

Form PTO-1595 (Rev. 06/04)
OMB No. 0651-0027 (exp. 6/30/2005)

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

RECORDATION FORM COVER SHEET PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)/Execution Date(s):

PICOTRONIX, INC.

Execution Date(s) March 10, 2005

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

3. Nature of conveyance:

- ☐ Assignment ☐ Merger
☒ Security Agreement ☐ Change of Name
☐ Government Interest Assignment
☐ Executive Order 9424, Confirmatory License
☐ Other _____

2. Name and address of receiving party(ies)

Name: Advanced Photonix, Inc.

Internal Address: _____

Street Address: 1240 Avenida Acaso

City: Camarillo

State: California

Country: USA Zip: 93012

Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application or patent number(s):

☐ This document is being filed together with a new application.

A. Patent Application No.(s)

PCT/US2000/41172 60/334,549
PCT/US1999/08922 10/295,512
PCT/US1999/22339 10/307,085
PCT/US2000/3550 10/502,109
60/336,302

B. Patent No.(s)

6,262,465 6,649,852
6,320,191
6,816,647

Additional numbers attached? ☒ Yes ☐ No

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

Name: Philip T. Shannon

Internal Address: FROSS, ZELNICK, LEHRMAN & ZISSU

Street Address: 866 United Nations Plaza

City: New York

State: New York Zip: 10017

Phone Number: (212) 813-5917

Fax Number: (212) 813-5901

Email Address: pshannon@frosszelnick.com

6. Total number of applications and patents involved:

28

7. Total fee (37 CFR 1.21(h) & 3.41) \$1,200.00

- ☐ Authorized to be charged by credit card
☒ Authorized to be charged to deposit account
☐ Enclosed
☐ None required (government interest not affecting title)

8. Payment Information

a. Credit Card Last 4 Numbers _____
Expiration Date _____

b. Deposit Account Number 230825

Authorized User Name Philip T. Shannon

9. Signature:

Philip T. Shannon
Signature

March 14, 2005
Date

PHILIP T. SHANNON

Name of Person Signing

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

30

Documents to be recorded (including cover sheet) should be faxed to (703) 306-5995, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

CH \$1200.00 230825 60336302

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PATENT
REEL: 015896 FRAME: 0210

cont.

PICOTRONIX, INC.

Additional Patent Application Nos. (Item 4)

PCT/US2002/38584
PCT/US2002/38265
PCT/US2003/03203
PCT/US2003/03181
60/467,399
60/491,902
10,836,878
PCT/US2003/039553
PCT/US2004/013484
PCT/US2004/013584
60/574,643
10/502,110
10/502,111
10/614,793
10/833,662

EXHIBIT D-1**PLEDGE AND SECURITY AGREEMENT**

PLEDGE AND SECURITY AGREEMENT, dated as of March 10, 2005 (this "Agreement") made by **Picotronix, Inc.**, a Michigan corporation ("Picotronix" and the "Grantor") in favor and on behalf of **Advanced Photonix, Inc.**, a Delaware corporation ("API" and the "Secured Party"), pursuant to that certain Agreement and Plan of Merger, dated as of March 8, 2005 (the "Merger Agreement") among the Secured Party, Picotronix, Michigan Acquisition Sub, LLC and the other stockholders party thereto.

W I T N E S S E T H:

WHEREAS, API and Picotronix, Robin Risser, Steve Williamson and the other party signatories thereto (collectively, the "Sellers") are parties to the Merger Agreement, pursuant to which API shall purchase, and the Sellers shall sell, the "Company Capital Stock" (as defined therein) (the "Transaction");

WHEREAS, it is a condition precedent to the closing of the transaction contemplated by the Merger Agreement (the "Transaction") that Picotronix shall have executed and delivered to the Secured Party this Agreement providing for the grant to the Secured Party of a security interest in certain intellectual property currently owned by Picotronix to secure all of Picotronix's obligations under the "API Loan" (as each term is defined in the Merger Agreement) issued pursuant to the Merger Agreement (as such API Loan may be amended, restated, replaced or otherwise modified from time to time in accordance with the terms thereof, collectively, the "Note");

NOW, THEREFORE, in consideration of the premises and the agreements herein and in order to induce the Sellers to perform under the Merger Agreement, the Grantor agrees with the Secured Party, as follows:

SECTION 1. Definitions.

(a) Reference is hereby made to the Merger Agreement and the Notes for a statement of the terms thereof. All terms used in this Agreement and the recitals hereto which are defined in the Merger Agreement, the Notes or in Articles 8 or 9 of the Uniform Commercial Code (the "Code") as in effect from time to time in the State of Michigan, and which are not otherwise defined herein shall have the same meanings herein as set forth therein; provided that terms used herein which are defined in the Code as in effect in the State of Michigan on the date hereof shall continue to have the same meaning notwithstanding any replacement or amendment of such statute except as the Secured Party may otherwise determine.

(b) The following terms shall have the respective meanings provided for in the Code: "Cash Proceeds", "Noncash Proceeds", "Proceeds", "Security", and "Record".

(c) As used in this Agreement, the following terms shall have the respective meanings indicated below, such meanings to be applicable equally to both the singular and plural forms of such terms:

"Copyright Licenses" means all licenses, contracts or other agreements, whether written or oral, acquired by the Grantor in the Transaction, naming the Grantor as licensee or licensor and providing for the grant of any right to use or sell any works covered by any copyright, in each case, as set forth in Schedule II hereto.

"Copyrights" means all domestic and foreign copyrights, whether registered or not, including, without limitation, all copyright rights throughout the universe in any and all media, in and to all original works of authorship fixed in any tangible medium of expression, acquired or used by the Grantor, in each case, as described in Schedule II hereto, all applications, registrations and recordings thereof (including, without limitation, applications, registrations and recordings in the United States Copyright Office or in any similar office or agency of the United States or any other country or any political subdivision thereof), and all reissues, divisions, continuations, continuations in part and extensions or renewals thereof.

"Event of Default" shall have the meaning set forth in the Notes.

"Intellectual Property" means the Copyrights, Trademarks and Patents.

"Licenses" means the Copyright Licenses, the Trademark Licenses and the Patent Licenses.

"Lien" means any mortgage, deed of trust, pledge, lien (statutory or otherwise), security interest, charge or other encumbrance or security or preferential arrangement of any nature, including, without limitation, any conditional sale or title retention arrangement, any capitalized lease and any assignment, deposit arrangement or financing lease intended as, or having the effect of, security.

"Patent Licenses" means all licenses, contracts or other agreements, whether written or oral, naming the Grantor as licensee or licensor and providing for the grant of any right to manufacture, use or sell any invention covered by any Patent, in each case, as set forth in Schedule II hereto.

"Patents" means all domestic and foreign letters patent, design patents, utility patents, industrial designs, inventions, trade secrets, ideas, concepts, methods, techniques, processes, proprietary information, technology, know-how, formulae, rights of publicity and other general intangibles of like nature, in each case, as described in Schedule II hereto, all applications, registrations and recordings thereof (including, without limitation, applications, registrations and recordings in the United States Patent and Trademark Office, or in any similar office or agency of the United States or any other country or any political subdivision thereof), and all reissues, divisions, continuations, continuations in part and extensions or renewals thereof.

"Trademark Licenses" means all licenses, contracts or other agreements, whether written or oral, naming the Grantor as licensor or licensee and providing for the grant of

any right concerning any Trademark, together with any goodwill connected with and symbolized by any such trademark licenses, contracts or agreements, in each case, as described in Schedule II hereto.

"Trademarks" means all domestic and foreign trademarks, service marks, collective marks, certification marks, trade names, business names, d/b/a's, Internet domain names, trade styles, designs, logos and other source or business identifiers and all general intangibles of like nature, adopted, acquired or used by the Grantor, in each case, as described in Schedule II hereto, all applications, registrations and recordings thereof (including, without limitation, applications, registrations and recordings in the United States Patent and Trademark Office or in any similar office or agency of the United States, any state thereof or any other country or any political subdivision thereof), and all reissues, extensions or renewals thereof, together with all goodwill of the business symbolized by such marks and all customer lists, formulae and other Records of the Grantor relating to the distribution of products and services in connection with which any of such marks are used.

SECTION 2. Grant of Security Interest. As collateral security for all of the "Obligations" (as defined in Section 3 hereof), the Grantor hereby pledges and assigns to the Secured Party, and grants to the Secured Party a continuing security interest in the following (collectively, the "**Collateral**"):

- (a) all Copyrights, Patents and Trademarks, and all Licenses; and
 - (b) all Proceeds, including all Cash Proceeds and Noncash Proceeds, and products of any and all of the foregoing Collateral, including, without limitation, the proceeds of any license or grant of rights under or relating to the Copyrights, Patents and Trademarks; and
 - (c) all documentation and know-how related to the foregoing;
- in each case howsoever the Grantor's interest therein may arise or appear (whether by ownership, security interest, claim or otherwise).

SECTION 3. Security for Obligations. The security interest created hereby in the Collateral constitutes continuing collateral security for all of the following obligations, whether now existing or hereafter incurred (collectively, the "**Obligations**"):

- (a) (i) the payment by the Grantor, as and when due and payable (by scheduled maturity, required prepayment, acceleration, demand or otherwise), of all amounts from time to time owing by it in respect of the Notes; and
- (b) the due performance and observance by the Grantor of all of its other obligations from time to time existing in respect of the Notes, for so long as the Notes are outstanding.

SECTION 4. Representations and Warranties. The Grantor represents and warrants as follows:

(a) Schedule I hereto sets forth (i) the exact legal name of the Grantor, and (ii) the organizational identification number of the Grantor or states that no such organizational identification number exists.

(b) There is no pending or written notice threatening any action, suit, proceeding or claim affecting the Grantor before any governmental authority or any arbitrator, or any order, judgment or award by any governmental authority or arbitrator, that may adversely affect the grant by the Grantor, or the perfection, of the security interest purported to be created hereby in the Collateral, or the exercise by the Secured Party of any of its rights or remedies hereunder.

(c) All Federal, state and local tax returns and other reports required by applicable law to be filed by the Grantor have been filed, or extensions have been obtained, and all taxes, assessments and other governmental charges imposed upon the Grantor or any property of the Grantor (including, without limitation, all federal income and social security taxes on employees' wages) and which have become due and payable on or prior to the date hereof have been paid, except to the extent contested in good faith by proper proceedings which stay the imposition of any penalty, fine or Lien resulting from the non-payment thereof and with respect to which adequate reserves have been set aside for the payment thereof in accordance with generally accepted accounting principles consistently applied.

(d) No authorization or approval or other action by, and no notice to or filing with, any governmental authority or other regulatory body, or any other Person, is required for (i) the grant by the Grantor, or the perfection, of the security interest purported to be created hereby in the Collateral, or (ii) the exercise by the Secured Party of any of its rights and remedies hereunder, except (A) for the filing under the Uniform Commercial Code as in effect in the applicable jurisdiction of the financing statements, all of which financing statements, have been duly filed and are in full force and effect, (B) with respect to the perfection of the security interest created hereby in the Intellectual Property, for the recording of the appropriate Assignment for Security, substantially in the form of Exhibit A hereto, as applicable, in the United States Patent and Trademark Office or the United States Copyright Office, as applicable, and (C) with respect to the perfection of the security interest created hereby in foreign Intellectual Property and Licenses, for registrations and filings in jurisdictions located outside of the United States and covering rights in such jurisdictions relating to the Intellectual Property and Licenses.

(e) This Agreement creates in favor of the Secured Party a legal, valid and enforceable security interest in the Collateral, as security for the Obligations. The recording of the appropriate Assignment for Security executed pursuant hereto in the United States Patent and Trademark Office and the United States Copyright Office, as applicable, and the filing of the financing statements and the other filings and recordings, as applicable, described in Schedule V hereto and, with respect to the Intellectual Property hereafter existing and not covered by an appropriate Assignment for Security, the recording in the United States Patent and Trademark Office or the United States Copyright Office, as applicable, of appropriate instruments of

assignment, result in the perfection of such security interests. Such security interests are perfected, first priority security interests, subject only to the recording of such instruments of assignment. Such recordings and filings and all other action necessary or desirable to perfect and protect such security interest have been duly taken, except for the other filings and recordings described in Section 4(d) hereof.

SECTION 5. Covenants as to the Collateral. So long as any of the Obligations shall remain outstanding, unless the Secured Party shall otherwise consent in writing:

(a) **Further Assurances.** The Grantor will at its expense, at any time and from time to time, promptly execute and deliver all further instruments and documents and take all further action that the Secured Party may reasonably request in order to: (i) perfect and protect the security interest purported to be created hereby; (ii) enable the Secured Party to exercise and enforce its rights and remedies hereunder in respect of the Collateral; or (iii) otherwise effect the purposes of this Agreement, including, without limitation: (A) marking each License and, at the request of the Secured Party, each of its Records pertaining to the Collateral with a legend, in form and substance satisfactory to the Secured Party, indicating that such License or Collateral is subject to the security interest created hereby, (B) executing and filing (to the extent, if any, that the Grantor's signature is required thereon) or authenticating the filing of, such financing or continuation statements, or amendments thereto, as may be necessary or desirable or that the Secured Party may request in order to perfect and preserve the security interest purported to be created hereby, (C) furnishing to the Secured Party from time to time statements and schedules further identifying and describing the Collateral and such other reports in connection with the Collateral in each case as the Secured Party may reasonably request, all in reasonable detail, (D) if any Collateral shall be in the possession of a third party, notifying such Person of the Secured Party's security interest created hereby and obtaining a written acknowledgment from such Person that such Person holds possession of the Collateral for the benefit of the Secured Party, which such written acknowledgment shall be in form and substance satisfactory to the Secured Party, and (E) taking all actions required by any earlier versions of the Uniform Commercial Code or by other law, as applicable, in any relevant Uniform Commercial Code jurisdiction, or by other law as applicable in any foreign jurisdiction.

(b) **Provisions Concerning the Licenses.**

(i) The Grantor will (A) give the Secured Party at least 30 days' prior written notice of any change in the Grantor's name, identity or organizational structure, (B) maintain its jurisdiction of incorporation as set forth in Section 4(a) hereto, and (C) notify the Secured Party upon obtaining an organizational identification number, if on the date hereof the Grantor did not have such identification number.

(ii) Upon the occurrence and during the continuance of any breach or default under any material License referred to in Schedule II hereto by any party thereto other than the Grantor, the Grantor will, as promptly as possible after obtaining knowledge thereof, give the Secured Party written notice of the nature and duration thereof, specifying what action, if any, it has taken and proposes to take with respect thereto and thereafter will take reasonable steps to protect and preserve its rights and remedies in respect of such breach or default, or will obtain or acquire an appropriate substitute License.

(iii) The Grantor will, at its expense, as promptly as possible deliver to the Secured Party a copy of each notice or other communication received by it by which any other party to any material License referred to in Schedule II hereto purports to exercise any of its rights or affect any of its obligations thereunder, together with a copy of any reply by the Grantor thereto.

(iv) The Grantor will exercise as promptly and diligently as possible each and every right which it may have under each material License (other than any right of termination) and will duly perform and observe in all respects all of its obligations under each material License and will take all action reasonably necessary to maintain such Licenses in full force and effect. The Grantor will not, without the prior written consent of the Secured Party, cancel, terminate, amend or otherwise modify in any respect, or waive any provision of, any material License referred to in Schedule II hereto.

(c) Transfers and Other Liens.

(i) The Grantor will not, without the prior written consent of the Secured Party, sell, assign (by operation of law or otherwise), lease, license, exchange or otherwise transfer or dispose of any of the Collateral, except worn-out or obsolete assets not necessary to the business.

(ii) The Grantor will not, without the prior written consent of the Secured Party, create, suffer to exist or grant any Lien upon or with respect to any Collateral.

(d) Intellectual Property.

(i) If applicable, the Grantor shall, upon the Secured Party's written request, duly execute and deliver the applicable Assignment for Security in the form attached hereto as Exhibit A. The Grantor (either itself or through licensees) will, and will cause each licensee thereof to, take all action necessary to maintain all of the Intellectual Property in full force and effect, including, without limitation, using the proper statutory notices and markings and using the Trademarks on each applicable trademark class of goods in order to so maintain the Trademarks in full force and free from any claim of abandonment for non-use, and the Grantor will not (nor permit any licensee thereof to) do any act or knowingly omit to do any act whereby any Intellectual Property may become invalidated; provided, however, that so long as no Event of Default has occurred and is continuing, the Grantor shall not have an obligation to use or to maintain any Intellectual Property (A) that relates solely to any product or work, that has been, or is in the process of being, discontinued, abandoned or terminated, (B) that is being replaced with Intellectual Property substantially similar to the Intellectual Property that may be abandoned or otherwise become invalid, so long as the failure to use or maintain such Intellectual Property does not materially adversely affect the validity of such replacement Intellectual Property and so long as such replacement Intellectual Property is subject to the Lien created by this Agreement or (C) that is substantially the same as another Intellectual Property that is in full force, so long the failure to use or maintain such Intellectual Property does not materially adversely affect the validity of such replacement Intellectual Property and so long as such other Intellectual Property is subject to the Lien and security interest created by this Agreement. The Grantor will cause to be taken all necessary steps in any proceeding before the United States Patent and Trademark Office and the

United States Copyright Office or any similar office or agency in any other country or political subdivision thereof to maintain each registration of the Intellectual Property (other than the Intellectual Property described in the proviso to the immediately preceding sentence), including, without limitation, filing of renewals, affidavits of use, affidavits of incontestability and opposition, interference and cancellation proceedings and payment of maintenance fees, filing fees, taxes or other governmental fees. If any Intellectual Property (other than Intellectual Property described in the proviso to the first sentence of subsection (i) of this clause (d)) is infringed, misappropriated, diluted or otherwise violated in any material respect by a third party, the Grantor shall (x) upon learning of such infringement, misappropriation, dilution or other violation, promptly notify the Secured Party and (y) to the extent practicable under the circumstances, promptly sue for infringement, misappropriation, dilution or other violation, seek injunctive relief where appropriate and recover any and all damages for such infringement, misappropriation, dilution or other violation, or take such other actions as the Grantor shall deem commercially reasonable and prudent under the circumstances to protect such Intellectual Property. The Grantor shall furnish to the Secured Party from time to time upon its request statements and schedules further identifying and describing the Intellectual Property and Licenses and such other reports in connection with the Intellectual Property and Licenses as the Secured Party may reasonably request, all in reasonable detail and promptly upon request of the Secured Party, following receipt by the Secured Party of any such statements, schedules or reports, the Grantor shall modify this Agreement by amending Schedule II hereto, as the case may be, to include any Intellectual Property and License, as the case may be, which becomes part of the Collateral under this Agreement and shall execute and authenticate such documents and do such acts as shall be necessary or, in the reasonable judgment of the Secured Party, desirable to subject such Intellectual Property and Licenses to the Lien and security interest created by this Agreement. Notwithstanding anything herein to the contrary, upon the occurrence and during the continuance of an Event of Default, the Grantor may not abandon or otherwise permit any Intellectual Property to become invalid without the prior written consent of the Secured Party, and if any Intellectual Property is infringed, misappropriated, diluted or otherwise violated in any material respect by a third party, the Grantor will take such action as the Secured Party shall reasonably deem appropriate under the circumstances to protect such Intellectual Property.

(ii) In no event shall the Grantor, either itself or through any agent, employee, licensee or designee, file an application for the registration of any Trademark or Copyright or the issuance of any Patent with the United States Patent and Trademark Office or the United States Copyright Office, as applicable, or in any similar office or agency of the United States or any country or any political subdivision thereof unless it gives the Secured Party prior written notice thereof. Upon request of the Secured Party, the Grantor shall execute, authenticate and deliver any and all assignments, agreements, instruments, documents and papers as the Secured Party may reasonably request to evidence the Secured Party's security interest hereunder in such Intellectual Property of the Grantor relating thereto or represented thereby, and the Grantor hereby appoints the Secured Party its attorney-in-fact to execute and/or authenticate and file all such writings for the foregoing purposes, all acts of such attorney being hereby ratified and confirmed, and such power (being coupled with an interest) shall be irrevocable until the indefeasible payment in full in cash of all of the Obligations in full.

SECTION 6. Additional Provisions Concerning the Collateral.

(a) The Grantor hereby (i) authorizes the Secured Party to file one or more Uniform Commercial Code financing or continuation statements, and amendments thereto, relating to the Collateral and (ii) ratifies such authorization to the extent that the Secured Party has filed any such financing or continuation statements, or amendments thereto, prior to the date hereof. A photocopy or other reproduction of this Agreement or any financing statement covering the Collateral or any part thereof shall be sufficient as a financing statement where permitted by law.

(b) The Grantor hereby irrevocably appoints the Secured Party as its attorney-in-fact and proxy, with full authority in the place and stead of the Grantor and in the name of the Grantor or otherwise, from time to time in the Secured Party's discretion, so long as an Event of Default shall have occurred and is continuing, to take any action and to execute any instrument which the Secured Party may deem necessary or advisable to accomplish the purposes of this Agreement (subject to the rights of the Grantor under Section 5 hereof), including, without limitation, (i) to ask, demand, collect, sue for, recover, compound, receive and give acquittance and receipts for moneys due and to become due under or in respect of any Collateral, (ii) to file any claims or take any action or institute any proceedings which the Secured Party may deem necessary or desirable for the collection of any Collateral or otherwise to enforce the rights of the Secured Party with respect to any Collateral, and (iii) to execute assignments, licenses and other documents to enforce the rights of the Secured Party with respect to any Collateral. This power is coupled with an interest and is irrevocable until all of the Obligations are indefeasibly paid in full.

(c) For the purpose of enabling the Secured Party to exercise rights and remedies hereunder, at such time as the Secured Party shall be lawfully entitled to exercise such rights and remedies, and for no other purpose, the Grantor hereby grants to the Secured Party, to the extent assignable, an irrevocable, non-exclusive license (exercisable without payment of royalty or other compensation to the Grantor) to use, assign, license or sublicense any of the Intellectual Property acquired by the Grantor in connection with the Transaction, wherever the same may be located, including in such license reasonable access to all media in which any of the licensed items may be recorded or stored and to all computer programs used for the compilation or printout thereof. Notwithstanding anything contained herein to the contrary, but subject to Section 5(d) hereof, so long as no Event of Default shall have occurred and be continuing, the Grantor may exploit, use, enjoy, protect, license or sublicense the Intellectual Property in the ordinary course of its business. In furtherance of the foregoing, unless an Event of Default shall have occurred and be continuing, the Secured Party shall from time to time, upon the request of the Grantor, execute and deliver any instruments, certificates or other documents, in the form so requested, which the Grantor shall have certified are appropriate (in the Grantor's judgment) to allow it to take any action permitted above (including relinquishment of the license provided pursuant to this clause (c) as to any Intellectual Property). Further, upon the indefeasible payment in full of all of the Obligations, the Secured Party (subject to Section 10(e) hereof) shall release and reassign to the Grantor all of the Secured Party's right, title and interest in and to the Intellectual Property, and the Licenses, all without recourse, representation or warranty whatsoever. The exercise of rights and remedies hereunder by the Secured Party shall not terminate the rights of the holders of any licenses or sublicenses theretofore granted by the

Grantor in accordance with the second sentence of this clause (c). The Grantor hereby releases the Secured Party from any claims, causes of action and demands at any time arising out of or with respect to any actions taken or omitted to be taken by the Secured Party under the powers of attorney granted herein other than actions taken or omitted to be taken through the Secured Party's gross negligence or willful misconduct, as determined by a final determination of a court of competent jurisdiction.

(d) If the Grantor fails to perform any agreement contained herein, the Secured Party may itself perform, or cause performance of, such agreement or obligation, in the name of the Grantor or the Secured Party, and the expenses of the Secured Party incurred in connection therewith shall be payable by the Grantor pursuant to Section 8 hereof and shall be secured by the Collateral.

(e) The powers conferred on the Secured Party hereunder are solely to protect its interest in the Collateral and shall not impose any duty upon it to exercise any such powers. Except for the safe custody of any Collateral in its possession and the accounting for moneys actually received by it hereunder, the Secured Party shall have no duty as to any Collateral or as to the taking of any necessary steps to preserve rights against prior parties or any other rights pertaining to any Collateral.

(f) Anything herein to the contrary notwithstanding (i) the Grantor shall remain liable under the Licenses and otherwise with respect to any of the Collateral to the extent set forth therein to perform all of its obligations thereunder to the same extent as if this Agreement had not been executed, (ii) the exercise by the Secured Party of any of its rights hereunder shall not release the Grantor from any of its obligations under the Licenses or otherwise in respect of the Collateral, and (iii) the Secured Party shall not have any obligation or liability by reason of this Agreement under the Licenses or with respect to any of the other Collateral, nor shall the Secured Party be obligated to perform any of the obligations or duties of the Grantor thereunder or to take any action to collect or enforce any claim for payment assigned hereunder.

SECTION 7. Remedies Upon Event of Default. If any Event of Default shall have occurred and be continuing:

(a) The Secured Party may exercise in respect of the Collateral, in addition to any other rights and remedies provided for herein or otherwise available to it, all of the rights and remedies of a secured party upon default under the Code (whether or not the Code applies to the affected Collateral), and also may (i) take absolute control of the Collateral, including, without limitation, transfer into the Secured Party's name or into the name of its nominee or nominees (to the extent the Secured Party has not theretofore done so) and thereafter receive, for the benefit of the Secured Party, all payments made thereon, give all consents, waivers and ratifications in respect thereof and otherwise act with respect thereto as though it were the outright owner thereof, (ii) require the Grantor to, and the Grantor hereby agrees that it will at its expense and upon request of the Secured Party forthwith, assemble all or part of its respective Collateral as directed by the Secured Party and make it available to the Secured Party at a place or places to be designated by the Secured Party that is reasonably convenient to both parties, and the Secured Party may enter into and occupy any premises owned or leased by the Grantor where the

Collateral or any part thereof is located or assembled for a reasonable period in order to effectuate the Secured Party's rights and remedies hereunder or under law, without obligation to the Grantor in respect of such occupation, and (iii) without notice except as specified below and without any obligation to prepare or process the Collateral for sale, (A) sell the Collateral or any part thereof in one or more parcels at public or private sale, at any of the Secured Party's offices or elsewhere, for cash, on credit or for future delivery, and at such price or prices and upon such other terms as the Secured Party may deem commercially reasonable and/or (B) lease, license or dispose of the Collateral or any part thereof upon such terms as the Secured Party may deem commercially reasonable. The Grantor agrees that, to the extent notice of sale or any other disposition of its respective Collateral shall be required by law, at least ten (10) days' notice to the Grantor of the time and place of any public sale or the time after which any private sale or other disposition of its respective Collateral is to be made shall constitute reasonable notification. The Secured Party shall not be obligated to make any sale or other disposition of any Collateral regardless of notice of sale having been given. The Secured Party may adjourn any public or private sale from time to time by announcement at the time and place fixed therefor, and such sale may, without further notice, be made at the time and place to which it was so adjourned. The Grantor hereby waives any claims against the Secured Party arising by reason of the fact that the price at which its respective Collateral may have been sold at a private sale was less than the price which might have been obtained at a public sale or was less than the aggregate amount of the Obligations, even if the Secured Party accepts the first offer received and does not offer such Collateral to more than one offeree, and waives all rights that the Grantor may have to require that all or any part of such Collateral be marshalled upon any sale (public or private) thereof. The Grantor hereby acknowledges that (i) any such sale of its respective Collateral by the Secured Party shall be made without warranty, (ii) the Secured Party may specifically disclaim any warranties of title, possession, quiet enjoyment or the like, and (iii) such actions set forth in clauses (i) and (ii) above shall not adversely effect the commercial reasonableness of any such sale of Collateral. In addition to the foregoing, (1) upon written notice to the Grantor from the Secured Party, the Grantor shall cease any use of the Intellectual Property or any trademark, patent or copyright similar thereto for any purpose described in such notice; (2) the Secured Party may, at any time and from time to time, upon 10 days' prior notice to the Grantor, license, whether general, special or otherwise, and whether on an exclusive or non-exclusive basis, any of the Intellectual Property, throughout the universe for such term or terms, on such conditions, and in such manner, as the Secured Party shall in its sole discretion determine; and (3) the Secured Party may, at any time, pursuant to the authority granted in Section 6 hereof (such authority being effective upon the occurrence and during the continuance of an Event of Default), execute and deliver on behalf of the Grantor, one or more instruments of assignment of the Intellectual Property (or any application or registration thereof), in form suitable for filing, recording or registration in any country.

(b) All Cash Proceeds received by the Secured Party in respect of any sale of or collection from, or other realization upon, all or any part of the Collateral may, in the discretion of the Secured Party, be held by the Secured Party as collateral for, and/or then or at any time thereafter applied (after payment of any amounts payable to the Secured Party pursuant to Section 8 hereof) in whole or in part by the Secured Party against, all or any part of the Obligations in such order as the Secured Party shall elect. Any surplus of such cash or Cash Proceeds held by the Secured Party and remaining after the indefeasible payment in full in cash

of all of the Obligations shall be paid over to whomsoever shall be lawfully entitled to receive the same or as a court of competent jurisdiction shall direct.

(c) In the event that the proceeds of any such sale, collection or realization are insufficient to pay all amounts to which the Secured Party is legally entitled, the Grantor shall be liable for the deficiency, together with interest thereon at the highest rate specified in any of the applicable Notes for interest on overdue principal thereof or such other rate as shall be fixed by applicable law, together with the costs of collection and the reasonable fees, costs, expenses and other client charges of any attorneys employed by the Secured Party to collect such deficiency.

(d) The Grantor hereby acknowledges that if the Secured Party complies with any applicable state, provincial, or federal law requirements in connection with a disposition of the Collateral, such compliance will not adversely affect the commercial reasonableness of any sale or other disposition of the Collateral.

(e) The Secured Party shall not be required to marshal any present or future collateral security (including, but not limited to, this Agreement and the Collateral) for, or other assurances of payment of, the Obligations or any of them or to resort to such collateral security or other assurances of payment in any particular order, and all of the Secured Party's rights hereunder and in respect of such collateral security and other assurances of payment shall be cumulative and in addition to all other rights, however existing or arising. To the extent that the Grantor lawfully may, the Grantor hereby agrees that it will not invoke any law relating to the marshalling of collateral which might cause delay in or impede the enforcement of the Secured Party's rights under this Agreement or under any other instrument creating or evidencing any of the Obligations or under which any of the Obligations is outstanding or by which any of the Obligations is secured or payment thereof is otherwise assured, and, to the extent that it lawfully may, the Grantor hereby irrevocably waives the benefits of all such laws.

SECTION 8. Indemnity and Expenses.

(a) The Grantor agrees to defend, protect, indemnify and hold the Secured Party harmless from and against any and all claims, damages, losses, liabilities, obligations, penalties, fees, costs and expenses (including, without limitation, reasonable legal fees, costs, expenses, and disbursements of such Person's counsel) to the extent that they arise out of or otherwise result from this Agreement (including, without limitation, enforcement of this Agreement), except claims, losses or liabilities resulting solely and directly from such Person's gross negligence or willful misconduct, as determined by a final judgment of a court of competent jurisdiction.

(b) The Grantor agrees to upon demand pay to the Secured Party the amount of any and all costs and expenses, including the reasonable fees, costs, expenses and disbursements of counsel for the Secured Party and of any experts and agents (including, without limitation, any collateral trustee which may act as agent of the Secured Party), which the Secured Party may incur in connection with (i) the preparation, negotiation, execution, delivery, recordation, administration, amendment, waiver or other modification or termination of this Agreement, (ii) the custody, preservation, use or operation of, or the sale of, collection from, or other realization upon, any Collateral, (iii) the exercise or enforcement of any of the rights of the

Secured Party hereunder, or (iv) the failure by the Grantor to perform or observe any of the provisions hereof.

SECTION 9. Notices, Etc. All notices and other communications provided for hereunder shall be in writing and shall be mailed (by certified mail, postage prepaid and return receipt requested), telecopied or delivered, if to a Grantor at its address specified below and if to the Secured Party to it, at its address specified below; or as to any such Person, at such other address as shall be designated by such Person in a written notice to such other Person complying as to delivery with the terms of this Section 9. All such notices and other communications shall be effective (a) if sent by certified mail, return receipt requested, when received or three days after deposited in the mails, whichever occurs first, (b) if telecopied, when transmitted (during normal business hours) and confirmation is received, otherwise, the day after the notice was transmitted if confirmation is received, or (c) if delivered, upon delivery.

SECTION 10. Miscellaneous.

(a) No amendment of any provision of this Agreement shall be effective unless it is in writing and signed by the Grantor and the Secured Party, and no waiver of any provision of this Agreement, and no consent to any departure by the Grantor therefrom, shall be effective unless it is in writing and signed by the Secured Party, and then such waiver or consent shall be effective only in the specific instance and for the specific purpose for which given.

(b) No failure on the part of the Secured Party to exercise, and no delay in exercising, any right hereunder shall operate as a waiver thereof; nor shall any single or partial exercise of any such right preclude any other or further exercise thereof or the exercise of any other right. The rights and remedies of the Secured Party provided herein are cumulative and are in addition to, and not exclusive of, any rights or remedies provided by law.

(c) Any provision of this Agreement that is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining portions hereof or thereof or affecting the validity or enforceability of such provision in any other jurisdiction.

(d) This Agreement shall create a continuing security interest in the Collateral and shall (i) remain in full force and effect until the indefeasible payment in full in cash of the Obligations, and (ii) be binding on the Grantor and all other Persons who become bound as debtor to this Agreement in accordance with Section 9-203(d) of the Code and shall inure, together with all rights and remedies of the Secured Party hereunder, to the benefit of the Secured Party and its respective permitted successors, transferees and assigns. Without limiting the generality of clause (ii) of the immediately preceding sentence, without notice to the Grantor, the Secured Party may assign or otherwise transfer its rights and obligations under this Agreement, to any other Person and such other Person shall thereupon become vested with all of the benefits in respect thereof granted to the Secured Party herein or otherwise. Upon any such assignment or transfer, all references in this Agreement to the Secured Party shall mean the assignee of the Secured Party. None of the rights or obligations of the Grantor hereunder may be assigned or otherwise transferred without the prior written consent of the Secured Party, and any such assignment or transfer without the consent of the Secured Party shall be null and void.

(e) Upon the indefeasible payment in full in cash of the Obligations, (i) this Agreement and the security interests created hereby shall terminate and all rights to the Collateral shall revert to the Grantor that granted such security interests hereunder, and (ii) the Secured Party will, upon the Grantor's request and at the Grantor's expense, (A) return to the Grantor such of the Collateral as shall not have been sold or otherwise disposed of or applied pursuant to the terms hereof, and (B) execute and deliver to the Grantor such documents as the Grantor shall reasonably request to evidence such termination, all without any representation, warranty or recourse whatsoever.

(f) THIS AGREEMENT SHALL BE GOVERNED BY, CONSTRUED AND INTERPRETED IN ACCORDANCE WITH THE LAWS OF THE STATE OF MICHIGAN, EXCEPT AS REQUIRED BY MANDATORY PROVISIONS OF LAW AND EXCEPT TO THE EXTENT THAT THE VALIDITY AND PERFECTION OR THE PERFECTION AND THE EFFECT OF PERFECTION OR NON-PERFECTION OF THE SECURITY INTEREST CREATED HEREBY, OR REMEDIES HEREUNDER, IN RESPECT OF ANY PARTICULAR COLLATERAL ARE GOVERNED BY THE LAW OF A JURISDICTION OTHER THAN THE STATE OF MICHIGAN.

(g) ANY LEGAL ACTION, SUIT OR PROCEEDING WITH RESPECT TO THIS AGREEMENT OR ANY DOCUMENT RELATED THERETO MAY BE BROUGHT IN THE COURTS OF THE STATE OF MICHIGAN IN THE COUNTY OF MICHIGAN OR THE UNITED STATES OF AMERICA FOR THE EASTERN DISTRICT OF MICHIGAN, AND APPELLATE COURTS THEREOF, AND, BY EXECUTION AND DELIVERY OF THIS AGREEMENT, THE GRANTOR HEREBY ACCEPTS FOR ITSELF AND IN RESPECT OF ITS PROPERTY, GENERALLY AND UNCONDITIONALLY, THE JURISDICTION OF THE AFORESAID COURTS. THE GRANTOR HEREBY EXPRESSLY AND IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY LAW, ANY OBJECTION, INCLUDING, WITHOUT LIMITATION, ANY OBJECTION TO THE LAYING OF VENUE OR BASED ON THE GROUNDS OF FORUM NON CONVENIENS, WHICH IT MAY NOW OR HEREAFTER HAVE TO THE BRINGING OF ANY SUCH ACTION, SUIT OR PROCEEDING IN SUCH RESPECTIVE JURISDICTIONS AND CONSENTS TO THE GRANTING OF SUCH LEGAL OR EQUITABLE RELIEF AS IS DEEMED APPROPRIATE BY THE COURT.

(h) THE GRANTOR AND (BY ITS ACCEPTANCE OF THE BENEFITS OF THIS AGREEMENT) THE SECURED PARTY WAIVE ANY RIGHT THEY MAY HAVE TO TRIAL BY JURY IN RESPECT OF ANY LITIGATION BASED ON, ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT OR THE NOTES, OR ANY COURSE OF CONDUCT, COURSE OF DEALING, VERBAL OR WRITTEN STATEMENT OR OTHER ACTION OF THE PARTIES HERETO.

(i) The Grantor irrevocably consents to the service of process of any of the aforesaid courts in any such action, suit or proceeding by the mailing of copies thereof by registered or certified mail (or any substantially similar form of mail), postage prepaid, to the Grantor at its address provided herein, such service to become effective 10 days after such mailing.

(j) Nothing contained herein shall affect the right of the Secured Party to serve process in any other manner permitted by law or commence legal proceedings or otherwise proceed against the Grantor or any property of the Grantor in any other jurisdiction.

(k) The Grantor irrevocably and unconditionally waives any right it may have to claim or recover in any legal action, suit or proceeding referred to in this Section any special, exemplary, punitive or consequential damages.

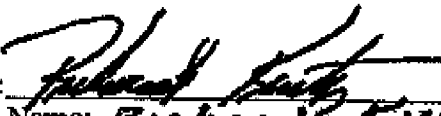
(l) Section headings herein are included for convenience of reference only and shall not constitute a part of this Agreement for any other purpose.

(m) This Agreement may be executed in any number of counterparts and by different parties hereto in separate counterparts, each of which shall be deemed to be an original, but all of which taken together constitute one in the same Agreement.

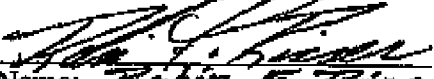
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IN WITNESS WHEREOF, the Grantor has caused this Agreement to be executed and delivered by its officer thereunto duly authorized, as of the date first above written.

**ADVANCED PHOTONIX, INC., as Secured
Party**

By: 
Name: Richard K. Kartz
Title: CEO
Address: 1240 Avenida Acaso
Camarillo, CA 93012

PICOTRONIX, INC., as Grantor

By: 
Name: Robin F. Fisser
Title: CEO
Address: 2925 Boardwalk
P. O. Box 130243
Ann Arbor MI 48113-0243

165979.1

Sched. I-1

SCHEDULE I

ORGANIZATIONAL IDENTIFICATION NUMBERS; STATES OR
JURISDICTION OF ORGANIZATION

165979.1

Sched. I-1

PATENT
REEL: 015896 FRAME: 0227

SCHEDULE II

API

INTELLECTUAL PROPERTY AND LICENSES

See Attached Picotronix Master Docket List

Client #10555

Picomatrix Master Docket List - Sorted by Families

Family #	Matter #	Country	Matter Type	Attorney	Status	Serial #	Filing Date	Patent #	Issue Date	Title	Comments
10555-3	10555-3-003		Regular	JOHN M. CARD	Issued	09/161,097	9/25/1996	6,282,405	7/17/2001	HIGH-Y-DOPED P-TYPE CONTACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE	3.5 year maintenance fee paid
8	4US		Provisional Filing	Steven L. Oberholzer	Closed	60/169,369	10/14/1999			COMPACT FIBER PISTOL, TERAHERTZ IMAGING SYSTEM	
16	7US		Provisional Filing	Steven L. Oberholzer	Closed	66/173,225	12/29/1999			METHOD AND APPARATUS TO MONITOR PHASE CHANGES IN MATRICE WITH TERAHERTZ RADIATION	
8	8PCT		Regular	ERIC J. SOSENKO	Completed	US00/41172	10/19/2000			COMPACT FIBER PISTOL, TERAHERTZ IMAGING SYSTEM	
9	8US		Regular	Steven L. Oberholzer	Issued	09/267,421	2/26/1999	6,320,191	11/20/2001	A DISPERSIVE PRECOMPENSATOR FOR USE IN AN ELECTROMAGNETIC RADIATION GENERATION AND DETECTION SYSTEM	3.5 year maintenance fee due 5/20/05
9	10PCT		Regular	Steven L. Oberholzer	Completed	US99/00902	9/29/1999			A DISPERSIVE PRECOMPENSATOR FOR USE IN AN ELECTROMAGNETIC RADIATION GENERATION AND DETECTION SYSTEM	
8	12EP		Regular	JOHN M. CARD	Published	99/915,244	3/28/1999			A DISPERSIVE PRECOMPENSATOR FOR USE IN AN ELECTROMAGNETIC RADIATION GENERATION AND DETECTION SYSTEM	
9	13CA		Regular	JOHN M. CARD	Pending	2,350,005	3/28/1999			A DISPERSIVE PRECOMPENSATOR FOR USE IN AN ELECTROMAGNETIC RADIATION GENERATION AND DETECTION SYSTEM	
3	14PCT		Regular	JOHN M. CARD	Completed	US99/22,039	9/24/1999			HIGH-Y-DOPED P-TYPE CONTACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE	
10	16PCT		Regular	Steven L. Oberholzer	Completed	US00/00550	12/28/2000			METHOD AND APPARATUS TO MONITOR PHASE CHANGES IN MATRICE WITH TERAHERTZ RADIATION	
8	17JP		Regular	JOHN M. CARD	Pending	2000-612949	9/24/1999			HIGH-Y-DOPED P-TYPE CONTACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE	Request for examination due 8/25/05
3	18NO		Regular	Steven L. Oberholzer	Abandoned	2/01/1497	9/24/1999			HIGH-Y-DOPED P-TYPE CONTACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE	
3	18IS		Regular	JOHN M. CARD	Pending	142185	9/24/1999			HIGH-Y-DOPED P-TYPE CONTACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE	
3	20JAU		Regular	ERIC J. SOSENKO	Issued	62976/09	9/24/1999	786719	1/9/2004	HIGH-Y-DOPED P-TYPE CONTACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE	

*all matter numbers begin with client number 10555-

Client #10555
Picometrix Master Docket List - Sorted by Families

Family #	Member #	Country	Member Type	Attorney	Status	Serial #	Filing Date	Patent #	Issue Date	Title	Comments
3	21 CA		Regular	JOHN M. CARD	Issued	2,345,153	9/24/1998	2,345,153	9/8/2004	HIGHLY DOPED P-TYPE CONTACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE	
3	22 KO		Regular	JOHN M. CARD	Pending	2001-7003783	9/24/1998			HIGHLY DOPED P-TYPE CONTACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE	Request for examination filed 9/23/04
3	23 EP		Regular	JOHN M. CARD	Pending	99949800.7	9/24/1998			HIGHLY DOPED P-TYPE CONTACT FOR HIGH-SPEED, FRONT-SIDE ILLUMINATED PHOTODIODE	
41	25 US		Provisional Filing	Steven L. Oshroff	Completed	60/356,302	11/15/2001			LENSED OPTICAL FIBER FOR RIGHT-ANGLE FOCUSING APPLICATION	
43	28 US		Provisional Filing	Steven L. Oshroff	Completed	60/354,549	11/28/2001			EXTRAXIAL STRUCTURES OPTIMIZED FOR PHOTOCONDUCTIVE FREESPACE TERAHERTZ GENERATION AND HIGH SPEED	
54	27 US		Provisional Filing	Steven L. Oshroff	Closed	60/355,786	2/1/2002			PLANAR APD	
54	28 US		Provisional Filing	Steven L. Oshroff	Closed	60/355,630	2/1/2002			INFINITESIMAL AVALANCHE PHOTODIODES	
53	30 US		Provisional Filing	Steven L. Oshroff	Closed	60/355,649	2/1/2002			HIGH SPEED ENHANCED RESPONSIVITY PHOTO DETECTOR	
62	31 US		Provisional Filing	Steven L. Oshroff	Closed	60/353,418	2/1/2002			AVALANCHE PHOTODIODES WITH ULTRA-THIN CARBON DOPED CHARGE CONTROL LAYER	
8	32 US		Regular	JOHN M. CARD	Issued	10/110,178	9/4/2002	6,948,647	11/8/2004	COMPACT FIBER PIGTAILED TERAHERTZ IMAGING SYSTEM	3.5 year maintenance fee due 5/8/08
8	33 EP		Regular	JOHN M. CARD	Pending	992302	10/15/2000			COMPACT FIBER PIGTAIL TERAHERTZ IMAGING SYSTEM	
8	34 JP		Regular	RAY J. VIVACCA	Pending	2001-540423	10/19/2000			COMPACT FIBER PIGTAIL TERAHERTZ IMAGING SYSTEM	Request for examination filed 5/28/02
18	35 JP		Regular	JOHN M. CARD	Pending	2001-540921	10/28/2000			METHOD AND APPARATUS TO MONITOR PHASE CHANGES IN MATTER WITH TERAHERTZ RADIATION	Request for examination due 12/28/07
48	36 US		Regular	JOHN M. CARD	Issued	10/189,303	10/28/2002	6,849,602	2/1/2005	SYSTEM AND METHOD FOR MONITORING CHANGES IN STATE OF MATTER WITH TERAHERTZ RADIATION	

*all matter numbers begin with client number 10555-

Client #10555
Picometric Master Docket List - Sorted by Families

Family #	Master #	Country	Master Type	Attorney	Status	Serial #	Filing Date	Patent #	Issue Date	Title	Comments
16	38EP		Regular	JOHN M. CARD	Pending	980749	12/20/2003			METHOD AND APPARATUS TO MONITOR PHASE CHANGES IN MATTER WITH TERAHERTZ RADIATION	
18	38CA		Regular	JOHN M. CARD	Pending	2,390,603	12/28/2003			METHOD AND APPARATUS TO MONITOR PHASE CHANGES IN MATTER WITH TERAHERTZ RADIATION	
18	38KO		Regular	JOHN M. CARD	Pending	2007-7008422	12/20/2003			METHOD AND APPARATUS TO MONITOR PHASE CHANGES IN MATTER WITH TERAHERTZ RADIATION	Request for examination due 12/21/05
41	41US		Regular	ROBERT K. PERCAY	Pending	10/286,812	11/15/2002			FOCUSING FIBER OPTIC	
54	42US		Regular	Steven L. Oberholzer	Closed					PLANAR ADP	Incorporated into 10555-54
43	43US		Regular	JOHN M. CARD	Pending	10/597,006	11/28/2002			AMPLIFIED PHOTOCONDUCTIVE GATE	
54	44US		Regular	Steven L. Oberholzer	Closed					MINI-MESA AVALANCHE PHOTODIODES	Incorporated into 10555-54
52	45US		Regular	JOHN M. CARD	Closed					AVALANCHE PHOTODIODES WITH ULTRA-THIN CARBON-DOPED CHARGE CONTROL LAYER	
52	46US		Regular	JOHN M. CARD	Pending	10/592,100	7/21/2004			HIGH SPEED ENHANCED RESPONSIVITY PHOTO DETECTOR	
41	46PCT		Regular	ERIC J. SOSENKO	Completed	1694	11/13/2002			FOCUSING FIBER OPTIC	
43	50PCT		Regular	ERIC J. SOSENKO	Completed	65	11/28/2002			AMPLIFIED PHOTOCYNDUCTIVE GATE	
67	61US		Provisional Filing	Steven L. Oberholzer	Closed	804432,332	12/10/2002			PRECISION FIBER ATTACHMENT	
52	52PCT		Regular	ERIC J. SOSENKO	Completed	103	2/3/2003			CHARGE CONTROLLED AVALANCHE PHOTODIODE AND METHOD OF MAKING THE SAME	
53	53PCT		Regular	ERIC J. SOSENKO	Pending	PCT/US03/0031	2/3/2003			ENHANCED PHOTODETECTOR	
54	54PCT		Regular	ERIC J. SOSENKO	Completed	PCT/US03/0033	2/3/2003			PLANAR AVALANCHE PHOTODIODE	

*all matter numbers begin with client number 10555-

Picometrix Master Docket List - Sorted by Families

Last updated 2/18/05

Client #10355
Picometrics Master Docket List - Sorted by Families

Family #	Master #	Country	Master Type	Attorney	Status	Serial #	Filing Date	Patent #	Issue Date	Title	Comments
54	83 KO		Regular	ERIC J. SOSENKO	Pending	70118572004	2/2/2003			PLANAR AVALANCHE PHOTODIODE	Request for examination due 2/2/05
54	84 CH		Regular	JOHN M. CARD	Pending	N/A	2/3/2003			PLANAR AVALANCHE PHOTODIODE	
54	85 US		Regular	JOHN M. CARD	Pending	10502,110	7/21/2004			PLANAR AVALANCHE PHOTODIODE	
52	86 EP		Regular	ERIC J. SOSENKO	Pending	3709052,2	2/3/2003			CHARGE CONTROLLED AVALANCHE PHOTODIODE AND METHOD OF MAKING THE SAME	
52	87 CA		Regular	JOHN M. CARD	Pending	2473223	2/3/2003			CHARGE CONTROLLED AVALANCHE PHOTODIODE AND METHOD OF MAKING THE SAME	
52	88 JP		Regular	JOHN M. CARD	Pending	2003-564911	2/3/2003			CHARGE CONTROLLED AVALANCHE PHOTODIODE AND METHOD OF MAKING THE SAME	Request for examination due 2/3/10
52	89 KO		Regular	ERIC J. SOSENKO	Pending	70118552004	2/3/2003			CHARGE CONTROLLED AVALANCHE PHOTODIODE AND METHOD OF MAKING THE SAME	Request for examination due 2/2/05
52	90 CH		Regular	JOHN M. CARD	Pending	N/A	2/3/2003			CHARGE CONTROLLED AVALANCHE PHOTODIODE AND METHOD OF MAKING THE SAME	
52	91 US		Regular	JOHN M. CARD	Pending	10502,111	7/21/2004			CHARGE CONTROLLED AVALANCHE PHOTODIODE AND METHOD OF MAKING THE SAME	
53	92 EP		Regular	ERIC J. SOSENKO	Pending	3708942,2	2/3/2003			ENHANCED PHOTO DETECTOR	
53	93 CA		Regular	JOHN M. CARD	Pending	2474559	2/3/2003			ENHANCED PHOTO DETECTOR	
53	94 JP		Regular	JOHN M. CARD	Pending	2003-564910	2/3/2003			ENHANCED PHOTO DETECTOR	Request for examination due 2/3/10
53	95 KO		Regular	ERIC J. SOSENKO	Pending	70118582004	2/3/2003			ENHANCED PHOTO DETECTOR	Request for examination due 2/3/05
53	96 CH		Regular	JOHN M. CARD	Pending	3803936	2/3/2003			ENHANCED PHOTO DETECTOR	
54	97 EP		Regular	ERIC J. SOSENKO	Pending	3710463	2/3/2003			PLANAR AVALANCHE PHOTODIODE	

*all master numbers begin with client number 10355-

Client #10555

Picomatrix Master Docket List - Sorted by Families

Family #	Matr #	Country	Matr Type	Attorney	Status	Total #	Filing Date	Patent #	Issue Date	Title	Comments
98	98US	Provisional Filing	JOHN H. CARD	Pending	60814.793	9/10/2004				PROSECOND OPTICAL DELAY	new provisional filing
100	100US	Provisional Filing	JOHN H. CARD	Pending	60833.663	12/7/2004				HIGH-SPEED NIGAS PHOTOCONDUCTIVE DEVICE	new provisional filing

*all matter numbers begin with client number 10555-

SCHEDULE V

API

1 FINANCING STATEMENTS

EXHIBIT AASSIGNMENT FOR SECURITY[TRADEMARKS] [PATENTS] [COPYRIGHTS]

WHEREAS, _____ (the "Assignor") [has adopted, used and is using, and holds all right, title and interest in and to, the trademarks and service marks listed on the annexed Schedule 1A, which trademarks and service marks are registered or applied for in the United States Patent and Trademark Office (the "Trademarks") [holds all right, title and interest in the letter patents, design patents and utility patents listed on the annexed Schedule 1A, which patents are issued or applied for in the United States Patent and Trademark Office (the "Patents") [holds all right, title and interest in the copyrights listed on the annexed Schedule 1A, which copyrights are registered in the United States Copyright Office (the "Copyrights")];

WHEREAS, the Assignor has entered into a Security Agreement, dated as of _____, 2005 (as amended, restated or otherwise modified from time to time the "Security Agreement"), in favor of Advanced Photonix, Inc., as secured party on behalf of the secured parties under the Security Agreement (the "Assignee");

WHEREAS, pursuant to the Security Agreement, the Assignor has assigned to the Assignee and granted to the Assignee for the benefit of the Secured Parties (as defined in the Security Agreement) a continuing security interest in all right, title and interest of the Assignor in, to and under the [Trademarks, together with, among other things, the good-will of the business symbolized by the Trademarks] [Patents] [Copyrights] and the applications and registrations thereof, and all proceeds thereof, including, without limitation, any and all causes of action which may exist by reason of infringement thereof and any and all damages arising from past, present and future violations thereof (the "Collateral"), to secure the payment, performance and observance of the "Obligations" (as defined in the Security Agreement);

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Assignor does hereby pledge, convey, sell, assign, transfer and set over unto the Assignee and grants to the Assignee for the benefit of the Assignee a continuing security interest in the Collateral to secure the prompt payment, performance and for the benefit of the Assignee observance of the Obligations.

The Assignor does hereby further acknowledge and affirm that the rights and remedies of the Assignee with respect to the Collateral are more fully set forth in the Security Agreement, the terms and provisions of which are hereby incorporated herein by reference as if fully set forth herein.

N WITNESS WHEREOF, the Assignor has caused this Assignment to be duly
officer thereunto duly authorized as of _____, 2005

ADVANCED PHOTONIX, INC.

By: _____

Name:

Title:

STATE OF _____

35.

COUNTY OF _____

On this _____ day of _____, 2005, before me personally came _____, to me known to be the person who executed the foregoing instrument, and who, being duly sworn by me, did depose and say that s/he is the _____ of Advanced Photonix, Inc., a Delaware corporation, and that s/he executed the foregoing instrument on behalf of such corporation, and that s/he had authority to sign the same, and s/he acknowledged to me that he executed the same as the act and deed of such corporation for the uses and purposes therein mentioned.

_____, Notary Public
_____, County, CA
My Commission Expires: _____

SCHEDULE 1A TO ASSIGNMENT FOR SECURITY

[Trademarks and Trademark Applications]
[Patent and Patent Applications]
[Copyright and Copyright Applications]
Owned by _____

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