

Form PTO-1595 (Rev. 08/05)  
OMB No. 0651-0027 (exp. 6/30/2008)

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.

<b>1. Name of conveying party(ies)</b>  <u>High Throughput Genomics, Inc.</u>  Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>2. Name and address of receiving party(ies)</b> Name: <u>Solstice Capital II, L.P.</u> Internal Address: _____  Street Address: <u>15 Broad Street, 3rd Floor</u>  City: <u>Boston</u>  State: <u>MA</u>  Country: <u>USA</u> Zip: <u>02109</u>  Additional name(s) & address(es) attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>3. Nature of conveyance/Execution Date(s):</b> Execution Date(s) <u>09/28/2006</u> <input type="checkbox"/> Assignment <input type="checkbox"/> Merger <input checked="" type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Joint Research Agreement <input type="checkbox"/> Government Interest Assignment <input type="checkbox"/> Executive Order 9424, Confirmatory License <input type="checkbox"/> Other _____	<b>4. Application or patent number(s):</b> <input type="checkbox"/> This document is being filed together with a new application. A. Patent Application No.(s) _____ B. Patent No.(s) <u>6,083,763; 6,232,066; 6,238,869;</u> <u>6,312,960; 6,479,301; 6,331,441;</u> <u>6,458,533; 6,803,238; 6,919,180</u>  Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>5. Name and address to whom correspondence concerning document should be mailed:</b> Name: <u>Kent M. Walker, Esq.</u> <u>Cooley Godward Kronish, LLP</u> Internal Address: _____  Street Address: <u>4401 Eastgate Mall</u>  City: <u>San Diego</u> State: <u>CA</u> Zip: <u>92121-1909</u>  Phone Number: <u>858 550-6000</u> Fax Number: <u>858 550-6420</u> Email Address: <u>trademarks@cooley.com</u>	<b>6. Total number of applications and patents involved:</b> <u>9</u>  <b>7. Total fee (37 CFR 1.21(h) &amp; 3.41) \$</b> <u>360</u> <input type="checkbox"/> Authorized to be charged by credit card <input checked="" type="checkbox"/> Authorized to be charged to deposit account <input type="checkbox"/> Enclosed <input type="checkbox"/> None required (government interest not affecting title)
<b>9. Signature:</b> _____ <div style="text-align: center;">Signature</div> <u>William S. Galliani</u> <div style="text-align: center;">Name of Person Signing</div>	<b>8. Payment Information</b> a. Credit Card Last 4 Numbers _____ Expiration Date _____  b. Deposit Account Number <u>03-3117</u> Authorized User Name <u>William Galliani</u>  <div style="text-align: right;">Date <u>10-23-06</u></div>
Total number of pages including cover sheet, attachments, and documents: <span style="border: 1px solid black; padding: 2px 10px;"><b>12</b></span>	

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:  
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, V.A. 22313-1450

CH \$360.00 033117 6083763

**2. Receiving Parties (Cont'd)**

1. Valley Ventures III, L.P.  
80 E. Rio Salado Pkwy, Ste. 705  
Tempe, AZ 85281  
Fax: (520) 327-5665  
Attention: Lawrence J. Aldrich

2. Village Ventures Partners Fund, L.P.  
c/o Village Ventures, Inc.  
430 Main Street, Suite 1  
Williamstown, MA 01267  
Fax: (413) 458-0338  
Attention: President

3. Village Ventures Partners Fund A, L.P.  
c/o Village Ventures, Inc.  
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Williamstown, MA 01267  
Fax: (413) 458-0338  
Attention: President

4. VVN, LLC  
c/o Village Ventures, Inc.  
430 Main Street, Suite 1  
Williamstown, MA 01267  
Fax: (413) 458-0338  
Attention: President

5. Ralph R. Martel  
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6. Constance A. Junghans  
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7. Michael Cusack  
5018 Valley View Road  
Tucson, AZ 85718

8. Lawrence J. Aldrich  
6045 E. Fangio Place

Tucson, AZ 85750

9. E. William Radany  
5800 N. Kolb Road, # 2108  
Tucson, AZ 85750

10. Kirk Collamer  
12333 N. Red Mountain Drive  
Tucson, AZ 85755-6553

11. Seligmann-Junghans Family Trust U/A/D  
July 9, 1999  
6290 N. Nirvana Place  
Tucson, AZ 85750

## INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement (the "*Agreement*") is entered into as of September 28, 2006 by and between High Throughput Genomics, Inc., a Delaware corporation having a principal place of business at 6296 E. Grant Rd., Tucson, Arizona 85712 (the "*Company*"), and Solstice Capital II, L.P., as agent for and on behalf of the Purchasers (as defined below) (the "*Agent*", which term shall include any successor Agent appointed in accordance with the terms of the Security Agreement (as defined below)).

WHEREAS, the Company has entered into a Note and Warrant Purchase Agreement, dated as of the date hereof and as may be amended from time to time (the "*Purchase Agreement*"), with those purchasers listed on the Schedule of Purchasers thereto (the "*Purchasers*"), and the Company, the Purchasers and the Agent have entered into a Security Agreement dated as of the date hereof and as may be amended from time to time (the "*Security Agreement*");

WHEREAS, the Purchasers have purchased or will purchase from the Company certain convertible secured promissory notes (the "*Notes*") pursuant to the provisions of the Purchase Agreement; and

WHEREAS, it is a condition to the obligation of the Purchasers to purchase the Notes that the Company shall have executed and delivered this Agreement,

NOW, THEREFORE, in consideration of the premises and to induce the Purchasers to purchase the Notes and for other good and valuable consideration, the Company hereby agrees with the Agent on behalf of the Purchasers as follows:

1. Defined Terms. All capitalized terms used herein and not defined herein shall have the meanings ascribed to such terms in the Security Agreement.

2. Grant of Security Interest. To secure the Company's prompt, punctual, and faithful performance of all and each of the Company's Obligations (whether at the stated maturity, by acceleration or otherwise) to the Purchasers, the Company hereby grants to the Agent as secured party for the benefit of the Purchasers a continuing security interest in and to all its now owned and existing or hereafter acquired Intellectual Property (including without limitation those Copyrights, Patents and Trademarks listed on Exhibits A, B and C hereto) that may have been or may hereafter be granted in the United States of America or foreign countries, and all reissues, divisions, continuations, renewals, extensions, and continuations-in-part thereof and all improvements made thereon, together with all rights to bring actions for past, present, and future infringements and all rights corresponding thereto, and all proceeds of any of the foregoing (including without limitation license royalties and proceeds of infringement suits). Notwithstanding anything to the contrary contained in this Agreement, (i) the Purchasers shall share Ratably in all proceeds from or distributions of or with respect to the Collateral and (ii) the execution of this Agreement by the Agent shall not affect any of the rights granted to the

Purchasers in the Security Agreement, and all power or authority to act hereunder on behalf of the Purchasers conferred upon the Agent may be exercised only upon the written consent or authorization of the Requisite Holders.

3. Company Representation. The Company represents and warrants that Exhibits A, B, and C attached hereto set forth any and all intellectual property rights in connection to which the Company has registered or filed an application with either the United States Patent and Trademark Office or the United States Copyright Office, as applicable. If the Company shall purchase, register or otherwise acquire rights to any new Intellectual Property, the provisions of Section 2 hereof shall automatically apply thereto and the Company shall take any other action reasonably necessary to record the Purchasers' interest in such Intellectual Property with the United States Patent and Trademark Office and/or the United States Copyright Office, as applicable.

4. Remedies. If there occurs an Event of Default, the Agent on behalf of the Purchasers shall be entitled to exercise any and all remedies available to the Purchasers under the Security Agreement for the benefit of all Purchasers only upon the written consent or authorization of the Requisite Holders.

5. Notices. All notices, requests, demands and other communications provided for hereunder shall be in writing and shall be given as provided in Section 20 of the Security Agreement.

6. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument.

7. Headings. The headings of the various sections of this Agreement have been inserted for convenience of reference only and shall not be deemed to be a part of this Agreement.

8. Governing Law. This Agreement shall be governed by and construed in accordance with the law of the State of Delaware without giving effect to the conflicts of law principles thereof.

*[Remainder of Page Intentionally Left Blank]*

IN WITNESS WHEREOF, the Company and the Agent have caused this Agreement to be executed as an instrument under seal as of the date first above written.

COMPANY:

HIGH THROUGHPUT GENOMICS, INC.

By: Kirk Collamer

Name: Kirk Collamer

Title: Vice President & Chief Financial Officer

AGENT:

SOLSTICE CAPITAL II, L.P.

By: Solstice Capital LLC  
its general partner

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

IN WITNESS WHEREOF, the Company and the Agent have caused this Agreement to be executed as an instrument under seal as of the date first above written.

COMPANY:

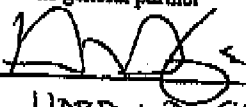
HIGH THROUGHPUT GENOMICS, INC.

By: \_\_\_\_\_  
Name: Kirk Collamer  
Title: Vice President & Chief Financial Officer

AGENT:

SOLSTICE CAPITAL II, L.P.

By: Solstice Capital LLC  
its general partner

By:   
Name: HARRY A. GEORGE  
Title: EXECUTIVE MANAGER

**EXHIBIT A**  
**COPYRIGHTS**

<u>Description</u>	<u>Registration Number</u>	<u>Registration Date</u>
None		

512971 v3/SD



**EXHIBIT B****PATENTS AND PATENT APPLICATIONS**

<u>Patent #</u>	<u>Country</u>	<u>Issue Date</u>	<u>Description</u>
6,083,763	U.S.	7/4/00	Multiplexed molecular analysis apparatus and method
6,232,066	U.S.	5/15/01	High throughput assay system
6,238,869	U.S.	5/29/01	High throughput assay system
6,312,960 B1	U.S.	11/6/01	Methods for fabricating an array for use in multiplexed biochemical analysis
6,331,441	U.S.	12/18/01	Multiplexed molecular analysis apparatus and method
6,458,533 B21	U.S.	10/1/02	High throughput assay system for monitoring EST's
6,479,301 B1	U.S.	11/12/02	Methods for fabricating an array for use in multiplexed biochemical analysis
6,803,238	U.S.	10/12/04	Methods for multiplexed biochemical analysis
6,919,180	U.S.	7/19/05	Hybridization rate enhancement for substrate-bound specific nucleic acid- binding agents

**EXHIBIT C**  
**TRADEMARKS**

<u>Description</u>	<u>Registration Number</u>	<u>Registration Date</u>
None		

512971 v3/SD

**SCHEDULE OF PURCHASERS**

<b>INITIAL CLOSING</b>	
<b>Name and Address</b>	<b>Loan Amount</b>
Solstice Capital II, L.P. 15 Broad Street, 3 <sup>rd</sup> Floor Boston, MA 02109 Fax: (617) 523-5827 Attention: Henry Newman	
Valley Ventures III, L.P. 80 E. Rio Salado Pkwy, Ste. 705 Tempe, AZ 85281 Fax: (520) 327-5665 Attention: Lawrence J. Aldrich	
Village Ventures Partners Fund, L.P. c/o Village Ventures, Inc. 430 Main Street, Suite 1 Williamstown, MA 01267 Fax: (413) 458-0338 Attention: President  <i>With a copy to:</i> Village Ventures, Inc. 430 Main Street, Suite 1 Williamstown, MA 01267 Fax: (413) 458-0338 Attention: Senior Vice President and General Counsel	
Village Ventures Partners Fund A, L.P. c/o Village Ventures, Inc. 430 Main Street, Suite 1 Williamstown, MA 01267 Fax: (413) 458-0338 Attention: President  <i>With a copy to:</i> Village Ventures, Inc. 430 Main Street, Suite 1 Williamstown, MA 01267 Fax: (413) 458-0338 Attention: Senior Vice President and General Counsel	

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Name and Address	Loan Amount
VVN, LLC c/o Village Ventures, Inc. 430 Main Street, Suite 1 Williamstown, MA 01267 Fax: (413) 458-0338 Attention: President  <i>With a copy to:</i> Village Ventures, Inc. 430 Main Street, Suite 1 Williamstown, MA 01267 Fax: (413) 458-0338 Attention: Senior Vice President and General Counsel	
Ralph R. Martel 6726 N. Calle Zella Tucson, AZ 85718	
Constance A. Junghans 1829 S. Deer Head Place Tucson, AZ 85748	
Michael Cusack 5018 Valley View Road Tucson, AZ 85718	
Lawrence J. Aldrich 6045 E. Fangio Place Tucson, AZ 85750	
E. William Radany 5800 N. Kolb Road, # 2108 Tucson, AZ 85750	
Kirk Collamer 12333 N. Red Mountain Drive Tucson, AZ 85755-6553	
Seligmann-Junghans Family Trust U/A/D July 9, 1999 6290 N. Nirvana Place Tucson, AZ 85750	