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RECORDATION FORM COVER SHEET (~ 4/ 3)/								
TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).								
Submission	Туре	Conveyance Typ						
✓ New	sion (Non-Recordation)	Assignment	Security Agre	ement				
Document		License	Change of Na	me				
Correction Reel #	n of PTO Error Frame #	Merger	L	irmatory L	License			
F	Document	- -	U.S. Government e ONLY by U.S. Governmen	nt Agencies)	i			
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Conveying F			names of conveying pa	arties attac	Month Day Year			
Name (line 1)	SCIENCE AND ENGINEERING ASS	OCIATES			5/2/2002			
Name (line 2) Second Party					Execution Date Month Day Year			
Name (line 1)								
Name (line 2)								
Receiving P	arty	M	ark if additional names	of receiving	g parties attached			
Name (line 1)	U. S. Department of Energy				If document to be recorded is an assignment and the			
Name (line 2)				7	receiving party is not domiciled in the United States, an appointment			
	of a domestic representative is attached.							
1	1000 Independence Avenue, S.W. (Designation must be a separate document from Assignment.)							
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Mail documents to be recorded with required cover sheet(s) information to:

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OMB 0651-0027					

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U.S. Department of Commerce Patent and Trademark Office PATENT

		PAIENI
Correspondent Name and Address	Area Code and Telephone Number	202-586-2802
Name Betty A. Winchester		
Address (line 1) U. S. Department of Energy		
Address (line 2) 1000 Independence Avenue, S.W.		
Address (line 3) Washington, D. C. 20585-0162		
Address (line 4)		
Pages Enter the total number of page including any attachments.	es of the attached conveyance docu	ment # 8
Application Number(s) or Patent Num Enter either the Patent Application Number or the Patent Application Number(s)	ntent Number (DO NOT ENTER BOTH number	if additional numbers attached s for the same property). ent Number(s)
Patent Application Number(s)	6,035,701	ant Number(s)
If this document is being filed together with a new Paten was	at Application, enter the date the patent applic	ation Month Day Year
Patent Cooperation Treaty (PCT)		
Enter PCT application number only if a U.S. Application Number has not been assigned.	PCT PCT PCT	PCT PCT
Number of Properties Enter the total r	number of properties involved.	# 1
Fee Amount Fee Amount	for Properties Listed (37 CFR 3.41):	\$ 0.00
Method of Payment: Enclos Deposit Account (Enter for payment by deposit account or if addi		#
A	Authorization to charge additional fees:	Yes No 🗸
Statement and Signature		
To the best of my knowledge and belattached copy is a true copy of the orindicated herein. Brenda K. Banks		
Name of Person Signing	Signature	Date



Format F

09/060, 952 now Pat: 6,035,701

CONFIRMATORY LICENSE (Nonprofit Organizations or Small Business Firms)

Title: Method and System To Locate Leaks in Subsurface Containment Structures Using Tracer

Gases

William E. Lowry, Sandra Dalvit Dunn, Robert Walsh, Daniel Merewether and Inventor(s):

Desario V. Rao

Serial No.: 060,952 Filing Date (U.S.): April 15, 1998

Patent No.: 6,035,701 Issue Daté (U.S.): March 14, 2000

Contractor: Science and Engineering Associates

DOE Case No.: S-98,321

DOE Contract No.: DE-AC21-96MC33125

Patent Rights Clause No.: 1-085

Foreign Applications filed in or intended to be filed at Contractor's expense in (countries):

None

The Contractor, having the right to retain title to Subject Inventions as a result of Public Law 96-517, has reported the above-identified invention as a Subject Invention to DOE with its election to retain title thereto.

Accordingly, this document is confirmatory of the nonexclusive, nontransferable, irrevocable, Accordingly, this document is confirmatory of the nonexclusive, nontransferable, irrevocable, paid-up license to practice or to have practiced for or on behalf of the United States, required by the Public Law and the above-identified contract, in this Subject Invention, patent application and any resulting patent, as well as any continuation, divisional, reissue, or supplemental thereof, throughout the world and of all other rights acquired by the Government by the above-identified patent rights clause, a copy of which *is attached* hereto and incorporated by reference herein. The undersigned certifies the attached copy to be a true copy of said clause. It is understood and agreed that this license does not preclude the Government from asserting rights under the provisions of said contract or of any other agreement between the Government and the provisions of said contract or of any other agreement between the Government and the Contractor, or from asserting any other rights of the Government with respect to the aboveidentified Subject Invention.

The Government is hereby granted an irrevocable power to inspect and make copies of the above-identified patent application.

Signed this Aday of

(SEAL)

Science and Engineering Associates 6100 Uptown Blvd N.E., Suite 700 Albuquerque, New Mexico 87112 (Business Address)

PATENT

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I.083 FAR 52.227-16 -- ADDITIONALDATAREQUIREMENTS (JUN 1987)

NOTE: This clause does not apply to this contract if the contract is for the conduct of basic or applied research, as set out elsewhere in this contract, to be performed solely by a college or university, and the estimated cost is not in excess of \$500,000.

- A. In addition to the data (as defined in the clause at 52.227-14, Rights in Data--General clause or other equivalent included in this contract) specified elsewhere in this contract to be delivered, the Contracting Officer may, at any time during contract performance or within a period of 3 years after acceptance of all items to be delivered under this contract, order any data first produced or specifically used in the performance of this contract.
- B. The Rights in Data--General clause or other equivalent included in this contract is applicable to all data ordered under this Additional Data Requirements clause. Nothing contained in this clause shall require the Contractor to deliver any data the withholding of which is authorized by the Rights in Data--General or other equivalent clause of this contract, or data which are specifically identified in this contract as not subject to this clause.
- C. When data are to be delivered under this clause, the Contractor will be compensated for converting the data into the prescribed form, for reproduction, and for delivery.
- D. The Contracting Officer may release the Contractor from the requirements of this clause for specifically identified data items at any time during the 3-year period set forth in A. above.

I.085 FAR 52.227-23 -- RIGHTS TO PROPOSAL DATA(TECHNICAL)(JUN 1987)

Except for data contained on pages	, it is agreed that as a condition of award of this
contract, and notwithstanding the conditions of any	notice appearing thereon, the Government shall
have unlimited rights (as defined in the "Rights in Da	ataGeneral" clause contained in this contract) in
and to the technical data contained in the proposal d	ated, upon which this contract is
based	

I.086 DEAR 952.227-11 -- PATENT RIGHTS--RETENTIONBY THE CONTRACTOR (SHORT FORM) (FEB 1995)

A. Definitions.

- 1. "Invention" means any invention or discovery which is or may be patentable or otherwise protectable under title 35 of the United States Code, or any novel variety of plant which is or may be protected under the Plant Variety Protection Act (7 U.S.C. 2321, et seq.).
- 2. "Made" when used in relation to any invention means the conception of first actual reduction to practice of such invention.
- 3. "Nonprofit Organization" means a university or other institution of higher education or an organization of the type described in section 501(c)(3) of the Internal Revenue Code of 1954 (26 U.S.C. 501(c)) and exempt from taxation under section 501(a) of the Internal Revenue Code (26 U.S.C. 501(a)) or any nonprofit scientific or educational organization qualified under a state nonprofit organization statute.

- 4. "Practical application" means to manufacture, in the case of a composition or product; to practice, in the case of a process or method; or to operate, in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or Government regulations, available to the public on reasonable terms.
- 5. "Small business firm" means a small business concern as defined at Section 2 of Public Law 85-536 (15 U.S.C. 632) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of this clause, the size standards for small business concerns involved in Government procurement and subcontracting at 13 CFR 121.3-8 and 13 CFR 121.3-12, respectively, will be used.
- 6. "Subject invention" means any invention of the Contractor conceived or first actually reduced to practice in the performance of work under this contract, provided that in the case of a variety of plant, the date of determination (as defined in section 41(d) of the Plant Variety Protection Act, 7 U.S.C. 2401(d)) must also occur during the period of contract performance.
- 7. "Agency licensing regulations" and "agency regulations concerning the licensing of Government-owned inventions" mean the Department of Energy patent licensing regulations at 10 CFR Part 781.
- B. Allocation of principal rights.

The Contractor may retain the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this clause and 35 U.S.C. 203. With respect to any subject invention in which the Contractor retains title, the Federal Government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States for subject invention throughout the world.

- C. Invention disclosure, election of title, and filing of patent application by Contractor.
 - 1. The Contractor will disclose each subject invention to the Department of Energy (DOE) within 2 months after the inventor discloses it in writing to Contractor personnel responsible for patent matters. The disclosure to DOE shall be in the form of a written report and shall identify the contract under which the invention was made and the inventor(s). It shall be sufficiently complete in technical detail to convey a clear understanding to the extent known at the time of the disclosure, of the nature, purpose, operation, and the physical, chemical, biological or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale or public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to the DOE, the Contractor will promptly notify that agency of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the Contractor.
 - 2. The Contractor will elect in writing whether or not to retain title to any such invention by notifying DOE within 2 years of disclosure to DOE. However, in any case where publication, on sale or public use has initiated the 1-year statutory period wherein valid patent protection can still be obtained in the United States, the period for election of title may be shortened by DOE to a date that is no more than 60 days prior to the end of the statutory period.

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- 3. The Contractor will file its initial patent application on a subject invention to which it elects to retain title within 1 year after election of title or, if earlier, prior to the end of any statutory period wherein valid patent protection can be obtained in the United States after a publication, on sale, or public use. The Contractor will file patent applications in additional countries or international patent offices within either 10 months of the corresponding initial patent application or 6 months from the date permission is granted by the Commissioner of Patents and Trademarks to file foreign patent applications where such filing has been prohibited by a Secrecy Order.
- 4. Requests for extension of the time for disclosure, election, and filing under subparagraphs C.1., 2., and 3. of this clause may, at the discretion of the agency, be granted.
- D. Conditions when the Government may obtain title.

The Contractor will convey to the Federal agency, upon written request, title to any subject invention--

- 1. If the Contractor fails to disclose or elect title to the subject invention within the times specified in paragraph C. of this clause, or elects not to retain title; provided, that DOE may only request title within 60 days after learning of the failure of the Contractor to disclose or elect within the specified times.
- 2. In those countries in which the Contractor fails to file patent applications within the times specified in paragraph C. of this clause; provided, however, that if the Contractor has filed a patent application in a country after the times specified in paragraph C. of this clause, but prior to its receipt of the written request of the Federal agency, the Contractor shall continue to retain title in that country.
- 3. In any country in which the Contractor decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in reexamination or opposition proceeding on, a patent on a subject invention.
- E. Minimum rights to Contractor and protection of the Contractor right to file.
 - 1. The Contractor will retain a nonexclusive royalty-free license throughout the world in each subject invention to which the Government obtains title, except if the Contractor fails to disclose the invention within the times specified in paragraph. C. of this clause. The Contractor's license extends to its domestic subsidiary and affiliates, if any, within the corporate structure of which the Contractor is a party and includes the right to grant sublicenses of the same scope to the extent the Contractor was legally obligated to do so at the time the contract was awarded. The license is transferable only with the approval of the Federal agency, except when transferred to the successor of that part of the Contractor's business to which the invention pertains.
 - 2. The Contractor's domestic license may be revoked or modified by DOE to the extent necessary to achieve expeditious practical application of subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provision at 37 CFR Part 404 and agency licensing regulations. This license will not be revoked in that field of use or the geographical areas in which the Contractor has achieved practical application and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked

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or modified at the discretion of DOE to the extent the Contractor, its licensees, or the domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.

- 3. Before revocation or modification of the license, DOE will furnish the Contractor a written notice of its intention to revoke or modify the license, and the Contractor will be allowed 30 days (or such other time as may be authorized by DOE for good cause shown by the Contractor) after the notice to show cause why the license should not be revoked or modified. The Contractor has the right to appeal, in accordance with applicable regulations in 37 CFR Part 404 and agency regulations concerning the licensing of Government owned inventions, any decision concerning the revocation or modification of the license.
- F. Contractor action to protect the Government's interest.
 - 1. The Contractor agrees to execute or to have executed and promptly deliver to DOE all instruments necessary to (i) establish or confirm the rights the Government has throughout the world in those subject inventions to which the Contractor elects to retain title, and (ii) convey title to DOE when requested under paragraph D. of this clause and to enable the Government to obtain patent protection throughout the world in that subject invention.
 - 2. The Contractor agrees to require, by written agreement, its employees, other than clerical and nontechnical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by the Contractor each subject invention made under contract in order that the Contractor can comply with the disclosure provisions of paragraph C. of this clause, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. This disclosure format should require, as a minimum, the information required by subparagraph C.1. of this clause. The Contractor shall instruct such employees, through employee agreements or other suitable educational programs, on the importance of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.
 - 3. The Contractor will notify DOE of any decision not to continue the prosecution of a patent application, pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than 30 days before the expiration of the response period required by the relevant patent office.
 - 4. The Contractor agrees to include, within the specification of any United States patent application and any patent issuing thereon covering a subject invention, the following statement,

"This invention was made with Government support under (identify the contract) awarded by the United States Department of Energy. The Government has certain rights in the invention."

G. Subcontracts.

1. The Contractor will include this clause, suitably modified to identify the parties, in all subcontracts, regardless of tier, for experimental, developmental, or research work to be

performed by a small business firm or domestic nonprofit organization. The subcontractor will retain all rights provided for the Contractor in this clause, and the Contractor will not, as part of the consideration for awarding the subcontract, obtain rights in the subcontractor's subject inventions.

- 2. The Contractor shall include in all other subcontracts, regardless of tier, for experimental, developmental, demonstration, or research work the patent rights clause at 952,227-13.
- 3. In the case of subcontracts, at any tier, DOE, subcontractor, and the Contractor agree that the mutual obligations of the parties created by this clause constitute a contract between the subcontractor and DOE with respect to the matters covered by the clause; provided, however, that nothing in this paragraph is intended to confer any jurisdiction under the Contract Disputes Act in connection with proceedings under paragraph J. of this clause.
- H. Reporting on utilization of subject inventions.

The Contractor agrees to submit, on request, periodic reports no more frequently than annually on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by the Contractor or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received, by the Contractor, and such other data and information as DOE may reasonably specify. The Contractor also agrees to provide additional reports as may be requested by DOE in connection with any march-in proceeding undertaken by that agency in accordance with paragraph J. of this clause. As required by 35 U.S.C. 202(c)(5), DOE agrees it will not disclose such information to persons outside the Government without permission of the Contractor.

I. Preference for United States industry.

Notwithstanding any other provision of this clause, the Contractor agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell any subject invention in the United States unless such person agrees that any product embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement for such an agreement may be waived by DOE upon a showing by the Contractor or its assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.

J. March-in rights.

The Contractor agrees that, with respect to any subject invention in which it has acquired title, DOE has the right in accordance with the procedures in 37 CFR 401.6 and any supplemental regulations of the agency to require the Contractor, an assignee or exclusive licensee of a subject invention to grant a nonexclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances, and, if the Contractor, assignee, or exclusive licensee refuses such a request, DOE has the right to grant such a license itself if DOE determines that-

- 1. Such action is necessary because the Contractor or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field of use;
- 2. Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the Contractor, assignee, or their licensees;
- 3. Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the Contractor, assignee, or licensees; or
- 4. Such action is necessary because the agreement required by paragraph I. of this clause has not been obtained or waived or because a licensee of the exclusive right to use or sell any subject invention in the United States is in breach of such agreement.
- K. Special provisions for contracts with nonprofit organizations.

If the Contractor is a nonprofit organization, it agrees that--

- 1. Rights to a subject invention in the United States may not be assigned without the approval of the Federal agency, except where such assignment is made to an organization which has as one of its primary functions the management of inventions; provided, that such assignee will be subject to the same provisions as the Contractor;
- 2. The Contractor will share royalties collected on a subject invention with the inventor, including Federal employee co-inventors (when DOE deems it appropriate) when the subject invention is assigned in accordance with 35 U.S.C. 202(e) and 37 CFR 401.10;
- 3. The balance of any royalties or income earned by the Contractor with respect to subject inventions, after payment of expenses (including payments to inventors) incidental to the administration of subject inventions will be utilized for the support of scientific research or education; and
- It will make efforts that are reasonable under the circumstances to attract licensees of 4. subject inventions that are small business firms, and that it will give a preference to a small business firm when licensing a subject invention if the Contractor determines that the small business firm has a plan or proposal for marketing the invention which, if executed, is equally as likely to bring the invention to practical appliention as any plans or proposals from applicants that are not small business firms; provided, that the Contractor is also satisfied that the small business firm has the capability and resources to carry out its plan or proposal. The decision whether to give a preference in any specific case will be at the discretion of the Contractor. However, the Contractor agrees that the Secretary of Commerce may review the Contractor's licensing program and decisions regarding small business applicants, and the Contractor will negotiate changes to its licensing policies, procedures, or practices with the Secretary of Commerce when that Secretary's review discloses that the Contractor could take of this requirements more effectively implement the to reasonable steps subparagraph K.4.

L. Communications.

- 1. The Contractor shall direct any notification, disclosure, or request to DOE provided for in this clause to the DOE patent counsel assisting the DOE contracting activity, with a copy of the communication to the Contracting Officer.
- 2. Each exercise of discretion or decision provided for in this clause, except subparagraph K.4., is reserved for the DOE Patent Counsel and is not a claim or dispute and is not subject to the Contract Disputes Act of 1978.
- 3. Upon request of the DOE Patent Counsel or the Contracting Officer, the Contractor shall provide any or all of the following:
 - A copy of the patent application, filing date, serial number and title, patent number, and issue date for any subject invention in any country in which the Contractor has applied for a patent;
 - ь. A report, not more often than annually, summarizing all subject inventions which were disclosed to DOE individually during the reporting period specified; or
 - A report, prior to closeout of the contract, listing all subject inventions or stating c. that there were none.

RECORDED: 10/25/2002

PATENT REEL: 013429 FRAME: 0855