PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3161701

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
LOS ALAMOS NATIONAL SECURITIES, LLC	10/15/2014

RECEIVING PARTY DATA

Name:	CALDERA PHARMACEUTICALS, INC
Street Address:	278-D DP ROAD
City:	LOS ALAMOS
State/Country:	NEW MEXICO
Postal Code:	87544

PROPERTY NUMBERS Total: 1

Property Type	Number
Patent Number:	7241381

CORRESPONDENCE DATA

Fax Number: (302)347-1326

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: 630-802-2152

Email: fderege@xrpro.com

Correspondent Name: FRANCIS DE REGE

Address Line 1: ONE KENDALL SQUARE

Address Line 2: B20020

Address Line 4: CAMBRIDGE, MASSACHUSETTS 02139

ATTORNEY DOCKET NUMBER:	XR3-US2
NAME OF SUBMITTER:	FRANCESCO DE REGE
SIGNATURE:	/Francis de Rege/
DATE SIGNED:	12/24/2014
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 5

source=724138 assignment cover sheet#page1.tif

source=Assignment#page1.tif

source=Assignment#page2.tif

source=Assignment#page3.tif

source=Assignment#page4.tif

503115093 REEL: 034699 FRAME: 0956

ASSIGNMENT

WHEREAS, LOS ALAMOS NATIONAL SECURITY, LLC, a limited liability corporation duly organized under the laws of the State of Delaware, with its principal office and place of business at Office of Laboratory Counsel, Los Alamos National Laboratory, P.O. Box 1663, MS A187, Los Alamos, NM 87545 (hereinafter referred to as "Assignor"), is the sole owner of the entire right, title and interest in and to the listed patents and patent applications set forth in Schedule A attached hereto and in and to the inventions described therein; and

WHEREAS, CALDERA PHARMACEUTICALS, INC., a corporation organized and existing under the laws of the State of Delaware, with its principal office and place of business at 278-D DP Road, Los Alamos, NM 87544 (hereinafter referred to as "Assignee"), is desirous of acquiring the entire rights, titles and interests in and to the inventions, patents and patent applications set forth in Schedule A including any patents that may issue based on the pending applications; and

NOW THEREFORE, TO ALL WHOM IT MAY CONCERN, BE IT KNOWN THAT, for good and valuable consideration paid by Assignee, the receipt and sufficiency of which is hereby acknowledged, Assignor by these presents does hereby assign, sell, transfer and set over to said Assignee, Assignor's entire rights, titles and interests in and to said inventions and in and to the patents and patent applications set forth in Schedule A, including any patents that may issue therefore and including any and all continuations, divisionals and reissues, together with the right to file and obtain foreign patents and applications therefor, all of said rights to be held and enjoyed by Assignee for its own use and for the use of its legal representatives, successors and assigns, to the full end of the term or terms for which said patents may be granted as fully and entirely as the same would have been held and enjoyed by Assignor if this assignment had not been made; and the same to include any and all past and present rights and powers, under statutory and common law, including the right to sue others for infringement and collect damages, which have accrued or may accrue to Assignor of any and all kind and nature pertaining to said inventions, patents and patent applications.

Assignor does hereby authorize and request the Commissioner of Patents and Trademarks to issue in accordance with this Assignment any and all U.S. Letters Patent that may be granted

SLC-7311619-1

PATENT REEL: 034699 FRAME: 0957 on any of said U.S. patent applications to said Assignee for its sole use and enjoyment, and for the use and enjoyment of Assignee's successors and assigns.

Assignee acknowledges that each of the patents and patent applications in Appendix A are subject to U.S. Government Rights pursuant to Contract Number DE-AC52-06NA25396 between the Assignor and the United States Department of Energy, National Nuclear Security Administration. The Government will continue to have rights in the patents and patent applications in Appendix A following execution of this Assignment.

IN WITNESS WHEREOF, Assignor has hereunto set his hand and seal.

ar as as w	and the state of t	
LOSA	LAMOS NATI	ONAL SECURITY, LLC
Name:		54
Title:	Group Leader	Tehnologic Assets + Stategies Office of Legal Course
Date:	10/15	12014

STATE OF	NW	.)
COUNTY O	FLOSAL) ss Ayw(s)

On this day of <u>October</u>, 2014, before me, the undersigned, a Notary Public within and for the County and State aforesaid, personally appeared <u>David</u> E. Mecumber to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as his free act and deed.

In Witness Whereof, I have hereunto attached my hand and notarial seal, at the County and State aforesaid on the day and year last above written.

Hatu Cordou

My Commission Expires: May 31,

SLC-7311619-1

CHENER A

ir. I water to have a second and the	ent Applicat	Foreign Patent Applications/Issued Patents				
Title	COUNTRY Serial No.	Serial No.	Filed Date	Patent No.	Issue Date Status	Status
ADVANCED DRUG DEVELOPMENT AND	CH	07 874 491.9	10/10/2007			PENDING
MANUFACTURING	***************************************				***************************************	
ADVANCED DRUG DEVELOPMENT AND	E	60 2007 024 468.4	06/18/2012		····	PENDING
MANUFACIURING						
ADVANCED DRUG DEVELOPMENT AND	DX	07 874 491.9	10/10/2007	DK/EP208451908/01/2012ISSUED	X08/01/2012	ISSUED
MANUFACTURING						
ADVANCED DRUG DEVELOPMENT AND	EP	07 874 491.9	10/10/2007	2 084 519	08/01/2012 ISSUED	CEUSSI
MANUFACTURING						
ADVANCED DRUG DEVELOPMENT AND	THE STATE OF THE S	112 164 870.3	10/10/2007		••••	PENDING
MANUFACTURING				***************************************		
ADVANCED DRUG DEVELOPMENT AND	THE STATE OF THE S	07 874 491.9	10/10/2007			PENDING
MANUFACTURING						
ADVANCED DRUG DEVELOPMENT AND	G	07 874 491.9	10/10/2007			PENDING
WALVOPACIONING	***************************************				-	
MANIFACTIRING		E 0 E 0 1 M 0 0 10	EQU EQU EQUE			
ADVANCED DRUG DEVELOPMENT AND	 	07 874 491.9	10/10/2007			PENDING
MANUFACTURING						
ADVANCED DRUG DEVELOPMENT AND	П	07 874 491,9	10/10/2007			PENDING
MANUFACTURING						
ADVANCED DRUG DEVELOPMENT AND	dt	2009-532446	10/10/2007	5143841	11/30/2012 ISSUED	SSUED
MANUFACTURING						
ADVANCED DRUG DEVELOPMENT AND	Ħ	2012-122988	05/30/2012			PENDING
MANUFACTURING						
ADVANCED DRUG DEVELOPMENT AND	Ħ	2014-123249	06/16/2014			PENDING
MANUFACTURING						
ADVANCED DRUG DEVELOPMENT AND	ZI.	07 874 491.9	10/10/2007			PENDING
MANUFACTURING						******
ADVANCED DRUG DEVELOPMENT AND	SE	07 874 491.9	10/10/2007			PENDING
MANUFACTURING			1			
FLOW METHOD AND APPARATUS FOR SCREENING	SC	200500360-3	06/24/2003	109345	10/31/2008 ISSUED	SSUED
CHEMICALS USING MICRO X-RAY FLUORESCENCE						
METHOD AND APPARATUS FOR DETECTING CHEMICAL	SG	PCT/US04/019678	06/18/2004	118682	05/30/2007ISSUED	SSUED
BINDING						
			***************************************	***************************************	There are a substitute to the substitute of the	***************************************

PATENT REEL: 034699 FRAME: 0959

RECORDED: 12/24/2014

	SCHEDULE A Applications/Is	SCHEDULE A U.S. Patent Applications/Issued Patents				
Tile	COUNTRY Serial No.	Serial No.	Filed Date Fatent No.	Fatent No.	Issue Date Status	Status
DRUG DEVELOPMENT AND MANUFACTURING	CS.	10/880,388	06/29/2004			PUBLISHED
FLOW METHOD AND APPARATUS FOR SCREENING	CS.	11/444,660	05/31/2006 7,519,145	7,519,145	04/14/2009ISSUED	SSUED
CHEMICALS USING MICRO X-RAY FLUORESCENCE	*****					
FLOW METHOD AND APPARATUS FOR SCREENING	SU	12/396,592	03/03/2009 7,929,662	7,929,662	04/19/2011 ISSUED	SSUED
CHEMICALS USING MICRO X-RAY FLUORESCENCE						
ADVANCED DRUG DEVELOPMENT AND	CS.	111/974,156	10/10/2007			PUBLISHED
MANUFACTURING					******	
METHOD AND APPARATUS FOR DETECTING CHEMICAL	US	10/621,825	07/16/2003 6,858,148	6,858,148	02/22/2005[ISSUED	GEUSS
BINDING						
METHOD FOR DETECTING BINDING EVENTS USING	87	09/859,701	05/16/2001 7,858,385	7,858,385	12/28/2010ISSUED	ISSUED

PATENT REEL: 034699 FRAME: 0960