PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2696538

SUBMISSION TYPE:		NEW ASSIGNMENT					
NATURE OF CONVEYANCE:		ASSIGNMENT					
CONVEYING PARTY DATA							
		N	lame	Execution Date			
ROCHE DIAGNOSTICS OPERATIONS, INC. 01/15/2014							
RECEIVING PARTY DATA							
Name:	Roche Molecular Systems, Inc.						
Street Address:	4300 Hacien	da Driv	e				
City:	Pleasanton						
State/Country:	CALIFORNIA	CALIFORNIA					
Postal Code:	94588						
PROPERTY NUMBERS Total: 1							
Property T	уре		Number				
Application Number: 132		13295	5504				
CORRESPONDENCE DATA							
Fax Number:	(925	5)225-1	128				
Phone:		-730-85					
Email:			ad@roche.com				
-			hen the email attempt is unsuccessful.				
Correspondent Name: MISTY PRASAD Address Line 1: 4300 HACIENDA DRIVE							
Address Line 2: PATENT LAW DEPARTMENT							
Address Line 4: PLEASANTON, CALIFORNIA 94588							
ATTORNEY DOCKET NUMBER:		26571-US					
NAME OF SUBMITTER:			CHARLES M. DOYLE				
Signature:		/Charles M Doyle/39175/					
Date:			01/24/2014				
				PATENT			

Total Attachments: 4 source=Executed_Assignment_RAS_to_RMS#page1.tif source=Executed_Assignment_RAS_to_RMS#page2.tif source=Executed_Assignment_RAS_to_RMS#page3.tif source=Executed_Assignment_RAS_to_RMS#page4.tif

ASSIGNMENT

Assignment Effective As Of January 15, 2014

WHEREAS, ROCHE DIAGNOSTICS OPERATIONS, INC. of 9115 Hague Road, Indianapolis, Indiana 46250, United States of America, a company organized under the Laws of the State of Delaware, and hereinafter referred to as **ASSIGNOR**, is the owner of the following United States Patents and Patent Applications:

Serial No.	Patent No.	Filing Date	Issue Date	Title
09/823711	6,691,041	3/30/2001	2/10/2004	Method for the Efficiency-Corrected Real-
				Time Quantification of Nucleic Acids
10/746993		12/24/2003		Method for the Efficiency-Corrected Real-
				Time Quantification of Nucleic Acids
10/549648	8,137,616	4/1/2004	3/20/2012	System for Multi Color Real Time PCR
13/023407		2/8/2011		System for Multi Color Real Time PCR
12/407339		3/19/2009		Detection Format for Hot Start Real Time Polymerase Chain Reaction
11/912557		4/3/2006	· ·	Thermocycling of a Block Comprising Multiple Sample
12/963828	-	12/9/2010		Thermocycling of a Block Comprising Multiple Sample
60/741094		11/30/2005	· ·	Process for DNA Decontamination
11/564441		11/29/2006		Process for DNA Decontamination
12/481807	8,124,338	6/10/2009	2/28/2012	Use of TDE for Isolation of Nucleic Acids
13/182691		7/14/2011	·····	Use of TDE for Isolation of Nucleic Acids
12/603648		10/22/2009		Single-Cell MRNA Quantification with Real-Time RT-PCR
12/546940		8/25/2009		High-Density Multiwell-Plate
12/261476		10/30/2008		Method and Device for Purifying Nucleic Acids
12/582737		10/21/2009	-	Lysis and Reverse Transcription for MRNA Quantification
12/797878		6/10/2010	-	Lysis and Reverse Transcription for MRNA Quantification
12/406450		3/18/2009		Nucleic Acid Amplification in the Presence of Modified Randomers
13/711846		12/12/2012		Nucleic Acid Amplification in the Presence of Modified Randomers
12/623757		11/23/2009		System and Method for Nucleic Acids Containing Fluid Processing
12/623785		11/23/2009		Pipetting Device, Modular Pipetting Unit,

PATENT REEL: 032039 FRAME: 0870

		Pipetting System and Method for Pipetting of Fluid Samples
13/008949	1/19/2011	Lysis and Reverse Transcription for MRNA Quantification
12/623797	11/23/2009	System and Method for the Automated Processing of Fluids, Method for Determining the Matching of Objects
12/623774	11/23/2009	System and Method for the Automated Extraction of Nucleic Acids
12/641747	12/18/2009	Dry Composition of Reaction Compounds with Stabilized Polymerase
12/748535	3/29/2010	Dye Composition for Liquid Transfer Control
12/748688	3/29/2010	Fluid Transfer Control for Real-Time PCR
12/705679	2/15/2010	Solid Support for High-Throughput Nucleic Acid Analysis
12/709782	2/22/2010	Miniaturized, High-Throughput Nucleic Acid Analysis
13/746812	1/22/2013	Miniaturized, High-Throughput Nucleic Acid Analysis
13/862530	4/15/2013	Set of Oligonucleotide Probes as Well as Methods and Uses Thereto
12/963169	- 12/8/2010	System and Method for Cycling Liquid Samples Through a Series of Temperature Excursions
13/295504	11/14/2011	Instrument and Method for the Automated Thermal Treatment of Liquid Samples
13/236863	9/20/2011	Instrument and Process for the Storing and/or Processing of Liquid Samples
13/473010	5/16/2012	Instrument and Method for Detecting Analytes
13/169110	6/27/2011	Clonal PRE-Amplification in Emulsion
13/224423	9/2/2011	Relative Quantification Analysis of Multi- parametric PCR Experiments
13/853830	3/29/2013	Method for Cell Lysis and PCR Within The Same Reaction Chamber
13/853838	3/29/2013	Method for Cell Lysis in a PCR Reaction Buffer
13/411902	3/5/2012	Type of Universal Probe for the Detection of Genomic Variants
13/930638	6/28/2013	High Resolution Melting Analysis as a Prescreening Tool
13/853841	3/29/2013	Method for Cell Lysis and TR-PCR within the Same Reaction Vessel
61/695913	8/31/2012	Microfluidic Chip, Device and System for the Generation of Aqueous Droplets in Emulsion Oil for Nucleic Acid Amplification

PATENT REEL: 032039 FRAME: 0871

14/016840	9/3/2013	Microfluidic Chip, Device and System for the Generation of Aqueous Droplets in Emulsion Oil for Nucleic acid Amplification
14/097694	12/5/2013	Lysis and Reverse Transcription for MRNA Quantification

WHEREAS, ROCHE MOLECULAR SYSTEMS, INC., of 4300 Hacienda Drive, Pleasanton, California, United States of America, a Corporation organized under the Laws of the State of Delaware, hereinafter referred to as **ASSIGNEE**, is desirous of acquiring the entire rights, titles and interests in the said inventions, applications, issued patents, and in any Letters Patents which may be granted on the same in the United States of America and its territories;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for valuable consideration, receipt of which is hereby acknowledged, **ASSIGNOR** has sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said **ASSIGNEE**, and **ASSIGNEE'S** successors and assigns, all rights, titles and interests in and to the said inventions, said applications for United States Letters Patents, said Letters Patents, or any Letters Patents which may hereafter be granted on the same in the United States including any applications claiming priority under 35 U.S.C. §119(e), divisions, renewals, continuations in whole or in part, substitutions, conversions, reissues, reexaminations, prolongations or extensions thereof, said interest to be held and enjoyed by said **ASSIGNOR** had this assignment and transfer not been made, to the full end and term of any Letters Patents.

ASSIGNOR further agrees that it will, without charge to said ASSIGNEE, but at ASSIGNEE'S expense, cooperate with ASSIGNEE in the prosecution of said Patents and/or applications, execute, verify, acknowledge and deliver all such further papers, including applications for Letters Patent and for the reissue thereof, and instruments of assignment and transfer thereof, and will perform such other acts as ASSIGNEE lawfully may request, to obtain or maintain Letters Patents for said inventions and improvement in any and all countries, and to vest title thereto in said ASSIGNEE, or ASSIGNEE'S successors and assigns.

3 of 4

IN TESTIMONY WHEREOF, an authorized representative of the ASSIGNOR has hereunto signed his name to this assignment on the date indicated below and ASSIGEE has accepted on the date indicated below.

ROCHE DIAGNOSTICS OPERATIONS, INC.

D. Michael 1/15/14

D. Michael Young \lor Date Vice President & Chief Intellectual Property Counsel

Accepted by:

ROCHE MOLECULAR SYSTEMS, INC.

16-Jan . 2014

Date

Name: Charles M. Doyle^{*} Title: Senior Director of Patents

RECORDED: 01/24/2014