PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5170440

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Execution Date
BIOLOG, INC.	09/28/2018

RECEIVING PARTY DATA

Name:	BROADOAK FUND III, LLC
Street Address:	4800 MONTGOMERY LANE
Internal Address:	SUITE 230
City:	BETHESDA
State/Country:	MARYLAND
Postal Code:	20814

PROPERTY NUMBERS Total: 18

Property Type	Number
Patent Number:	5541082
Patent Number:	5627045
Patent Number:	5800785
Patent Number:	5882882
Patent Number:	6046020
Patent Number:	6046021
Patent Number:	6271022
Patent Number:	6387651
Patent Number:	6472201
Patent Number:	6686173
Patent Number:	6696239
Patent Number:	6727076
Patent Number:	9274101
Patent Number:	9662372
Application Number:	10126345
Application Number:	11192161
Patent Number:	5134063
Patent Number:	5374551

PATENT REEL: 047045 FRAME: 0872

505123679

CORRESPONDENCE DATA

Fax Number: (410)234-2314

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 4106596402

Email: patents@wtplaw.com

Correspondent Name: WHITEFORD, TAYLORY & PRESTON, LLP

Address Line 1: SEVEN SAINT PAUL STREET

Address Line 4: BALTIMORE, MARYLAND 21202-1636

ATTORNEY DOCKET NUMBER:	090670.00020
NAME OF SUBMITTER:	J. HINDAH WEISSBROT
SIGNATURE:	/j. hindah weissbrot/
DATE SIGNED:	10/03/2018

Total Attachments: 8

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INTELLECTUAL PROPERTY SECURITY AGREEMENT

This INTELLECTUAL PROPERTY SECURITY AGREEMENT ("IP Security Agreement"), dated as of September 28, 2018, is made by and between BIOLOG, INC., a California corporation (the "Borrower") in favor of BROADOAK FUND III, LLC, a Delaware limited liability company, as Lender ("BroadOak") and as Administrative Agent ("Administrative Agent") for the benefit of itself and for any other Lenders to whom the Loan or any portion thereof is assigned pursuant to the Loan Agreement (defined below). BroadOak and any future Lender are sometimes referred to, individually as "Lender" and collectively, as "Lenders."

WHEREAS, the Borrower has entered into a Loan and Security Agreement dated as of the date hereof (the "Loan Agreement"), with BroadOak, as Lender and as Administrative Agent for all Lenders under the Loan Agreement.

WHEREAS, under the terms of the Loan Agreement, the Borrower has granted to the Administrative Agent, for the benefit of the Lenders, a security interest in, among other property, certain intellectual property of the Borrower, and has agreed to execute and deliver this IP Security Agreement, for recording with national, federal and state government authorities, including, but not limited to, the United States Patent and Trademark Office and the United States Copyright Office.

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Borrower agrees with the Administrative Agent as follows:

- 1. <u>Grant of Security</u>. Borrower hereby pledges and grants to the Administrative Agent, for the benefit of the Lenders, a security interest in and to all of the right, title and interest of such Borrower in, to and under the following (the "**IP Collateral**"):
- (a) the patents and patent applications set forth in <u>Schedule 1</u> hereto and all reissues, divisions, continuations, continuations-in-part, renewals, extensions and reexaminations thereof and amendments thereto (the "**Patents**");
- (b) the trademark registrations and applications set forth in <u>Schedule 2</u> hereto, together with the goodwill connected with the use thereof and symbolized thereby and all extensions and renewals thereof (the "**Trademarks**");
- (c) the copyright registrations, applications and copyright registrations and applications exclusively licensed to Borrower set forth in <u>Schedule 3</u> hereto, and all extensions and renewals thereof (the "**Copyrights**");
- (d) all rights of any kind whatsoever of the Borrower accruing under any of the foregoing provided by applicable law of any jurisdiction, by international treaties and conventions and otherwise throughout the world;
- (e) any and all royalties, fees, income, payments and other proceeds now or hereafter due or payable with respect to any and all of the foregoing; and

- (f) any and all claims and causes of action with respect to any of the foregoing, whether occurring before, on or after the date hereof, including all rights to and claims for damages, restitution and injunctive and other legal and equitable relief for past, present and future infringement, dilution, misappropriation, violation, misuse, breach or default, with the right but no obligation to sue for such legal and equitable relief and to collect, or otherwise recover, any such damages.
- 2. <u>Recordation</u>. Borrower authorizes the Commissioner for Patents, the Commissioner for Trademarks and the Register of Copyrights and any other government officials to record and register this IP Security Agreement upon request by the Administrative Agent.
- 3. <u>Loan Documents</u>. This IP Security Agreement has been entered into pursuant to and in conjunction with the Loan Agreement, which is hereby incorporated by reference. The provisions of the Loan Agreement shall supersede and control over any conflicting or inconsistent provision herein. The rights and remedies of the Administrative Agent and the Lenders with respect to the IP Collateral are as provided by the Loan Agreement and related documents, and nothing in this IP Security Agreement shall be deemed to limit such rights and remedies.
- 4. <u>Execution in Counterparts</u>. This IP Security Agreement may be executed in counterparts (and by different parties hereto in different counterparts), each of which shall constitute an original, but all of which when taken together shall constitute a single contract. Delivery of an executed counterpart of a signature page to this IP Security Agreement by facsimile or in electronic (i.e., "pdf" or "tif") format shall be effective as delivery of a manually executed counterpart of this IP Security Agreement.
- 5. <u>Successors and Assigns</u>. This IP Security Agreement will be binding on and shall inure to the benefit of the parties hereto and their respective successors and assigns.
- 6. <u>Governing Law.</u> This IP Security Agreement and any claim, controversy, dispute or cause of action (whether in contract or tort or otherwise) based upon, arising out of or relating to this IP Security Agreement and the transactions contemplated hereby and thereby shall be governed by, and construed in accordance with, the laws of the United States and the State of Delaware, without giving effect to any choice or conflict of law provision or rule (whether of the State of Delaware or any other jurisdiction).

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHE duly executed and delivered written.	REOF, the Borrower has caused this IP Security Agreement to be by its officer thereunto duly authorized as of the date first above
V. CONTRACTO	BORROWER:
	BIOLOG, INC.
	By: Bany Bocker Name: Farmy Bocker Title: CED & CSI)
	ADMINISTRATIVE AGENT AND LENDER:
	BROADOAK FUND III, LLC, A Delaware Limited Liability Company
	Ву;

William Snider, Manager

duly executed and delivered by its officer thereunto duly authorized as of the date first above written.

BORROWER:
BIOLOG, INC.

By:

Name:
Title:

ADMINISTRATIVE AGENT AND LENDER:
BROADOAK FUND III, LLC,
A Delaware Limited Liability Company

By:

William Snider, Manager

IN WITNESS WHEREOF, the Borrower has caused this IP Security Agreement to be

SCHEDULE 1 PATENTS AND PATENT APPLICATIONS

Title	Application No.	Filing Date	Patent No.	Issue Date
MICROBIOLOGICAL MEDIUM	08450935	MAY 25, 1995	5541082	JUL 30, 1996
MULTI-TEST FORMAT WITH GEL-	08421377	APR 12, 1995	5627045	MAY 6, 1997
FORMING MATRIX FOR				
CHARACTERIZATION OF				
MICROORGANISMS TESTING DEVICE FOR LIQUID AND	08685695	JUL 24, 1996	5800785	SEP 1, 1998
LIQUID SUSPENDED SAMPLES	08083093	JUL 24, 1990	3800783	SEP 1, 1998
GEL MATRIX WITH REDOX PURPLE	08762656	DEC 9, 1996	5882882	MAR 16,
FOR TESTING AND CHARACTERIZING	00702030	<i>BEE</i> 3, 1330	3002002	1999
MICROORGANISMS				
USE OF ANTI-CAPSULE AGENTS IN	09075562	MAY 5, 1998	6046020	APR 4, 2000
MICROBIOLOGICAL TESTING				
COMPARATIVE PHENOTYPE	09098066	JUN 16, 1998	6046021	APR 4, 2000
ANALYSIS OF TWO OR MORE				
MICROORGANISMS USING A PLURALITY OF SUBSTRATES WITHIN				
A MICROWELL TESTING DEVICE				
DEVICE FOR INCUBATING AND	09277353	MAR 26, 1999	6271022	AUG 7, 2001
MONITORING MILTIWELL ASSAYS	0,21,1333	1011 IX 20, 1999	0271022	71007,2001
COMPARATIVE PHENOTYPE	09574087	MAY 18, 2000	6387651	MAY 14,
ANALYSIS OF TWO OR MORE				2002
MICROORGANISMS USING A				
PLURALITY OF SUBSTRATES WITHIN				
A MULTIWELL DEVICE	00552160	DEG 20, 2000	6472201	O CIT 20, 2002
COMPARATIVE PHENOTYPE	09752168	DEC 29, 2000	6472201	OCT 29, 2002
ANALYSIS COMPARATIVE PHENOTYPE	10047048	JAN 14, 2002	6686173	FEB 3, 2004
ANALYSIS OF TWO OR MORE	10047046	JAN 14, 2002	0080173	TEB 3, 2004
MICROORGANISMS USING A				
PLURALITY OF SUBSTRATES WITHIN				
A MULTIWELL TESTING DEVICE				
COMPARATIVE PHENOTYPE	09556898	APR 20, 2000	6696239	FEB 24, 2004
ANALYSIS FOR ASSESSMENT OF				
BIOLOGICAL ACTIVE COMPOUNDS				
SUCH AS ANTIMICROBIALS	10226426	ATIC 22, 2002	(72707)	A DD 27, 2004
COMPARATIVE PHENOTYPE ANALYSIS	10226436	AUG 23, 2002	6727076	APR 27, 2004
METHODS AND KITS FOR OBTAINING	11418804	MAY 5, 2006	9274101	MAR 1, 2016
A METABOLIC PROFILE OF LIVING	11-1000-	77771 3, 2000	727-101	1, 2010
ANIMAL CELLS				
TO INACTIVATE AND/OR REDUCE	14768084	AUG 14, 2015	9662372	MAY 30,
PRODUCTION OF MICROBIAL TOXINS				2017
COMPARATIVE PHENOTYPE	10126345	APR 19, 2002		
ANALYSIS OF CELLS, INCLUDING				
TESTING OF BIOLOGICALLY ACTIVE	1		1	<u> </u>

COMPOUNDS				
COMPARATIVE PHENOTYPE	11192161	JUL 27, 2005		
ANALYSIS OF CELLS INCLUDING				
TESTING OF BIOLOGICALLY ACTIVE				
CHEMICALS				
METHODS FOR DETECTION,	07549394	JUL 6, 1990	5134063	JUL 28, 1992
IDENTIFICATION AND SPECIATION OF				
LISTERIAS				
METHODS FOR DETECTION,	07920100	JUL 24, 1992	5374551	DEC 20, 1994
IDENTIFICATION AND SPECIATION OF				
MEMBERS OF THE GENUS LISTERIA				

SCHEDULE 2 TRADEMARK REGISTRATIONS AND APPLICATIONS

Mark	Application	Filing Date	Registration	Registration
	No.		No.	Date
OMNILOG	76185183	12/22/2000	2609021	8/20/2002
PHENOTYPE MICROARRAY	76221348	03/07/2001		
PHENOTYPE MICROARRAYS	76185134	12/20/2000		
RAINBOW	74528114	5/20/1994	2025851	12/24/1996

SCHEDULE 3 COPYRIGHT REGISTRATIONS AND APPLICATIONS

PATENT REEL: 047045 FRAME: 0881

RECORDED: 10/03/2018

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