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I-2003.001 US		
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Form PTO-1595 (Rev. 07/05) OMB No. 0651-0027 (exp. 6/30/2008)		
PATENT		
	e record the attached documents or the new address(es) below.	
1. Name of conveying party(ies)	2. Name and address of receiving party(ics)	
Paul BRITTON David CAVANAGH	Name: AKZO NOBEL N.V.	
ian TARPEY	Internal Address: PATENT DEPARTMENT	
Additional name(s) of conveying party(ies) attached?		
3. Nature of conveyance/Execution Date(s):	Street Address: Vetperwag 76	
Execution Date(s) August 18, 2005 & September 2, 2005		
Assignment Merger	City 6924 BM Lunham	
Security Agreement Change of Name	City: 6824 BM Arnhem	
Joint Research Agreement	State:	
Government Interest Assignment	Country: Netherlands Zip:	
Executive Order 9424, Confirmatory License		
Other Correction of incorrect recordation	Additional name(s) & address(cs) attached? Yes	
A. Patent Application No.(s)	B. Patent No.(s)	
10/547,219	B. Patent No.(s)	
10/547,219 Additional numbers at	B. Patent No.(s)	
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Additional numbers at Additional numbers at 5. Name and address to whom correspondence concerning document should be mailed: Name: William M. Blackstone Internal Address. Intervet Inc., Patent Department Street Address; 29160 Intervet Lane City: Millsboro State: DE Zip:19966 Phone Number: (302) 933-4034	B. Patent No.(s) tached? Yes Yes ✓ No 6. Total number of applications and patents involved:_one (1) 7. Total fee (37 CFR 1.21(h) & 3.41) \$0.00 Authorized to be charged by credit card ✓ Authorized to be charged by credit card ✓ Authorized to be charged to deposit account Enclosed None required (government interest not affecting 8. Payment Information a. Credit Card	
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PAGE 2/9 * RCVD AT 9/26/2006 3:31:24 PM [Eastern Daylight Time] * SVR: USPTO-EFXRF-3/4 * DNIS:2733250 * CSID: * DURATION (mm-ss):02-26

PATENT REEL: 018340 FRAME: 0723 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 Ian 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

PAGE 4/9 * RCVD AT 9/26/2006 3:31:24 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-3/4 * DNIS:2733250 * CSID: * DURATION (mm-ss):02-26

PATENT REEL: 018340 FRAME: 0724

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 CAVANAGH, David TARPEY, lan Institute for Animal Health Institute for Animal Health 12 The Quadrant Compton, Newbury Compton, Newbury St. Ives Berkshire RG20 7NN Berkshire RG20 7NN Cambridgeshire PE17 4PE United Kingdom United Kingdom United Kingdom hcreby sell, assign and transfer to Assignees:

Akzo Nobel N.Y. and Institute for Animal Health

its successors, assigns and legal representatives, the entire right, title and interest for the United States and all foreign countries, in and to, and any and all improvements which are disclosed in

(a) Patent Number ______Dated ________ (b) Application for Letters Patent Serial No______, filed _______ (c) Application for Letters Patent which has been executed by the undersigned concurrently herewith and is entitled: "INFECTIOUS BRONCHITIS VIRUS WITH AN ALTERED SPIKE GENE"

and in and to said application and all divisional, continuing, substitute, renewal, reissue and all other applications for Letters Patent which have been or shall be filed in the United States and all other foreign countries on any of said improvements; and in and to all original and reissued patents which have been or shall be issued in the United States and all foreign countries on said improvements.

The Assignce may apply for and receive the Letters Patent in its own name. When requested by the Assignce or its successors, the undersigned will execute all other patent applications; proper oaths; assignments; powers of attorney, or other papers and communicate all facts known to it relating to the improvements and the history thereof; and generally do everyting possible which the Assignce or its successors shall consider desirable for aiding in securing and maintaining proper patent protection for the improvements and for vesting title in the Assignce or its successors.

Assignors warrant that they have the full right to convey the rights and property described herein and no assignment, grant, mortgage or license or other agreement affecting such rights and property has been made to other by the undersigned.

Assigno By D. Cava Bу P. Britto

Βv I. Tarpey

Ву_____

Before me this $\frac{2}{3}$ day of $\frac{1}{2}$, 2005 personally appeared the above named individual(s) to me known to be the person(s) who (is) (arc) described in and who executed the above instrument, and acknowledged to me that (he) (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.

Bγ DL-DI GEOFT Type name LOMPTON BERKSTORE UK RG207NN Address INSTITUTE

PAGE 5/9 * RCVD AT 9/26/2006 3:31:24 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-3/4 * DNIS:2733250 * CSID: * DURATION (mm-ss):02-26

PATENT REEL: 018340 FRAME: 0725

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 CAVANAGH, David Institute for Animal Health Institute for Animal Health Compton, Newbury Compton, Newbury Berkshire RG20 7NN Berkshire RG20 7NN United Kingdom 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 right, title and interest for the United States and all foreign countries, in and to, and any and all improvements which are disclosed in (a) Patent Number_ Dated_

(b) Application for Letters Patent Serial No. , filed (c) Application for Letters Patent which has been executed by the undersigned concurrently herewith and is entitled: "INFECTIOUS BRONCHITIS VIRUS WITH AN ALTERED SPIKE GENE"

and in and to said application and all divisional, continuing, substitute, renewal, reissue and all other applications for Letters Patent which have been or shall be filed in the United States and all other foreign countries on any of said improvements; and in and to all original and reissued patents which have been or shall be issued in the United States and all foreign countries on said improvements.

The Assignce may apply for and receive the Letters Patent in its own name. When requested by the Assignee or its successors, the undersigned will execute all other patent applications; proper oaths; assignments; powers of attorney, or other papers and communicate all facts known to it relating to the improvements and the history thereof, and generally do everyting possible which the Assignee or its successors shall consider desirable for aiding in securing and maintaining proper patent protection for the improvements and for vesting title in the Assignee or its successors.

Assignors warrant that they have the full right to convey the rights and property described herein and no assignment, grant, mortgage or license or other agreement affecting such rights and property has been made to other by the undersigned.

Assignor
By D. Cavanagh
F. R. and
By P. Britton
By

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Bу

Before me this 💰 day of , 2005 personally appeared the above named individual(s) to me known to be the person(s) who (is) (are) described in and who executed the above instrument, and acknowledged to me that (he) (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.

Βу GEOFF DEDH Type name INSTITUTE FOR ANIMAL HEALTH Address BERKSTIRC UK RG207NN Compton

PAGE 6/9 * RCVD AT 9/26/2006 3:31:24 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-3/4 * DNIS:2733250 * CSID: * DURATION (mm-ss):02-26

PATENT REEL: 018340 FRAME: 0726

RECORDED: 09/27/2006