

FORM PTO-1586
(Rev. 8-83)

OMB No. 0051-0011 (exp. 4/94)

Tab settings

12-12-2000



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HEET

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

11-9-00

To the Honorable Commissioner of

and the attached original documents or copy thereof.

1. Name of conveying party(ies):

Institute for Radiological Image
Sciences, Inc.

Phosphorous Plate Technology, Inc.

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

2. Name and address of receiving party(ies)

Name: Montana Investments, Inc.

Internal Address: _____

Street Address: 1706 Rosemont Avenue

P.O. Box 1719

City: Frederick State: MD ZIP: 21702Additional name(s) & address(es) attached? ☐ Yes ☒ No

3. Nature of conveyance:

☐ Assignment☐ Merger☒ Security Agreement☐ Change of Name☐ Other: _____Execution Date: October 25, 2000

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)

SEE SCHEDULE A ATTACHED

B. Patent No.(s)

SEE SCHEDULE A ATTACHED

Additional numbers attached? ☒ Yes ☐ No5. Name and address of party to whom correspondence
concerning document should be mailed:Name: Laura S. Runyeon

Internal Address: _____

Street Address: Miles & Stockbridge10 Light StreetCity: Baltimore State: MD ZIP: 212026. Total number of applications and patents involved: 417. Total fee (37 CFR 3.41).....\$ 1040.00☒ Enclosed☐ Authorized to be charged to deposit account

8. Deposit account number: _____

(Attach duplicate copy of this page if paying by remittance 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.

CHRISTINE E WILSONLaura S. Runyeon

Name of Person Signing

Signature

November 2, 2000

12

Total number of pages including cover sheet, attachments, and document:

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

SCHEDULE A

LIST OF PATENTS

<u>Patent No.</u>	<u>Description</u>
4,693,906	Dielectric for Electroluminescent Devices, and Methods for Making (thin-film EL insulator layer)
4,705,952	Communications Apparatus Using Infrared-Triggered Phosphor for Receiving Infrared Signals (general device using IR-to-visible conversation by ET materials)
4,748,375	Stable Optically Transmissive Conductors, Including Electrodes for Electroluminescent Devices, and Methods for Making (article, with repair of indium-tin oxide thin-film layer)
4,755,324	Thermoluminescent Material (F-15 material glows when warmed by CO2 laser beam)
4,806,772	Infrared Sensing Device Outputting Orange Light and a Process for Making the Same (Q-11 ET device using SrS, europium and samarium)
4,812,659	Infrared Sensing Device Outputting Blue-Green Light (Q-16 ET device using SrS, cerium and samarium)
4,812,660	Photoluminescent Materials for Outputting Yellow-Green Light (Q-31 ET material using CaS for longer-wave IR, cerium & samarium)
4,818,434	Thermoluminescent Material Including Fusible Salt (improvement on F-15 to F-16)
4,822,520	Photoluminescent Materials for Outputting Blue-Green Light (Q-16 ET material using SrS, cerium and samarium)
4,830,875	Photoluminescent Materials and Associated Process and Infrared Sensing Device (Thin-film ET material compositions and vapor deposition)
4,839,092	Photoluminescent Materials for Outputting Orange Light (Q-11 ET material using SrS, europium and samarium)
4,855,603	Photoluminescent Materials for Radiography (Q-16 ET special for radiation image capture sensitivity)
4,855,879	High Luminance Radioluminescent Lamp (stacked plates of fluorescent-coated glass for tritium sealed-beam)
4,864,536	Optical Memory System and Method of Using Same (ET optical memory system; general and broad)
4,879,186	Photoluminescent Materials for Outputting Reddish-Orange Light and a Process for making the Same (Q-32 ET material, CaS for longer-wave IR, europium & samarium)
4,880,475	Method for Making Stable Optically Transmissive Conductors, Including Electrodes for Electroluminescent Devices (method for # 4,748,375)
4,891,507	Apparatus for Extending the Infrared Response of Photocathodes (ET material on front of night vision viewer)
4,915,982	Method of Making Thin Film Photoluminescent Articles (method of making # 4,830,875)
4,940,603	Thin Film Inorganic Scintillator and Method of Making Same (CaS phosphor for cathode ray tube screen; electron-excited)
4,979,935	Method of Photodynamic Therapy Employing ET Material (ET material activation of cancer chemotherapy)
4,983,834	Large Area Particle Detector (general ET device for nuclear particle recording, e.g., Bio-Rad's)

5,006,366 Photoluminescent Material for Outputting Orange Light with Reduced Phosphorescence After Charging and a Process for Making Same (Q-11 ET material with short phosphorescence time)

5,007,037 Optical Disk Drive System
(ET optical memory generic article patent)

5,012,098 Photomultiplier with IR Sensitivity
(ET material on a photomultiplier to make it work in near-IR0)

5,028,793 Imaging Screen for Electrophoresis Applications
(ET radiotracer emission image capture system, i.e., Bio-Rad's)

5,029,253 Spatial Light Modulator for using ET Materials
(ET blue/IR light modulator)

5,030,834 Fiber Optic Dosimeter Utilizing ET Materials
(ET on a fiber tip, acting like #4,983,834 in a tiny remote space)

5,043,096 Thermoluminescent Material Including Lanthanum, Europium and Cerium Dopants
(improvement on F-15, #4,755,324 for CO2 laser detection)

5,043,097 Photoluminescent Material for Outputting Reddish-Orange Light with Reduced Phosphorescence After Charging and a Process for Making
(Q-32 material with short phosphorescence time)

5,065,023 Solid-State High Resolution Photography and Imaging Using ET Materials
(multiple ET layers for color photographic image capture/storage)

5,091,653 Fiber Optic Dosimeter Using ET Materials Employing Technique for Eliminating Background Fluorescence
(improvement on #5,030,834 to kill fiber scintillation noise)

5,124,558 Imaging Screen for Mammography Employing ET Material
(System for ET mammogram X-ray image capture)

5,134,686 Compact Vector-Matrix Multiplier System Employing ET Materials
(ET visible + IR light and scan column on a matrix to process data)

5,142,493 Optical Disk Employing ET Material as a Storage Medium
(Erasable ET optical memory disk)

5,144,145 Optical Image Subtraction Employing Electron Trapping Materials
(using IR image to subtract from a visible-light image in ET film)

5,163,039 Three Dimensional Optical Memory System
(multiple ET layers for different wavelengths on an optical disk)

5,321,270 Compact Vector-Matrix Multiplier System Employing Electron Trapping Materials
(Improvement on #5,134,686 ET data processor system)

5,412,703 Reduced partial volume artifacts in image reconstruction, with application to X-ray computed tomography

5,502,706 Optical Storage Medium Utilizing Electron Trapping Film Layers Sandwiched With Electrodes
(Multilayer ET optical memory with electrical layer selection for read and/or write action)

5,772,916 Phosphor screen, method of producing the same, and method for preparing a phosphor powder for producing a phosphor screen

5,712,486 Flexible cassette for holding storage phosphor screen

COLLATERAL ASSIGNMENT OF PATENTS AS SECURITY

THIS COLLATERAL ASSIGNMENT OF PATENTS AS SECURITY (this "Assignment") is made as of this 25th day of October, 2000, by Institute for Radiological Image Sciences, Inc., a Maryland corporation (the "Guarantor"), and Phosphorous Plate Technology, Inc., a Maryland corporation (the "Borrower") (with the Borrower and the Guarantor being collectively called the "Assignor"), in favor of Montana Investments, Inc., a Maryland corporation (the "Lender").

RECITALS

A. The Borrower has applied to the Lender for certain revolving credit facility (the "Credit Facility") under the provisions of a certain Line of Credit, Pledge and Security Agreements dated the date hereof by and between the Lender and the Borrower (as amended, restated, supplemented or otherwise modified, the "Financing Agreement"). Pursuant to the terms of a certain Guaranty and Indemnification Agreement of even date herewith by the Guarantor in favor of the Lender (the "Guaranty"), the Guarantor has guaranteed the Borrower's obligations under the Financing Agreement, the Note described therein, and the other Loan Documents described in the Note. The Assignor has secured the obligations under the Loan Documents by executing in favor of the Lender, among other things, certain Security Agreements of even date herewith (collectively the "Security Agreements"). As used herein, all of the Assignor's obligations under the Financing Agreement, the Note described therein, the Security Agreements and the other Loan Documents described in the Note shall be collectively referred to as the "Obligations". All other capitalized terms used, but not specifically defined herein, shall have the same meaning given such terms in the Financing Agreement.

B. The Assignor (i.e., the Guarantor, the Borrower, or both) has adopted, used and is using certain patents as listed on SCHEDULE A attached hereto and made a part hereof and has applied for or has pending the patents also as listed on SCHEDULE A (collectively, the "Patents").

C. Pursuant to the terms of the Security Agreements the Assignor has granted to the Lender, a security interest in, among other things, certain assets of the Assignor associated with or relating to products sold under any one or more of the Patents and under which the Lender is entitled to foreclose or otherwise deal with the Patents under the terms and conditions set forth in the Security Agreements.

D. The Lender desires to have the interest of the Lender in such Patents confirmed by a document identifying the same and in such form that it may be recorded in the United States Patent and Trademark Office.

E. As collateral security for the Obligations, whether arising under the Loan Documents or otherwise, the Assignor has agreed to assign to the Lender the Patents and the goodwill of the business associated therewith.

NOW THEREFORE, with the foregoing Recitals being deemed incorporated by

reference and made a part hereof, and in consideration of the premises and mutual promises herein contained, the parties hereto, intending to be legally bound hereby, covenant and agree as follows:

ARTICLE I ASSIGNMENT

In consideration of and pursuant to the terms of the Security Agreements and each of the other Loan Documents, and for other good, valuable and sufficient consideration, the receipt of which is hereby acknowledged, and to secure all of the Obligations, the Assignor hereby grants, assigns and conveys to the Lender all of its present and future right, title and interest in and to, and grants to the Lender a security interest in, and collateral assignment of, the Patents, together with all of the Assignor's rights, title and interest in and to (a) any and all inventions and improvements described and claimed in such Patents and patent applications, (b) reissues, divisions, continuations, renewals, extensions and continuations-in-part of any Patents and patent applications, (c) income, royalties, damages, claims and payments now or hereafter due and/or payable under and with respect to any patents or patent applications, including, without limitation, damages and payments for past and future infringements, (d) rights to sue for past, present and future infringements of patents, and (f) all rights corresponding to any of the foregoing throughout the world.

The foregoing grant, security interest and assignment is a present grant of a collateral assignment and, upon the occurrence of an Event of Default and notice to the Assignor from the Lender, and subject to the filing with and notice to the United States Patent and Trademark Office, shall become an absolute assignment in favor of the Lender or in favor of such person as the Lender may designate, and may be the subject of such confirmatory instruments as the Lender may elect, which instruments shall be conclusive evidence of the Event of Default and absolute assignment.

ARTICLE II REPRESENTATIONS AND WARRANTIES

Section 2.1 Patent Existence.

The Assignor represents and warrants to the Lender, and shall be deemed to represent and warrant to the Lender at each time an advance is made under the Financing Agreement, that based on the records of the United States Patent and Trademark Office and on the Assignor's knowledge:

2.1.1 The Patents are subsisting and have not been adjudged invalid or unenforceable in the United States.

2.1.2 Each of the Patents is valid and enforceable in the United States.

2.1.3 The Assignor has the right to enter into this Assignment and perform its terms.

ARTICLE III
COVENANTS AND AGREEMENTS

Section 3.1 New Agreements, Patents and Consents.

The Assignor covenants that until all the Obligations have been paid and performed in full, and all commitments of the Lender to make further advances under the Financing Agreement (hereinafter the "Commitments") have been terminated or have expired:

3.1.1 It will not enter into any agreement, including without limitation, license agreements that would have a material adverse effect on the Lender's rights under this Assignment.

3.1.2 It will exercise reasonable supervision over each of its present and future employees, agents and consultants which will enable the Assignor to comply with the covenants herein contained.

3.1.3 If the Assignor obtains rights or becomes entitled to the benefit of any patent, patent application, or patentable invention (other than the Patents), or becomes entitled to the benefit of any patent application or patent for any reissue, division, continuation, renewal, extension, the provisions of this Assignment shall automatically apply thereto, and the Assignor shall give the Lender prompt written notice thereof along with an amended SCHEDULE A.

3.1.4 The Assignor shall, at the Lender's request, obtain consents to this Assignment where the Assignor's right to assign any Patents requires such consent.

Section 3.2 Maintenance.

3.2.1 Except as permitted by the provisions of the Security Agreements, the Assignor hereby covenants and agrees to maintain the Patents in full force and effect until all of the Obligations are satisfied in full, and all Commitments have been terminated or have expired.

3.2.2 Except as permitted by the provisions of the Security Agreements, the Assignor shall have the duty to (a) prosecute diligently any patent application that is part of the Patents pending as of the date of this Assignment or thereafter to the extent the value of such application in the Assignor's business justifies such prosecution until the Obligations shall have been satisfied in full, and all Commitments have been terminated or have expired, (b) preserve and maintain all rights in such applications and/or Patents including but not limited to the payment of registration and renewal fees, if any and (c) upon reasonable written request of the Lender, to make federal patent application for patentable inventions. Any expenses incurred in connection with such applications shall be the responsibility of the Assignor. The Assignor shall not abandon any Patent or any pending application for patent registration, without the consent of the Lender.

3.2.3 Prior to an Event of Default, the Assignor shall have the right to bring suit in its own name to enforce the Patents, in which event the Lender may, if necessary, at

its own expense, be joined as a nominal party to such suit if the Lender shall have been satisfied that it is not thereby incurring any risk of liability because of such joinder. If suit is brought subsequent to an Event of Default, the Assignor shall promptly, upon demand, reimburse and indemnify the Lender for all damages, costs and reasonable expenses, including attorneys' fees, as they arise incurred by the Lender in the fulfillment of the provisions of this paragraph.

3.2.4 If the Assignor fails to comply with any of its obligations hereunder in any material respect, the Lender may do so in the Assignor's name or in the Lender's name, but at the Assignor's expense, and the Assignor hereby agrees to reimburse and indemnify the Lender in full for all reasonable expenses, including reasonable attorneys' fees, incurred by the Lender in protecting, defending and maintaining the Patents, together with interest at the Default Interest Rate set forth in the Note.

3.2.5 The Assignor will continue to use, for the duration of this Assignment, proper statutory identification in connection with its use of the Patents.

Section 3.3 Fees and Expenses.

The Assignor agrees to pay to the Lender upon demand, any and all reasonable fees, costs and expenses, of whatever kind or nature, including attorney's fees and legal expenses incurred by the Lender in connection with the preparation of this Assignment and of all other documents relating hereto and the consummation of this transaction, the filing or recording of any documents (including all taxes in connection therewith) in public offices, the payment or discharge of any taxes, counsel fees, maintenance fees, encumbrances or costs otherwise incurred in protecting, maintaining or preserving the Patents, or in enforcing the Lender's rights therein or in defending or prosecuting any actions or proceedings arising out of or related to the Patents, shall be borne and paid by the Assignor on demand by the Lender.

ARTICLE IV EVENTS OF DEFAULT; RIGHTS AND REMEDIES

Section 4.1 Assignor Use.

Prior to an Event of Default (a) the Assignor shall have an exclusive nontransferable right and license to use the Patents and (b) the Lender shall have no right to use the Patents or issue any exclusive or non-exclusive license under the Patents, or assign, pledge or otherwise transfer title in the Patents to any other party. Except as otherwise permitted by the Financing Agreement, the Assignor agrees not to sell or assign its interest in, or grant any sublicense under, except in the ordinary course of the Assignor's business pursuant to arm's length transactions for full and adequate consideration, and only if such sublicensee is provided notice that the sublicense is subject to the terms of this Assignment, or allow any security interest, encumbrance, charge or other lien to attach to, the license granted to the Assignor in this Section, without the prior written consent of the Lender.

Section 4.2 Certain Lender Rights.

The Assignor hereby covenants and agrees that the Lender, as assignee hereunder and as the holder of a security interest under the Uniform Commercial Code, as now or hereafter in

effect in the State of Maryland, and under any other applicable law, following an Event of Default under the Financing Agreement (with an Event of Default thereunder to constitute an Event of Default hereunder as well), upon notice to the Assignor, may terminate the license set forth in Section 4.1 and may take such other action permitted hereunder or under the other Loan Documents or permitted by applicable Laws, in its exclusive discretion, to foreclose upon the Patents covered hereby. For such purposes, and in the event of an Event of Default under the Financing Agreement or in the Obligations, the Assignor upon the occurrence of an Event of Default hereby authorizes and empowers the Lender to make, constitute and appoint any officer of Lender as the Lender may select, in its exclusive discretion, (with full power of substitution and delegation, in its exclusive discretion), as the Assignor's true and lawful attorney-in-fact, with the power, without notice to the Assignor, to endorse the Assignor's name on all applications, documents, papers and instruments in the name of the Lender or in the name of the Assignor or otherwise, for the use and benefit of the Lender to use the Patents or to grant or issue any exclusive or non-exclusive license under the Patents to anyone else, or necessary for the Lender to assign, pledge, convey or otherwise transfer title in or dispose of the Patents to anyone else. This power of attorney shall be irrevocable for the life of this Assignment, the Financing Agreement, the Loan Documents and other obligations and until all of the Obligations to the Lender are satisfied in full and all Commitments have been terminated or otherwise have expired. Notwithstanding any of the foregoing provisions to the contrary, in the event that prior to an Event of Default Assignor has granted unto any one or more third parties one or more sublicenses in the Patents, as provided in Section 4.1 above, then Lender agrees not to terminate such sublicenses, provided the payments thereunder are paid to Lender and not to Assignor, and provided that such third parties are not in default under their applicable sublicense agreements.

Section 4.3 Rights and Remedies.

All rights and remedies herein granted to the Lender shall be in addition to any rights and remedies granted to the Lender under the Loan Documents.

Section 4.4 Re-Vesting of Assignor's Rights.

Upon the full payment and performance of all of the Obligations and termination or expiration of all Commitments, the Lender shall, upon the Assignor's request and at the Assignor's expense, execute and deliver to the Assignor all documents reasonably necessary to terminate this Assignment and re-vest in the Assignor full title to the Patents.

Section 4.5 No Waiver.

No course of dealing between the Assignor and the Lender, nor any failure to exercise, nor any delay in exercising, on the part of the Lender, any right, power or privilege hereunder or under the Loan Documents shall operate as a waiver thereof, and all of the Lender's rights and remedies with respect to the Patents, whether established hereby or by the Loan Documents, or by any other future agreements between the Assignor and the Lender or by law shall be cumulative and may be exercised singularly or concurrently.

ARTICLE V
MISCELLANEOUS

Section 5.1 Severability.

The provisions of this Assignment are severable and the invalidity or unenforceability of any provision herein shall not affect the remaining provisions which shall continue unimpaired and in full force and effect.

Section 5.2 Successors and Assigns.

This Assignment shall inure to the benefit of and be binding upon the respective successors and permitted assigns of the parties and shall specifically inure, without limitation, to the benefit of each Person who may from time to time be the "Lender" under the Financing Agreement.

Section 5.3 Modification.

This Assignment is subject to modification only by a writing signed by the parties and shall be subject to the terms, provisions, and conditions set forth in the Financing Agreement and may not be modified without the written consent of the party against whom enforcement is being sought.

Section 5.4 Captions and Headings.

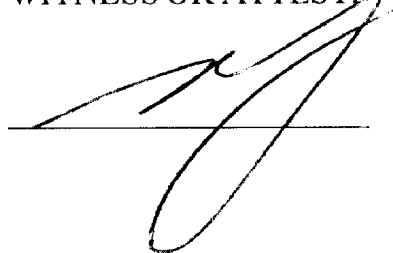
The section headings in this Assignment are for convenience only, and shall not limit or otherwise affect any of the terms hereof.

Section 5.5 Governing Law.

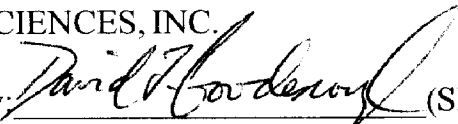
This Assignment shall be governed by and construed in conformity with the laws of the State of Maryland.

IN WITNESS WHEREOF, the Assignor has executed this Assignment under seal, the day and year first above written.

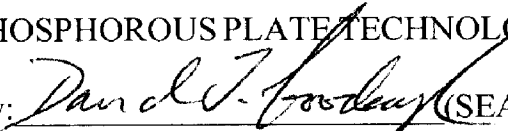
WITNESS OR ATTEST:



INSTITUTE FOR RADIOLOGICAL IMAGE
SCIENCES, INC.

By:  (SEAL)
David J. Goodenough
President

PHOSPHOROUS PLATE TECHNOLOGY, INC.

By:  (SEAL)
David J. Goodenough
President

Approved and Accepted:

MONTANA INVESTMENTS, INC.

By: 


Thomas B. Trott, Jr.

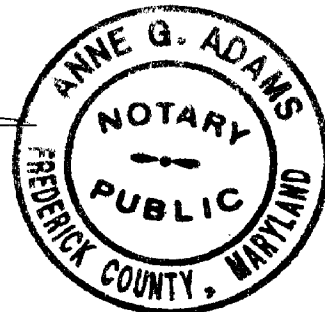
President

ACKNOWLEDGMENT

STATE OF MARYLAND, COUNTY OF FREDERICK, TO WIT:

On this 25th day of October, 2000, before me personally appeared David J. Goodenough, to me known and being duly sworn, deposes and says that he is the President of Institute for Radiological Image Sciences, Inc., a Maryland corporation, the Assignor; that he signed the Assignment as President of such corporation pursuant to the authority vested in him by law; that the within Assignment is the voluntary act of such corporation; and he desires the same to be recorded as such.


Notary Public

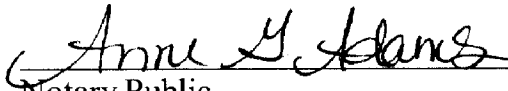


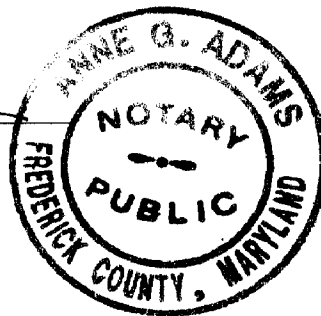
My Commission Expires: 2.2.04

ACKNOWLEDGMENT

STATE OF MARYLAND, COUNTY OF FREDERICK, TO WIT:

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Notary Public



My Commission Expires: 2.2.04

6039708v3:MHD

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4,983,834	Large Area Particle Detector (general ET device for nuclear particle recording, e.g., Bio-Rad's)

PATENT

RECORDED: 11/09/2000

REEL: 011314 FRAME: 0164