

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Achim Frauenschuh</td> <td>11/11/2010</td> </tr> <tr> <td>Kurt Bill</td> <td>11/11/2010</td> </tr> </tbody> </table>		Name	Execution Date	Achim Frauenschuh	11/11/2010	Kurt Bill	11/11/2010				
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<table border="1"> <tr> <td>Name:</td> <td>Novartis AG</td> </tr> <tr> <td>Street Address:</td> <td>Lichtstrasse 35</td> </tr> <tr> <td>City:</td> <td>Basel</td> </tr> <tr> <td>State/Country:</td> <td>SWITZERLAND</td> </tr> <tr> <td>Postal Code:</td> <td>4056</td> </tr> </table>		Name:	Novartis AG	Street Address:	Lichtstrasse 35	City:	Basel	State/Country:	SWITZERLAND	Postal Code:	4056
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CORRESPONDENCE DATA											
<p>Fax Number: 6177424214 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 617-573-4700 Email: carolyn.blake@nelsonmullins.com Correspondent Name: Jill Gorny Sloper Address Line 1: One Post Office Square Address Line 2: 30th Floor Address Line 4: Boston, MASSACHUSETTS 02109-2127</p>											
ATTORNEY DOCKET NUMBER:	NV1-078US										
NAME OF SUBMITTER:	Jill Gorny Sloper, Esq.										
<p>Total Attachments: 2 source=NV1-078US_Assignment#page1.tif source=NV1-078US_Assignment#page2.tif</p>											

CH \$40.00 13516960

(joint)

Patent Case PAT053962-US-PSP

ASSIGNMENT

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

Achim Frauenschuh
Novartis Pharma AG
Postfach
4002 Basel
Switzerland

and

Kurt Bill
Novartis Pharma AG
Postfach
4002 Basel
Switzerland

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, (hereinafter referred to as the "**ASSIGNEE**") and its successors, assigns and legal representatives, all of our right, title and interest for all countries of the world in and to (1) all of my inventions and discoveries described in the patent application(s) titled

WASH SOLUTION AND METHOD FOR AFFINITY CHROMATOGRAPHY

and filed in the United States Patent and Trademark Office on 18 December 2009 and accorded Application Number 61/288059, (2) the patent application identified in (1), (3) the right to file patent applications on said inventions and discoveries in the name of **ASSIGNEE** or their designees or in my name, at their election and in accordance with applicable law in all countries and regions, (4) for all patent applications, all rights of priority based upon the patent application identified in (1) in all countries and regions under the Paris Convention for the Protection of Industrial Property, the Inter-American Convention relating to Inventions, Patents, Designs, and Industrial Models and all other international agreements to which the United States now is or hereafter becomes a signatory and, if the patent application identified in (1) is a provisional patent application, under 35 USC 119(e), (5) all patent applications in all countries and regions claiming the priority of the patent application identified in (1) and only one or more inventions and/or discoveries disclosed in said patent application (including national stages of any international patent application), (6) all continuations and divisions of any non-provisional patent application identified in (1) and any patent application within the scope of (5) (including further continuations and divisions such as, but not limited to, continuations of continuations and continuations of divisions), ((2), (5) and (6) hereinafter referred to collectively as "patent applications"), (7) all patents that are granted on any of said patent applications, (8) all registrations and confirmations of, and importation certificates based upon, one or more of said patents and applications for such registrations, confirmations and importation certificates and (9) all reissues, renewals and extensions of said patents, registrations, confirmations and importation certificates, reexamination certificates issued for said patents and supplementary protection certificates based upon said patents and applications for such reissues, renewals, extensions, reexamination certificates and supplementary protection certificates, the same to be held and enjoyed by said **ASSIGNEES** and their successors, assigns and legal representatives

to the full ends of the terms for which said patents, registrations, confirmations, importation certificates, reexamination certificates, supplementary protection certificates, reissues, renewals and extensions may be granted, as fully and entirely as the same would have been held and enjoyed by me if this sale, assignment and transfer had not been made.

*We hereby authorize **ASSIGNEE** and their representatives to insert in this Assignment the filing date and Application Number of said provisional or non-provisional patent application when notified thereof.

And we hereby covenant and agree that we will, at any time, (i) upon the request, but at the expense, of **ASSIGNEE** or their successors, assigns or legal representatives 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, supplementary protection certificates and applications within the scope of (8) and (9) in **ASSIGNEE** or their successors, assigns or 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, (ii) upon the request, but at the expense, of **ASSIGNEE** or their successors, assigns or legal representatives execute all additional patent applications within the scope of (5) and (6) and all applications within the scope of (8) and (9) and (iii) make all rightful oaths and declarations and do all lawful acts required for procuring the same or for aiding therein, without further compensation, but at the expense of **ASSIGNEE** or their successors, assigns or legal representatives.

Executed this 11 day of November, 2010
[Signature] L.S.
 Achim Frauenschuh

Executed this 11 day of Nov, 2010
[Signature] L.S.
 Kurt Bill

Wittness:

Name: Thomas Lehuier

Signature : [Signature]