Form PTO-1592 (modified) 101425636 To the Honorable Commissioner of Pauline -.tached original documents or copies thereof: 1. Name of Conveying Party or Parties: 2. Name and address of receiving party or parties: National Aeronautics and Space Administration (NASA) Science Applications International Corporation 10260 Campus Point Drive San Diego, CA 92121 Additional Names of conveying party or parties attached? □ Yes □ No Additional Name(s) and address(es) attached? □ Yes □ No 3. Nature of Conveyance: ☐ Assignment Merger Security Agreement Change of Name Other Instrument of Waiver Execution Date: April 9, 1999; April 26, 1999 4. Application Number(s) or Patent Number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent Application Number(s): B. Patent Number(s): 09/232,169 Additional Name(s) and address(es) attached? ☐ Yes ☐ No 5. Name and address of party to whom correspondence 6. Total Number of Applications and patents involved: concerning the document should be mailed: 7. Total fee (37 CFR 3.41) ...\$40.00... Enclosed Joseph M. Potenza Authorized to be charged to deposit account Banner & Witcoff, Ltd. Please charge or credit our deposit account for any 1001 G Street, N.W., 11th Floor additional or refunded fees associated with recording this Washington, D.C. 20001-4597 assignment 8. Deposit Account No.: 19-0733 (in the event additional fees are required) (Duplicate copy of this page attached if paying by deposit account) Do Not Use this Space 9. Statement and Signature: To the best of my knowledge and belief, the foregoipg information is true and correct and any attached copy is a true copy of the original document. Gary D. Fedorochko Reg.No. 35,509 July 24, 2000 Name of Person Signing Total Number of Pages comprising Cover Sheet:

INSTRUMENT OF WAIVER (Domestic and Foreign Rights)

PETITIONER: Science Applications International Corporation (SAIC)

WAIVER CASE NUMBER: W-4096 NASA CASE NUMBER: LAR-15,858-1

CONTRACT NUMBER: NAS1-19570

TITLE OF INVENTION: Coherent Terahertz Source Via Three-Wave Optical Mixing in Nonlinear Crystals

Using Cross-Restrahlen-Band, Dispersion-Compensated Phasematching

INVENTOR(S): Gregory S. Herman and Norman P. Barnes

WHEREAS, the above-identified invention was made in the performance of work under the above-identified contract, and is subject to Section 305 of the National Aeronautics and Space Act of 1958, as amended (42 U.S.C. 2457, hereinafter referred to as "the Act"); and

WHEREAS, the petitioner (hereinafter referred to as the "waiver recipient") has filed a Petition for Waiver of Rights of the United States for said invention in conformance with the National Aeronautics and Space Administration (NASA) Patent Waiver Regulations, effective November 16, 1987 (52 FR 43748-43753;14 CFR 1245.1); and, more specifically, Section 1245.105, Waiver After Reporting Inventions and Section 1245.106, Waiver of Foreign Rights; and

WHEREAS, the Administrator of NASA has determined that the interests of the United States of America will be served by this Waiver;

NOW THEREFORE, subject to the acceptance of the Conditions of Reservations hereinafter specified:

WAIVER

1. The Administrator waives the property rights of the United States Government to said invention in the United States of America, and in the following foreign countries: France, Germany, Japan, United Kingdom, and hereby conveys to the waiver recipient the entire right, title, and interest in and to said invention subject, however, to the Conditions and Reservations set forth below.

CONDITIONS

- 2. This waiver is granted pursuant to the provisions of the NASA Patent Waiver Regulations (November 16, 1987) and is subject to the conditions prescribed therein and as specifically provided below:
- (a) The waiver shall extend to the claimed invention of any division or continuation of the patent application filed on the reported invention provided the claims of the subsequent application do not substantially change the scope of the reported invention.
- (b) The waiver of rights granted herein shall be voidable at the option of the Administrator, unless the waiver recipient:
 - (1) With respect to domestic rights files or causes an application for U.S. Letters Patent to be filed within 1 year from the granting by the Administrator of this waiver disclosing and claiming the invention, and including within the first paragraph of the specification following the abstract, the statement:

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PATENT REEL: 010970 FRAME: 0183 The invention described herein was made in the performance of work under NASA Contract No.____ and is subject to the provisions of Section 305 of the National Aeronautics and Space Act of 1958 (42 U.S.C. 2457).

- (2) With respect to foreign rights, files or causes to be filed a patent application in such countries identified in paragraph (l) above, within 10 months from the date that a corresponding U.S. patent application has been filed or 6 months from the date a license is granted by the Commissioner of Patents and Trademarks to file foreign patent applications where such filing has been prohibited by a Secrecy Order or such longer periods as may be expressly approved by NASA.
- (3) Furnishes to the Chairperson of the NASA Inventions and Contributions Board or to the patent representative designated in the contract a copy of such application including the filing date, serial number, and title of the waived invention, and upon request a copy of any domestic or foreign patent application including an English version if filed in a language other than English, and a copy of the patent or the patent number and issue date.
- (4) Delivers to the Chairperson a duly executed and approved instrument, prepared by the Government, fully confirming of all the rights domestic and foreign to which the Government is entitled pursuant to the Reservations, specified below.
- (5) With respect to any country in which the waiver recipient decides not to continue prosecution of any application, to pay maintenance fees on, or defend in reexamination or opposition proceedings on a patent on a waived invention, the waiver recipient shall notify the patent representative within sufficient time for NASA to continue prosecution, pay the maintenance fee or defend the reexamination or opposition, and upon written request, convey title to NASA and execute all papers necessary for NASA to preceed with the appropriate action.
- (6) During the term of the patent files a utilization report with the Chairperson, upon NASA's written request, not more often than annually setting forth in detail the steps taken by the waiver recipient or its licensees or assigns regarding the progress, development, application, and commercial use being made and that is intended to be made of the waived invention.
- (7) Notifies the Chairperson prior to any transfer of principal rights in such invention to any party and identifies such party by name and address.
- (8) Grants any license which the Administrator may require pursuant to the RESERVATIONS specified below.

RESERVATIONS

- 3. (a) License to the Government. The waiver of domestic and foreign rights granted herein shall be subject to the reservation of an irrevocable, nonexclusive, nontransferable, royalty-free license for the practice of the invention throughout the world by or on behalf of the United States Government or any agency thereof, or any foreign government pursuant to any existing or future treaty or agreement with the United States.
- (b) March-in Rights. With respect to the invention, NASA has the right in accordance with 35 U.S.C. 203 and 210, and with the procedures set forth 37 CFR 401.6 to require the waiver recipient, an assignee or exclusive licensee of the 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 waiver recipient, assignee, or exclusive licensee refuses such a request, NASA has the right to grant such a license itself if NASA determines that:

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- (1) Such action is necessary because the waiver recipient or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the invention in such field of use;
- (2) Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the waiver recipient, 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 waiver recipient, assignee, or licensees; or
- (4) Such action is necessary because the agreement required by paragraph (c) below, has not been obtained or waived or because a license of the exclusive right to use or sell the invention in the United States is in breach of such agreement.
- (c) Preference for United States Industry. The waiver recipient agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell the invention in the United States unless such person agrees that any products embodying the invention or produced through the use of the invention will be manufactured substantially in the United States. However, in individual cases, the requirement for such an agreement may be waived by NASA upon a showing by the waiver recipient 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.
- (d) Additional Reservations: Notwithstanding any other provision in this Instrument of Waiver, if a Government employee is a coinventor on the invention covered by this Instrument of Waiver, then the waiver recipient and the United States Government shall be co-owners of the invention. As co-owners, both parties agree to negotiate in good faith with respect to (1) the cost of obtaining and maintaining any patents, (2) the exploitation of the invention (including the possibility of providing exclusive rights to the waiver recipient), and (3) the sharing of any licensing revenue. Nevertheless, if both parties fail to agree, then each co-owner may act separately to the extent permitted by law.

EXECUTION

> Edward A. Frankle General Counsel

ACCEPTANCE AND AGREEMENT

The waiver recipient agrees that the invention identified above was made under the above-identified contract in the performance of work under said contract by a person or persons described in paragraph (1) or (2) of Section 305(a) of the Act and under the conditions therein described.

The waiver recipient further agrees that in the event it acknowledges that the conditions upon which this waiver is based have not been satisfied, or in the event the Administrator voids this waiver where conditions of paragraph 2 above have not been met, it will deliver to the Administrator the property rights waived above, including the instrument of waiver, upon request, and an instrument of assignment for any patent application or any patent which may have been filed thereon; and that failing to deliver to the Administrator such duly

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PATENT REEL: 010970 FRAME: 0185 executed assignment, the Administrator may prepare a decision voiding the waiver of rights which shall operate to restore to the United States title to said invention. Such decision shall be conclusive evidence as to the title of the United States to said invention and that the Commissioner of the Patent and Trademark Office shall be authorized upon the filing of said decision to record the title to saidinvention, patent application or patent, as applicable, in the name of the United States.

The waiver recipient accepts this waiver subject to all the terms and conditions set forth herein and has caused this instrument to be executed and attested by its duly authorized representative(s) this <u>to</u> day of <u>April</u> with the intent to be legally bound thereby.

Waiver Recipient

By: ANTHONY M. DOVIE

CORPORATE VILE PRESIDENT

Attest

RECORDED: 07/24/2000 .