FORM PTO-1619A Expires 06/30/99 OMB 0651-0027

05-04-2001

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

101701939

#### RECORDATION FORM COVER SHEET PATENTS ONLY

TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).						
Submission Type Conveyance Type						
<b>√</b> New	Assignment Securi	ty Agreement				
Resubmission (Non-Recordation) Document ID#	License Chang	e of Name				
Correction of PTO Error Reel # Frame #	Merger	CONFIRMATORY LICENSE				
Corrective Document	U.S. Gover (For Use ONLY by U.S. Go					
Reel # Frame #	✓ Departmental File					
Conveying Party(ies)	Mark if additional names of conv	eying parties attached Execution Date  Month Day Year				
Name (line 1) GENERAL MOTORS CORPORATI	ON	04/03/2001				
Name (line 2) Second Party		Execution Date  Month Day Year				
Name (line 1)		HIVILLI Vay 1881				
Name (line 2)						
Receiving Party  Mark if additional names of receiving parties attached						
Name (line 1) UNITED STATES DEPARTMENT	OF ENERGY	If document to be recorded is an assignment and the				
Name (line 2)		receiving party is not domiciled in the United States, an appointment				
Address (line 1) 1000 INDEPENDENCE AVENUE, S	S.W.	of a domestic representative is attached. (Designation must be a separate document from				
Address (line 2)		Assignment.)				
Address (line 3) WASHINGTON	D. C. USA	20585				
City	State/Country	Zip Code				
Domestic Representative Name and Address  Enter for the first Receiving Party only.						
Name						
Address (line 1)						
Address (line 2)						
Address (line 3)						
Address (line 4)						
FOD OFFICE HOP ONLY						
FOR OFFICE USE ONLY						

Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief Information Officer,

D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20503. See OMB

FORM	PTO-1619B				
Expires 06/30/99					
OMB 0651	-0027				

**U.S. Department of Commerce** 

Expires 06/30/99 OMB 0651-0027	Page 2	Patent and Trademark Office PATENT
Correspondent Name and	Address Area Code and Telepho	one Number [630] 252-2393
Name ROBERT J. FISHER	L .	
Address (line 1) U.S. DEPARTMENT	OF ENERGY	
Address (line 2) OFFICE OF INTEL	LECTUAL PROPERTY LAW	
Address (line 3) 9800 SOUTH CASS	AVENUE	
Address (line 4) ARGONNE, ILLING	DIS 60439	
Pages Enter the total n including any a	umber of pages of the attached convey ttachments.	yance document # 14
Application Number(s) or	Patent Number(s)	Mark if additional numbers attached
• •	Number or the Patent Number (DO NOT ENTER	• • •
Patent Application I	vumber(s)	Patent Number(s)
09/330,034		
If this document is being filed together was	with a new Patent Application, enter the date the	ne patent application Month Day Year
Patent Cooperation Treaty	(PCT)	
Enter PCT application	n number	PCT
only if a U.S. Applica has not been assigne		PCT PCT
Number of Properties E	nter the total number of properties inve	olved. # 01
Fee Amount	Fee Amount for Properties Listed (37	CFR 3.41): \$
Method of Payment: Deposit Account	Enclosed Deposit Acco	ount
	account or if additional fees can be charged to	1 I
	Deposit Account Number:	#
	Authorization to charge addi	itional fees: Yes No
Statement and Signature		
attached copy is a true	rledge and belief, the foregoing information of the original document. Charg	ation is true and correct and any es to deposit account are authorized, as
indicated herein.	<b>A</b> 21	APR 1 9 2001
Mark P. Dvorscak	Morso	
Name of Person Signi	ng Signature	Date

**PATENT** 

**REEL: 011747 FRAME: 0792** 

# **CONFIRMATORY LICENSE**

(Advanced Waiver)

Title :		METHOD OF MONITORING CO CONCENTRATIONS IN HYDROGEN FEED TO A PEM FUEL CELL				
Inventor(s)	Mark Alexander M	Mark Alexander Meltser, Stanley Gutowski & Kirk Weisbrod,				
Serial No. :	09/550,054	Filing Date:	April 14, 2000			
Subcontractor :	General Motors C	orporation				
DOE Contract No.:	DE-AC02-90CH10	)435				
DOE Case No. :	S-97,001					
DOE Advanced Waive	r No.: W(A) -94-024					
Foreign Applications fi	ed in or intended to be	e filed at Contractor's	s expense in (countries	s):		
Canada,	France, Germany,	Italy, Japan and	United Kingdom			
application thereon, the Accordingly, this document under 41 application and any resort continuation-in-part patent rights clause, a undersigned certifies the agreed that this license provisions of said contany other rights of the	ment is confirmatory of CFR 9-9.109.6 and the sulting patent as well a thereof, and of all right copy of which is attached copy to be does not preclude the act or any other agreed Government with response to the contract of any other agreed covernment with response to the covernment with response contract or any other agreed covernment with response covernment with	I waiver for the above the paid-up license e above-identified constant and continuation, and acquired by the Control and income a true copy of said e Government from the control above-identified to the above-identified above-identification.	required to be granted ontract in this invention, divisional, reissue, supported by the reference by the reference by the section of the clause. It is understood asserting rights under the Countified invention.	to the patent plemental renced partent and he ontractor, or		
identified patent applic		sable power to mope	or and make depice or	une above		
(SEAL)	Signed	this 3rd	_ day of April	<u>, 200<sup>1</sup> .</u>		
		GENERAL MOT	ORS CORPORATION			
	Ву:	M	actor)			
			r's Official & Title) off, Assistant Secretary			
		General Motors Co	rporation			
300 Renaissance Center						

Mail Code 482-C23-B21

Detroit, Michigan 48265-3000

P.O. Box 300

8265-3000 PATENT REEL: 011747 FRAME: 0793 Attachment B to Hodification No. A028 Supplemental Agreement to Contract No. DE-AC02-90CH10435

#### ADVANCE WAIVER OF PATENT RIGHTS

(Attachment 2 to Appendix B, Chicago Operations Office, Intellectual Property Provisions for a Contract With a Large Business for Research, Development or Demonstration Work)

#### ADVANCE WAIVER OF PATENT RIGHTS

#### (a) Definitions.

- (1) "Subject Invention" means any invention or discovery of the Contractor or Subcontractor, other than domestic small businesses or nonprofit or educational institutions having a right to elect title pursuant to P.L. 96-517, as amended, or inventions or discoveries made by employees of National Laboratories, conceived or first actually reduced to practice in the course of or under this contract, and includes any art, method, process, machine, manufacture, design, or composition of matter, or any new and useful improvement thereof, or any variety of plants, whether patented or unpatented under the Patent Laws of the United States of America or any foreign country.
- (2) "Contract" means any contract, grant, agreement, understanding, or other arrangement, which includes research, development, or demonstration work, and includes any assignment or substitution of parties.
- (3) "Government agency" includes an executive department, independent commission, board, office, agency, administration, authority, Government corporation, or other Government establishment of the Executive Branch of the Government of the United States of America.
- (4) "To the point of practical application" means to manufacture in the case of a composition or product, to practice in the case of a process, or to operate in the case of a machine and under such conditions as to establish that the invention is being worked and that its benefits are reasonably accessible to the public.
  - (5) "Patent Counsel" means the DOE Patent Counsel assisting the procuring activity.
- (6) "Advance Waiver of Patent Rights" means the advance waiver of the Government's U.S. and Foreign Patent Rights in inventions as set out in the Statement of Considerations dated December 9, 1994, W(A)-94-024, CH-0840, a copy of which is included as Attachment 1 to this clause.

# (b) Allocation of principal rights.

- (1) Assignment to the Government. The Contractor agrees to assign to the Government the entire right, title, and interest throughout the world in and to each Subject Invention, except to the extent that rights are waived to and retained by the Contractor under paragraphs (b)(2) and (c) or by a Subcontractor pursuant to paragraph (j)(2) of this clause.
- (2) Greater rights determinations. The Contractor or the employee-inventor with authorization of the Contractor may request greater rights than the domestic and foreign patent rights provided in paragraph (c) of this clause on identified inventions in accordance with 41 CFR 9-9.109-6. Such requests must be submitted to Patent Counsel (with notification by Patent

Counsel to the Contracting Officer) at the time of the first disclosure pursuant to paragraph (e)(2) of this clause, or not later than nine (9) months after conception or first actual reduction to practice, whichever occurs first, or such longer period as may be authorized by Patent Counsel (with notification by Patent Counsel to the Contracting Officer) for good cause shown in writing by the Contractor.

#### (c) Rights to the Contractor.

(1) Minimum Contractor license. The Contractor reserves an irrevocable, nonexclusive, paid-up license in each patent application filed in any country on a Subject Invention and any resulting patent in which the Government acquires title. The license shall extend to the Contractor's domestic subsidiaries and affiliates, if any, within the corporate structure of which the Contractor is a part and shall include 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 shall be transferable only with approval of DOE except when transferred to the successor of that part of the Contractor's business to which the invention pertains.

#### (2) Election to retain waived rights.

- (i) Subject to the provisions of paragraph (c)(3), paragraph (d), and paragraph (j)(2) of this clause, with respect only to a Subject Invention reported in accordance with paragraph (e)(2)(i) of this clause and with the written report of which is included an election as to whether the Contractor will retain the rights in the invention waived therein, the Contractor reserves the entire domestic right, title and interest in any United States patent application on the Subject Invention filed and any resulting United States patent secured by the Contractor.
- (ii) Subject to the provisions of paragraph (c)(3), paragraph (d), and paragraph (j)(2) of this clause, with respect only to a Subject Invention reported in accordance with paragraph (e)(2)(i) of this clause and with the written report of which is included an election as to whether the Contractor will retain the rights in the invention waived herein and a statement specifying those foreign countries in which such rights will be retained, and subject to DOE security regulations and requirements, the Contractor reserves the entire right, title and interest in any foreign patent application on the Subject Invention filed and any resulting foreign patent secured by the Contractor in those foreign countries specified.

## (3) Terms and Conditions of Waived Rights.

- (i) Subject to the rights granted in paragraph (c)(1) of this clause, the Contractor agrees to convey to the Government, upon request, the entire domestic right, title, and interest in any Subject Invention when the Contractor:
- (A) Does not elect pursuant to paragraph (c)(2)(i) of this clause to retain such rights;

- 2 -

- (B) Fails to have a United States patent application filed on the invention in accordance with paragraph (d)(1) of this clause, or decides not to continue prosecution of such application; or
  - (C) At any time, no longer desires to retain title.
- (ii) Subject to the rights granted in paragraph (c)(1) of this clause, the Contractor agrees to convey to the Government, upon request, the entire right, title, and interest in any Subject Invention in any foreign country if the Contractor:
- (A) Does not elect pursuant to paragraph (c)(2)(ii) of this clause to retain such rights in the country; or
- (B) Fails to have a patent application filed in the country on the Subject Invention in accordance with paragraph (d)(3) of this clause, or decides not to continue prosecution or to pay any maintenance fees covering the invention. To avoid forfeiture of the patent application or patent, the Contractor shall notify the Patent Counsel not less than 60 days before the expiration period for any action required by the foreign Patent Office.
- (iii) Conveyance requested pursuant to paragraphs (c)(3)(i) and (c)(3)(ii) of this clause shall be made by delivering to the Patent Counsel duly executed instruments and such other papers as are deemed necessary to vest in the Government the entire right, title, and interest in the invention to enable the Government to apply for and prosecute patent applications covering the invention in this or the foreign country, respectively, or otherwise establish its ownership of the invention.
- (iv) For each invention in which the Contractor initially elects pursuant to (c)(2)(i) or (c)(2)(ii) of this clause not to retain the rights waived, the Contractor shall inform the Patent Counsel promptly in writing of the date and identity of any on sale, public use, or public disclosure of the invention which may constitute a statutory bar under 35 USC 102, which was authorized by or known to the Contractor, or any contemplated action of this nature.

#### (v) Government License

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 the Subject Invention throughout the world.

- 3 -

#### (vi) 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 DOE in accordance with paragraph (c)(3)(viii) of this clause. To the extent data or information supplied under this paragraph is considered by the Contractor, its licensee or assignee to be privileged and confidential and is so marked, DOE agrees that, to the extent permitted by 35 USC 202(c)(5), it will not disclose such information to persons outside the Government.

### (vii) 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 products 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.

## (viii) 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 DOE 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;

- 4 -

- (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 (c)(3)(vii) 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.

#### (ix) U.S. Competitiveness

- (a) The Contractor agrees that major components of PEM fuel cell systems embodying a subject invention shall be manufactured substantially in the United States.
- (b) Notwithstanding the foregoing provision, the requirement for manufacturing major components of PEM fuel cell systems substantially in the United States shall be deemed to be satisfied upon a showing by the Contractor or its assignee, in writing, 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 domestic manufacture is not commercially feasible and some form of significant economic and technical benefits will flow to the United States. Such showing by the Contractor or its assignee must be approved in writing by DOE.
- (c) This clause does not constitute a commitment that either party will actually manufacture PEM fuel cell systems.
- (d) This clause will be included in all subcontracts with organizations other than domestic small businesses or nonprofit or educational institutions, regardless of tier, for research, development or demonstration work.

## (4) Terminations.

- (i) Any waiver or retention of rights by the Contractor under paragraphs (b)(2), (c)(1), or (c)(2) of this clause may be terminated at the discretion of the Secretary or his designee, in whole or in part, if the request for waiver or retention of rights by the Contractor is found to contain false material statements or nondisclosure of material facts, and such were specifically relied upon in reaching the waiver deter-mination or the agreement to the retention of rights by the Contractor.
- (ii) Any waiver of the rights retained in accordance with paragraph (c)(2), as applied to particular inventions, may be terminated at the discretion of the Secretary or his designee, in whole or in part, if the Contractor fails to comply with the provisions set forth in paragraph (c)(3) and paragraph (d) of this clause, and such failure is determined by the Secretary

- 5 <del>-</del>

or his designee to be material and detrimental to the interests of the United States and the general public.

- (iii) Prior to terminating any waiver of rights under paragraph (c)(4)(i) or (c)(4)(ii) of this clause, the Contractor will be given written notice of the intention to terminate the waiver of rights, the extent of such proposed termination and the reasons therefor, and a period of 30 days, or such longer period as the Secretary or his designee shall determine for good cause shown in writing, to show cause why the waiver of rights should not be so terminated.
- (iv) All terminations of waivers of rights under paragraph (c)(4)(ii) shall be subject to the rights granted in paragraph (c)(1) of this clause, and termination shall normally be partial in nature, requiring the Contractor to grant nonexclusive or partially exclusive licenses to responsible applicants upon terms reasonable under the circumstances.

## (5) Effective Date of Waivers.

The waiver of rights in a Subject Invention shall be effective on the following dates:

- (i) For advance waivers of identified inventions, i.e., inventions conceived prior to the effective date of the contract, on the effective date of the contract even though the advance waiver may have been requested after that date;
- (ii) For identified inventions under advance waivers, i.e., inventions conceived or first actually reduced to practice after the effective date of the contract, on the date the invention is reported with the election to retain the waived rights in that invention; and
- (iii) For waivers of identified inventions (other than under an advance waiver), on the date of the letter notifying the requestor that the waiver has been granted.

# (d) Filing of patent applications.

(1) With respect to each Subject Invention in which the Contractor elects to retain domestic rights pursuant to paragraph (c)(2)(i) of this clause, the Contractor shall have a domestic patent application filed on the invention within six (6) months after submission of the invention disclosure pursuant to paragraph (e)(2)(i) of this clause, or such longer period of time as may be approved by the Patent Counsel for good cause shown in writing by the Contractor. For each identified invention, the rights in which are waived to the Contractor, the Contractor shall have a domestic patent application filed on the invention within six (6) months after the waiver has become effective. With respect to the invention, the Contractor shall promptly notify the Patent Counsel of any decision not to file an application.

- 6 -

(2) For each Subject Invention on which a domestic patent application is filed by the Contractor, the Contractor shall: (i) Within two (2) months after the filing or within two (2) months after submission of the invention disclosure if the patent application previously has been filed, deliver to Patent Counsel a copy of the application as filed including the filing date and serial number; (ii) Within six (6) months after filing the application or within six (6) months after submitting the invention disclosure if the application has been filed previously, deliver to the Patent Counsel a duly executed and approved instrument fully confirmatory of all rights to which the Government is entitled, and provide DOE an irrevocable power to inspect and make copies of the patent application filed; (iii) Provide the Patent Counsel with a copy of the patent within two (2) months after a patent is issued on the application; (iv) Not less than 30 days before the expiration of the response period for any action required by the Patent and Trademark Office, notify the Patent Counsel of any decision not to continue prosecution of the application and deliver to the Patent Counsel executed instruments granting the Government a power of attorney; and (v) Include the following statement in the second paragraph of the specification of the application and any patents issued on a Subject Invention, "The Government of the United States of America has rights in this invention pursuant to Contract No. \_\_\_\_\_ (or Grant No. \_\_\_\_\_) awarded by the U.S. Department of Energy". (3) With respect to each Subject Invention in which the Contractor has elected pursuant to paragraph (c)(2)(ii) of this clause to retain the patent rights waived in specified foreign countries, or in which the Contractor has obtained a waiver of foreign rights on an identified invention: (i) The Contractor shall file a patent application on the invention in each specified foreign country in accordance with applicable statutes and regulations and within one of the following periods:

- 7 -

Commissioner of Patents and Trademarks to file the foreign patent application where such filing

(B) Six (6) months from the date a license is granted by the

application, or if such an application is not filed, six (6) months from the date the invention is

submitted in a disclosure pursuant to paragraph (e)(2)(i) of this clause;

has been prohibited by security reasons; or

(A) Eight (8) months from the date of filing a corresponding United States

- (C) Such longer period as may be approved by the Patent Counsel for good cause shown in writing by the Contractor.
- (ii) The Contractor shall notify the Patent Counsel promptly of each foreign application filed and upon written request shall furnish an English version of the application without additional compensation.

## (e) Invention identification, disclosures, and reports.

- (1) The Contractor shall establish and maintain active and effective procedures to ensure that Subject Inventions are promptly identified and timely disclosed. Those procedures shall include the maintenance of laboratory notebooks or equivalent records and any other records that are reasonably necessary to document the conception and/or the first actual reduction to practice of subject Inventions, and records which show that the procedures for identifying and disclosing the inventions are followed. Upon request, the Contractor shall furnish the Contracting Officer a description of these procedures so that he may evaluate and determine their effectiveness.
- (2) The Contractor shall furnish the Patent Counsel (with notification by Patent Counsel to the Contracting Office) on a DOE-approved form:
- (i) A written report containing full and complete technical information concerning each Subject Invention within six (6) months after conception or first actual reduction to practice whichever occurs first in the course of or under this contract, but in any event prior to any on sale, public use or public disclosure of such inventions known to the Contractor. The report shall identify the contract and inventor and shall be sufficiently complete in technical detail and appropriately illustrated by sketch or diagram to convey to one skilled in the art to which the invention pertains a clear understanding of the nature, purpose, operation, and to the extent known, the physical, chemical, biological, or electrical characteristics of the invention. The report should also include any election of foreign patent rights under paragraph (c)(2)(ii) of this clause and any election of rights under paragraph (c)(2)(i) of this clause. Any requests for greater rights shall be made within the period set forth in paragraph (b)(2) of this clause. When an invention is reported under this paragraph (e)(2)(i), it shall be presumed to have been made in the manner specified in Section (a)(1) and (2) of 42 USC 5908 unless the Contractor contends it was not so made in accordance with paragraph (g)(2)(ii) of this clause.
- (ii) Upon request, but not more than annually, interim reports on a DOE-approved form listing Subject Inventions and subcontracts awarded containing a Patent Rights clause for that period and certifying that:
- (A) The Contractor's procedures for identifying and disclosing Subject Inventions as required by this paragraph (e) have been followed throughout the reporting period;

- 8 -

- (B) All Subject Inventions have been disclosed or that there are no such inventions;
- (C) All subcontracts containing a Patent Rights clause have been reported or that no such subcontracts have been awarded; and
- (iii) A final report on a DOE-approved form within three (3) months after completion of the contract work listing all Subject Inventions and all subcontracts awarded containing a Patent Rights clause and certifying that:
- (A) All Subject Inventions have been disclosed or that there were no such inventions; and
- (B) All subcontracts containing a Patent Rights clause have been reported or that no such subcontracts have been awarded.
- (3) The Contractor shall obtain patent agreements to effectuate the provisions of this clause from all persons in its employ who perform any part of the work under this contract except nontechnical personnel, such as clerical employees and manual laborers.
- (4) The Contractor agrees that the Government may duplicate and disclose Subject Invention disclosures and all other reports and papers furnished or required to be furnished pursuant to this clause. If the Contractor is to file a foreign patent application on a Subject Invention, the Government agrees, upon written request, to use its best efforts to withhold publication of such invention disclosures until the expiration of the time period specified in paragraph (d)(1) of this clause, but in no event shall the Government or its employees be liable for any publication thereof.

#### (f) Publication.

It is recognized that during the course of the work under this contract, the Contractor or its employees may from time to time desire to release or publish information regarding scientific or technical developments conceived or first actually reduced to practice in the course of or under this contract. In order that public disclosure of such information will not adversely affect the patent interests of DOE or the Contractor, patent approval for release or publication shall be secured from Patent Counsel prior to any such release or publication.

### (g) Forfeiture of rights in unreported Subject Inventions.

(1) The Contractor shall forfeit to the Government, at the request of the Secretary or his designee, all rights in any Subject Invention which the Contractor fails to report to Patent Counsel (with notification by Patent Counsel to the Contracting Officer) within six (6) after the time the Contractor:

- 9 -

- (i) Files or causes to be filed a United States or foreign patent application thereon; or
- (ii) Submits the final report required by paragraph (e)(2)(ii) of this clause, whichever is later.
- (2) However, the Contractor shall not forfeit rights in a Subject Invention if, within the time specified in (1)(i) or (1)(ii) of this paragraph (g), the Contractor:
- (i) Prepared a written decision based upon a review of the record that the invention was neither conceived nor first actually reduced to practice in the course of or under the contract and delivers the same to Patent Counsel (with notification by Patent Counsel to the Contracting Officer); or
- (ii) Contending that the invention is not a Subject Invention the Contractor nevertheless discloses the invention and all facts pertinent to this contention to the Patent Counsel (with notification by Patent Counsel to the Contracting Officer); or
- (iii) Establishes that the failure to disclose did not result from the Contractor's fault or negligence.
- (3) Pending written assignment of the patent applications and patents on a Subject Invention determined by the Secretary or his designee to be forfeited (such determination to be a final decision under the Disputes Clause of this contract), the Contractor shall be deemed to hold the invention and the patent applications and patents pertaining thereto in trust for the Government. The forfeiture provision of this paragraph (g) shall be in addition to and shall not supersede other rights and remedies which the Government may have with respect to Subject Invention.

# (h) Examination of records relating to inventions.

- (1) The Contracting Officer or his authorized representative, until the expiration of 3 years after final payment under this contract, shall have the right to examine any books (including laboratory notebooks), records, documents, and other supporting data of the Contractor which the Contracting Officer or his authorized representative reasonably deem pertinent to the discovery or identification of Subject Inventions or to determine compliance with the requirements of this clause.
- (2) The Contracting Officer or his authorized representative shall have the right to examine all books (including laboratory notebooks), records and documents of the Contractor relating to the conception or first actual reduction to practice of inventions in the same field of technology as the work under this contract to determine whether any such inventions are Subject Inventions, if the Contractor refuses or fails to:

- 10 -

- (i) Establish the procedures of paragraph (e)(1) of this clause; or
- (ii) Maintain and follow such procedures; or
- (iii) Correct or eliminate any material deficiency in the procedures within thirty (30) days after the Contracting Officer notifies the Contractor of such a deficiency.
- (i) Withholding of payment (not applicable to subcontracts).
- (1) Any time before final payment of the amount of this contract, the Contracting Officer may, if he deems such action warranted, withhold payment until a reserve not exceeding \$50,000 or 5 percent of the amount of this contract, whichever is less, shall have been set aside if in his opinion the Contractor fails to:
- (i) Establish, maintain and follow effective procedures for identifying and disclosing Subject Inventions pursuant to paragraph (e)(1) of this clause; or
- (ii) Disclose any Subject Invention pursuant to paragraph (e)(2)(i) of this clause; or
  - (iii) Deliver the interim reports pursuant to paragraph (e)(2)(ii) of this clause; or
- (iv) Provide the information regarding subcontracts pursuant to paragraph (j)(5) of this clause; or
- (v) Convey to the Government in a DOE-approved form the title and/or rights of the Government in each Subject Invention as required by this clause.
- (2) The reserve or balance shall be withheld until the Contracting Officer has determined that the Contractor has rectified whatever deficiencies exist and has delivered all reports, disclosures, and other information required by this clause.
- (3) Final payment under this contract shall not be made by the Contracting Officer before the Contractor delivers to Patent Counsel all disclosures of Subject Inventions and other information required by (e)(2)(i) of this clause, the final report required by (e)(2)(iii) of this clause, and Patent Counsel has issued a patent clearance certification to the Contracting Officer.
- (4) The Contracting Officer may, in his direction, decrease or increase the sums withheld up to the maximum authorized above. If the Contractor is a nonprofit organization, the maximum amount that may be withheld under this paragraph shall not exceed \$50,000 or 1 percent of the amount of this contract, whichever is less. No amount shall be withheld under this paragraph while the amount specified by this paragraph is being withheld under other provisions

- 11 -

of the contract. The withholding of any amount or subsequent payment thereof shall not be construed as a waiver of any rights accruing to the Government under this contract.

#### (i) Subcontracts.

- (1) For the purpose of this paragraph the term "Contractor" means the party awarding a subcontract and the term "Subcontractor" means the party being awarded a subcontract, regardless of tier.
- (2) The Contractor will include the Patent Rights clause of DEAR 952.227-71 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 or a domestic nonprofit organization. In all other subcontracts, regardless of tier, for experimental, developmental demonstration, or research work, the Contractor shall include the Patent Rights article of 41 CFR 9-9.107-5(a) or 41 CFR 9-9.107-6 as appropriate, modified to identify the parties, unless a waiver has been granted to the Contractor with respect to Subcontractor's Subject Inventions in which case the Contractor shall include a Patent Rights clause substantially as set out in Attachment 1 or Attachment 2 as may be appropriate depending on the allocation of rights to subject inventions agreed to by the parties as contemplated by the Advance Waiver of Patent Rights identified in paragraph (a), unless otherwise approved in writing by Patent Counsel.
- (3) Except as may be otherwise provided in this clause, the Contractor shall not, in any subcontract or by using a subcontract as consideration therefor, acquire any rights in its subcontractor's Subject Invention for the Contractor's own use (as distinguished from such rights as may be required solely to fulfill the Contractor's contract obligations to the Government in the performance of this contract or as contemplated by the Advance Waiver of Patent Rights identified in paragraph (a)).
- (4) All invention disclosures, reports, instruments, and other information required to be furnished by the Subcontractor to DOE, under the provisions of a Patent Rights clause in any subcontract hereunder may, in the discretion of the Contracting Officer, be furnished to the Contractor for transmission to DOE.
- (5) The Contractor shall promptly notify the Contracting Officer in writing upon the award of any subcontract containing a Patent Rights clause by identifying the Subcontractor, the work to be performed under the subcontract, and the dates of award, and estimated completion. Upon the request of the Contracting Officer the Contractor shall furnish him a copy of the subcontract.
- (6) The Contractor shall identify all Subject Inventions of the Subcontractor of which it acquires knowledge in the performance of this contract and shall notify the Patent Counsel (with notification by Patent Counsel to the Contracting Officer) promptly upon the identification of the inventions.

- 12 -

(7) It is understood that the Government is a third party beneficiary of any subcontract clause granting rights to the Government in Subject Inventions, and the Contractor hereby assigns to the Government all rights that the Contractor would have to enforce the Subcontractor's obligations for the benefit of the Government with respect to Subject Inventions. The Contractor shall not be obligated to enforce the agreements of any Subcontractor hereunder relating to the obligations of the Subcontractor to the Government regarding Subject Inventions.

#### (k) Background Patents.

RECORDED: 04/19/2001

- (1) "Background Patent" means a domestic patent covering an invention or discovery which is not a Subject Invention and which is owned or controlled by the Contractor at any time through the completion of this contract:
- (i) Which the Contractor, but not the Government, has the right to license to others without obligation to pay royalties thereon, and
- (ii) Infringement of which cannot reasonably be avoided upon the practice of any specific process, method, machine, manufacture or composition of matter (including relatively minor modifications thereof) which is a subject of the research, development, or demonstration work performed under this contract.
- .(2) The Contractor agrees to and does hereby grant to the Government a royalty-free, nonexclusive license under any Background Patent for purposes of practicing a subject of this contract by or for the Government in research, development, and demonstration work only.
- (3) The Contractor also agrees that upon written application by DOE, it will grant to responsible parties for purposes of practicing a subject of this contract nonexclusive licenses under any Background Patent on terms that are reasonable under the circumstances. If, however, the Contractor believes that exclusive or partially exclusive rights are necessary to achieve expeditious commercial development or utilization, then a request may be made to DOE for DOE approval of such licensing by the Contractor.
- (4) Notwithstanding the foregoing paragraph (k)(3), the Contractor shall not be obligated to license any Background Patent if the Contractor demonstrates to the satisfaction of the Secretary or his designee that:
- (i) a competitive alternative to the subject matter covered by said Background Patent is commercially available or readily introducible from one or more other sources; or
- (ii) the Contractor or its licensees are supplying the subject matter covered by said Background Patent in sufficient quantity and at reasonable prices to satisfy market needs, or have taken effective steps or within a reasonable time are expected to take effective steps to so supply the subject matter.

- 13 -