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Form PTO-1595
(Rev. 03/01)

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OMB No. 0651-0027 (exp. 5/31/2002)

Tab settings

U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Hydrogen Burner Technology, Inc.
19300 Susana Road
Rancho Dominguez, CA 90221

2. Name and address of receiving party(ies)

Name: SOFINOV, Société Financière
d'Innovation

Internal Address: _____

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

☐ Assignment☐ Merger☒ Security Agreement☐ Change of Name☐ Other _____

Street Address: 1981, Avenue McGill

College

City: Montréal State: Quebec Zip: H3A 3C7

Country: Canada

Additional name(s) & address(es) attached? ☐ Yes ☒ NoExecution Date: May 15, 2001 with amendment
dated June 22, 2001

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 No.(s)

B. Patent No.(s)

SEE CONTINUATION SHEET

Additional numbers attached? ☒ Yes ☐ No

09240798

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Eric van Ginkel

Internal Address: _____

Street Address: Hughes Hubbard & Reed LLP

350 S. Grand Avenue, 36th Floor

City: Los Angeles State: CA Zip: 90071

6. Total number of applications and patents involved: 17

7. Total fee (37 CFR 3.41): \$ 680.00

☐ Enclosed☒ Authorized to be charged to deposit account

8. Deposit account number:

08-3264 - Hughes Hubbard & Reed LLP

(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. 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.

Eric van Ginkel

Name of Person Signing

Signature

8/9/01

Date

Total number of pages including cover sheet, attachments, and documents: 10

08/16/2001 LMJELLER 00000131 09240298

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680.00 DP

Mail documents to be recorded with required cover sheet information to:
Commissioner of Patents & Trademarks, Box Assignments
Washington, D.C. 20231PATENT
REEL: 012066 FRAME: 0621

4. Application Numbers(s) or Patent Number(s)

Patent Application No.

09/ 240, 298
09/ 318, 695
09/ 512, 727
09/ 618, 527
09/ 732, 230
09/ 827,258
09/ 827,257

Patent No.

US 5,207,185
US 5,299,536
US 5,437,123
US 5,441,546
US 5,529,484
US 5,546,701
US 5,728,183
US 5,944,510
US 6,033,793
US 6,089,859

SECURITY AGREEMENT

THIS SECURITY AGREEMENT (this "**Agreement**") is entered into as of the 15th day of May, 2001, by and between **Hydrogen Burner Technology, Inc.**, a Delaware corporation ("**Obligor**"), with an address at 19300 Susana Road, Rancho Dominguez, California 90221, and **SOFINOV Société Financière d'Innovation**, a Québec corporation ("**Secured Party**"), with an address at 1981, Avenue McGill College, Montréal, Québec H3A 3C7, Canada.

WHEREAS, concurrent with the execution hereof, Obligor, as borrower, and Secured Party, as lender, have entered into a bridge loan agreement ("**Loan Agreement No. 4**", and together with that certain bridge loan agreement dated as of December 22, 2000, that certain bridge loan agreement dated as of February 16, 2001, and that certain bridge loan agreement dated as of March 23, 2001, the "**Loan Agreements**"), pursuant to which Secured Party has agreed to make a loan available to Obligor in the amount of \$1,000,000 in two Tranches (the "**Loan**", and together with the loans made by Secured Party to Obligor pursuant to the other Loan Agreements, the "**Loans**");

WHEREAS, Tranche II of the Loan is being made on the condition that the Loans are first secured by a security interest in the Collateral described in Paragraph 2 below (the "**Collateral**").

AGREEMENT

NOW THEREFORE, in consideration of the Loan provided by Secured Party to Obligor under Loan Agreement No. 4, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. Grant of Security Interest. In order to secure payment of all principal amounts, interest, costs and fees payable under the Loans by Obligor to Secured Party and/or its successors and assigns which are now due or hereafter become due from Obligor, its predecessors, successors and present and former officers, directors and affiliates, and the performance of all of the obligations of Obligor under the Loan Agreements and this Security Agreement (collectively and severally, the "**Obligations**"), Obligor hereby grants to Secured Party a continuing security interest in the Collateral.

2. Collateral. The Collateral under this Security Agreement consists of:

(a) All right, title and interest of Obligor in and to the following Intellectual Property:

(i) all United States and foreign (i) patents, patent applications and recordings of assignments, including, without limitation, the patents listed on **Schedule 2(a)** attached hereto and made a part hereof by this reference;

(ii) trademark registrations (including material Internet domain registrations) and applications and material unregistered trademarks;

(iii) copyright registrations and applications, indicating for each, the applicable jurisdiction, registration number (or application number), and date issued (or date filed);

(iv) all agreements to which Obligor is party related to the rights and ownership of Intellectual Property; and

(v) all trade secrets, company know-how, technical ideas and concepts prosecuted to patent applications, no matter how evidenced.

(b) All rights, interests, claims and causes of action (collectively, "Claims") of Obligor against any third party which relate in any manner to Obligor's Intellectual Property ; and

(c) Any and all proceeds of the foregoing Collateral.

3. Affirmative Covenants of Obligor. Until the Obligations have been paid and performed in full, Obligor shall:

(a) Furnish and cause to be furnished to Secured Party such information concerning Obligor and the Collateral as Secured Party may from time to time request;

(b) Permit Secured Party to institute and maintain actions or other proceedings on the Claims in the name of Obligor, to settle, compromise or assign the Claims and to give releases thereof in the name of Obligor in full discharge of liability thereunder;

(c) Use its best efforts to preserve, protect and enhance the value of the Collateral; and

(d) Pay all charges of any nature against the Collateral.

4. Negative Covenant. Until the Obligations have been paid and performed in full, Obligor shall not, without the prior written consent of Secured Party, sell, assign, transfer or create or permit to exist any lien or security interest in the Collateral or any portion thereof in favor of anyone other than Secured Party.

5. Representations and Warranties. Obligor represents and warrants that it has full right, power and authority to execute and deliver this Security Agreement, that it owns all of the Collateral free of any lien, charge, encumbrance or other adverse interest, and that it has not previously sold, assigned, transferred or created or permitted to exist any lien or security interest in the Collateral or any portion thereof in favor of anyone other than Secured Party.

6. Events of Default; Remedies. Upon the occurrence of any of the following (an "Event of Default"):

(a) Failure of Obligor to pay or perform the Obligations or any portion thereof when due, or failure to observe or perform any term or provision of this Security Agreement or any Loan Agreement; or

(b) The termination of business, dissolution or insolvency of Obligor or the commencement of any bankruptcy, receivership or similar proceeding under bankruptcy or debtor's relief laws by or against Obligor;

THEN, Secured Party may, at its option: (a) without notice, declare all Obligations immediately due and payable and proceed to collect the same; (b) foreclose or otherwise enforce Secured Party's security interest in the Collateral in any manner permitted by law; (c) sell or otherwise dispose of the Collateral or any portion thereof at one or more public or private sales, on such terms and in such manner as Secured Party may determine; and (d) apply all sums received or collected from or on account of the Collateral, including, without limitation, the proceeds of any sale thereof, to the payment of (i) the costs and expenses incurred in preserving and enforcing the rights of Secured Party in effecting a sale of the Collateral (including, without limitation, reasonable attorneys' fees and legal expenses) and (ii) the Obligations in such order and manner as Secured Party, in its sole discretion, elects.

7. Cumulative Rights. Secured Party shall have all the rights, powers and remedies of a secured party under the California Commercial Code. All of the rights, powers and remedies of Secured Party under this Security Agreement shall be in addition to all rights, powers and remedies given to Secured Party by any statute or rule of law, or other agreement, shall be cumulative and may be exercised successively or concurrently without impairing or in any way affecting Secured Party's security interest in the Collateral.
8. Waiver. Any forbearance, or failure or delay by Secured Party in exercising any right, power or remedy, shall not preclude the further exercise thereof, and every right, power or remedy of Secured Party shall continue in full force and effect unless such right, power or remedy is specifically waived in writing by Secured Party. Obligor waives any right to require Secured Party to proceed against any person or to exhaust any Collateral or to pursue any remedy in Secured Party's power and any right of subrogation and any right to participate in the Collateral until all Obligations have been paid or performed in full.
9. Cooperation. Obligor shall from time to time execute and deliver to Secured Party, at its request, any instruments, including, without limitation, appropriate financing statements, and will perform any and all acts deemed necessary by Secured Party to carry into or continue in effect the terms, conditions and provisions of this Security Agreement and the transactions connected herewith. Should Obligor fail to execute or deliver any such instruments or to perform any such acts, Obligor hereby irrevocably authorizes and appoints Secured Party to execute and deliver such instruments and to perform such acts in the name of Obligor and on its behalf as its attorney-in-fact.
10. Notices. All notices, requests and other communications hereunder shall be in writing and shall be deemed given upon receipt if either (a) personally delivered, (b) sent by prepaid first class mail, and registered or certified and a return receipt requested or (c) by facsimile telecopier with completed transmission acknowledged:

If to Obligor:

Hydrogen Burner Technology, Inc.
19300 Susana Road
Rancho Dominguez, California 90221
Fax: 310-900-0410
Attention: President and CEO

With a copy to:

Manatt, Phelps & Phillips, LLP
11355 West Olympic Boulevard.
Los Angeles, California 90664
Fax: 310-312-4224
Attention: John Sarafopoulos

If to Secured Party:

SOFINOV Société Financière d'Innovation, Inc.
1981, Avenue McGill College
Montréal, Québec H3A 3C7
Canada
Fax: (514) 847-2628
Attention: Denis Dionne, President


With a copy to:

Hughes Hubbard & Reed LLP
Two California Plaza
350 South Grand Avenue, 36th Floor
Los Angeles, California 90071-3442
Fax: (213) 613-2950
Attention: Eric van Ginkel

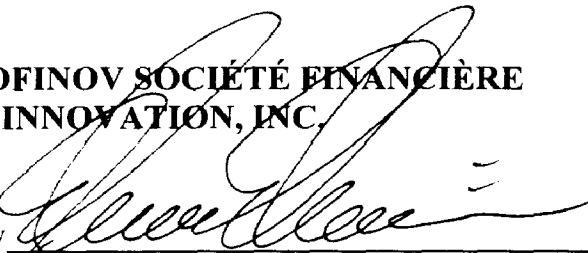
11. Miscellaneous. This Security Agreement shall be governed by and construed in accordance with the laws of the State of California, and, where applicable and except as otherwise defined herein, the terms used herein shall have the meanings given them in the California Commercial Code. If any of the provisions of this Security Agreement shall be held invalid or unenforceable, this Security Agreement shall be construed as not containing those provisions and all rights and obligations of the parties hereto shall be construed and enforced accordingly. Time is of the essence of this Security Agreement. This Security Agreement shall be binding on Obligor, its successors and assigns.

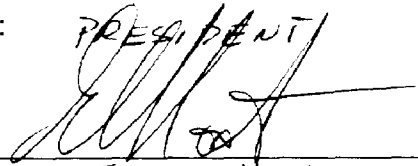
IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first set forth above.

HYDROGEN BURNER TECHNOLOGY, INC.

By 
Name: JAMES K. BURKE
Title: CHIEF FINANCIAL OFFICER

**SOFINOV SOCIÉTÉ FINANCIÈRE
D'INNOVATION, INC.**

By 
Name: DENIS DIONNE
Title: PRESIDENT

By 
Name: EDWARD SIOCT
Title: DIRECTOR

Schedule 2a

List of United States Patents and Patent Applications Owned by Hydrogen Burner Technology, Inc.

1. Patents

- US 5,207,185 – Apparatus and Method for decreasing Nitrogen Oxide Emissions From Internal Combustion Power Sources.
- US 5,299,536 – Apparatus and Method for decreasing Nitrogen Oxide Emissions From Internal Combustion Power Sources.
- US 5,437,123 – Underoxidized Burner Utilizing Improved Injectors.
- US 5,441,546 – Apparatus and Method for decreasing Nitrogen Oxide Emissions From Internal Combustion Power Sources.
- US 5,529,484 – Apparatus and Method for decreasing Nitrogen Oxide Emissions From Internal Combustion Power Sources.
- US 5,546,701 – Underoxidized Burner Utilizing Improved Injectors.
- US 5,728,183 – Shift Reactor for Use with an Underoxidized Burner.
- US 5,944,510 – Dynamic Fluid Injector.
- US 6,033,793 – Integrated Power Module.
- US 6,089,859 – Reduced Carbon form Underoxidized Burner.

2. Patents Pending

- PP 09/240,298
- PP 09/318,695
- PP (# not assigned, filed 4/5/01)
- PP-CIP 09/512,727
- PP-CIP 09/618,527
- PP 00/732,230
- PP (# not assigned, filed 4/5/01)

REDACTED

3. Patent Applications

- Appl HbT-004-103
- Appl HbT-008-104
- Appl HbT-008-105

REDACTED

- Appl HbT-008-106
- Appl HbT-008-107
- Appl HbT-009-101
- Appl HbT-010-101

REDACTED

FIRST AMENDMENT
TO THE SECURITY AGREEMENT

THIS FIRST AMENDMENT to that certain security agreement (the "**Security Agreement**") entered into as of May 15, 2001 ("**this Amendment**") is entered into as of the 22nd day of June, 2001, by and between **Hydrogen Burner Technology, Inc.**, a Delaware corporation ("**Obligor**"), with an address at 19300 Susana Road, Rancho Dominguez, California 90221, and **SOFINOV Société Financière d'Innovation**, a Québec corporation ("**Secured Party**"), with an address at 1981, Avenue McGill College, Montréal, Québec H3A 3C7, Canada.

RECITALS

WHEREAS, as of May 15, 2001, the parties entered into the Security Agreement, pursuant to which Obligor granted Secured Party a continuing security interest in the Collateral (as defined therein) in order to secure payment of all principal amounts, interest, costs and fees payable under the Loans (as defined therein) by Obligor to Secured Party;

WHEREAS, concurrent with the execution hereof, Obligor, as borrower, and Secured Party, as lender, have entered into a bridge loan agreement ("**Bridge Loan Agreement No. 5**"), pursuant to which Secured Party has agreed to make a loan available to Obligor in the amount of \$1,000,000 (the "**Loan**", and together with the loans made by Secured Party to Obligor pursuant to the other Loan Agreements [as hereinafter defined], the "**Loans**");

WHEREAS, in consideration of Secured Party's entering into that certain Bridge Loan Agreement No. 5 of even date herewith, the parties desire to amend the wording of Section 1 of the Security Agreement to extend the purpose of the continuing security interest in the Collateral to include the Loan and all other indebtedness of Obligor to Secured Party, including without limitation, all future indebtedness.

AGREEMENT

NOW THEREFORE, in consideration of the mutual covenants herein contained and for other good and valuable consideration, including without limitation the Loan provided by Secured Party to Obligor under Bridge Loan Agreement No. 5, the receipt and sufficiency of which are hereby conclusively acknowledged, the parties hereto agree as follows:

Article 1. Certain Defined Terms. Terms used herein with their initial letters capitalized, and not otherwise defined herein, shall have the respective meanings given to such terms in the Security Agreement.

Article 2. Amendment of the first "WHEREAS" clause of the Security Agreement. The first "Whereas" clause of the Security Agreement is hereby amended to read in its entirety as follows:

"WHEREAS, Obligor, as borrower, and Secured Party, as lender, have entered into a number of bridge loan agreements, respectively dated as of December 22, 2000, February 16, 2001, March 23, 2001, May 15, 2001 and June 22, 2001 (collectively, the "**Loan Agreements**"), pursuant to which Secured Party has agreed to make certain loans available to Obligor (the "**Loans**");"

Article 3. Amendment of Section 1 of the Security Agreement. Section 1 of the Security Agreement is hereby amended to read in its entirety as follows:

"1. Grant of Security Interest. In order to secure payment of (i) all principal amounts, interest, costs and fees payable under the Loans by Obligor to Secured Party and/or its successors and assigns which are now due or hereafter become due from Obligor, its predecessors, successors and present and former officers, directors and affiliates, (ii) all other indebtedness by Obligor to Secured Party and/or its successors and assigns, whether present or future indebtedness, and whether now due or hereafter becoming due to Obligor, its predecessors, successors and present and former officers, directors and affiliates, and (iii) the performance of all of the obligations of Obligor under the Loan Agreements and this Security Agreement (collectively and severally, the "**Obligations**"), Obligor hereby grants to Secured Party a continuing security interest in the Collateral."

Article 4. Counterparts. This Amendment may be executed in one or more counterparts and by facsimile, each of which shall be an original, but all of which together shall constitute one and the same instrument.

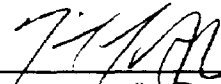
Article 5. Governing Law. This Amendment shall be governed by and construed in accordance with the laws of the State of California, excluding any conflicts or choice of law rule or principle that might otherwise refer construction or interpretation of this Amendment to the substantive law of another jurisdiction.

Article 6. Entire Agreement. The Security Agreement and this Amendment constitute the entire agreement among the parties with respect to the subject matter of the


Security Agreement and supersede all other prior agreements and understandings, both oral and written, between the parties with respect to the subject matter hereof and thereof.


Article 7. Captions. The captions herein are included for convenience of reference only and shall be ignored in the construction or interpretation hereof. IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first set forth above.

HYDROGEN BURNER TECHNOLOGY, INC.

By 
Name: MICHAEL H. BURKE
Title: CHIEF FINANCIAL OFFICER

**SOFINOV SOCIÉTÉ FINANCIÈRE
D'INNOVATION, INC.**

By 
Name: LUC CHARRON
Title:

By 
Name: DENIS DIONNE
Title: PRESIDENT