

PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT												
NATURE OF CONVEYANCE:	ASSIGNMENT												
CONVEYING PARTY DATA													
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Name</th> <th style="width: 30%;">Execution Date</th> </tr> </thead> <tbody> <tr> <td>Jiri KOVARIK</td> <td>10/20/2006</td> </tr> <tr> <td>Gebhard THOMA</td> <td>10/23/2006</td> </tr> <tr> <td>Beat Weidmann</td> <td>05/23/2007</td> </tr> <tr> <td>Timothy WRIGHT</td> <td>05/10/2007</td> </tr> <tr> <td>Hans-Gunter ZERWES</td> <td>10/25/2006</td> </tr> </tbody> </table>		Name	Execution Date	Jiri KOVARIK	10/20/2006	Gebhard THOMA	10/23/2006	Beat Weidmann	05/23/2007	Timothy WRIGHT	05/10/2007	Hans-Gunter ZERWES	10/25/2006
Name	Execution Date												
Jiri KOVARIK	10/20/2006												
Gebhard THOMA	10/23/2006												
Beat Weidmann	05/23/2007												
Timothy WRIGHT	05/10/2007												
Hans-Gunter ZERWES	10/25/2006												
RECEIVING PARTY DATA													
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">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		
Name:	Novartis AG												
Street Address:	Lichtstrasse 35												
City:	Basel												
State/Country:	SWITZERLAND												
Postal Code:	4056												
PROPERTY NUMBERS Total: 1													
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Property Type</th> <th style="width: 70%;">Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>06709399</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	06709399								
Property Type	Number												
Application Number:	06709399												
CORRESPONDENCE DATA													
<p>Fax Number: (617)871-3392</p> <p><i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 6178714989</p> <p>Email: michael.corman@novartis.com</p> <p>Correspondent Name: Michael Corman</p> <p>Address Line 1: 220 Massachusetts Ave</p> <p>Address Line 4: Cambridge, MASSACHUSETTS 02139</p>													
ATTORNEY DOCKET NUMBER:	34439-US-PSP												
NAME OF SUBMITTER:	Michael Corman												

CH \$40.00 06709399

501068703

PATENT
REEL: 023804 FRAME: 0673

Total Attachments: 9

source=34439 Assignment#page1.tif

source=34439 Assignment#page2.tif

source=34439 Assignment#page3.tif

source=34439 Assignment#page4.tif

source=34439 Assignment#page5.tif

source=34439 Assignment#page6.tif

source=34439 Assignment#page7.tif

source=34439 Assignment#page8.tif

source=34439 Assignment#page9.tif



(joint)

Patent Case 34439-WO-PCT

ASSIGNMENT

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

(1) Jiri KOVARIK, (2) Gebhard THOMA, (3) Beat WEIDMANN, (4) Timothy WRIGHT and (5) Hans-Günter ZERWES,

respectively residing at

(1) Voltastr. 43, 8044 Zürich, Switzerland,

(2) Talweg 32, 79540 Lörrach, Germany,

(3) 47 Bacon Street, Winchester, Massachusetts 01890, US,

(4) 471 Puritan Road, Swampscott, Massachusetts 01907, US and

(5) Holzgasse 55, 79539 Lörrach, Germany,

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 of 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 of 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) titled

CXCR4 BINDING MOLECULES

and filed in the United States Patent and Trademark Office on _____, 20__ and accorded Application Number _____* and/or filed in the RO/US on August 17, 2006 and accorded International Patent Application Number PCT/US2006/032192*, (2) the patent application(s) identified in (1), (3) all national stages of any international patent application identified in (1), (4) all other patent applications in all countries and regions claiming the priority of the provisional or non-provisional patent application filed in the United States Patent and Trademark Office on August 18, 2005, and accorded Application Number 60/709,399, (5) for all patent applications, all rights of priority based upon the United States patent application identified in (4) 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 United States patent application identified in (4) is a provisional patent application, under 35 USC 119(e) (including the right to file patent applications on said inventions and discoveries in the names of **ASSIGNEES** or their designees or in our names, at their election and in accordance with applicable law in all countries and regions), (6) all continuations and divisions of any United States patent application or international patent application designating the United States identified in (1), any national stages of any international application identified in (1) and any patent applications within the scope of (4) (including further continuations and divisions such as, but not limited to, continuations of continuations and continuations of divisions), ((2)-(4) 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 us if this sale, assignment and transfer had not been made.

PATENT

REEL: 023804 FRAME: 0675

(joint)

Patent Case 34439-WO-PCT

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

And we hereby covenant and agree that we will, at any time, (i) upon the request, but at the expense, of **ASSIGNEES** 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 **ASSIGNEES** 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 **ASSIGNEES** or their successors, assigns or legal representatives execute all additional patent applications within the scope of (3), (4) and (6) and all applications within the scope of (8) or (9) and (iii) 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** or their successors, assigns or legal representatives.

Executed this 20 day of October, 20 06.


 _____ L.S.
 Jiri KOVARIK

ACKNOWLEDGEMENT

State of _____)
) s.s.:
 County of _____)

On this _____ day of _____, 20_____, personally appeared before me _____ to me known and known by me to be the same person described in and who executed the foregoing Assignment and acknowledged that (s)he executed the same of his (her) own free will for the purpose set forth.

(Seal)

 Notary Public

PATENT
REEL: 023804 FRAME: 0677

Patent Case 34439-WO-PCT

Timothy WRIGHT L.S.

State of _____)
) s.s.:
County of _____)

Notary Public

Hans-Günter ZERWES L.S.
Hans-Günter ZERWES

State of _____)
) s.s.
County of _____)

Notary Public

Attestation

I, the undersigned notary public of Basel, Switzerland, certify herewith the authenticity of the following signatures:

- **Mr. Jiri Kovarik**, citizen of Basel, Switzerland, residing in Zürich, Switzerland,
- **Mr. Gebhard Thoma**, German citizen, residing in Lörrach, Germany,
- **Dr. Hans-Günther Zerwes**, German citizen, residing in Lörrach, Germany.

The authenticity of the signatures was established by comparison.

BASEL, Switzerland, this 30th (thirtieth) day of October 2006 (twothousandandsix)

M. Staehelin, Notar

Dr. M. Staehelin
Notar

Leg. Prot. Nr. 1421/2006

ASSIGNMENT

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

(1) Jiri KOVARIK, (2) Gebhard THOMA, (3) Beat WEIDMANN, (4) Timothy WRIGHT and (5) Hans-Günter ZERWES,

respectively residing at

(1) Voltastr. 43, 8044 Zürich, Switzerland,

(2) Talweg 32, 79540 Lörrach, Germany,

(3) 47 Bacon Street, Winchester, Massachusetts 01890, US 3314 Stearns Hill Road

(4) 471 Puritan Road, Swampscott, Massachusetts 01907, US and

Waltham MA 02451-7100
U.S.A.

(5) Holzgasse 55, 79539 Lörrach, Germany,

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 of 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 of 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) titled

CXCR4 BINDING MOLECULES

and filed in the United States Patent and Trademark Office on _____, 20____ and accorded Application Number _____* and/or filed in the RO/US on August 17, 2006 and accorded International Patent Application Number PCT/US2006/032192, (2) the patent application(s) identified in (1), (3) all national stages of any international patent application identified in (1), (4) all other patent applications in all countries and regions claiming the priority of the provisional or non-provisional patent application filed in the United States Patent and Trademark Office on August 18, 2005, and accorded Application Number 60/709,399, (5) for all patent applications, all rights of priority based upon the United States patent application identified in (4) 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 United States patent application identified in (4) is a provisional patent application, under 35 USC 119(e) (including the right to file patent applications on said inventions and discoveries in the names of ASSIGNEES or their designees or in our names, at their election and in accordance with applicable law in all countries and regions), (6) all continuations and divisions of any United States patent application or international patent application designating the United States identified in (1), any national stages of any international application identified in (1) and any patent applications within the scope of (4) (including further continuations and divisions such as, but not limited to, continuations of continuations and continuations of divisions), ((2)-(4) 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 us if this sale, assignment and transfer had not been made.

(joint)

Patent Case 34439-WO-PCT

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

And we hereby covenant and agree that we will, at any time, (i) upon the request, but at the expense, of **ASSIGNEES** 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 **ASSIGNEES** 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 **ASSIGNEES** or their successors, assigns or legal representatives execute all additional patent applications within the scope of (3), (4) and (6) and all applications within the scope of (8) or (9) and (iii) 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** or their successors, assigns or legal representatives.

Executed this _____ day of _____, 20____.

Jiri KOVARIK L.S.

ACKNOWLEDGEMENT

State of _____)
) s.s.:
County of _____)

On this _____ day of _____, 20____, personally appeared before me _____ to me known and known by me to be the same person described in and who executed the foregoing Assignment and acknowledged that (s)he executed the same of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

(joint)

Patent Case 34439-WO-PCT

Executed this _____ day of _____, 20____.

Gebhard THOMA L.S.

ACKNOWLEDGEMENT

State of _____)
) s.s.:
County of _____)

On this _____ day of _____, 20____, personally appeared before me
 _____ to me known and known by me to be the same person
 described in and who executed the foregoing Assignment and acknowledged that (s)he executed the same
 of his (her) own free will for the purpose set forth.

(Seal)

Notary PublicExecuted this 23 day of May, 2007.

Beat Weidmann L.S.
 Beat WEIDMANN

ACKNOWLEDGEMENT

State of Massachusetts)
) s.s.:
 County of Middlesex)

On this 23 day of May, 2007, personally appeared before me
Beat Weidmann to me known and known by me to be the same person
 described in and who executed the foregoing Assignment and acknowledged that (s)he executed the same
 of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

(joint)

Patent Case 34439-WO-PCTExecuted this 10th day of May, 2007.

T. Wright L.S.
 Timothy WRIGHT

ACKNOWLEDGEMENT

State of Massachusetts)
) s.s.:
 County of Worcester)

On this 10th day of May, 2007, personally appeared before me
Timothy Wright to me known and known by me to be the same person
 described in and who executed the foregoing Assignment and acknowledged that (s)he executed the same
 of his (her) own free will for the purpose set forth.

(Seal)

[Signature]
 Notary Public

Executed this _____ day of _____, 20_____.

 Hans-Günter ZERWES L.S.

ACKNOWLEDGEMENT

State of _____)
) s.s.:
 County of _____)

On this _____ day of _____, 20_____, personally appeared before me
 _____ to me known and known by me to be the same person
 described in and who executed the foregoing Assignment and acknowledged that (s)he executed the same
 of his (her) own free will for the purpose set forth.

(Seal)

 Notary Public