Inc.*, 131 S. Ct. 2196 (2011)). In May 1995, Sandia Corporation provided Notice of Election to Retain Title to Defense Invention Under Class Waiver W(C)91-004; S-79,030; (SD-5308) (i.e., the invention claimed the '321 patent) to DOE, identified as document nos. SNL00000195-200 and attached hereto as Exhibit 4. In June 1995, DOE approved Sandia Corporation's election to retain title to the above-identified invention, identified as document nos. SNL00000202-205 and attached

hereto as Exhibit 5. As a condition of the election, Sandia provided DOE with a Confirmatory License, attached hereto as Exhibit 6, which confirmed that Sandia Corporation granted to the Government a nonexclusive, nontransferable, irrevocable, paid up license to practice or have practiced for or on behalf of the United States the invention throughout the world.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct.

DATED: June 6, 2012


Kevin W. Bieg

Tri-Valley Herald

c/o ANG Newspapers
4770 Willow Road
Pleasanton, CA 94588
Legal Advertising
(800) 595-9595 opt.4

SANDIA NATIONAL LABORATORIES
P.O. BOX 5800, ATTN: CINDY WRIGHT, ACCTG
SERVICES
Albuquerque NM 87185-1382

PROOF OF PUBLICATION

FILE NO. 404845

In the matter of

SANDIA NATIONAL LABORATORIES

The undersigned deposes that he/she is the Public Notice Advertising Clerk of the TRI-VALLEY HERALD, a newspaper of general circulation as defined by Government Code Section 6000, adjudicated as such by the Superior Court of the State of California, County of Alameda (Order Nos. 205 370 AND 240 625), which is published and circulated daily in said county and state.

The PUBLIC NOTICE

was published in every issue of the TRI-VALLEY HERALD on the following date(s):

1/20/2008, 1/27/2008, 2/3/2008, 2/10/2008

I certify (or declare) under the penalty of perjury
that the foregoing is true and correct.

Public Notice Advertising Clerk

Legal No. 0000839989

FICTITIOUS BUSINESS
NAME STATEMENT
FILE NO. 404845

The following person is doing business
as:

SANDIA NATIONAL LABORATORIES,
7011 East Avenue, Livermore, CA 94550;
Mailing address: P.O. Box 5800, Albuquerque,
NM 87185-1832

Sandia Corporation, 7011 East Avenue,
Livermore, CA 94550

This business is conducted by: a Delaware
corporation.

The registrant commenced to transact
business under the fictitious business name
or names listed above on August 13, 1985.

SANDIA CORPORATION
JENNIFER S. CROOKS,
Assistant Treasurer

THIS STATEMENT WAS FILED WITH THE
COUNTY CLERK-RECORDER OF ALAMEDA
COUNTY ON December 20, 2007, 2007.

Tri-Valley Herald, #839989
January 20, 27;
February 3, 10, 2008

ENDORSED
FILED
ALAMEDA COUNTY

FEB 11 2008

PATRICK O'CONNELL, County Clerk
By _____ Deputy

EXHIBIT

tabbles



1 This report is mandatory under Section 320.5 of the California Unemployment Insurance Code and Section 320-1 Title 22 of the California Code of Regulations, and is authorized by law, 29 U.S.C. 2. Your cooperation is needed to make the results of this survey complete, accurate, and timely.

2 The questions on this form concern the work location(s) using Unemployment Insurance account number **0529831** IN CALIFORNIA.

SANDIA NATIONAL LABORATORIES
SANDIA CORPORATION
BX 5800
ALBUQUERQUE NM 87185

3 We need the name and direct mailing address for the business using this Unemployment Insurance account, regardless of who prepares this form. This information does not affect mailings for tax purposes. Are the name and mailing address shown in Item 2 correct for the business using this Unemployment Insurance account?

☒ YES ☐ NO ... Please print corrections or additions to the right of the printed address in Item 2.

☐ COMPANY PERMANENTLY OUT OF BUSINESS OR MOVED OUT OF CALIFORNIA

Enter date closed or moved: _____ SKIP to Item 9 on the back of this form

4 In addition to your mailing address, please tell us where your business is physically located (street and number). The physical location address is the place where you conduct your business and receive deliveries, so it cannot be a Post Office Box or a rural route number. Our records show that this business in California is physically located at:

7011 EAST AVENUE
LIVERMORE, CA 94550

7011 EAST AVENUE
LIVERMORE, CA 94551

Is this address correct for the location in California?

☐ YES--> Continue with Item 5

☒ NO --> Please make changes to the right of the address here, in Item 4. Continue with Item 5

5 Is the following information correct for the address in Item 4? CALIFORNIA COUNTY: ALAMEDA

☒ YES...Continue with Item 6

☐ NO... Please print corrections in this space and then continue with Item 6

6 According to our records, the business operating under Unemployment Insurance account 0529831 in California mainly provides goods and services to the general public. Is this correct? ("The general public" includes individual consumers, other businesses, and organizations.)
PRIMARY CUSTOMER IS THE U.S. GOVERNMENT, NOT INDIVIDUAL CUSTOMERS

☐ YES, we MAINLY provide goods or services to the general public

☐ NO, we are part of a larger company and we MAINLY support other locations of OUR company

7 Does this business have a website? ☒ YES ...Please enter your website address here: WWW.SANDIA.GOV ...Continue with Item 8

☐ NO ...Continue with Item 8

8 Does the business using Unemployment Insurance account 0529831 IN CALIFORNIA have only one physical location in this state? (Do not count client sites or offsite projects that will last less than a year.)

☒ YES (One physical location) ...Continue with Item 9 on the back

☐ NO (More than one physical location) ...Please attach a separate sheet. For each site, (1) list physical location address, (2) show number of employees, and (3) answer Items 6 and 9-11. Continue with Item 9.

PLEASE CONTINUE WITH ITEM 9 ON THE BACK OF THIS PAGE.

OFFICE USE FY07 11/29/06

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9

Our records show that the *main* activity of the business using U.I. number
0529831 IN CALIFORNIA IS:

Please provide estimated percentages of your business activity for the following:

Research and development in biotechnology.

7 %

Research and development in the physical, engineering, and
life sciences (other than biotechnology research and development).

93 %

DOES NOT INCLUDE providing physical, chemical, or other analytical testing services, providing
medical laboratory testing for humans, and providing veterinary testing services.

Other business activities (list in Box 11 below).

_____ %

541710

10

While you may not do everything listed above, does the information in Item 9 accurately describe the *main* business in CALIFORNIA during the past 12 months? (If the business has been closed, sold, or moved out of this state, please answer in terms of its former activity.)

- ☒ YES ... Please **SKIP** to Item 12
☐ NO Continue with Item 11

11

We need detailed information to assign the correct Industry code to this business. In the space provided below, describe your main business activities, goods, products, or services in this state, as though you were telling a prospective employee what you do. Then give us the approximate percentage of sales or revenues resulting from each item. See examples below. Percentages should total 100%. If you are a third party agent for the business named in Item 2, such as a payroll service or accountant, please review Items 9-11 with your client.

Goods or Products: What are they, and what do you do with them? Do you design, manufacture, sell directly to customers, distribute to wholesalers, install, repair, or do something else with them? What are these goods or products made of?

EXAMPLE 1: Major appliances: Sell to public 40%; Sell to retailers 30%; Repair 30% EXAMPLE 2: Install fiber optic cable 100%

Manufacturers: What are your main products? What are your most important materials? What are the main production methods?

EXAMPLE: Weaving cotton broadwoven fabrics 80%; Spinning cotton threads 20%

N/A **Services:** Describe in detail the services you provide. To whom do you provide those services? If you offer consulting, brokerage, management, or similar services, what are your major activities?

EXAMPLE 1: Hair cutting & styling 65%; Manicures 25%; Facials 10% EXAMPLE 2: Long distance trucking, less than truckload 100%

EXAMPLE 3: Marketing consulting: Planning strategy 60%; Sales forecasting 40% EXAMPLE 4: Cleaning private homes 100%

Construction or Building Trades: Is the work mostly residential or nonresidential? Single- or multi-family? New or remodeling?

EXAMPLE: Electrical contractor: Wiring new homes 51%; Electrical refurbishing of office buildings 49%

List most

important

activities

PLEASE PRINT CLEARLY

100%

12

Please provide a contact for us if we have questions about this report. (Please print)

Name: CINDY BURNS

Phone: (505) 844-3741

Date: 1/15/07

Title: _____

Fax: (505) 844-9845

If you are a third party agent, such as an accounting firm or payroll service, check here. ☐ Please be sure to answer Items 9-11.

13

Please place your completed form in the postage paid envelope provided and return it to the address in Item 14 within 14 days. Thank you for your cooperation!

14

For questions concerning this form, contact:

California Employment Development Department
Labor Market Information Division
P.O. Box 1881
Sacramento, CA 95812-1881
(916) 262-1855 or 1-800-562-3366

Purpose and Use: The purpose of this report is to update information on your products or services. The information will be used to ensure that we assign the correct North American Industry Classification System (NAICS) code to this business location, and that our records contain the correct name and address. The information collected on this form by the Bureau of Labor Statistics and the State agencies cooperating in its statistical programs will be used for statistical and Unemployment Insurance program purposes, and other purposes in accordance with law.

Time of Completion: Time of completion is estimated to vary from 2 to 30 minutes with an average of 5 minutes per form. This estimate includes time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this information. If you have any comments regarding these estimates, or any other aspect of this survey, send them to the Bureau of Labor Statistics, Division of Administrative Statistics and Labor Turnover (NVS), Room 4840, 2 Massachusetts Avenue N.E., Washington, D.C. 20212. You are not required to respond to the collection of information unless it displays a currently valid OMB number.



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Sandia National Laboratories

Word Mark**SANDIA NATIONAL LABORATORIES****Goods and Services**

IC 045. US 100 101. G & S; security services, namely ensuring nuclear weapon stockpile is secure; civil protection, namely enhancing the surety of energy and other critical infrastructure; security services, namely planning strategizing, and supervising the nonproliferation of weapons of mass destruction, the threat of nuclear accidents, and damage to the environment; security services, namely assessment of threats to national security; security services, namely homeland security. FIRST USE: 19791220. FIRST USE IN COMMERCE: 19791220

Mark Drawing Code

(3) DESIGN PLUS WORDS, LETTERS, AND/OR NUMBERS

Design Search Code

03.15.19 - Birds or bats in flight or with outspread wings
 03.15.24 - Stylized birds and bats
 03.15.25 - Cardinals; Crows; Doves; Other birds; Pigeons; Ravens; Robins; Woodpeckers
 26.09.02 - Plain single line squares; Squares, plain single line

Trademark Search Facility Classification Code

GROT-BIRD Exaggerated depiction of a bird
 SHAPES-MISC Miscellaneous shaped designs
 SHAPES-OVALS Oval figures or designs including incomplete ovals and one or more ovals

Serial Number 76674753**Filing Date** March 29, 2007**Current Basis** 1A**Original Filing Basis** 1A**Published for Opposition** March 18, 2008

Registration Number 3438725
Registration Date June 3, 2008
Owner (REGISTRANT) United States Department of Energy FEDERAL AGENCY UNITED STATES 1000 Independence Avenue, S.W. Washington D.C. 20585
Attorney of Record Annette Reimers
Disclaimer NO CLAIM IS MADE TO THE EXCLUSIVE RIGHT TO USE "NATIONAL LABORATORIES" APART FROM THE MARK AS SHOWN
Description of Mark Color is not claimed as a feature of the mark. Stylized thunderbird with "SANDIA NATIONAL LABORATORIES" a vertical format.
Type of Mark SERVICE MARK
Register PRINCIPAL
Live/Dead Indicator LIVE

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Sandia National Laboratories

Word Mark

SANDIA NATIONAL LABORATORIES

Translations

The wording "SANDIA" has no meaning in a foreign language

Goods and Services

IC 045. US 100 101. G & S: Security services, namely, ensuring nuclear weapon stockpile is secure; Civil protection, namely, enhancing the surety of energy and other critical infrastructure; Security services, namely, planning, strategizing, and supervising the nonproliferation of weapons of mass destruction, the threat of nuclear accidents, and damage to the environment; Security services, namely, assessment of threats to national security; Security services, namely, Homeland Security. FIRST USE: 19791220. FIRST USE IN COMMERCE: 19791220

Mark Drawing Code

(3) DESIGN PLUS WORDS, LETTERS, AND/OR NUMBERS

Design Search Code

03.15.19 - Birds or bats in flight or with outspread wings
 03.15.24 - Stylized birds and bats
 03.15.25 - Cardinals; Crows; Doves; Other birds; Pigeons; Ravens; Robins; Woodpeckers
 26.09.02 - Plain single line squares; Squares, plain single line

Trademark Search Facility Classification Code

GROT-BIRD Exaggerated depiction of a bird
 SHAPES-GEOMETRIC Geometric figures and solids including squares, rectangles, quadrilaterals and polygons
 SHAPES-MISC Miscellaneous shaped designs

Serial Number

76674754

Filing Date

March 29, 2007

Current Basis

1A

Original Filing Basis

1A



Published for Opposition April 1, 2008
Registration Number 3447321
Registration Date June 17, 2008
Owner (REGISTRANT) United States Department of Energy FEDERAL AGENCY UNITED STATES 1000 Independence Avenue, S.W. Washington D.C. 20585
Attorney of Record Linda P. Field
Disclaimer NO CLAIM IS MADE TO THE EXCLUSIVE RIGHT TO USE "NATIONAL LABORATORIES" APART FROM THE MARK AS SHOWN
Description of Mark Color is not claimed as a feature of the mark. The mark consists of a Stylized thunderbird with "SANDIA NATIONAL LABORATORIES" a vertical format.
Type of Mark SERVICE MARK
Register PRINCIPAL
Live/Dead Indicator LIVE

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Sandia National Laboratories

operated by Sandia Corporation
a Lockheed Martin Company
Albuquerque, New Mexico 87185
Patent & Licensing Center 11500

date: May ²³19, 1995

to: James H. Chafin, Patent Counsel
DOE/AL - Mail Stop 1396

from: *Gregory A. Cone*
Gregory A. Cone, Mail Stop 0161

subject: Notice of Election to Retain Title to Defense Invention Under Class
Waiver W(C)91-004; S-79,030; (SD-5308)

Attached are the original and one copy of Sandia Corporation's Notice of Election to Retain Title to the referenced Defense Program Subject Invention under Class Waiver W(C)91-004.

Note: The first three-named inventors are associated with UNM whose work was performed under AFOSR Contract No. F49620-89-C-0028. It is Sandia's understanding that on September 20, 1993, UNM filed its own patent application. It is further Sandia's understanding that ownership will be shared with Sandia in view of [Sandia] inventor Bruce Draper's contribution. Should DOE grant this request for waiver, Sandia intends to enter into an agreement with UNM to allow UNM to be the exclusive licensing agent for this invention.

GAC:11500;brr

attachments

Copy to:
11500 Subject file

Exceptional Service in the National Interest



SNL00000195

NOTICE OF ELECTION TO RETAIN TITLE
TO THE FOLLOWING DEFENSE PROGRAM SUBJECT INVENTION
UNDER CLASS WAIVER W(C)91-004

DOE No.: S-79,030 (SD-5308)
Date Reported to DOE: July 19, 1993
Title: METHOD FOR FABRICATION OF QUANTUM WIRES AND
QUANTUM DOTS
First Inventor's Name: Bruce L. Draper*
B&R Code: GB0103
DOE Program Official: Assistant Secretary for Defense Programs

*The first three-named inventors are associated with UNM whose work was performed under AFOSR Contract No. F49620-89-C-0028.

A copy of the Subject Invention disclosure is attached.

Sandia Corporation hereby elects to retain title to the Subject Invention, under the terms and conditions of the Statement of Considerations of Class Waiver W(C)91-004 in the United States and in the following foreign countries:

None.

Sandia Corporation hereby represents that it has conducted a reasonable internal inquiry and, as a result, it has determined that the Subject Invention falls within the Class Waiver. Sandia Corporation has further determined that the invention does not fall within international agreements or treaties of the U.S. Government.

Sandia Corporation further represents that it will attempt to commercialize the invention through its licensees within five years from the time this election is effective. ¹ Sandia Corporation agrees to file, prosecute, and maintain those patent applications and issued patents on the Subject Invention which are necessary to effectively fulfill its obligations under the subject Class Waiver and the Technology Transfer Clause contained in the Sandia Corporation management and operating contract entered into with the Department of Energy (DOE).

Sandia Corporation further represents that it has determined that the technology is exportable under General license to all country groups except S, and Z as set forth in Commodity Control List Category No. 3E96G. Sandia Corporation further represents that it will inform all licensees of any requirements or limitations on export of the technology.

23m ✓

In making its determination that the Subject Invention falls within the subject Class Waiver, Sandia Corporation has concluded, through its program, classification, nuclear weapons program office, and technology transfer offices that national security will not be compromised by the development, commercialization or licensing activities involving the invention; that no sensitive technical information (classified or unclassified) under any of DOE's programs will be released to unauthorized persons; that the dissemination of the technology does not contribute to the proliferation of nuclear weapons; and that there will be no adverse effect on the operation of the Naval Nuclear Propulsion Program or the Nuclear Weapons Program or other defense activities of DOE by Sandia Corporation taking title.

Sandia Corporation has provided for the following safeguards for the protection of national security while commercializing the subject matter of this invention:

Sandia has long-standing, resident expertise in security matters concerning weapons research and development. It has implemented well-developed procedures that minimize the possibility of any compromise of information from a national security perspective.

Uniform arrays of quantum-wire structures in both silicon and III-V semiconductor materials have been fabricated by a simple interferometric technique - dubbed fine-line interferometric lithography. Nonlinearities in the exposure, development, and etch processes are exploited to make a periodic grating structure with very narrow lines, much smaller than the limit imposed by the linear variation of the aerial image of the optical intensity on the footrests (one quarter optical wavelength). In addition, advantage is taken of the highly anisotropic etching of <110> silicon to fabricate structures with very high aspect ratios (Over 100:1, depth/width), and nearly atomically smooth sidewalls.

While the subject invention was funded by Defense Programs it is so unrelated to weapons or weapons application as attested by the Weapons Review and approval dated January 27, 1994.

Furthermore, it is believed that this invention could have non-defense applications, for example, in both government laboratories and industrial laboratories involved in materials studies. It could eventually also be utilized by commercial analytical laboratories as well as forensic laboratories.

In addition, the subject invention will be subject to the rigorous investigation conducted by the technology transfer organization of all potential licensees

and/or prospective users of any of Sandia Corporation's technology before commercialization rights are extended.

Therefore, commercialization of this invention should not adversely impact national security, but should permit the promotion of technology development by Sandia in cooperation with DOE.

Sandia Corporation understands that an election of Defense Programs funded inventions is not effective until approval by the DOE Patent Counsel and concurrence by the Defense Programs Field Review Official are obtained.

CONCURRENCE:

G. Stanley Hearron
Defense Programs

Date: _____

APPROVAL:

James H. Chafin
Assistant Chief Counsel for
Intellectual Property

Effective Date: _____

GAC:11500:brr
Copy to:
11500 Subject File

REPRESENTATIONS FOR CLASS WAIVER OF SANDIA INVENTION (06/25/93-1)

(Please sign only if you agree with the statements in the box for your organization.)

Sandia SD- 5308

DOE S- 79,030

First Named Inventor: Bruce L. Draper

Case No.: 7057.000 [PROGRAM] DP

B&R No: GB0103 [PATENTS]

(1) Based on my understanding of how this invention will be implemented, in accordance with Commerce Control List No. 3E.966, October 1992, this invention appears to be exportable under general license to all country groups except SZ. (Groups: Q - Romania; S - Libya; T - Central, South America; V - Africa, Europe, Mid and Near East, Australia, W - Poland, Hungary; Y - (Former) Soviet Union; Z - No. Korea, Cuba). [CLASSIFICATION or PATENTS]

(2) Export of this invention DOES DOES NOT [Select One] require an export license from the Department of State for export in accordance with the International Traffic in Arms Regulations (22 CFR 120-130). [CLASSIFICATION or PATENTS]

(3) This invention is not covered by an existing class waiver granted by DOE to third parties such as work for others. [PATENTS]

(4) Sandia will file prosecute and maintain any and all patent applications and issued patents on the subject invention necessary to effectively carry out Sandia's obligations under the Class Waiver and the Technology Transfer Agreement with DOE of January 15, 1991. [PATENTS]

(5) This invention WAS WAS NOT [Select One] funded by DOE Defense Program money. [PATENTS]

PATENTS AND LICENSING:

(signed)

George H. Libman
Printed Name and Organization

11500

Date

(6) No aspect of the program under which this invention was developed or will be used is classified.

(7) Sensitive technical information (classified or unclassified) for which dissemination is controlled under Federal Statutes and Regulations will not be released to unauthorized persons.

(8) It is my considered opinion that failure by DOE to retain title in this invention will not adversely affect the operation of any DOE defense activities.

(9) This invention does not come within the ambit of International agreements or treaties of the United States known to Sandia.

PROGRAM OFFICE:

(signed)

Ron V. Jones, 1323
Printed Name and Organization

Date

(10) It is my considered opinion that the availability of the technology of the disclosed invention will have a negligible effect on the proliferation of nuclear weapons.

(11) This invention does not relate to naval nuclear propulsion; uranium enrichment (including isotope separation) or storage and disposal of either civilian high level nuclear waste or spent nuclear fuels.

(12) THIS INVENTION DISCLOSURE IS UNCLAS [Enter Classification]. Information concerning this invention IS NOT [Select One] sensitive under Section 148 of the Atomic Energy Act of 1954 as amended.

(13) It is my considered opinion that National Security WILL NOT be compromised by development, commercialization, or licensing activities involving this invention.

CLASSIFICATION:

(signed)

W. H. Plummer Jr. 7180
Printed Name and Organization

Date

(14) Sandia will attempt to commercialize this invention within five years from the time the election of title is effective.

TECHNOLOGY TRANSFER:

(signed)

A. Salamone
Printed Name and Organization

4212

Date

WEAPONS REVIEW FOR CLASS WAIVER OF SANDIA INVENTION (11/19/92-1)
(Please sign only if you agree with the statements in the box for your organization.)

Sandia SD- 5308 DOE S- 79,030 First Named Inventor: Bruce L. Draper

Case No.: 7057.000 [PROGRAM] B&R No: GB0103 [PATENTS]

It is my considered opinion that the availability of the technology of the disclosed invention will have a negligible effect on the proliferation of nuclear weapons.

WEAPON REVIEW:

C.C. Burks
(signed)

C.C. BURKS-5203
Printed Name and Organization

1/27/94
Date

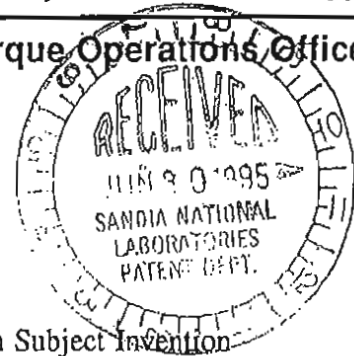
This form is to be transmitted to DOE/AL as an attachment to Representations For Class Waiver of Sandia Invention.

United States Government

Department of Energy

memorandum

Albuquerque Operations Office



DATE: June 29, 1995

REPLY TO
ATTN OF: PAT:SUBJECT: Notice of Election to Retain Title to the Following Defense Program Subject Invention
Under Class Waiver W(C)91-004, S-79,030 (SD-5308).

TO: K. C. Olsen, Patent Counsel, Org. 11500, MS0161, SNL/NM

Your election to retain title to the above-identified inventions has been approved.
Attached hereto is a fully executed copy of your Notice of Election.

Please send to this office a Confirmatory License in triplicate setting forth the terms and conditions of the election. For each patent application filed on the above invention, please complete and execute the Confirmatory License in triplicate and forward it to this office for recording in the U.S. Patent and Trademark Office. Please also notify this office of any foreign filing as it occurs and furnish a suitable Confirmatory License for each such filing.

If this office can be of any further assistance, please contact the undersigned at
(505) 845-6664.

Russell D. Elliott
Patent Attorney

Attachment

cc w/attachment:
GC-62, HQ

Printed on recycled paper



SNL00000202

JSm ✓

NOTICE OF ELECTION TO RETAIN TITLE
TO THE FOLLOWING DEFENSE PROGRAM SUBJECT INVENTION
UNDER CLASS WAIVER W(C)91-004

DOE No.: S-79,030 (SD-5308)
Date Reported to DOE: July 19, 1993
Title: METHOD FOR FABRICATION OF QUANTUM WIRES AND
QUANTUM DOTS
First Inventor's Name: Bruce L. Draper*
B&R Code: GB0103
DOE Program Official: Assistant Secretary for Defense Programs

*The first three-named inventors are associated with UNM whose work was performed under AFOSR Contract No. F49620-89-C-0028.

A copy of the Subject Invention disclosure is attached.

Sandia Corporation hereby elects to retain title to the Subject Invention, under the terms and conditions of the Statement of Considerations of Class Waiver W(C)91-004 in the United States and in the following foreign countries:

None.

Sandia Corporation hereby represents that it has conducted a reasonable internal inquiry and, as a result, it has determined that the Subject Invention falls within the Class Waiver. Sandia Corporation has further determined that the invention does not fall within international agreements or treaties of the U.S. Government.

Sandia Corporation further represents that it will attempt to commercialize the invention through its licensees within five years from the time this election is effective. Sandia Corporation agrees to file, prosecute, and maintain those patent applications and issued patents on the Subject Invention which are necessary to effectively fulfill its obligations under the subject Class Waiver and the Technology Transfer Clause contained in the Sandia Corporation management and operating contract entered into with the Department of Energy (DOE).

Sandia Corporation further represents that it has determined that the technology is exportable under General license to all country groups except S, and Z as set forth in Commodity Control List Category No. 3E96G. Sandia Corporation further represents that it will inform all licensees of any requirements or limitations on export of the technology.

USM

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In making its determination that the Subject Invention falls within the subject Class Waiver, Sandia Corporation has concluded, through its program, classification, nuclear weapons program office, and technology transfer offices that national security will not be compromised by the development, commercialization or licensing activities involving the invention; that no sensitive technical information (classified or unclassified) under any of DOE's programs will be released to unauthorized persons; that the dissemination of the technology does not contribute to the proliferation of nuclear weapons; and that there will be no adverse effect on the operation of the Naval Nuclear Propulsion Program or the Nuclear Weapons Program or other defense activities of DOE by Sandia Corporation taking title.

Sandia Corporation has provided for the following safeguards for the protection of national security while commercializing the subject matter of this invention:

Sandia has long-standing, resident expertise in security matters concerning weapons research and development. It has implemented well-developed procedures that minimize the possibility of any compromise of information from a national security perspective.

Uniform arrays of quantum-wire structures in both silicon and III-V semiconductor materials have been fabricated by a simple interferometric technique - dubbed fine-line interferometric lithography. Nonlinearities in the exposure, development, and etch processes are exploited to make a periodic grating structure with very narrow lines, much smaller than the limit imposed by the linear variation of the aerial image of the optical intensity on the footrests (one quarter optical wavelength). In addition, advantage is taken of the highly anisotropic etching of <110> silicon to fabricate structures with very high aspect ratios (Over 100:1, depth/width), and nearly atomically smooth sidewalls.

While the subject invention was funded by Defense Programs it is so unrelated to weapons or weapons application as attested by the Weapons Review and approval dated January 27, 1994.

Furthermore, it is believed that this invention could have non-defense applications, for example, in both government laboratories and industrial laboratories involved in materials studies. It could eventually also be utilized by commercial analytical laboratories as well as forensic laboratories.

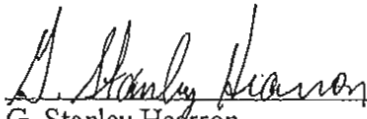
In addition, the subject invention will be subject to the rigorous investigation conducted by the technology transfer organization of all potential licensees

and/or prospective users of any of Sandia Corporation's technology before commercialization rights are extended.

Therefore, commercialization of this invention should not adversely impact national security, but should permit the promotion of technology development by Sandia in cooperation with DOE.

Sandia Corporation understands that an election of Defense Programs funded inventions is not effective until approval by the DOE Patent Counsel and concurrence by the Defense Programs Field Review Official are obtained.

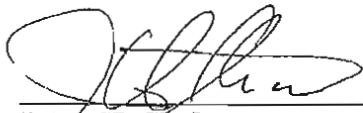
CONCURRENCE:



G. Stanley Hearron
Defense Programs, *AL*

Date: 6/27/95

APPROVAL:



James H. Chafin
Assistant Chief Counsel for
Intellectual Property

Effective Date: 6/27/95

GAC:11500:brr

Copy to:

11500 Subject File

JSMV

SNL00000205

United States Government

Department of Energy

memorandum

Albuquerque Operations Office

October 1, 1996

DATE:

REPLY TO
ATTN OF: PAT:AM

SUBJECT: Confirmatory License

TO: Paul Gottlieb, Asst. Gen. Cnsl. for Technology Transfer & Intellectual Property, GC-62
(FORSTL), DOE HQ

Attached is an original and one copy of a Confirmatory License in each of the following cases:

S-79,030 (SD-5308)



Armand McMillan
Patent Attorney

Attachments

cc w/o attachment:

Timothy D. Stanley, MS 0161, SNL/NM



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DMV

SNL00000235

CONFIRMATORY LICENSE

Application for: Method for Manufacture of Quantum Sized Periodic
Structures in Si Materials
Inventor(s): Steven R. J. Brueck, et al
Serial Number: 08/123,543
Filing Date: September 20, 1993
Contract No.: DE-AC04-94AL85000
Contractor: Sandia Corporation

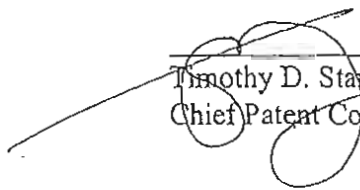
The invention identified above is a "Subject Invention" under the above-numbered contract. A copy of the provisions of the above-numbered contract certified on December 13, 1995. Governing patent rights in the Subject Invention at the time the invention was made, has been submitted to the U. S. Department of Energy.

The contractor hereby confirms that under the provisions of the above-numbered contract governing patent rights, it has granted to the Government a nonexclusive, nontransferable, irrevocable, paid up license to practice or have practiced for or on behalf of the United States the Subject Invention throughout the world. This license applies to the invention in the above-identified patent application and any and all divisions or continuations thereof and any resulting patent or reissue patent which may be granted thereon.

It is understood and agreed that this document does not preclude the Government from asserting rights under the provisions of said contract or any other agreement between the Government and the Contractor, or any other rights of the Government with respect to the above-identified invention.

The Contract hereby grants the Government an irrevocable power to inspect and make copies of the above-identified application.

Signed this 3 day of Sept, 1996



Timothy D. Stanley
Chief Patent Counsel

If the invention was made under a subcontract, please identify the Prime Contractor:

_____, Prime Contract No. _____

orig. + 2 9/3/96.
to D.E. dh