

216/270-PCT

RECORDED

06-10-1998



100734051

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

08/809455  
40,00-581

To the Honorable Commissioner of Patents and Trademarks

and original documents or copy thereof.

1. Name of conveying party(ies)  
George Phillip Vlasuk, Patrick Eric Hugo Stanssens, Joris  
Hilda Lieven Messens, Marc Josef Lauwereys, Yves  
Rene LaRoche, Laurent Stephane Jaspers, Yannick  
Georges Jozef Gansemans, Matthew Moyle and Peter  
W. Bergum

Additional name(s) of conveying party(ies) attached? ☐ Yes No ☒

3. Nature of conveyance: Assignment

Execution Date: October 22, 1997.

2. Name and address of receiving party(ies)

CORVAS INTERNATIONAL, INC.  
Corporate Secretary  
3030 Science Park Road  
San Diego, California 92121

Additional name(s) & address(es) attached? ☐ Yes No ☒

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)

08/809,455

B. Patent No.(s)

Additional numbers attached? ☐ Yes No ☒

5. Name and address of party to whom  
correspondence concerning document should be  
mailed:

Name: Suzanne L. Biggs  
LYON & LYON

Street Address: 633 West Fifth Street  
Suite 4700

City: Los Angeles State: CA Zip: 90071-2066

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41).....\$40.00

x Charge to Deposit Account

8. Deposit account number:

12-2475

DO NOT USE THIS SPACE

9. Statement and signature.

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.

SUZANNE L. BIGGS

Name of Person Signing

[Signature]  
Signature

November 24, 1997  
Date

Total number of pages including cover sheet, attachments, and document: 49

Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents & Trademarks, Box Assignments  
Washington, D.C. 20231

**ASSIGNMENT**

For valuable consideration, we, George Phillip Vlasuk of 7325 Calle Luna, Carlsbad, California 92009; Patrick Eric Hugo Stanssens of Constant Permekelaan 48, B-9830 St-Martens-Latem, Belgium; Joris Hilda Lieven Messens of Saviolaan 34,<sup>6</sup>1700 Dilbeek, Belgium; Marc Josef Lauwereys of Wilgenstraat 2, B-9450 Haaltert, Belgium; Yves Rene Laroche of Rue Bemel 115, 1150 Bruxelles, Belgium; Laurent Stephane Jaspers of Karel Van Lorrainen Laan 4, 3080 Tervuren, Belgium; Yannick Georges Jozef Gansemans of Zeeweg 32, 8480 Ichtegem, Belgium; Matthew Moyle of 3171 4th Street, Boulder, Colorado 80304 and Peter W. Bergum of 12906 Carmel Creek Road #6, San Diego, California 92130 hereby assign to CORVAS INTERNATIONAL, INC., a Delaware corporation having a place of business at 3030 Science Park Road, San Diego, California 92121, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the invention and improvements which are the subject of an application for United States Patent entitled **"NEMATODE EXTRACTED SERINE PROTEASE INHIBITORS AND ANTICOAGULANT PROTEINS"**, filed on **October 17, 1995**, U.S. Serial No. **08/809,455**, this assignment including said application, any and all United States and foreign patents granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents and like rights of exclusion and for inventor's certificates for said inventions and improvements; and we agree for ourselves and our heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this Assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
George Phillip Vlasuk

State of \_\_\_\_\_ :

ss.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared George Phillip Vlasuk personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
Patrick Eric Hugo Stanssens

State of \_\_\_\_\_ :

ss.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Patrick Eric Hugo Stanssens personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
Joris Hilda Lieven Messens

State of \_\_\_\_\_ :

ss.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Joris Hilda Lieven Messens personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
Marc Josef Lauwereys

State of \_\_\_\_\_ :

ss.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Marc Josef Lauwereys personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at Bruxel, this 3<sup>rd</sup> day of October, 1997.

KINGDOM OF BELGIUM  
CITY OF BRUSSELS  
EMBASSY OF THE UNITED  
STATES OF AMERICA  
State of Bruxel } SS.

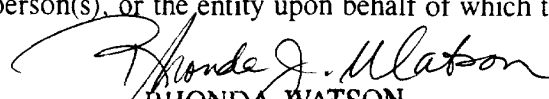


Yves Rene LaRoche

County of Belgium :  
SS.

On October 3, 1997, before me, Rhonda J. Watson personally appeared Yves Rene LaRoche personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

  
RHONDA WATSON  
CONSUL  
~~UNITED STATES OF AMERICA~~  
Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
Laurent Stephane Jespers

State of \_\_\_\_\_ :  
County of \_\_\_\_\_ :  
SS.

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Laurent Stephane Jespers personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

Yannick Georges Jozef Gansemans

Signature of Notary

Matthew Moyle

Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
Peter W. Bergum

State of \_\_\_\_\_ :

ss.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Peter W. Bergum personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

**ASSIGNMENT**

For valuable consideration, we, George Phillip Vlasuk of 7325 Calle Luna, Carlsbad, California 92009; Patrick Eric Hugo Stanssens of Constant Permekelaan 48, B-9830 St-Martens-Latem, Belgium; Joris Hilda Lieven Messens of Saviolaan 34,<sup>6</sup>1700 Dilbeek, Belgium; Marc Josef Lauwereys of Wilgenstraat 2, B-9450 Haaltert, Belgium; Yves Rene Laroche of Rue Bemel 115, 1150 Bruxelles, Belgium; Laurent Stephane Jespers of Karel Van Lorrainen Laan 4, 3080 Tervuren, Belgium; Yannick Georges Jozef Gansemans of Zeeweg 32, 8480 Ichtegem, Belgium; Matthew Moyle of 3171 4th Street, Boulder, Colorado 80304 and Peter W. Bergum of 12906 Carmel Creek Road #6, San Diego, California 92130 hereby assign to CORVAS INTERNATIONAL, INC., a Delaware corporation having a place of business at 3030 Science Park Road, San Diego, California 92121, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the invention and improvements which are the subject of an application for United States Patent entitled **"NEMATODE EXTRACTED SERINE PROTEASE INHIBITORS AND ANTICOAGULANT PROTEINS"**, filed on **October 17, 1995**, U.S. Serial No. **08/809,455**, this assignment including said application, any and all United States and foreign patents granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents and like rights of exclusion and for inventor's certificates for said inventions and improvements; and we agree for ourselves and our heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this Assignment.



IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
George Phillip Vlasuk

State of \_\_\_\_\_ :

ss.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared George Phillip Vlasuk personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
Patrick Eric Hugo Stanssens

State of \_\_\_\_\_ :

ss.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Patrick Eric Hugo Stanssens personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
Joris Hilda Lieven Messens

State of \_\_\_\_\_ :

ss.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Joris Hilda Lieven Messens personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
Marc Josef Lauwereys

State of \_\_\_\_\_ :

ss.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Marc Josef Lauwereys personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
Yves Rene LaRoche

State of \_\_\_\_\_ :

ss.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Yves Rene LaRoche personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
Laurent Stephane Jespers

State of \_\_\_\_\_ :

ss.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Laurent Stephane Jespers personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
Yannick Georges Jozef Gansemans

State of \_\_\_\_\_ :

SS.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Yannick Georges Jozef Gansemans personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at Thousand Oaks, CA, this 22 day of October, 1997.

\_\_\_\_\_  
Matthew Moyle

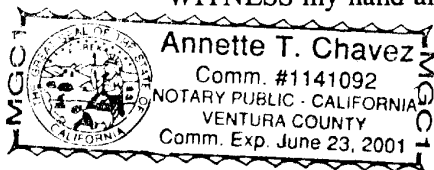
State of CALIFORNIA :

SS.

County of VENTURA :

On OCT 22, 1997, before me, ANNETTE T. CHAVEZ personally appeared Matthew Moyle personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.



\_\_\_\_\_  
Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
Peter W. Bergum

State of \_\_\_\_\_ :

ss.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Peter W. Bergum personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

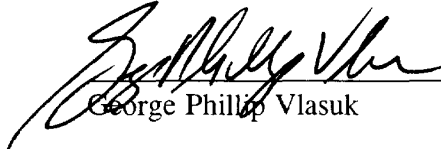
WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

**ASSIGNMENT**

For valuable consideration, we, George Phillip Vlasuk of 7325 Calle Luna, Carlsbad, California 92009; Patrick Eric Hugo Stanssens of Constant Permekelaan 48, B-9830 St-Martens-Latem, Belgium; Joris Hilda Lieven Messens of Saviolaan 34,<sup>6</sup>1700 Dilbeek, Belgium; Marc Josef Lauwereys of Wilgenstraat 2, B-9450 Haaltert, Belgium; Yves Rene Laroche of Rue Bemel 115, 1150 Bruxelles, Belgium; Laurent Stephane Jaspers of Karel Van Lorreinen Laan 4, 3080 Tervuren, Belgium; Yannick Georges Jozef Gansemans of Zeeweg 32, 8480 Ichtegem, Belgium; Matthew Moyle of 3171 4th Street, Boulder, Colorado 80304 and Peter W. Bergum of 12906 Carmel Creek Road #6, San Diego, California 92130 hereby assign to CORVAS INTERNATIONAL, INC., a Delaware corporation having a place of business at 3030 Science Park Road, San Diego, California 92121, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the invention and improvements which are the subject of an application for United States Patent entitled **"NEMATODE EXTRACTED SERINE PROTEASE INHIBITORS AND ANTICOAGULANT PROTEINS"**, filed on **October 17, 1995**, U.S. Serial No. **08/809,455**, this assignment including said application, any and all United States and foreign patents granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents and like rights of exclusion and for inventor's certificates for said inventions and improvements; and we agree for ourselves and our heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this Assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at San Diego, this 20 day of October, 1997.

  
George Phillip Vlasuk

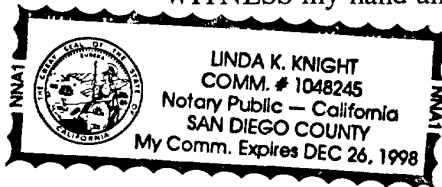
State of CALIFORNIA :

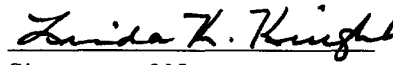
SS.

County of SAN DIEGO :

On OCTOBER 20, 1997, before me, LINDA K. KNIGHT personally appeared George Phillip Vlasuk personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.



  
Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
Patrick Eric Hugo Stanssens

State of \_\_\_\_\_ :

SS.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Patrick Eric Hugo Stanssens personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

Joris Hilda Lieven Messens

State of \_\_\_\_\_ :  
County of \_\_\_\_\_ :  
SS. \_\_\_\_\_

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Joris Hilda Lieven Messens personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

Marc Josef Lauwereys

State of \_\_\_\_\_ :  
County of \_\_\_\_\_ :  
SS. \_\_\_\_\_

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Marc Josef Lauwereys personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary



IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_\_ day of \_\_\_\_\_, 1997.

Yves Rene LaRoche

State of \_\_\_\_\_ :  
County of \_\_\_\_\_ ss.

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Yves Rene LaRoche personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

Laurent Stephane Jespers

State of \_\_\_\_\_ :  
County of \_\_\_\_\_ :  
SS. \_\_\_\_\_

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Laurent Stephane Jespers personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary

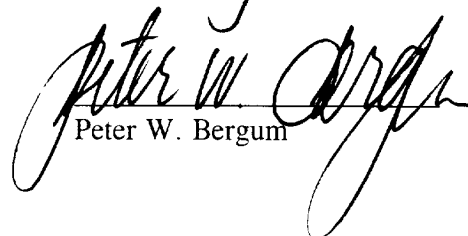
Yannick Georges Jozef Gansemans

Signature of Notary

Matthew Moyle

Signature of Notary

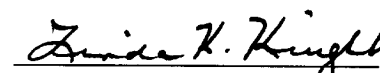
IN WITNESS WHEREOF, I hereto set my hand and seal at San Diego, this 20 day of October, 1997.

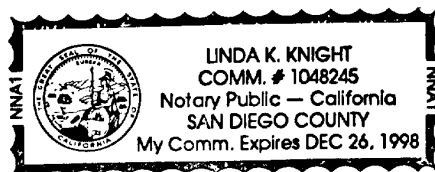
  
Peter W. Bergum

State of CALIFORNIA :  
County of SAN DIEGO :  
SS.

On OCTOBER 20, 1997, before me, LINDA K. KNIGHT personally appeared Peter W. Bergum personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

  
Signature of Notary



**ASSIGNMENT**

For valuable consideration, we, George Phillip Vlasuk of 7325 Calle Luna, Carlsbad, California 92009; Patrick Eric Hugo Stanssens of Constant Permekelaan 48, B-9830 St-Martens-Latem, Belgium; Joris Hilda Lieven Messens of Saviolaan 34, <sup>6</sup>1700 Dilbeek, Belgium; Marc Josef Lauwereys of Wilgenstraat 2, B-9450 Haaltert, Belgium; Yves Rene Laroche of Rue Bemel 115, 1150 Bruxelles, Belgium; Laurent Stephane Jespers of Karel Van Lorrainen Laan 4, 3080 Tervuren, Belgium; Yannick Georges Jozef Gansemans of Zeeweg 32, 8480 Ichtegem, Belgium; Matthew Moyle of 3171 4th Street, Boulder, Colorado 80304 and Peter W. Bergum of 12906 Carmel Creek Road #6, San Diego, California 92130 hereby assign to CORVAS INTERNATIONAL, INC., a Delaware corporation having a place of business at 3030 Science Park Road, San Diego, California 92121, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the invention and improvements which are the subject of an application for United States Patent entitled **"NEMATODE EXTRACTED SERINE PROTEASE INHIBITORS AND ANTICOAGULANT PROTEINS"**, filed on **October 17, 1995**, U.S. Serial No. **08/809,455**, this assignment including said application, any and all United States and foreign patents granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents and like rights of exclusion and for inventor's certificates for said inventions and improvements; and we agree for ourselves and our heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this Assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
George Phillip Vlasuk

State of \_\_\_\_\_ :

ss.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared George Phillip Vlasuk personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
Patrick Eric Hugo Stanssens

State of \_\_\_\_\_ :

ss.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Patrick Eric Hugo Stanssens personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at Brunswick, Belgium this 1st day of October, 1997.

al at Brussels, Belgium this 1st day of October  
Joris Hilda Lieven Messens OCT 01 1997

State of KINGDOM OF BELGIUM :  
CITY OF BRUSSELS } SS. SS.  
EMBASSY OF THE UNITED  
County of STATES OF AMERICA :

On October 1, 1997, before me, Lynne Skeinik personally appeared Joris Hilda Lieven Messens personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she~~/they executed the same in his/~~her~~/~~their~~ authorized capacity(ies), and that by his/~~her~~/~~their~~ signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

**Commission expiration**  
date : not applicable

Signature of Notary

Signature of Notary

Lynne Skeirik

Consul of the

United States of America

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

Marc Josef Lauwereys

State of \_\_\_\_\_ :  
ss.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Marc Josef Lauwereys personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_\_ day of \_\_\_\_\_, 1997.

Yves Rene LaRoche

State of \_\_\_\_\_ :  
County of \_\_\_\_\_ :  
SS. \_\_\_\_\_

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Yves Rene LaRoche personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_\_ day of \_\_\_\_\_, 1997.

Laurent Stephane Jespers

State of \_\_\_\_\_ :  
County of \_\_\_\_\_ :  
SS.

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Laurent Stephane Jespers personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
Yannick Georges Jozef Gansemans

State of \_\_\_\_\_ :

ss.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Yannick Georges Jozef Gansemans personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
Matthew Moyle

State of \_\_\_\_\_ :

ss.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Matthew Moyle personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary





**ASSIGNMENT**

For valuable consideration, we, George Phillip Vlasuk of 7325 Calle Luna, Carlsbad, California 92009; Patrick Eric Hugo Stanssens of Constant Permekelaan 48, B-9830 St-Martens-Latem, Belgium; Joris Hilda Lieven Messens of Saviolaan 34,<sup>6</sup> 1700 Dilbeek, Belgium; Marc Josef Lauwereys of Wilgenstraat 2, B-9450 Haaltert, Belgium; Yves Rene Laroche of Rue Bemel 115, 1150 Bruxelles, Belgium; Laurent Stephane Jespers of Karel Van Lorreinen Laan 4, 3080 Tervuren, Belgium; Yannick Georges Jozef Gansemans of Zeeweg 32, 8480 Ichtegem, Belgium; Matthew Moyle of 3171 4th Street, Boulder, Colorado 80304 and Peter W. Bergum of 12906 Carmel Creek Road #6, San Diego, California 92130 hereby assign to CORVAS INTERNATIONAL, INC., a Delaware corporation having a place of business at 3030 Science Park Road, San Diego, California 92121, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the invention and improvements which are the subject of an application for United States Patent entitled **"NEMATODE EXTRACTED SERINE PROTEASE INHIBITORS AND ANTICOAGULANT PROTEINS"**, filed on **October 17, 1995**, U.S. Serial No. **08/809,455**, this assignment including said application, any and all United States and foreign patents granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents and like rights of exclusion and for inventor's certificates for said inventions and improvements; and we agree for ourselves and our heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this Assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
George Phillip Vlasuk

State of \_\_\_\_\_ :

ss.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared George Phillip Vlasuk personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at Brussels, Belgium this 29th day of Sept., 1997.

SEP 29 1997

\_\_\_\_\_  
Patrick Eric Hugo Stanssens

State of KINGDOM OF BELGIUM } ss. :  
CITY OF BRUSSELS  
EMBASSY OF THE UNITED STATES OF AMERICA }  
County of \_\_\_\_\_ :

On Sept. 29, 1997, before me, Rhonda J. Watson personally appeared Patrick Eric Hugo Stanssens personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/~~her~~/~~their~~ authorized capacity(ies), and that by his/~~her~~/~~their~~ signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

Commission expiration  
date : not applicable

RHONDA WATSON  
CONSUL  
UNITED STATES OF AMERICA



IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_\_ day of \_\_\_\_\_, 1997.

Yves Rene LaRoche

State of \_\_\_\_\_ :  
County of \_\_\_\_\_ :  
SS. \_\_\_\_\_

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Yves Rene LaRoche personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_\_ day of \_\_\_\_\_, 1997.

Laurent Stephane Jespers

State of \_\_\_\_\_ :  
County of \_\_\_\_\_ :  
SS. \_\_\_\_\_

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Laurent Stephane Jespers personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary



IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
Peter W. Bergum

State of \_\_\_\_\_ :

ss.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Peter W. Bergum personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

**ASSIGNMENT**

For valuable consideration, we, George Phillip Vlasuk of 7325 Calle Luna, Carlsbad, California 92009; Patrick Eric Hugo Stanssens of Constant Permekelaan 48, B-9830 St-Martens-Latem, Belgium; Joris Hilda Lieven Messens of Saviolaan 34, 1700 Dilbeek, Belgium; Marc Josef Lauwereys of Wilgenstraat 2, B-9450 Haaltert, Belgium; Yves Rene Laroche of Rue Bemel 115, 1150 Bruxelles, Belgium; Laurent Stephane Jespers of Karel Van Lorrainen Laan 4, 3080 Tervuren, Belgium; Yannick Georges Jozef Gansemans of Zeeweg 32, 8480 Ichtegem, Belgium; Matthew Moyle of 3171 4th Street, Boulder, Colorado 80304 and Peter W. Bergum of 12906 Carmel Creek Road #6, San Diego, California 92130 hereby assign to CORVAS INTERNATIONAL, INC., a Delaware corporation having a place of business at 3030 Science Park Road, San Diego, California 92121, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the invention and improvements which are the subject of an application for United States Patent entitled **"NEMATODE EXTRACTED SERINE PROTEASE INHIBITORS AND ANTICOAGULANT PROTEINS"**, filed on **October 17, 1995**, U.S. Serial No. **08/809,455**, this assignment including said application, any and all United States and foreign patents granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents and like rights of exclusion and for inventor's certificates for said inventions and improvements; and we agree for ourselves and our heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this Assignment.





IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
Joris Hilda Lieven Messens

State of \_\_\_\_\_ :

ss.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Joris Hilda Lieven Messens personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
Marc Josef Lauwereys

State of \_\_\_\_\_ :

ss.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Marc Josef Lauwereys personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
Yves Rene LaRoche

State of \_\_\_\_\_ :  
SS.  
County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Yves Rene LaRoche personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at Brussels, this 14th day of Oct -, 1997.

Laurent  
\_\_\_\_\_  
Laurent Stephane Jaspers OCT 14 1997

State of KINGDOM OF BELGIUM } :  
CITY OF BRUSSELS } SS. SS.  
EMBASSY OF THE UNITED STATES OF AMERICA } :  
County of \_\_\_\_\_ :

On Oct 14, 1997, before me, Ted Halstead personally appeared Laurent Stephane Jaspers personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Ted Halstead  
\_\_\_\_\_  
Signature of Notary

Commission expiration  
date : not applicable

Ted Halstead  
Consul of the  
United States of America

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
Yannick Georges Jozef Gansemans

State of \_\_\_\_\_ :

ss.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Yannick Georges Jozef Gansemans personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
Matthew Moyle

State of \_\_\_\_\_ :

ss.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Matthew Moyle personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

Peter W. Bergum

State of \_\_\_\_\_ :  
 \_\_\_\_\_ ss.  
 County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Peter W. Bergum personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary

**ASSIGNMENT**

For valuable consideration, we, George Phillip Vlasuk of 7325 Calle Luna, Carlsbad, California 92009; Patrick Eric Hugo Stanssens of Constant Permekelaan 48, B-9830 St-Martens-Latem, Belgium; Joris Hilda Lieven Messens of Saviolaan 34,<sup>6</sup>1700 Dilbeek, Belgium; Marc Josef Lauwereys of Wilgenstraat 2, B-9450 Haaltert, Belgium; Yves Rene Laroche of Rue Bemel 115, 1150 Bruxelles, Belgium; Laurent Stephane Jespers of Karel Van Lorrainen Laan 4, 3080 Tervuren, Belgium; Yannick Georges Jozef Gansemans of Zeeweg 32, 8480 Ichtegem, Belgium; Matthew Moyle of 3171 4th Street, Boulder, Colorado 80304 and Peter W. Bergum of 12906 Carmel Creek Road #6, San Diego, California 92130 hereby assign to CORVAS INTERNATIONAL, INC., a Delaware corporation having a place of business at 3030 Science Park Road, San Diego, California 92121, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the invention and improvements which are the subject of an application for United States Patent entitled **"NEMATODE EXTRACTED SERINE PROTEASE INHIBITORS AND ANTICOAGULANT PROTEINS"**, filed on **October 17, 1995**, U.S. Serial No. **08/809,455**, this assignment including said application, any and all United States and foreign patents granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents and like rights of exclusion and for inventor's certificates for said inventions and improvements; and we agree for ourselves and our heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this Assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

George Phillip Vlasuk

State of \_\_\_\_\_ :  
SS.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared George Phillip Vlasuk personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

Patrick Eric Hugo Stanssens

State of \_\_\_\_\_ :  
SS.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Patrick Eric Hugo Stanssens personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

Joris Hilda Lieven Messens

State of \_\_\_\_\_ :

SS.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Joris Hilda Lieven Messens personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

Marc Josef Lauwereys

State of \_\_\_\_\_ :

SS.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Marc Josef Lauwereys personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary





IN WITNESS WHEREOF, I hereto set my hand and seal at Brussels, this 14<sup>th</sup> day of Oct., 1997.

OCT 14 1997

Yannick Georges Jozef Gansemans

State of KINGDOM OF BELGIUM :  
CITY OF BRUSSELS } SS. SS.  
County of EMBASSY OF THE UNITED STATES OF AMERICA :

On Oct 14, 1997, before me, Ted Halstead personally appeared Yannick Georges Jozef Gansemans personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/~~she~~/they executed the same in his/~~her~~/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Commission expiration  
date : not applicable

Signature of Notary  
Ted Halstead  
Consul of the  
United States of America

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_\_ day of \_\_\_\_\_, 1997.

Matthew Moyle

State of \_\_\_\_\_ :  
County of \_\_\_\_\_ :  
SS.

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Matthew Moyle personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

Peter W. Bergum

State of \_\_\_\_\_ :  
County of \_\_\_\_\_ :  
SS. \_\_\_\_\_

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Peter W. Bergum personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary

**ASSIGNMENT**

For valuable consideration, we, George Phillip Vlasuk of 7325 Calle Luna, Carlsbad, California 92009; Patrick Eric Hugo Stanssens of Constant Permekelaan 48, B-9830 St-Martens-Latem, Belgium; Joris Hilda Lieven Messens of Saviolaan 34, 1700 Dilbeek, Belgium; Marc Josef Lauwereys of Wilgenstraat 2, B-9450 Haaltert, Belgium; Yves Rene Laroche of Rue Bemel 115, 1150 Bruxelles, Belgium; Laurent Stephane Jespers of Karel Van Lorrainen Laan 4, 3080 Tervuren, Belgium; Yannick Georges Jozef Gansemans of Zeeweg 32, 8480 Ichtegem, Belgium; Matthew Moyle of 3171 4th Street, Boulder, Colorado 80304 and Peter W. Bergum of 12906 Carmel Creek Road #6, San Diego, California 92130 hereby assign to CORVAS INTERNATIONAL, INC., a Delaware corporation having a place of business at 3030 Science Park Road, San Diego, California 92121, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the invention and improvements which are the subject of an application for United States Patent entitled **"NEMATODE EXTRACTED SERINE PROTEASE INHIBITORS AND ANTICOAGULANT PROTEINS"**, filed on **October 17, 1995**, U.S. Serial No. **08/809,455**, this assignment including said application, any and all United States and foreign patents granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents and like rights of exclusion and for inventor's certificates for said inventions and improvements; and we agree for ourselves and our heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this Assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
George Phillip Vlasuk

State of \_\_\_\_\_ :

ss.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared George Phillip Vlasuk personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
Patrick Eric Hugo Stanssens

State of \_\_\_\_\_ :

ss.

County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Patrick Eric Hugo Stanssens personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

\_\_\_\_\_  
Joris Hilda Lieven Messens

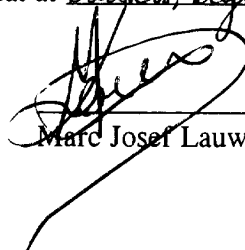
State of \_\_\_\_\_ :  
SS.  
County of \_\_\_\_\_ :

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Joris Hilda Lieven Messens personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at Brussels, Belgium this 1st day of October, 1997.

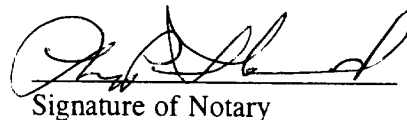
  
\_\_\_\_\_  
Marc Josef Lauwereys

OCT 01 1997

State of \_\_\_\_\_ :  
KINGDOM OF BELGIUM  
CITY OF BRUSSELS  
EMBASSY OF THE UNITED STATES OF AMERICA } SS.  
County of \_\_\_\_\_ :

On October 1, 1997, before me, Lynne Skeirik personally appeared Marc Josef Lauwereys personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she~~/~~they~~ executed the same in his/~~her~~/~~their~~ authorized capacity(ies), and that by his/~~her~~/~~their~~ signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

  
\_\_\_\_\_  
Signature of Notary

Lynne Skeirik

Commission expiration  
date : not applicable

CONSUL  
UNITED STATES OF AMERICA

PATENT

REEL: 9219 FRAME: 0464

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_\_ day of \_\_\_\_\_, 1997.

Yves Rene LaRoche

State of \_\_\_\_\_ :  
County of \_\_\_\_\_ ss.

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Yves Rene LaRoche personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

Laurent Stephane Jespers

State of \_\_\_\_\_ :  
County of \_\_\_\_\_ :  
SS.

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Laurent Stephane Jespers personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

Yannick Georges Jozef Gansemans

State of \_\_\_\_\_ :  
County of \_\_\_\_\_ :  
SS. \_\_\_\_\_

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Yannick Georges Jozef Gansemans personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary

IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_\_ day of \_\_\_\_\_, 1997.

Matthew Moyle

State of \_\_\_\_\_ :  
County of \_\_\_\_\_ :  
SS. \_\_\_\_\_

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Matthew Moyle personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary



IN WITNESS WHEREOF, I hereto set my hand and seal at \_\_\_\_\_, this \_\_\_\_ day of \_\_\_\_\_, 1997.

Peter W. Bergum

State of \_\_\_\_\_ :  
County of \_\_\_\_\_ ss.

On \_\_\_\_\_, 1997, before me, \_\_\_\_\_ personally appeared Peter W. Bergum personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary