





Form PTO-1595 (Rev. 07/05) OMB No. 0651-0027 (exp. 6/30/2208)		RECORDATION FORM COVER SHEET PATENTS ONLY		U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office				
Docket No.: PP019814.0004-0005								
To the Director of Patents and Trademarks: Please record the attached original documents or copy thereof.								
1. Name of conveying party(ies): Paul A. Barsanti, Nathan Brammeier, Liana Marie Klivansky (née Liana Marie Lagniton), Simon Ng, Zhi-Jie Ni, Keith B. Pfister, Nicholas Valiante, Allan S. Wagman, Amy J. Weiner, Weibo Wang, Casey Philbin, Anthony Diebes Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			2. Name and address of receiving party(ies) Name: NOVARTIS VACCINES AND DIAGNOSTICS, INC. Mail Stop: R-338 4560 Horton Street Emeryville, California 94608-2916 <input type="checkbox"/> Other Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Security Agreement <input type="checkbox"/> Joint Research Agreement <input type="checkbox"/> Government Interest Assignment <input type="checkbox"/> Executive Order 9424, Confirmatory License <input type="checkbox"/> Merger <input type="checkbox"/> Change of Name <input type="checkbox"/> Other _____ Execution Date(s): September 20, 2006, September 21, 2006, September 22, 2006			4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: _____ A. Patent Application No.(s) 10/748,071 Additional number(s) attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
5. Name and address of party to whom correspondence concerning document should be mailed: NOVARTIS VACCINES AND DIAGNOSTICS, INC. Intellectual Property – R338 4560 Horton Street Emeryville, CA 94608-2916			6. Total number of applications and patents involved 1 7. Total fee (37 CFR 3.41)..... \$40.00 <input type="checkbox"/> Enclosed <input checked="" type="checkbox"/> Authorized to be charged to deposit account, 8. Deposit account number: 03-1664 (Attach duplicate copy of this page if paying by deposit account)					
DO NOT USE THIS SPACE								
9. Statement and signature. <i>To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.</i> <table style="width:100%; border: none;"> <tr> <td style="width:30%; border-bottom: 1px solid black; vertical-align: bottom;"> Michael J. Moran, Reg. No. 42,013 <small>Name of Person Signing</small> </td> <td style="width:30%; text-align: center; border-bottom: 1px solid black; vertical-align: bottom;">  <small>Signature</small> </td> <td style="width:30%; text-align: right; border-bottom: 1px solid black; vertical-align: bottom;"> September 25, 2006 <small>Date</small> </td> </tr> </table> <div style="text-align: right; margin-top: 10px;"> Total number of pages including cover sheet, attachments, and document: 15 </div>						Michael J. Moran, Reg. No. 42,013 <small>Name of Person Signing</small>	 <small>Signature</small>	September 25, 2006 <small>Date</small>
Michael J. Moran, Reg. No. 42,013 <small>Name of Person Signing</small>	 <small>Signature</small>	September 25, 2006 <small>Date</small>						

Mail documents to be recorded with required cover sheet information to:
 M/S Assignment Recordation Services, Director of the USPTO, P.O. Box 1450,
 Alexandria, VA 22313-1450

I hereby certify that this paper is being transmitted via facsimile to the Assignment Recordation Services Office of the United States Patent and Trademark Office at telephone number (571) 273-0140 on 9/25/2006.


 Date

September 25, 2006
 Date

700288779

PATENT
REEL: 018309 FRAME: 0504

CH \$40.00 031664 10748071

PATENT

Atty. Docket No. PP019814.0004-.0005

ASSIGNMENT

WHEREAS, WE, PAUL A. BARSANTI, NATHAN BRAMMEIER, LIANA MARIE KLIVANSKY (née LIANA MARIE LAGNITON), SIMON NG, ZHI-JIE NI, KEITH B. PFISTER, NICHOLAS VALIANTE, ALLAN S. WAGMAN AND AMY J. WEINER hereinafter referred to as **ASSIGNORS**, have invented certain new and useful improvements as described and set forth in the below-identified International Patent Application(s), and application(s) for United States Letters Patent:

Title of Invention: **THIOSEMICARBAZONES AS ANTI-VIRALS AND IMMUNOPOTENTIATORS**

Date(s) of Execution: September 20, 2006; September 21, 2006

Application No(s): US 10/748,071 Filing Date: December 29, 2003
PCT/US2003/041493 Filing Date: December 29, 2003

WHEREAS, NOVARTIS VACCINES AND DIAGNOSTICS, INC., 4560 Horton Street, Emeryville, California 94608-2916, a corporation of the State of Delaware, hereinafter referred to as **ASSIGNEE**, is desirous of acquiring the entire right, title and interest in the above invention and application(s) and in any Letters Patent which may be granted on the same;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for and in consideration of the sum of One Dollar (\$1.00) lawful money paid to **ASSIGNORS** by **ASSIGNEE**, receipt of which is hereby acknowledged, **ASSIGNORS** have sold, assigned and transferred, and by these presents do sell, assign and transfer unto said **ASSIGNEE**, and **ASSIGNEE'S** successors and assigns, all right, title and interest in and to the said invention, said application(s) and any Letters Patent which may hereafter be granted on the same in the United States and all countries throughout the world including any divisions, renewals, continuations in whole or in part, substitutions, conversions (including conversions claiming priority under 35 U.S.C. §119(e)), reissues, prolongations or extensions thereof, the said interest to be held and enjoyed by said **ASSIGNEE** as fully and exclusively as it would have been held and enjoyed by said **ASSIGNORS** had this assignment and transfer not been made, to the full end and term of any Letters Patent.

PATENT

Atty. Docket No. PP019814.0004-.0005


ASSIGNORS also agree that the U.S. serial number may be entered above by *ASSIGNEE* or its agents upon designation of the application number by the U.S. Patent and Trademark Office.

ASSIGNORS further agree that they will, without charge to said *ASSIGNEE*, but at *ASSIGNEE'S* expense, cooperate with *ASSIGNEE* in the prosecution of said application 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 Patent for said invention and improvement in any and all countries, and to vest title thereto in said *ASSIGNEE*, or *ASSIGNEE'S* successors and assigns.

IN TESTIMONY WHEREOF, *ASSIGNORS* have hereunto signed their name to this assignment on the date indicated below.

DATE

9-20-06


Paul BARSANTI
A. PAS


DATE

9/20/06


Nathan BRAMMEIER

DATE

9/21/06


Liana KLIVANSKY (née Liana Lagniton)
Marie

PATENT

Atty. Docket No. PP019814.0004-.0005

DATE

9-20-2006


Simon NG

DATE

9-20-06


Zhi-Jie NI

DATE

9-20-06


Keith B. PFISTER

DATE

9/20/06


Nicholas VALIANTE

DATE

9/20/2006


Allan WAGMAN

S. 45w

DATE

9/20/2006


Amy WEINER

PATENT

Atty. Docket No. PP019814.0004-.0005

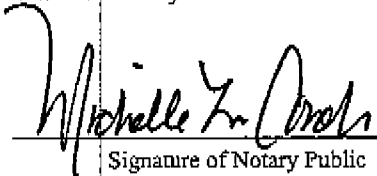
State of California

ss.

County of Alameda

On 9/20/2006 before me, **Michelle L. Couch, Notary Public**, personally appeared **Paul A. BARSANTI**, ~~personally known to me or~~ proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.


Signature of Notary Public



Place Notary Seal Above

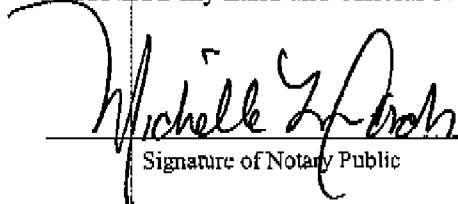
State of California

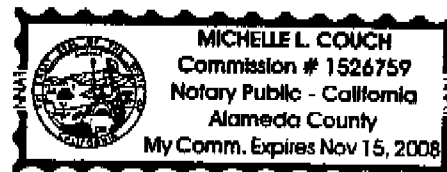
ss.

County of Alameda

On 9/20/2006 before me, **Michelle L. Couch, Notary Public**, personally appeared **Nathan BRAMMEIER**, ~~personally known to me or~~ proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.


Signature of Notary Public



Place Notary Seal Above

PATENT

Atty. Docket No. PP019814.0004-.0005

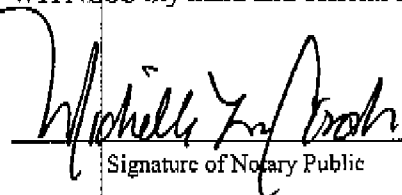
State of California

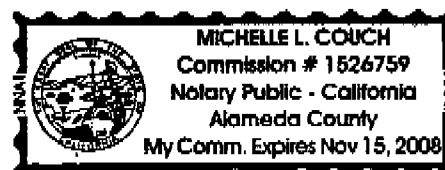
ss.

County of Alameda

On 9/21/2006 before me, **Michelle L. Couch, Notary Public**, personally appeared **Liana Marie KLIYANSKY (née Liana Marie LAGNITON)**, ~~personally known to me or~~ proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her authorized capacity, and that by her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.


Signature of Notary Public



Place Notary Seal Above

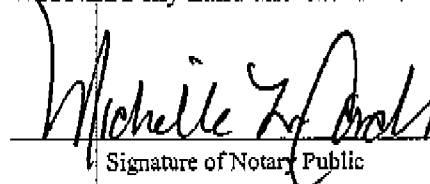
State of California

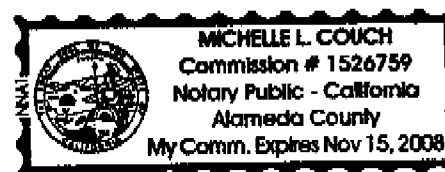
ss.

County of Alameda

On 9/20/2006 before me, **Michelle L. Couch, Notary Public**, personally appeared **Simon NG**, ~~personally known to me or~~ proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.


Signature of Notary Public



Place Notary Seal Above

PATENT

Atty. Docket No. PP019814.0004-.0005

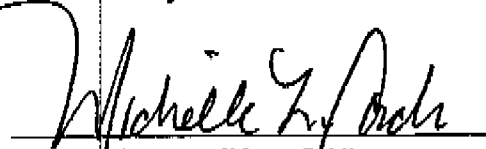
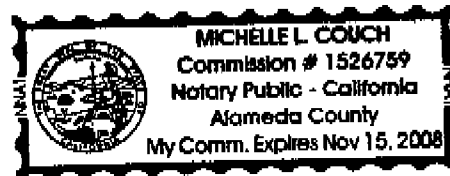
State of California

ss.

County of Alameda

On 9/20/2006 before me, **Michelle L. Couch, Notary Public**, personally appeared **Zhi-Lie NI**, ~~personally known to me or~~ proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.


Signature of Notary Public

Place Notary Seal Above

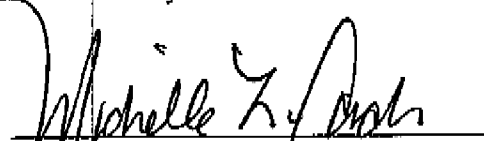
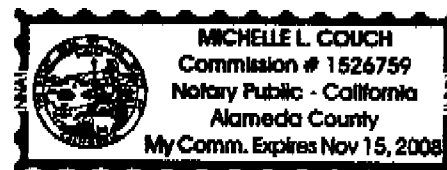
State of California

ss.

County of Alameda

On 9/20/2006 before me, **Michelle L. Couch, Notary Public**, personally appeared **Keith B. PEISTER**, ~~personally known to me or~~ proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.


Signature of Notary Public

Place Notary Seal Above

PATENT

Atty. Docket No. PP019814.0004-.0005

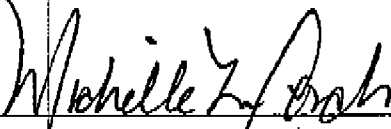
State of California

ss.

County of Alameda

On 9/20/2006 before me, **Michelle L. Couch, Notary Public**, personally appeared **Nicholas VALIANTE**, ~~personally known to me or~~ proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.



Signature of Notary Public



Place Notary Seal Above

State of California

ss.

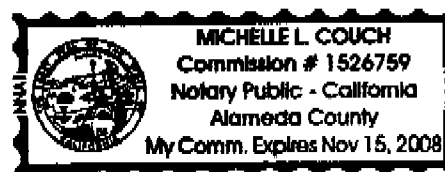
County of Alameda

On 9/20/2006 before me, **Michelle L. Couch, Notary Public**, personally appeared **Allan S. WAGMAN**, ~~personally known to me or~~ proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.



Signature of Notary Public



Place Notary Seal Above

PATENT

Atty. Docket No. PP019814.0004-.0005

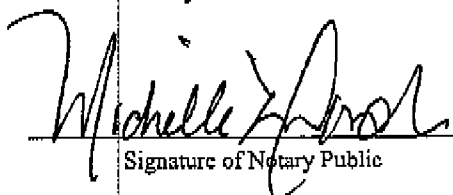
State of California

ss.

County of Alameda

On 9/25/2006 before me, Michelle L. Couch, Notary Public, personally appeared Amy J. WEINER, personally known to me ~~or proved to me on the basis of satisfactory evidence~~ to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.


Signature of Notary Public



Place Notary Seal Above

PATENT

Atty. Docket No. PP019814.0004-.0005

ASSIGNMENT

WHEREAS, I, WEIBO WANG, hereinafter referred to as *ASSIGNOR*, have invented certain new and useful improvements as described and set forth in the below-identified International Patent Application(s), and application(s) for United States Letters Patent:

Title of Invention: **THIOSEMICARBAZONES AS ANTI-VIRALS AND IMMUNOPOTENTIATORS**

Date(s) of Execution: September 20, 2006

Application No(s): US 10/748,071 Filing Date: December 29, 2003
PCT/US2003/041493 Filing Date: December 29, 2003

WHEREAS, NOVARTIS VACCINES AND DIAGNOSTICS, INC., 4560 Horton Street, Emeryville, California 94608-2916, a corporation of the State of Delaware, hereinafter referred to as *ASSIGNEE*, is desirous of acquiring the entire right, title and interest in the above invention and application(s) and in any Letters Patent which may be granted on the same;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for and in consideration of the sum of One Dollar (\$1.00) lawful money paid to *ASSIGNOR* by *ASSIGNEE*, 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 right, title and interest in and to the said invention, said application(s) and any Letters Patent which may hereafter be granted on the same in the United States and all countries throughout the world including any divisions, renewals, continuations in whole or in part, substitutions, conversions (including conversions claiming priority under 35 U.S.C. §119(e)), reissues, prolongations or extensions thereof, the said interest to be held and enjoyed by said *ASSIGNEE* as fully and exclusively as it would have been held and enjoyed by said *ASSIGNOR* had this assignment and transfer not been made, to the full end and term of any Letters Patent.

PATENT

Atty. Docket No. PP019814.0004-.0005

ASSIGNOR also agrees that the U.S. serial number may be entered above by *ASSIGNEE* or its agents upon designation of the application number by the U.S. Patent and Trademark Office.

ASSIGNOR further agrees that he will, without charge to said *ASSIGNEE*, but at *ASSIGNEE'S* expense, cooperate with *ASSIGNEE* in the prosecution of said application 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 Patent for said invention and improvement in any and all countries, and to vest title thereto in said *ASSIGNEE*, or *ASSIGNEE'S* successors and assigns.

IN TESTIMONY WHEREOF, *ASSIGNOR* has hereunto signed his name to this assignment on the date indicated below.

DATE

9/20/06

Weibo WANG

WITNESSED BY

WITNESSED BY

PATENT

Atty. Docket No. PP019814.0004-.0005

ASSIGNMENT

WHEREAS, I, CASEY PHILBIN, hereinafter referred to as *ASSIGNOR*, have invented certain new and useful improvements as described and set forth in the below-identified International Patent Application(s), and application(s) for United States Letters Patent:

Title of Invention: **THIOSEMICARBAZONES AS ANTI-VIRALS AND IMMUNOPOTENTIATORS**

Date(s) of Execution: September 22, 2006

Application No(s): US 10/748,071

Filing Date: December 29, 2003

PCT/US2003/041493

Filing Date: December 29, 2003

WHEREAS, NOVARTIS VACCINES AND DIAGNOSTICS, INC., 4560 Horton Street, Emeryville, California 94608-2916, a corporation of the State of Delaware, hereinafter referred to as *ASSIGNEE*, is desirous of acquiring the entire right, title and interest in the above invention and application(s) and in any Letters Patent which may be granted on the same;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for and in consideration of the sum of One Dollar (\$1.00) lawful money paid to *ASSIGNOR* by *ASSIGNEE*, 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 right, title and interest in and to the said invention, said application(s) and any Letters Patent which may hereafter be granted on the same in the United States and all countries throughout the world including any divisions, renewals, continuations in whole or in part, substitutions, conversions (including conversions claiming priority under 35 U.S.C. §119(e)), reissues, prolongations or extensions thereof, the said interest to be held and enjoyed by said *ASSIGNEE* as fully and exclusively as it would have been held and enjoyed by said *ASSIGNOR* had this assignment and transfer not been made, to the full end and term of any Letters Patent.

PATENT

Atty. Docket No. PP019814.0004-.0005

ASSIGNOR also agrees that the U.S. serial number may be entered above by **ASSIGNEE** or its agents upon designation of the application number by the U.S. Patent and Trademark Office.

ASSIGNOR further agrees that he will, without charge to said **ASSIGNEE**, but at **ASSIGNEE'S** expense, cooperate with **ASSIGNEE** in the prosecution of said application 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 Patent for said invention and improvement in any and all countries, and to vest title thereto in said **ASSIGNEE**, or **ASSIGNEE'S** successors and assigns.

IN TESTIMONY WHEREOF, **ASSIGNOR** has hereunto signed his name to this assignment on the date indicated below.

DATE

9/22/2006

Casey PHILBIN

Alex Siegewein

WITNESSED BY

Rachel Zipes

WITNESSED BY

PATENT

Atty. Docket No. PP019814.0004-.0005

ASSIGNMENT

WHEREAS, I, ANTHONY DIEBES, hereinafter referred to as *ASSIGNOR*, have invented certain new and useful improvements as described and set forth in the below-identified International Patent Application(s), and application(s) for United States Letters Patent:

Title of Invention: **THIOSEMICARBAZONES AS ANTI-VIRALS AND IMMUNOPOTENTIATORS**

Date(s) of Execution: September 22, 2006

Application No(s): US 10/748,071

Filing Date: December 29, 2003

PCT/US2003/041493

Filing Date: December 29, 2003

WHEREAS, NOVARTIS VACCINES AND DIAGNOSTICS, INC., 4560 Horton Street, Emeryville, California 94608-2916, a corporation of the State of Delaware, hereinafter referred to as *ASSIGNEE*, is desirous of acquiring the entire right, title and interest in the above invention and application(s) and in any Letters Patent which may be granted on the same;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for and in consideration of the sum of One Dollar (\$1.00) lawful money paid to *ASSIGNOR* by *ASSIGNEE*, 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 right, title and interest in and to the said invention, said application(s) and any Letters Patent which may hereafter be granted on the same in the United States and all countries throughout the world including any divisions, renewals, continuations in whole or in part, substitutions, conversions (including conversions claiming priority under 35 U.S.C. §119(e)), reissues, prolongations or extensions thereof, the said interest to be held and enjoyed by said *ASSIGNEE* as fully and exclusively as it would have been held and enjoyed by said *ASSIGNOR* had this assignment and transfer not been made, to the full end and term of any Letters Patent.

PATENT

Atty. Docket No. PP019814.0004-.0005

ASSIGNOR also agrees that the U.S. serial number may be entered above by *ASSIGNEE* or its agents upon designation of the application number by the U.S. Patent and Trademark Office.

ASSIGNOR further agrees that he will, without charge to said *ASSIGNEE*, but at *ASSIGNEE'S* expense, cooperate with *ASSIGNEE* in the prosecution of said application 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 Patent for said invention and improvement in any and all countries, and to vest title thereto in said *ASSIGNEE*, or *ASSIGNEE'S* successors and assigns.

IN TESTIMONY WHEREOF, *ASSIGNOR* has hereunto signed his name to this assignment on the date indicated below.

DATE

9/22/06


Anthony DIEBES
WITNESSED BY
WITNESSED BY