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PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE: NEW ASSIGNMENT NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JEFFREY A. DIETRICH	09/11/2014
JEFFREY L. FORTMAN	09/15/2014
ERIC STEEN	09/11/2014

RECEIVING PARTY DATA

Name:	LYGOS, INC.	
Street Address:	77 VAN NESS AVENUE, SUITE 101	
Internal Address:	MAIL STOP #1953	
City:	SAN FRANCISCO	
State/Country:	CALIFORNIA	
Postal Code:	94102-6042	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14386272

CORRESPONDENCE DATA

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Correspondent Name: DAVID R. CONKLIN OF KIRTON MCCONKIE

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ATTORNEY DOCKET NUMBER: 20248.18 NAME OF SUBMITTER: DAVID R. CONKLIN **SIGNATURE:** /David R. Conklin/ **DATE SIGNED:** 09/23/2014

Total Attachments: 5

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ASSIGNMENT

WHEREAS, the undersigned inventor (hereinafter, "Assignor") of the address indicated below, has invented subject matter disclosed in the patent application entitled RECOMBINANT HOST CELLS FOR THE PRODUCTION OF MALONATE, filed on:

 Serial No.: 14/386,272
 Filed: September 18, 2014

 Serial No.: PCT/US2013/029441
 Filed: March 6, 2013

 Serial No.: 61/607,479
 Filed: March 6, 2012

 Serial No.: 61/619,112
 Filed: April 2, 2012

AND WHEREAS, LYGOS, INC. (hereinafter "Assignee"), a corporation, having its principal place of business and mailing address at 77 Van Ness Avenue, Suite 101, Mail Stop #1953, San Francisco, California 94102-6042, is desirous to secure the entire right, title and interest in said invention.

THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNOR by these presents does sell, assign and transfer unto ASSIGNEE, its successors, assigns and legal representatives, the full and exclusive right to the invention, as described in the aforesaid application, including patent, copyright and any other intellectual property rights, any provisional, non-provisional, continuation, continuation-in-part, divisional, reissue, reexamination, foreign, PCT or other patent application or like document or any other application which claims priority to said application, in the United States and all foreign countries, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States adheres, and hereby authorizes and requests the Commissioner of Patent to issue said Letters Patent to ASSIGNEE, for the sole use and benefit of ASSIGNEE, its successors, assigns and legal representatives;

WE HEREBY authorize and request the United States Commissioner of Patents and Trademarks, and such Patent Office officials in foreign countries as are duly authorized by their patent laws to issue patents, to issue any and all patents on said invention to the Assignee as the owner of the entire interest, for the sole use and benefit of the said Assignee, its successors, assigns and legal representatives.

WE HEREBY agree, without further consideration and without expense to us, to sign all lawful papers and to perform all other lawful acts which the Assignee may request of us to make this Assignment fully effective, including, by way of example but not of limitation, the following:

Prompt execution of all original, divisional, substitute, reissue, and other United States and foreign patent applications on said invention, and all lawful documents requested by the Assignee to further the prosecution of any of such patent applications.

Cooperation to the best of our ability in the execution of all lawful documents, the production of evidence, nullification, reissue, extension, or infringement proceedings involving said invention.

AND HEREBY AGREES to transfer to ASSIGNEE, its successors, assigns, and legal representatives, without further remuneration, a like interest in and to any improvements, derivative works, and applications based thereon, growing out of or relating to the invention; and to provide all reasonable assistance and execute any papers, if accurate, desired by ASSIGNEE, its successors, assigns and legal representatives, to preserve, acquire and/or perfect ASSIGNEE's full protection and title in and to the invention and any improvements and to file any of the aforementioned applications.

EXECUTED as of the date written below by ASSIGNOR:

Executed this 11th day of ________, 2014, at

Enrogille Ct, USA

Jedney A. Dietrich 9 Brady Street

San Francisco, CA 94103 United States of America EXECUTED as of the date written below by ASSIGNOR:

Executed this 15 tay of September, 2014, at

Washington, DC USA

Jeffrey L. Fortman 1534 Innes Avenue San Francisco, CA 94124 United States of America EXECUTED as of the date written below by ASSIGNOR:

Executed this 11 day of September 2014, at

Freezille, CA, USA

Eric Steen

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