### I-2003.001 US

Form PTO-1595 (Rev. 07/05) QMB No. 0651-0027 (exp. 6/30/2008)	U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office
	DRM COVER SHEET
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	se record the attached documents or the new address(es) below.
1. Name of conveying party(ies)	2. Name and address of receiving party(les)
Paul BRITTON David CAVANAGH	Name: Akzo Nobel N.V.
lan TARPEY	Internal Address: Patent Department
Additional name(s) of conveying party(ies) attached? Yes 🗸 No	
3. Nature of conveyance/Execution Date(s):	Street Address: Velperweg 76
Execution Date(s) August 18, 2005 and September 2, 2005	
Assignment Merger	
Security Agreement Change of Name	City: 6824 BM Arnhem
Joint Research Agreement	State:
Government Interest Assignment	Country
Executive Order 9424, Confirmatory License	Country: Netherlands Zip:
Other	Additional name(s) & address(es) attached? ✓ Yes 🔲 No
4. Application or patent number(s):	document is being filed together with a new application.
A. Patent Application No.(s)	B. Patent No.(s)
10/547,219	
Additional numbers at	tached? Yes Vo
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents
Name: William M. Blackstone	involved: 1
	7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00
Internal Address. Intervet Inc. Patent Department	Authorized to be charged by credit card
	Authorized to be charged to deposit account
Street Address: 29160 Intervet Lane	Enclosed
	None required (government interest not affecting title)
City. Millsboro	8. Payment Information
State: <u>DE</u> Zip: <u>19966</u>	a. Credit Card Last 4 Numbers Expiration Date
Phone Number: 302-934-4317	· · · · · · · · · · · · · · · · · · ·
Fax Number: 302-934-4305	b. Deposit Account Number <u>02-2334</u>
Email Address:	Authorized User Name Dlane Payno
9. Signature: hu Stender	
Signature	September 8, 2006
William M. Blackstone, PTO Reg. No: 29,772	Total number of pages including cover
Name of Person Signing	sheet, attachments, and documents.

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

PATENT REEL: 018240 FRAME: 0474 Attorney Docket: 1-2003.001 US

Customer No: 31846

RECORDATION FORM COVER SHEET

PATENTS ONLY

PAGE 2

# 1. Name of conveying party(ies)

Paul BRITTON David CAVANAGH lan TARPEY

# 2. Name and address of receiving party(ies) continued

Institute for Animal Health Compton, Newbury Berskshire RG20 7NN United Kingdom

# 3. Nature of conveyance/Execution Date(s):

Execution Dates: August 18, 2005 and September 2, 2005 Assignment

# 4. Application or patent number(s):

10/547,219

PATENT REEL: 018240 FRAME: 0475

#### 2003.001 US

### United States Assignment from Inventor

In consideration of one dollar (\$ 1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, the undersigned Assignors:

BRITTON, Paul Institute for Animal Health Compton, Newbury Berkshire RG20 7NN United Kingdom

CAVANAGH, David Institute for Animal Health Compton, Newbury Berkshire RG20 7NN United Kingdom

TARPEY, lan 12 The Quadrant St. Ives Cambridgeshire PE17 4PE United Kingdom

hereby sell, assign and transfer to Assignees:

### Akzo Nobel N.V. and Institute for Animal Health

its successors, assigns and legal representatives, the entire rand all foreign countries, in and to, and any and all improver  (a) Patent Number	nents which are disclosed in
(b) Application for Letters Patent Serial No.	filed
(c) Application for Letters Patent which undersigned concurrently herewith and is	has been executed by the
"INFECTIOUS BRONCHITIS VIRUS WITH A	N ALTERED SPIKE GENE"
and in and to said application and all divisional, continuing applications for Letters Patent which have been or shall be foreign countries on any of said improvements; and in and have been or shall be issued in the United States and all force	be filed in the United States and all other to all original and reissued natents which
The Assignee may apply for and receive the Letter by the Assignee or its successors, the undersigned will exoaths; assignments; powers of attorney, or other papers and to the improvements and the history thereof; and generally dits successors shall consider desirable for aiding in securing for the improvements and for vesting title in the Assignee or	ecute all other patent applications; proper communicate all facts known to it relating to everyting possible which the Assignce or g and maintaining proper patent protection
Assignors warrant that they have the full right to herein and no assignment, grant, mortgage or license or a property has been made to other by the undersigned.	convey the rights and property described other agreement affecting such rights and
, , , , , , , , , , , , , , , , , , , ,	Assignor
	By D. Cavanagh
	By P. Britton
	By Tagey  I. Tarpey
	Ву
Before me this 18 day of August, 20 individual(s) to me known to be the person(s) who (is) (are)	005 personally appeared the above named described in and who executed the above

instrument, and acknowledged to me that (hc) (she) (they) executed the same of (his) (her) (their) own free will (on behalf of said firm or corporation) for the purposes therein set forth.

Туре пате Address 11010

PATENT REEL: 018240 FRAME: 0476

2003.001 US

#### United States

### Assignment from Inventor

In consideration of one dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, the undersigned Assignors:

BRITTON, Paul Institute for Animal Health Compton, Newbury Berkshire RG20 7NN United Kingdom

**RECORDED: 09/08/2006** 

CAVANAGH, David Institute for Animal Health Compton, Newbury Berkshire RG20 7NN United Kingdom

TARPEY, lan
12 The Quadrant
St. Ives
Cambridgeshire PE17 4PE
United Kingdom

hereby sell, assign and transfer to Assignees:

## Akzo Nobel N.V. and Institute for Animal Health

its successors, assigns and legal re-	epresentatives, the entire	re right, title and interest for the Unit	ed States
and all foreign countries, in and to	, and any and all impro	vements which are disclosed in	
(a) Patent Number	Dated		
(b) Application for Letters Patent	Serial No	, filed	
(c) Application for Let	ters Patent which	ch has been executed by the	ae
undersigned concurrentl	y nerewith and .	is entitled:	
INTECTIOUS BRONCHI	IIS VIKUS WITH	AN ALTERED SPIKE GENE	7.22
applications for Letters Patent was foreign countries on any of said i	hich have been or sha improvements; and in a	ning, substitute, renewal, reissue and II be filed in the United States and and to all original and reissued paten oreign countries on said improvements	all other
by the Assignee or its successors oaths; assignments; powers of atte to the improvements and the history	<ul> <li>the undersigned will pracy, or other papers a ry thereof; and generall able for aiding in secu</li> </ul>	etters Patent in its own name. When rexecute all other patent applications and communicate all facts known to it by do everyting possible which the Assuring and maintaining proper patent patent patent successors.	s; proper t relating
Assignors warrant that therein and no assignment, grant, property has been made to other by	mortgage or license of	Assignor  By  Cavanagh  By  P. Britton	escribed ghts and
		By I. Tarpey	
		Ву	
individual(s) to me known to be the	ie person(s) who (is) (a ne that (he) (she) (they	, 2005 personally appeared the above are) described in and who executed the executed the same of (his) (her) (the eposes therein set forth.	e shove
Type name GEOFF OF	DHAM		
Address <u>NETITVTE</u> Compt	ON BERKSH	HEALTH TRE UK RG207N	17

**PATENT** 

REEL: 018240 FRAME: 0477