PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:		NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		NUNC PRO TUNC AS	SIGNMENT	
EFFECTIVE DATE:		10/27/2005	10/27/2005	
CONVEYING PARTY DATA				
Name Executio			Execution Date	
Metamorphix, Inc.			03/28/2008	
RECEIVING PARTY DATA				
Name:	Metamorphix, Inc.			
Street Address:	8000 Virginia Manor Road			
Internal Address:	Suite 140			
City:	Beltsville			
State/Country:	MARYLAND			
Postal Code:	20705			
[1			
Name:	Cargill, Incorporated			
Street Address:	15407 McGinty Road West			
City:	Wayzata			
State/Country:	15407 McGinty Road West Wayzata MINNESOTA			
Postal Code:	55391-2399			
Postal Code: 55391-2399 80.00000000000000000000000000000000000				
Property Type			Number	
Application Number: 13220		13220174		
CORRESPONDENCE DATA				
Fax Number: 4046457707				
Correspondence will be sent via US Mail when the fax attempt is unsuccessful.				
Phone: 404.645.7700 Emoil: maarbaraugh@maainlaw.com				
Email: rscarborough@mcciplaw.com Correspondent Name: Meunier Carlin & Curfman, LLC				
Address Line 1: 817 W. Peachtree St., NW, Suite 500				
Address Line 4:		GEORGIA 30308		
			PATENT	
502351599			REEL: 030435 FRAME: 0522	

ATTORNEY DOCKET NUMBER:	10211-002US6			
NAME OF SUBMITTER:	P. Brian Giles			
Signature:	/Brian Giles/			
Date:	05/17/2013			
Total Attachments: 2 source=10211_002US6AssignmentMetamorphix_Inc_to_Metamorphix_Inc_and_Cargill#page1.tif source=10211_002US6AssignmentMetamorphix_Inc_to_Metamorphix_Inc_and_Cargill#page2.tif				

ASSIGNMENT NUNC PRO TUNC

WHEREAS, METAMORPHIX, INC., a corporation of the State of Delaware having a principal place of business at 8000 Virginia Manor Road, Suite 140, Beltsville, MD 20705, is the owner of certain inventions and improvements disclosed in an application for Letters Patent entitled "COMPOSITIONS, METHODS AND SYSTEMS FOR INFERRING BOVINE BREED," filed in the United States Patent and Trademark Office on December 31, 2003, and assigned Serial No. 10/750,622; and

WHEREAS, METAMORPHIX, INC., a corporation of the State of Delaware having a principal place of business at 8000 Virginia Manor Road, Suite 140, Beltsville, MD 20705, and CARGILL, INCORPORATED, a corporation of the State of Delaware having a principal place of business at 15407 McGinty Road West, Wayzata, MN 55391-2399, are desirous of acquiring a joint undivided interest in the same.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, METAMORPHIX, INC., by these presents does sell, assign, and transfer to METAMORPHIX, INC. and CARGILL, INCORPORATED, as co-assignees, their respective successors and assigns, each the full, exclusive, and joint right, title, and undivided interest in and to said application, in and to any divisions, continuations, reexaminations, and reissues thereof, and in and to all inventions and improvements disclosed and described in said application, preparatory to obtaining Letters Patent of the United States therefor; and hereby requests the Commissioner of Patents and Trademarks to issue any and all Letters Patent of the United States resulting from said application, or from a division, continuation, reexamination, or reissue thereof, jointly to METAMORPHIX, INC. and CARGILL, INCORPORATED, as coassignees, for their interest and for the sole use and benefit of METAMORPHIX, INC. and CARGILL, INCORPORATED, and their assigns and legal representatives;

For the same consideration, METAMORPHIX, INC., by these presents, does sell, assign, and transfer to METAMORPHIX, INC. and CARGILL, INCORPORATED, the full, exclusive, and

Page 1 of 2

PATENT REEL: 030435 FRAME: 0524

U.S. Patent Application No. 10/750,622

joint right, title, and undivided interest in and to any foreign application or applications corresponding to said application, in whole or in part, in countries other than the United States, in and to any Letters Patent and similar protective rights granted on said foreign applications, and in and to the right to claim any applicable priority rights arising from or required for said foreign applications under the terms of any applicable conventions, treaties, statutes, or regulations; said foreign applications to be filed and issued in the name of METAMORPHIX, INC. and CARGILL, INCORPORATED, or their designees insofar as permitted by applicable law;

AND, for the same consideration, METAMORPHIX, INC. agrees to sign all lawful papers, execute all division, continuing, reexamination, reissue, and other applications, make all assignments and rightful oaths, and generally do everything possible to aid METAMORPHIX, INC. and CARGILL, INCORPORATED, their successors, assigns, and nominees, to obtain and enforce proper protection for all said inventions and improvements in all countries throughout the world.

This Assignment is expressly made NUNC PRO TUNC to have the same legal force and effect as if executed on October 27, 2005 (the date of the Assignment from MMI Genomics, Inc. to MetaMorphix, Inc. and Cargill, Incorporated).

METAMORPHIX, INC.

Date:

2/23/04

Name: Landa Yarman- Curekary

Our Docket: MMI-0102 (14972.105004)

Page 2 of 2

PATENT REEL: 030435 FRAME: 0525

RECORDED: 05/17/2013