Form PTO-1595 (Rev. 01-09) OMB No. 0651-0027 (exp. 02/28/2009)	- 2009 U.S. DEPARTMENT OF COMMERCE Juited States Patent and Trademark Office				
To the Director of the U.S. Patent . 10354	9154				
Name of conveying party(ies)	2. Name and address of receiving party(ies)				
Noelle GAUVRY Beatrice BAPST Francois PAUTRAT Sandra SCHORDERET WEBER Jacques BOUVIER Jorg FRUCHTEL	Name: Novartis AG Internal Address:				
Additional name(s) of conveying party(ies) attached? Yes X No					
3. Nature of conveyance/Execution Date(s):	Street Address: Lichtstrasse 35				
Execution Date(s)4/30/07, 5/9/07, 5/21/07, 5/27/07 Assignment Merger Security Agreement Change of Name	City: Basel				
Joint Research Agreement Government Interest Assignment	State:				
Executive Order 9424, Confirmatory License	Country: Switzerland Zip: 4056				
Other	Additional name(s) & address(es) attached? Yes No				
4. Application or patent number(s): A. Patent Application No.(s)	document is being filed together with a new application. B. Patent No.(s)				
12/373,559					
Additional numbers attached? Yes No					
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: One				
Name: FIX, Amy H.	7. Total fee (37 CFR 1.21(h) & 3.41) \$40.00				
Internal Address:Womble Carlyle Sandridge & Rice PLLC	, , , , ,				
Attention: Patent Docketing, 32nd Floor	☒ Authorized to be charged to deposit account				
Street Address: P.O. Box 7037	Enclosed				
	None required (government interest not affecting title)				
City: Atlanta	8. Payment Information				
State: Georgia Zip: 30357-0037					
Phone Number: (919) 484-2314	- "A .N				
Fax Number: (919) 484-2340	Deposit Account Number090528				
Email Address: afix@wcsr.com	Authorized User Name womble Carlyle et al.				
9. Signature: Amy Alas Signature	17 February 2009 Date				
Amy H. Fix Name of Person Signing	Total number of pages including cover sheet, attachments, and documents:				

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

02/19/2009 DBYRNE 00000051 090528 123/3559

01 FC:8021

4**0.**00 DA

PATENT REEL: 022293 FRAME: 0536 Case No. 50326

1

ASSIGNMENT

For good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, we

- (1) Noëlle GAUVRY, (2) François PAUTRAT, (3) Jacques BOUVIER, (4) Jörg FRÜCHTEL, (5) Beatrice BAPST and
- (6) Sandra SCHORDERET WEBER,

respectively residing at

- (1) 8F, rue des buissons, 68680 Kembs-Loechle, FR,
- (2) 17, rue de Verdun, 68100 Mulhouse, FR,
- (3) Rue des Parcs 2, 2000 Neuchâtel, CH,
- (4) Rechbergstrasse 29, 79541 Lörrach, DE,
- (5) Route En Sibourg 42, 1566 St-Aubin, FR and
- (6) Sabions 30, 2000 Neuchâtel, CH,

do hereby sell, assign and transfer to **Novartis AG**, a company organized under the laws of the Swiss Confederation, of Lichtstrasse 35, 4056 Basel, Switzerland, and its successors, assigns and legal representatives, all our right, title and interest for all countries of the world except Austria and to **Novartis Pharma GmbH**, a company organized under the laws of Austria, of Brunner Strasse 59, 1230 Vienna, Austria, and its successors, assigns and legal representatives, all our right, title and interest for Austria (Novartis AG and Novartis Pharma GmbH hereinafter referred to collectively as the "ASSIGNEES") in and to (1) all of our inventions and discoveries described in the patent application(s) entitled

ORGANIC COMPOUNDS

filed* in the RO/ On 17 July, 20 17, and accorded International Patent Application Number PCT 2007 (2) said patent application(s), (3) (3) all national stages of said international patent application, (4) all other patent applications in all countries and regions claiming the priority of the EP, patent application filed on 21 July 2006 and accorded Application Number 06117639.2, (5) all continuations and divisions of all of said patent applications (including further continuations and divisions such as, but not limited to, continuations of continuations and continuations of divisions), ((2)-(5) hereinafter referred to collectively as "patent applications"), (6) all patents that are granted on any of said patent applications, (7) all registrations and confirmations of, and importation certificates based on, one or more of said patents and (8) all reissues, renewals and extensions of said patents, reexamination certificates issued for said patents and supplementary protection certificates based on said patents (including the right to file patent applications on said inventions and discoveries in the names of ASSIGNEES, their designees or in any or all of our names, at their election and in accordance with applicable law in all countries and regions and all rights of priority in all countries and regions for all of said patent applications under the International Convention for the Protection of Industrial Property, and all other applicable similar international agreements), the same to be held and enjoyed by said ASSIGNEES, their successors, assigns and legal representatives, to the full ends of the terms for which all patents therefor may be granted, as fully and entirely as the same would have been held and enjoyed by us if this sale, assignment and transfer had not been made.

*We hereby authorize **ASSIGNEES** and their representatives to insert in this instrument the Application Number and the filing date of said patent application when notified thereof.

PATENT REEL: 022293 FRAME: 0537 And we hereby covenant and agree that we will, at any time, upon the request and at the expense of ASSIGNEES, execute and deliver all documents that may be necessary or desirable to perfect the title to the foregoing inventions and discoveries, patent applications, patents, registrations, confirmations, importation certificates, reissues, renewals, extensions, reexamination certificates and supplementary protection certificates in ASSIGNEES, their successors, assigns or other legal representatives, including the execution and procurement of all further documents evidencing this sale, assignment and transfer as may be necessary or desirable for recording the same in the patent office or other intellectual property office, agency or the like of any country or region, that we will, at any time, upon the request and at the expense of ASSIGNEES, execute all additional patent applications, applications for registration and/or confirmation of one or more of said patents, applications for reissues, renewals and extensions of one or more of said patents and supplemental protection certificates based upon one or more of said patents, and that we will make all rightful oaths and declarations and do all lawful acts requisite for procuring the same or for aiding therein, without further compensation, but at the expense of ASSIGNEES, the successors, assigns or other legal representatives.

Name: Noëlle GAUVRY	L.S.
Executed this Oh day of 1974 Name: François PAUTRAT	, 20 <u>_0</u> 7 L.S.
Executed this 30 day of Agrif Name: Jacques BOUVIER	, 20 <u>07</u> L.S.
Executed this 21 day of May Name: Jörg FRÜCHTEL	, 20 <u>07</u> L.S.

Executed this 21 day of May ,2007.

PATENT REEL: 022293 FRAME: 0538

Case	No.	50326	
			۰

3

X	Executed this 30 day of April	,20 <u>0</u> }
X	PD A	L.S.
1	Name: Beatrice BAPST	

Executed this 30 day of April , 2007

Show de Marie Sandra SCHORDERET WEBER

L.S.

PATENT

REEL: 022293 FRAME: 0539

ACCEPTANCE OF ASSIGNMENT

With reference to the Assignment to NOVARTIS AG of an invention entitled "ORGANIC COMPOUNDS" signed by Noëlle GAUVRY, François PAUTRAT, Jacques BOUVIER, Jörg FRÜCHTEL, Beatrice BAPST, Sandra SCHORDERET WEBER; this will certify that NOVARTIS AG accepts such Assignment.

NOVARTIS AG

By:

Name :

Function:

Steve Braithwaite

IP Administrative Professional

Bernd Liphardt

Patent Attorney

Date: 1

23-5-2007

PATENT

EL: 022293 FRAME: 0540

Attestation

I, the undersigned notary public of Basel, Switzerland, certify herewith the authenticity of the signatures of **Noëlle Gauvry**, French citizen, residing in Kembs-Loechle, France; of **François Pautrat**, French citizen, residing in Mulhouse, France; of **Jacques Bouvier**, citizen of Neuchâtel, Switzerland, residing in Neuchâtel, Switzerland; of **Jörg Früchtel**, German citizen, residing in Lörrach, Germany; of **Beatrice Bapst**, citizen of La Roche FR, Switzerland, residing in St-Aubin, Switzerland; and of **Sandra Schorderet Weber**, citizen of Jens BE, Switzerland, residing in Neuchâtel, Switzerland.

I further certify that the above signatures are the genuine signatures of **Bernd Liphardt**, German citizen, residing in Lörrach, Germany; and of **Mr. Steve Braithwaite**, British citizen, residing in Basel, Switzerland; both acting for **Novartis AG**, in Basel, Switzerland, both as proxy holders, both with joint signature.

The authenticity of the signatures was established by comparison.

BASEL, Switzerland, this 11th (eleventh) day of June 2007 (twothousandandseven).

M. Stacker, Notar

Dr. M. Staehelin

Leg.Prot.Nr. 1011 /2007

PATENT

REEL: 022293 FRAME: 0541

FOR CERTIFIED COPY

I, the undersigned Civil Law Notary of Basel, Switzerland, Dr. Matthias Staehelin, hereby certify that the document attached heretofore is a true and authentic photocopy of the original.

BASEL (SWITZERLAND), this 22nd (twenty-second) day of December 2008 (two thousand and eight)

Mr. Stacher, Note

Dr. M. Staehelin

Leg. Prot. 3M8 /2008

ECORDED: 02/19/2009

PATENT

REEL: 022293 FRAME: 0542