

05-14-2002

PATENTS ONLY



102089296

To the Assistant Commissioner for Patents: Please record the attached original document!

<p>1. Name of conveying party(ies): Terralogix Inc.</p> <p>Additional names of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>2. Name and address of receiving party(ies): Name: Richard H. Colt</p> <p>Internal Address:</p> <p>Street Address: 1785 Ch. Ayer's Cliff</p> <p>P.O. Box 513,</p> <p>City: Ayer's Cliff State: Quebec ZIP: J0B 1C0</p> <p>Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>3. Nature of conveyance:</p> <p><input type="checkbox"/> Assignment <input type="checkbox"/> Merger</p> <p><input checked="" type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name</p> <p><input type="checkbox"/> Other _____</p> <p>Execution Date: December 20, 2001</p>	

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: _____

<p>A. Patent Application No.(s) 09/725,202</p>	<p>B. Patent No.(s) 6,167,872 6,193,851 6,202,633</p>
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Additional numbers attached? Yes No

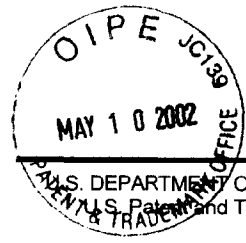
<p>5. Name and address of party to whom correspondence concerning document should be mailed:</p> <p>George R. Locke OGILVY RENAULT 1981 McGill College Ave., Suite 1100 Montreal, Quebec, Canada H3A 3C1 Tel. (514) 847-4681</p> <p>Attorney Docket No.: *</p>	<p>6. Total number of application and patents involved: 4</p> <p>7. Total fee (37 CFR 3.41): \$ <u>160.00</u></p> <p><input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Authorized to be charged to deposit account</p> <p>8. Deposit account number: _____ (Attach duplicate copy of this page if paying by deposit account)</p>
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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.

George R. Locke _____ **May 9, 2002**
Name of Person Signing Signature Date

Total number of pages comprising cover sheet: *



Form PTO-1595 (Rev. 03/01) OMB No. 0651-0027 (exp. 5/31/2002) Tab settings ⇌ ⇌ ⇌ ▼ ▼ ▼ ▼ ▼ ▼ ▼

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

1. Name of conveying party(ies): Terralogix Inc. 2-7-02
Additional name(s) of conveying party(ies) attached? Yes No

2. Name and address of receiving party(ies)
Name: Richard H. Colt
Internal Address: _____
Street Address: _____
City: _____ State: _____ Zip: _____
Additional name(s) & address(es) attached? Yes No

3. Nature of conveyance:
 Assignment Merger
 Security Agreement Change of Name
 Other _____
Execution Date: _____

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) 09/725,202
B. Patent No.(s) 6,167,872
6,193,851 6,202,633
Additional numbers attached? Yes No

5. Name and address of party to whom correspondence concerning document should be mailed:
Name: George R. Locke
Internal Address: Ogilvy Renault
Street Address: 1981 McGill College Avenue
City: Montreal State: QC Zip: H3A 3C1

6. Total number of applications and patents involved: 4
7. Total fee (37 CFR 3.41).....\$ 160
 Enclosed
 Authorized to be charged to deposit account

8. Deposit account number: _____

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9. Signature. DBYRNE 00000085 09725202 160.00 DP
George R. Locke
Name of Person Signing

George R. Locke
Signature

Feb 4/02
Date

Total number of pages including cover sheet, attachments, and documents: 1

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

02/12/2002 01 FC:581



TERRALOGIX INC.

No. 6

6% Convertible Debenture

\$145,000

TERRALOGIX INC. (the "**Company**"), for value received, promises to pay five years from the date of this Debenture subject to the terms and conditions hereinafter set forth, to Richard H. Colt (the "**Holder**") the principal sum of \$145,000 the "**Loan**") in lawful money of Canada together with interest thereon from the date of this Debenture, in like money, at the rate of 6% per annum payable on the due date of the Debenture or at the time of conversion hereinafter referred to, whichever occurs first.

The parties hereby further agree to the following terms and conditions:-

- 1. **Definitions.** The following words and expressions shall have the meanings set opposite them:

"**Civil Code**" or the abbreviation "**C.c.Q.**" means the Civil Code of Quebec.

"**Conventional Security**" means a conventional hypothec, a resolatory right, a right of redemption, a reservation of ownership, a trust and any security device or other real right, whether or not capable of registration, granted by agreement for the purpose of securing the performance of an obligation.

"**Company's Conversion Price**" means a price per share which is 75% of the price per share of an equity financing contemplated by the definition of "**Trigger Event**".

"**Control**" has the meaning ascribed to it in the *Canada Business Corporations Act*.

"**Encumbrance**" means a legal cause of preference, a dismemberment of the right of ownership, a special mode of ownership, a restriction on the right to dispose and a **Conventional Security**.

"**Event of Default**" means any of the events described in Section 5 hereof.

"**Holder's Conversion Price**" means Twenty-eight dollars (\$28), if the **Trigger Event** has not occurred or, if the **Trigger Event** has occurred, a price per share which is the lesser of Twenty-eight dollars (\$28) or 100% of the price per share of an equity financing contemplated by the definition of "**Trigger Event**".

"**Intellectual Property**" means the universality of all of the **Company's** present and future trade names, trade-marks, copyrights, designs, processes, know how, goodwill, licences, franchises, permits, quotas, patents and other rights of intellectual and industrial property of any nature and description, and all pending applications pertaining thereto including, without limiting the generality of the foregoing, in respect of the following patents and trade-marks:

Patents

Country	Application No.	Patent No.	Title
Australia	70212/98		FUEL AND PRODUCTION PROCESS FOR FUEL
Brazil	PI9808764		MOLECULAR REACTOR FOR FUEL INDUCTION
Brazil	PI9809098.4		FUEL AND PRODUCTION PROCESS FOR FUEL
Canada	2286589		FUEL AND PRODUCTION PROCESS FOR FUEL

Country	Application No.	Patent No.	Title
Canada	2289678		MOLECULAR REACTOR FOR FUEL INDUCTION
Canada	2348591		CLEANER FOR COMBUSTION SYSTEMS AND CATALYTIC CONVERTERS
China	98804912.2		FUEL AND PROCESS FOR FUEL PRODUCTION
China	98804938.4		MOLECULAR REACTOR FOR FUEL INDUCTION
Europe	98916716.8		FUEL AND PROCESS FOR FUEL PRODUCTION
Europe	98921284		MOLECULAR REACTOR FOR FUEL INDUCTION
Europe	99923343		CLEANER FOR COMBUSTION SYSTEMS AND CATALYTIC CONVERTERS
India	3045/Del/98		FUEL AND PROCESS FOR FUEL PRODUCTION
India	3046/Del/98		MOLECULAR REACTOR FOR FUEL INDUCTION
Japan	544603/1998		FUEL AND PROCESS FOR FUEL PRODUCTION
Japan	548634/1998		MOLECULAR REACTOR FOR FUEL INDUCTION
South Korea	99-7009045		FUEL AND PROCESS FOR FUEL PRODUCTION
South Korea	99-7010361		MOLECULAR REACTOR FOR FUEL INDUCTION
Mexico	0909508		FUEL AND PROCESS FOR FUEL PRODUCTION
Mexico	9910298		MOLECULAR REACTOR FOR FUEL INDUCTION
United States	09/372056	6167872	CLEANER FOR COMBUSTION AND CATALYTIC CONVERTERS
United States	09/417049	6193851	FUEL AND PROCESS FOR FUEL PRODUCTION
United States	09/435695	6202639	MOLECULAR REACTOR FOR FUEL INDUCTION
United States	09/725202		FUEL AND PROCESS FOR FUEL PRODUCTION
United States [not yet filed]			FUEL AND PROCESS FOR FUEL PRODUCTION

Trade-Mark Registrations

Country	Application No.	Reg'n No.	Title
Canada	874513	TMA544264	TERRALOGIX
Canada	874516	TMA512997	MRFI & Design
Canada	874517	TMA508436	TERRA-CLEAN Design
Canada	1010784	TMA538570	TERRALOGIX & Design
Canada	1010785	TMA594865	TERRACLEAN & Design
United States	75/401454	2262380	TERRALOGIX & Design
United States	75/478878	2264679	TERRA-CLEAN & Design

"Mortgaged Property" means any and all Intellectual Property, all substitutions and replacements thereof, all increases, additions and accessions thereto, all rights attaching thereto and all proceeds in any form derived directly or indirectly from any dealing with any of the foregoing or the proceeds therefrom.

"Specifically Mortgaged Property" means the Mortgaged Property which, at any particular time and from time to time, is actually in existence.

"Tax" means any and all taxes, assessments, levies and charges of any nature, payable to the State or to any other fiscal authority, and to which the law confers a legal cause of preference upon the Mortgaged Property or any part thereof.

"Trigger Event" means the closing by the Company of an equity financing issue of at least \$3,000,000.

2. **Hypothec.** As security for the full and final payment of the Loan and interest accrued thereon and of the expenses, if any, incurred by the Holder to obtain payment or to conserve the Mortgaged Property, the Company hereby (i) hypothecates the Mortgaged Property, present and future, to and in favour of the Holder for an amount of \$174,000 in lawful money of Canada, with interest thereon from the date hereof at the rate of 15% per annum and (ii) grants in favour of the Holder a mortgage on and a continuing security interest in the Mortgaged Property, the Holder expressly recognizing that the security constituted hereunder in its favour shall rank *pari passu* with the security to be created under various debentures up to a total outstanding aggregate amount not to exceed \$3,000,000 issued or to be issued by the Company (such debentures collectively hereinafter referred to as the "Other *Pari Passu* Debentures").

3. **Declarations of the Company.** The Company hereby declares and represents that:

3.1 The Company alone holds the right of ownership in all of the Specifically Mortgaged Property, and the Mortgaged Property is free and clear of any Encumbrance.

3.2 The Company has full legal capacity and authority to grant the security granted herein, and nothing herein constitutes a conflict, a violation or a default under any other contract or agreement evidencing or securing other obligations of the Company.

3.3 The Company is a corporation duly constituted and in good standing with respect to the filing of such returns and documents as are required to be filed from time to time under the laws of its constituting jurisdiction, the security hereby created has been duly authorized by resolution or other internal action of the Company as may be needed to make it a legal, binding and enforceable obligation of the Company, and

the person who has executed this Debenture on behalf of the Company has been duly authorized to do so.

4. **Covenants of the Company.** The Company hereby undertakes and covenants to:

4.1. Notify the Holder forthwith upon the occurrence of any change in the declarations and representations made by the Company in Section 3 above.

4.2. Maintain the Mortgaged Property entirely free and clear of Encumbrances other than the security created or to be created under the Other *Pari Passu* Debentures.

5. **Events of Default.** The security hereby constituted shall become enforceable upon the occurrence of any of the following events:

5.1. If the Company fails to repay the Loan and interest accrued thereon when such payment becomes due or payable and fails to remedy such default to the satisfaction of the Holder within fifteen (15) days following written notice of such default from the Holder;

5.2. If any of the declarations of the Company set forth in Section 3 hereof or otherwise made by the Company in connection with this Debenture is incorrect or misleading in any material respect and such default is not cured to the satisfaction of the Holder within fifteen (15) days following written notice of such default from the Holder;

5.3. If any process of execution (including, without limitation, a prior notice of the exercise of a hypothecary right) is enforced or levied by a third party upon the Mortgaged Property or any part thereof and remains unsatisfied for a period of 10 days, even though such proceedings may be contested in good faith by the Company; unless, in the latter case, the Holder is satisfied that such contested proceedings will not diminish or jeopardize the hypothecary rights of the Holder and the Company provides security which the Holder deems sufficient to pay the full amount of the claim, should it prove to be valid;

5.4. If the Company sells or otherwise disposes of, other than in the ordinary course of business, its rights in the Mortgaged Property or any part thereof without the prior written consent of the Holder;

5.5. If the Company ceases to carry on its business or any part thereof which the Holder deems material;

5.6. If the Company becomes subject to the provisions of the *Bankruptcy and Insolvency Act* (Canada) or of any other bankruptcy, insolvency or winding up legislation;

5.7. If the Company defaults in the performance of any of its other obligations hereunder and fails to remedy such default to the reasonable satisfaction of the Holder within 15 days following written notice of such default from the Holder; or

5.8. If an "Event of Default" occurs in any one of the Other *Pari Passu* Debentures.

6. **EXERCISE OF HYPOTHECARY RIGHTS**

6.1. Upon the occurrence of an Event of Default, the Company immediately loses the benefit of the term insofar as it could claim any such benefit, and the Holder may forthwith terminate any commitment that it had to make any advances or credit available to the Company. The Holder may also demand from the Company the immediate payment of the Loan and interest accrued thereon or any part thereof and, failing receipt of such payment within the specified period, the Holder may exercise at its discretion any rights and remedies which it has pursuant to this Debenture and the security constituted hereunder or at law and without limitation the Holder may request from the Company the voluntary surrender of the Specifically Mortgaged Property and the Company hereby undertakes to do so. To that end, the Company covenants not to oppose the measures initiated by the Holder for the purpose of taking possession of the assets surrendered by the Company, but

to facilitate the same. The Company shall also execute any deed or document which may be necessary or useful to evidence such surrender or to give it full effect.

6.2 The Holder shall not be bound to exercise the same hypothecary or other rights as a secured creditor against all of the Mortgaged Property. Whatever hypothecary rights the Holder elects to exercise, the following provisions shall apply:

- (a) The Holder shall have the right, at the expense of the Company and in order to conserve or realize upon the Mortgaged Property:
 - (i) to use any information obtained by reason of the exercise of its rights;
 - (ii) to perform any obligation or covenant of the Company in relation to the Mortgaged Property; and
 - (iii) to exercise any right with respect to the Mortgaged Property.
- (b) The Holder shall not be bound to make an inventory, to take out insurance or to furnish any security.
- (c) The Holder may acquire directly or indirectly any of the Mortgaged Property.
- (d) The Holder may from time to time in the course of the exercise of its rights, renounce, with or without consideration, any right of the Company in relation to the Mortgaged Property.
- (e) The Holder shall not be bound to make the Mortgaged Property productive or to conserve the same.
- (f) Should the Holder at any time abandon the exercise of its rights, hypothecary or otherwise, against the Mortgaged Property, the Holder may elect, at its option, to return to the Company without any representation or warranty, the Specifically Mortgaged Property which the Company had surrendered to the Holder, or the remainder thereof if any, the whole without prejudice to its other rights and recourses.

6.3 Where the Holder exercises a right of taking in payment and the Company, insofar as it has the right to do so, requires that the Holder sell the Mortgaged Property upon which such recourse was exercised, the Company acknowledges that the Holder shall not be bound to abandon the right of taking in payment unless the Holder has obtained, before the end of the period allowed for surrender, (i) a satisfactory security guaranteeing that the sale will be made at a sufficiently high price to enable the Holder's claim to be paid in full, (ii) the full reimbursement of all costs thus incurred by it, and (iii) an advance of the funds needed for the sale of the said properties.

6.4 If the Holder itself sells the Specifically Mortgaged Property, it shall not be required to obtain any prior appraisal thereof.

6.5 The sale by the Holder of the Specifically Mortgaged Property may be concluded by the Holder without legal warranty or, at its option, without any warranty whatsoever.

7. **Reduction and Cancellation.** The Holder may unilaterally at its entire discretion consent to the reduction or cancellation of the security hereby constituted. However, the Holder shall not be bound to consent to any such reduction or cancellation unless and until it has received the full and final payment of all amounts hereby secured and there is no outstanding commitment on the part of the Holder to advance further sums or extend further credits to the Company. Any such reduction or cancellation shall be at the expense of the Company.

8. **Right of Conversion.**

8.1 The Company shall have the right, upon the occurrence of the Trigger Event, to convert the principal amount of the Loan and, at the option of the Holder, any interest

thereon accrued and unpaid, in whole or in part, into Common shares in the capital of the Company at the Company's Conversion Price and such conversion shall extinguish the Holder's right to repayment of the Loan. The Company shall, as soon as possible after the Trigger Event, but in any event within thirty (30) business days thereof, cause to be issued to the Holder the number of Common shares in the capital of the Company obtained by dividing the amount of the outstanding principal of the Loan and interest accrued and unpaid thereon to be converted by the Company's Conversion Price.

8.2 The Holder shall have the right, at any time, upon notice to the Company, to convert the principal amount of the Loan and any interest thereon accrued and unpaid, in whole or in part, into Common shares in the capital of the Company at the Holder's Conversion Price and such conversion shall extinguish the Holder's right to repayment of the Loan. The Company shall, as soon as possible after receipt of such notice, but in any event within thirty (30) business days thereof, cause to be issued to the Holder the number of common shares in the capital of the Company obtained by dividing the amount of the outstanding principal of the Loan and interest accrued and unpaid thereon to be converted by the Holder's Conversion Price.

9. **Adjustment.** In the event of the declaration of a stock dividend, a subdivision, consolidation or reclassification or other changes with respect to the Class A or Class B shares in the share capital of the Company, then the number of Common Shares issuable pursuant to Section 11 hereof shall be adjusted in such manner as to fully give effect to any of the foregoing events so as not to prejudice the Holder in any way.

10. **General Provisions**

10.1 This Debenture does not operate novation and the security hereby constituted shall be in addition to any other guarantee or security which the Holder may have from time to time.

10.2 The Holder may waive any covenant in its favour and any Event of Default. The Holder may also grant extensions, take and give up security, accept arrangements and otherwise deal with the Company or with any other party as the Holder may see fit, the whole without prejudice to any rights of the Holder hereunder or otherwise. No failure or delay on the part of the Holder in exercising any right hereunder shall operate as a waiver thereof nor shall any waiver be effective unless the same be in writing.

10.3 The Company shall be in default by the mere lapse of time, or may be put in default by any other means provided by law.

10.4 This Debenture is a continuous security which will subsist notwithstanding any fluctuation of the amounts hereby secured. The Company shall be deemed to obligate itself again as provided in Article 2797 of the Civil Code with respect to any future obligation hereby secured.

10.5 The Holder shall have the right, at the expense of the Company, to perform all acts and things and to execute all documents as may be necessary to ensure that this security remains effective and enforceable against third parties, including the execution and filing of any forms required for the renewal hereof from time to time.

10.6 Any amount received by the Holder in the exercise of its rights hereunder or under any law may, at its option, be retained by it as part of the Mortgaged Property, or may be applied by it towards the partial payment of the Loan and interest thereon, even if not yet exigible, as the Holder shall alone determine notwithstanding the rules governing the application of payments.

10.7 The Holder is not bound by any degree of care beyond a reasonable diligence in the exercise of its rights or in the performance of its duties, and it shall not be liable for any loss or damage resulting therefrom except as a result of its own intentional or gross fault.

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- 10.8 The Holder may delegate to any other person the exercise of its rights or the performance of its duties hereunder and may provide such agents or mandataries with any information that the Holder may possess with respect to the Company or the Mortgaged Property.
- 10.9 The property or sums of money received or held by the Holder by reason of these presents may be invested by the Holder in such manner as it shall deem appropriate without regard to rules governing the administration of the property of others.
- 10.10 Every divisible obligation in favour of the Holder arising out of this Debenture and the agreements hereunder must be performed in its entirety, as if it were indivisible, by each heir or legal representative of any person who shall have been bound therefor.
- 10.11 The Company shall continue to be bound by all the obligations expressed herein notwithstanding any transfer of the Mortgaged Property or any part thereof.
- 10.12 Should the Holder at any time consider that the location or the use of the Mortgaged Property requires the registration of this security, or the creation of similar security, under the laws of another jurisdiction, the Company shall forthwith at the request of the Holder execute the documents and accomplish the formalities necessary for such purpose.
- 10.13 Except as may be otherwise apparent from the context, the word "Company" shall be interpreted as referring to the Company itself and to all subsequent owners of the Mortgaged Property as well as to any other person or persons having assumed the Company's liabilities to the Holder.
- 10.14 Unless there is something in the context inconsistent therewith, words importing the singular shall include the plural and vice-versa, and words importing the neuter gender shall include the masculine and feminine genders and vice-versa.
- 10.15 This Debenture need not be signed for acceptance by the Holder in order to be binding on the Company. Such acceptance by the Holder shall be presumed and cannot be disputed by the Company.
- 10.16 This Debenture shall be governed and construed in accordance with the laws in force in the Province of Quebec. It must also be interpreted so that any property forming part of the Mortgaged Property which is located or deemed to be in a jurisdiction other than the Province of Quebec be affected by valid security under the applicable law of such other jurisdictions.
- 10.17 The parties confirm their express wish that this Debenture and all documents related thereto be drawn up in English. *Les parties confirment leur volonté expresse de voir la présente débenture et tous les documents s'y rattachant être rédigés en anglais.*

IN WITNESS WHEREOF the Company has caused this Debenture to be executed on its behalf by its President and Chief Executive Officer and to be dated the 20th day of December, 2001.

TERRALOGIX INC.

By: 