

01-12-1999



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RECORDATION FORM COVER SHEET
PATENTS ONLY

MD01-05-99
09/03/0400

TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).

Submission Type

New

Resubmission (Non-Recordation)
Document ID#

Correction of PTO Error
Reel # Frame #

Corrective Document
Reel # Frame #

Conveyance Type

Assignment Security Agreement

License Change of Name

Merger Other

U.S. Government
(For Use ONLY by U.S. Government Agencies)

Departmental File Secret File

Conveying Party(ies)

Mark if additional names of conveying parties attached

Name (line 1) Execution Date Month Day Year

Name (line 2)

Second Party

Name (line 1)

Name (line 2)

Execution Date Month Day Year

Receiving Party

Mark if additional names of receiving parties attached

Name (line 1) If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)

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)

FOR OFFICE USE ONLY

Correspondent Name and Address

Area Code and Telephone Number

Name

Address (line 1)

Address (line 2)

Address (line 3)

Address (line 4)

Pages Enter the total number of pages of the attached conveyance document including any attachments. #

Application Number(s) or Patent Number(s) Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

Patent Number(s)

<input type="text" value="9/030,400"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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If this document is being filed together with a new Patent Application, enter the date the patent application was Month Day Year

Patent Cooperation Treaty (PCT)

Enter PCT application number only if a U.S. Application Number has not been assigned.

PCT <input type="text"/>	PCT <input type="text"/>	PCT <input type="text"/>
PCT <input type="text"/>	PCT <input type="text"/>	PCT <input type="text"/>

Number of Properties Enter the total number of properties involved. #

Fee Amount Fee Amount for Properties Listed (37 CFR 3.41): \$

Method of Payment: Enclosed Deposit Account

Deposit Account

(Enter for payment by deposit account or if additional fees can be charged to the

Deposit Account Number: #

Authorization to charge additional fees: Yes No

Statement and Signature

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.

Mark P. Dvorscak

Mark P. Dvorscak

Jan 5 1999

Name of Person Signing

Signature

Date

CONFIRMATORY LICENSE

(Metals Initiative)

Title : LASER-ULTRASOUND SPECTROSCOPY APPARATUS AND METHOD WITH
DETECTION OF SHEAR RESONANCES FOR MEASURING ANISOTROPY, THICKNESS,
AND OTHER PROPERTIES

Inventor(s) : Daniel Lévesque, André Moreau, Marc Dubois, Jean-Pierre Monchalin,
Jean Bussière, Martin Lord and Christian Padioleau

Serial No. : 09/030,400

Filing Date : February 25, 1998

Contractor : **AMERICAN IRON & STEEL INSTITUTE**

DOE Contract No.: **DE-FC07-9³ ID13205** *ell 11/23/98*

Holding Co. Agreement: **DE-GM07-95ID11176**

DOE Case No. : **S-89,086**

Foreign Applications filed in or intended to be filed at Contractor's expense in (countries):
Brazil, Australia, Mexico, Japan, Canada, South Korea, and European Union Countries

The Invention identified above is a "Subject invention" under the Patent Rights clause included in the above-identified contract with the U.S. Department of Energy and is subject to the above identified Holding Company Agreement.

This Document is confirmatory of the paid-up license required to be granted to the Government under this contract in this invention, patent application, and any resulting patent, and of all other rights acquired by the Government by the referenced agreement, a copy of which is attached hereto and incorporated by reference herein.

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

(SEAL) Signed this 23rd day of November, 1998

AMERICAN IRON AND STEEL INSTITUTE
(Contractor)

By: *[Signature]* VP - Mfg & Technology
(Contractor's Official and Title)

1101 17th Street, N.W. Suite 1300 Washington, D.C. 20036
(Business Address)

STEEL INITIATIVE AGREEMENT BETWEEN STEEL TECHNOLOGY CORPORATION AND THE U.S. DEPARTMENT OF ENERGY

THIS AGREEMENT, effective as of the 1st day of June, 1989, is entered into between the UNITED STATES OF AMERICA (hereinafter referred to as the "Government"), as represented by the DEPARTMENT OF ENERGY (hereinafter referred to as "DOE"), and Steel Technology Corporation, a corporation organized under the laws of the state of Delaware, with its principal place of business located in Washington, D.C. (hereinafter referred to as the "Holding Company").

WHEREAS, by Public Law 99-190, 99 STAT. 1253, Congress provided funding for a research and development initiative for new technologies to increase significantly the energy efficiency of processes that produce steel (hereinafter referred to as the "Steel Initiative");

WHEREAS, DOE has through various findings and determinations elected to waive title to inventions, conceived or first actually reduced to practice under the Direct Steelmaking Project (hereinafter referred to as the "Project") being undertaken by the American Iron and Steel Institute (hereinafter referred to as "AISI") pursuant to a Cooperative Agreement dated May 24, 1989 (hereinafter referred to as the "Cooperative Agreement"), between DOE and AISI, in order to further the purposes of the Steel Initiative; and

WHEREAS, the Participants have designated the Holding Company to be the entity to conduct on their behalf such activities as patenting, licensing, accounting, record-keeping and funds-disbursing relating to inventions arising out of the Project (hereinafter referred to as "Project Inventions").

NOW, THEREFORE, the parties hereto hereby agree as follows:

ARTICLE 1 - DEFINITIONS

- (a) "Contracting Officer" means a person with the authority to enter into, administer and/or terminate contracts and agreements and make related determinations and findings on behalf of DOE.
- (b) "Gross Royalty Income" means all income, receipts and proceeds of whatever kind received from the licensing of each Project Invention, including Participants' Fees referred to in Article 6.
- (c) "Net Royalty Income" means Gross Royalty Income less amounts for payment of costs associated with the preparation of patent applications, filing fees, prosecution costs, issue fees, maintenance fees, licensing expenses and other directly associated costs of the administration of Project Inventions. Licensing costs include only the reasonable costs of direct salaries and travel expenses of personnel engaged in licensing activities and also includes associated legal, accounting, and consulting costs. Travel expenses will be subject to the limitations contained in the Federal Acquisition Regulation (FAR) 31.205-46, in effect on the effective date of this Agreement.

- (d) "Participants" means those organizations listed in Appendix A.
- (e) "Patent Counsel" means the DOE Patent Counsel assisting the Procuring Activity.
- (f) "Procuring Activity" means the Idaho Operations Office of DOE.
- (g) "Project Invention" means a Subject Invention made under the Cooperative Agreement or any subcontract thereunder, or any other contract specifically directed to and a part of the above-identified project.
- (h) "Products", as used in Article 4, means those items resulting from the first commercial use of the invention, for example, the semi-finished (e.g., blooms, slabs, billets) and finished (e.g., sheet, strip, bars, tubes) items.

ARTICLE 2 - INVENTIONS AND RELATED REQUIREMENTS

(a) Invention Disclosures and Election of Title

- (1) When Patent Counsel determines that an invention which has been disclosed to Patent Counsel has been made under the Project and that a waiver of DOE rights applies by which title to such invention has been waived to the Holding Company, DOE shall promptly forward to the Holding Company a full disclosure of such Project Invention. Such determination by Patent Counsel shall be made within 60 days following receipt by Patent Counsel of the written disclosure of the invention.
- (2) The Holding Company shall elect in writing whether or not to retain domestic title to any such Project Invention by notifying Patent Counsel within six months of disclosure to the Holding Company, or such longer period as may be authorized by Patent Counsel for good cause shown in writing by the Holding Company. However, in any case where publication, on-sale, or public use has initiated the one year statutory period wherein valid patent protection can still be obtained in the United States, the period for election of title terminates sixty days prior to the end of the the statutory period. Such election should also include a statement specifying those foreign countries, if any, in which foreign patent rights will be retained.
- (3) Subject to the provisions of this Agreement, with respect to a Project Invention, the domestic title to which has been elected pursuant to paragraph (a) (2) above, the Holding Company reserves the entire domestic right, title and interest in any United States patent application on the Project Invention filed, and any resulting United States patent secured, by the Holding Company.
- (4) Subject to the provisions of this Agreement, with respect to a Project Invention, the foreign patent rights to which have been elected to be retained in specified foreign countries pursuant to paragraph (a) (2) above, the Holding Company reserves the entire right, title and interest in any foreign patent application on the Project Invention filed, and any resulting foreign patent secured, by the Holding Company in those foreign countries specified.
- (5) The waiver of rights in any Project Invention shall be effective on the date the Holding Company's written election to retain the waived rights in that Project Invention is submitted to Patent Counsel.

(b) Filing of Patent Applications

- (1) With respect to each Project Invention in which the Holding Company elects to retain domestic rights pursuant to paragraph (a) (2) of this ARTICLE 2, the Holding Company shall have a domestic patent application filed on the invention within six months after the waiver has become effective with respect to that invention, or such longer period of time as may be approved by the Patent Counsel for good cause shown in writing by the Holding Company. With respect to the invention, the Holding Company shall promptly notify the Patent Counsel of any decision not to file an application.**
- (2) For each Project Invention on which a domestic patent application is filed by the Holding Company, the Holding Company shall:**

 - (i) Within two months after the filing, deliver to the Patent Counsel a copy of the application as filed, including the filing date and serial number;**
 - (ii) Within six months after filing the application, 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 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 United States 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 power of attorney; and**
 - (v) Include the following statement in the second paragraph of the specification of the application issued on a Project Invention: "The Government of the United States of America has rights in this invention pursuant to Cooperative Agreement No. DE-FC07-89ID12847 awarded by the U.S. Department of Energy."**
- (3) With respect to each Project Invention in which the Holding Company has elected pursuant to paragraph (a) (2) of this ARTICLE 2 to retain the patent rights waived in specified foreign countries:**

 - (i) The Holding Company 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:**

 - (A) Eight months from the date of filing a corresponding United States application, or if such an application is not filed, six months from the date the waiver has become effective with respect to that invention;**
 - (B) Six months from the date a license is granted by the Commissioner of Patents and Trademarks to file the foreign patent application where such filing has been prohibited by security reasons; or**
 - (C) Such longer period as may be approved by the Patent Counsel for good cause shown in writing by the Holding Company**

- (ii) The Holding Company 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.

(c) Terms and Conditions of Waived Rights

- (1) Subject to any licenses consistent with the requirements of ARTICLE 4 below, which the Holding Company may have granted in the invention, the Holding Company agrees to convey to the Government, upon request, the entire domestic right, title, and interest in any Project Invention when the Holding Company:
 - (i) Does not elect pursuant to paragraph (a) (2) of this ARTICLE to retain such rights;
 - (ii) Fails to have a United States patent application filed on the invention in accordance with paragraph (b) (1) of this ARTICLE, or decides not to continue prosecution of such application; or
 - (iii) At any time, no longer desires to retain title.
- (2) Subject to any licenses consistent with the requirements of ARTICLE 4 below, which the Holding Company may have granted in the invention, the Holding Company agrees to convey to the Government, upon request, the entire right, title and interest in any Project Invention in any foreign country if the Holding Company:
 - (i) Does not elect pursuant to paragraph (a) (2) of this ARTICLE to retain such rights in the country; or
 - (ii) Fails to have a patent application filed in the country on the Project Invention in accordance with paragraph (b) (3) of this ARTICLE, 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 Holding Company shall notify the Patent Counsel not less than 60 days before the expiration period for any action required by the foreign Patent Office.
- (3) Conveyances requested pursuant to paragraph (c) (1) and (c) (2) of this ARTICLE 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 governing the invention in this or the foreign country, respectively, or otherwise establish its ownership of the invention.
- (4) For each invention in which the Holding Company initially elects pursuant to (a) (2) of this ARTICLE not to retain the rights waived, the Holding Company 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 that may constitute a statutory bar under 35 USC 102, that was authorized by or known to the Holding Company, or any contemplated action of this nature.

(5) Government License

With respect to any Project Invention in which the Holding Company 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 Project Invention throughout the world.

ARTICLE 3 - MARCH-IN RIGHTS, ASSIGNMENT OF PAYMENTS, DEFAULT AND TERMINATIONS

- (a) The Holding Company agrees that with respect to any Project 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 Holding Company, an assignee or exclusive licensee of a Project 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 Holding Company, 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 Holding Company or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the Project Invention in such field of use;**
 - (2) Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the Holding Company, the 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 Holding Company, the assignee or their licensees; or**
 - (4) Such action is necessary because the licensing contemplated by ARTICLE 4 of this Agreement has not been obtained or because the Holding Company is in breach of this Agreement or its licensee is in breach of the licensee's agreement with the Holding Company.**
- (b) Should the Holding Company be in default or in breach of any provisions of this Agreement, and if such default or breach shall continue for 30 days following written notice thereof by DOE to the Holding Company, DOE shall have the right, in addition to any other rights in law or equity, to declare this Agreement to be ended and have no further obligation to the Holding Company under this or any related agreement, and with respect to any license or assignment under which proceeds or royalty payments are due the Holding Company, to direct any such assignee or licensee to make all further remittances directly to DOE and release said licensee or assignee from any further obligation to the Holding Company.**
- (c) Any waiver of the rights retained in accordance with ARTICLE 2, paragraph (a) (3) and (a) (4), as applied to particular inventions, may be terminated at the discretion of the Secretary of DOE or his designee, in whole or in part, if the Holding Company fails to comply with the provisions set forth in ARTICLE 2, paragraphs (b) and (c), and ARTICLES 4, 5, 6, 7, 8, 9, 10 and 11 and such failure is determined by the Secretary of DOE or his designee to be material and detrimental to the interests of the United States and the general public. Prior to terminating any waiver of rights,**

the Holding Company 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 of DOE or his designee shall determine for good cause shown in writing, to show cause why the waiver of rights should not be so terminated.

ARTICLE 4 - LICENSING ACTIVITIES

(a) With respect to each Project Invention for which the Holding Company elects rights as provided in ARTICLE 2 above, the Holding Company shall promote domestic use by entering into license agreements with Participants and others who are not Participants consistent with the following requirements:

(1) **Royalty-Free License to Participants**

The Holding Company shall grant to each Participant, upon the written request of such Participant, a royalty-free, nonexclusive license in any Project Invention. The license shall expressly preclude sublicensing by the Participant except to the extent such is necessary for the sale of products or equipment and shall also require that any products sold in the United States be manufactured substantially in the United States.

(2) **Royalty-Bearing Licenses to Others**

The Holding Company shall also make good faith efforts to license Project Inventions to others who are not Participants at reasonable royalty rates based upon the volume or selling price of products produced with the use of such Project Inventions or upon any other commercially reasonable basis for establishing royalty rates. Any such license in a Project Invention shall be royalty-bearing and nonexclusive, shall expressly preclude sublicensing except to the extent such is necessary for the licensee's sale of products or equipment and shall require that any products sold in the United States be manufactured substantially in the United States. In addition, the royalties assessed a non-Participant licensee shall be on a basis that will be beneficial and equitable to the Participants.

(b) The Holding Company agrees that no licensing of Project Inventions to non-U.S. concerns will occur without the consent of AISI and the Contracting Officer provided that notwithstanding the foregoing the Holding Company may license Project Inventions to non-U.S. concerns that on the date of this Agreement are company members of AISI and may do so on a preferential royalty basis (but not at less than 50 percent of the third party rate) in recognition of their direct cost-sharing contribution to the Project through AISI. Any licenses granted to non-U.S. concerns will be subject to all the requirements set forth in paragraph (a) (2) of this ARTICLE 4. Notwithstanding the foregoing, the Holding Company may grant a nonexclusive license to Dofasco Inc., and its current wholly-owned subsidiaries, that is (a) royalty free after DOE has been repaid in total as required by ARTICLE 6 and (b) is without territorial restriction as contemplated by paragraph (a) (2) of this ARTICLE 4, in recognition of its agreement as a subcontractor to AISI to permit its principal steelmaking vessel to be used for tests under the Project and as a result disrupt its normal operation and subject its vessel to risk of damage.

ARTICLE 5 - PROHIBITION AGAINST EXCLUSIVE LICENSES AND ASSIGNMENT

The Holding Company agrees that it will not grant to any party the exclusive right to use or sell any Project Invention in the United States without the consent of two-thirds of the Participants or their successors or assignees and the Patent Counsel. Notwithstanding the provisions of paragraph (a) (1) of ARTICLE 4 above, any exclusive license shall provide for royalty payments in accordance with paragraph (a) (2) of ARTICLE 4. The Holding Company agrees that it will not assign title to any Project Invention without the approval of Patent Counsel.

ARTICLE 6 - REPAYMENT OF GOVERNMENT CONTRIBUTION

- (a) Each license agreement with a Participant shall require the Participant to pay to the Holding Company a fee ("Participants' Fee") equal to 25 percent of the royalty rate established for non-Participants with respect to the Project Invention being licensed, such Participants' Fee to be payable only until the Government Repayment Obligation hereinafter referred to shall have been satisfied. The Holding Company shall treat all participants' Fees received by it as "Gross Royalty Income".
- (b) The Holding Company shall pay to DOE monthly 25 percent of Net Royalty Income until the total of all such payments equals 150 percent of the Government's total payments to the Project (the "Government Repayment Obligation").

ARTICLE 7 - INVENTORS' AWARDS AND ROYALTY SHARING

The Holding Company shall establish a policy permitting inventors to receive awards and share in the Net Royalty Income with respect to their respective Project Inventions. The policy should take into account and make a reasonable attempt to treat inventors in conformance with any inventor's employer's corporate policy for awarding inventors and permitting royalty-sharing. The Holding Company's policy should also attempt to treat co-inventors having different employers as equitably as possible, taking into account any difference in the employers' policies. The policy shall also provide that at least 15 percent of the Net Royalty Income from a Project Invention shall be paid to the inventor or co-inventors where any inventor or co-inventor is an employee of the Government.

ARTICLE 8 - DISTRIBUTION OF REMAINING NET ROYALTY INCOME

After payment of 25 percent of Net Royalty Income to DOE under ARTICLE 6 above and payment to inventors under the policy established pursuant to ARTICLE 7 above, the remaining Net Royalty Income shall be dealt with as shall be agreed by the Participants.

ARTICLE 9 - PATENTING COSTS

The Holding Company agrees to bear all costs associated with the patenting of the elected Project Inventions, including costs associated with the preparation of patent applications, filing fees, prosecution costs, issue fees, maintenance fees and licensing expenses.

ARTICLE 10 - REPORTING ON UTILIZATION OF PROJECT INVENTIONS

The Holding Company agrees to submit reports annually to DOE on the utilization of Project Inventions or on efforts at obtaining such utilization that are being made by the Holding Company or its licensees. Such reports shall include information regarding the status of development, date of first commercial sale or use, and will provide an accounting of royalties and Participants' Fees received by the Holding Company, expenditures on account of each Project Invention, including inventor awards, Holding Company costs and such other data and information as is necessary to properly account for receipts and expenditures relating to Project Inventions. The Holding Company 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 ARTICLE 3. To the extent data or information supplied under this ARTICLE is considered by the Holding Company or its licensee 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.

ARTICLE 11 - AUDIT AND RECORDS

The Contracting Officer or representatives of the Contracting Officer shall have the right to examine and audit books, records, documents and other evidence and accounting procedures and practices, sufficient to reflect properly all costs claimed to have been incurred or anticipated to be incurred in performing this Agreement and all remittances or payments received (including amounts due but unpaid) for activities under this Agreement. This right of examination shall include inspection at all reasonable times of the Holding Company's offices, or parts of them, engaged in performing this Agreement.

Since the Holding Company is required to furnish cost, funding or performance reports, the Contracting Officer or representatives of the Contracting Officer who are employees of the Government shall have the right to examine and audit books, records, other documents, and supporting materials, for the purpose of evaluating (1) the effectiveness of the Holding Company's policies and procedures to produce data compatible with the objectives of these reports and (2) the data reported.

The Holding Company shall make available at its office at all reasonable times the materials described in this ARTICLE 11 for examination, audit or reproduction, until three years after expiration of any patents reserved by the Holding Company under this Agreement or for any longer period required by statute or by other clauses of this Agreement.

ARTICLE 12 - TERM OF AGREEMENT

This Agreement shall become effective on June 1, 1989 and shall continue until the expiration of all patents held by the Holding Company on elected Project Inventions or until all royalty or other payments are received by the Holding Company and disbursed and accounted for as required by this Agreement, whichever is later.