

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT																						
NATURE OF CONVEYANCE:	ASSIGNMENT																						
CONVEYING PARTY DATA																							
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Philip UTLEY	03/08/2012																						
Eric Martin VAUGHN	02/24/2012																						
RECEIVING PARTY DATA																							
Name:	Boehringer Ingelheim Vetmedica GmbH																						
Street Address:	Binger Strasse 173																						
City:	Ingelheim am Rhein																						
State/Country:	GERMANY																						
Postal Code:	55216																						
PROPERTY NUMBERS Total: 1																							
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13396298</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13396298																		
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Application Number:	13396298																						
CORRESPONDENCE DATA																							
Fax Number:	(203)837-5616																						
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ATTORNEY DOCKET NUMBER: 10-0137

NAME OF SUBMITTER: Joyce L. Morrison

Total Attachments: 30

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ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the undersigned ("the Assignors"):

Application Authority Type	Inventor
Primary Citizenship Country	DE
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Application Authority Type	Inventor
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Application Authority Type	Inventor
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NOVEL EUROPEAN PRRSV STRAIN ("the Application")

which


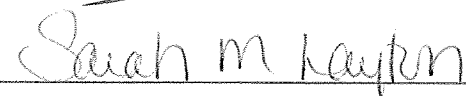
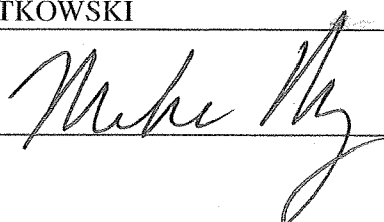
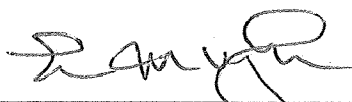
- was executed by the Assignors on
- was deposited with the United States Patent and Trademark Office on February 14, 2012, and accorded Serial No.: 13/396,298

and any and all improvements which are disclosed in the Application ("the Improvements") and all provisional, divisional, continuing, substitute, renewal, reissue, and all other applications for Letters Patent which have been or shall be filed in the United States or any other country on any of the Improvements, and in and to all original and reissued patents which have been or shall be issued in the United States or any other country on the Improvements;

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Covenant with the Assignee that no assignment, grant, mortgage, license, or other agreement affecting the rights and property in the Improvements herein conveyed has been made

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SIGNATURE OF APPLICANT	DATE
Kim BURGARD	
Jeremy KROLL 	24 Feb. 2012
Sarah M. LAYTON 	27 Feb 12
Volker OHLINGER	
Francois-Xavier ORVEILLON	
Stefan PESCH	
Michael Dennis PIONTKOWSKI	
Michael B. ROOF 	2/24/12
Philip UTLEY	
Eric Martin VAUGHN 	Feb 24, 2012

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NOVEL EUROPEAN PRRSV STRAIN (“the Application”)

which

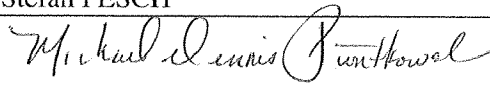
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Family Name	LAYTON
City of Residence	Newton
State or Province of Residence	IA
Country of Residence	US
Street of mailing address	2621 North Belt Highway
City of mailing address	St. Joseph
State or Province of mailing address	MO
Country of mailing address	US
Postal or Zip Code of mailing address	64506

Application Authority Type
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Status
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Family Name
City of Residence
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Mailing Address 1

Inventor
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Full Capacity
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Mailing Address 2
City of mailing address
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Application Authority Type
Primary Citizenship Country
Status
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Inventor
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Mailing Address 2
City of mailing address
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Application Authority Type	Inventor
Primary Citizenship Country	US
Status	Full Capacity
Given Name	Michael
Middle Name	Dennis
Family Name	PIONTKOWSKI
City of Residence	Perry
State or Province of Residence	KS
Country of Residence	US
Street of mailing address	2621 North Belt Highway
City of mailing address	St. Joseph
State or Province of mailing address	MO
Country of mailing address	US
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Application Authority Type	Inventor
Primary Citizenship Country	US
Status	Full Capacity
Given Name	Michael
Middle Name	B.
Family Name	ROOF
City of Residence	Ames
State or Province of Residence	IA
Country of Residence	US
Street of mailing address	2621 North Belt Highway
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Application Authority Type	Inventor
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Status	Full Capacity
Given Name	Philip
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State or Province of Residence	IA
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State or Province of mailing address	IA
Country of mailing address	US
Postal or Zip Code of mailing address	50244

Application Authority Type	Inventor
Primary Citizenship Country	US

Status	Full Capacity
Given Name	Eric
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Street of mailing address	2621 North Belt Highway
City of mailing address	St. Joseph
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NOVEL EUROPEAN PRRSV STRAIN ("the Application")

which

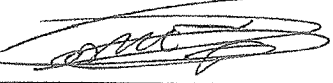
- was executed by the Assignors on
- was deposited with the United States Patent and Trademark Office on February 14, 2012, and accorded Serial No.: 13/396,298

and any and all improvements which are disclosed in the Application ("the Improvements") and all provisional, divisional, continuing, substitute, renewal, reissue, and all other applications for Letters Patent which have been or shall be filed in the United States or any other country on any of the Improvements, and in and to all original and reissued patents which have been or shall be issued in the United States or any other country on the Improvements;

Agree that the Assignee may apply for and receive Letters Patent for the Improvements in its own name or in Assignors' names, and that, when requested, without charge to but at the expense of the Assignee to carry out in good faith the intent and purpose of this assignment, the Assignors will execute all provisional, divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all of the Improvements, execute all rightful oaths, assignments, powers of attorney, and other papers, communicate to the Assignee all facts known to the Assignors relating to the Improvements and the history thereof, participate and assist in any judicial or administrative proceedings concerning the Improvements, and generally do everything possible which the Assignee considers desirable for aiding in securing and maintaining proper patent protection for the improvements and for vesting title to the Improvements and all applications for patents and all patents on the Improvements in the Assignee; and

Covenant with the Assignee that no assignment, grant, mortgage, license, or other agreement affecting the rights and property in the Improvements herein conveyed has been made

to others by the Assignors, and that full right to convey the same as herein expressed is possessed by the Assignors.

SIGNATURE OF APPLICANT	DATE
Kim BURGARD	
Jeremy KROLL	
Sarah M. LAYTON	
Volker OHLINGER	
Francois-Xavier ORVEILLON 	FEB. 23, 2012
Stefan PESCH	
Michael Dennis PIONTKOWSKI	
Michael B. ROOF	
Philip UTLEY	
Eric Martin VAUGHN	

ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the undersigned ("the Assignors"):

Application Authority Type	Inventor
Primary Citizenship Country	DE
Status	Full Capacity
Given Name	Kim
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Mailing Address 1	Boehringer Ingelheim GmbH
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Country of mailing address	US
Postal or Zip Code of mailing address	64506
Application Authority Type	Inventor
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Given Name	Sarah
Middle Name	M.
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Country of Residence	US
Street of mailing address	2621 North Belt Highway
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Application Authority Type	Inventor
Primary Citizenship Country	US
Status	Full Capacity
Given Name	Michael
Middle Name	Dennis
Family Name	PIONTKOWSKI
City of Residence	Perry
State or Province of Residence	KS
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Street of mailing address	2621 North Belt Highway
City of mailing address	St. Joseph
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Application Authority Type	Inventor
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Status	Full Capacity
Given Name	Michael
Middle Name	B.
Family Name	ROOF
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State or Province of Residence	IA
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Street of mailing address	2621 North Belt Highway
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Application Authority Type	Inventor
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Status	Full Capacity
Given Name	Philip
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State or Province of Residence	IA
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State or Province of mailing address	IA
Country of mailing address	US
Postal or Zip Code of mailing address	50244

Application Authority Type	Inventor
Primary Citizenship Country	US

Status	Full Capacity
Given Name	Eric
Middle Name	Martin
Family Name	VAUGHN
City of Residence	Ames
State or Province of Residence	IA
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NOVEL EUROPEAN PRRSV STRAIN ("the Application")

which

- was executed by the Assignors on
- was deposited with the United States Patent and Trademark Office on February 14, 2012, and accorded Serial No.: 13/396,298

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Case No.: 10-0137

to others by the Assignors, and that full right to convey the same as herein expressed is possessed by the Assignors.

SIGNATURE OF APPLICANT	DATE
Kim BURGARD	
Jeremy KROLL	
Sarah M. LAYTON	
Volker OHLINGER <i>Volker Ohlger</i>	02-23-2012
Francois-Xavier ORVEILLON	
Stefan PESCH <i>Stefan Pesch</i>	02-27-2012
Michael Dennis PIONTKOWSKI	
Michael B. ROOF	
Philip UTLEY	
Eric Martin VAUGHN	

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Application Authority Type	Inventor
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Given Name	Jeremy
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Application Authority Type	Inventor
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Status	Full Capacity
Given Name	Sarah
Middle Name	M.
Family Name	LAYTON
City of Residence	Newton
State or Province of Residence	IA
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Application Authority Type	Inventor
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Status	Full Capacity
Given Name	Michael
Middle Name	Dennis
Family Name	PIONTKOWSKI
City of Residence	Perry
State or Province of Residence	KS
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Application Authority Type	Inventor
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Given Name	Michael
Middle Name	B.
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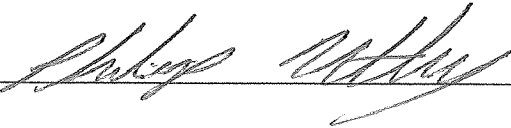
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Stefan PESCH	
Michael Dennis PIONTKOWSKI	
Michael B. ROOF	
Philip UTLEY 	3/8/2012
Eric Martin VAUGHN	