FORM PTO-1594 1-31-92

RECORDATION PAT 11-12-1999

3. Department of Commerce ent and Trademark Office orney Docket No. 05986.0008 3E 1 OF 2

101198626

To the donorable Commissioner of Patents and Trademarks:	
Please record the attached original documents or copy thereof.	

Please record the attached original documents or copy thereof.			ATTN. BOX ASSIGNMENTS					
Name of conveying party(ies):			Name and address of receiving party(ies):					
(1) Nathalie MIELCAREK (2) Camille LOCHT (3) Gilles RIVEAU (4) Odile POULAIN GODEFROY (5) André CAPROO NOV 0 9 1999			Name: (1) INSTITUT PASTEUR DE LILLE					
Addition	al name	(s) of conveying p	arty(ies) attached? □	Yes ⊠ No	Internal A	ddress:		
3.	Nature	of conveyance:		Rapper	Street Add	dress:	(1) 1 rue de Profe 59019 Lille, F	
					City:	<u> </u>		
Ø		Assignment		Merger	State:		Zip Code	e:
0		Security Agreement		Change of Name				
		Other			Additional	name(s) &	Address(es) attach	ed?
Execution	on Date:		, 1999 (2), (3) and (4) August 19, 1999	August 16,	⊠ Yes □ N	lo	100000000000000000000000000000000000000	4.1.
4.	Applica applica	, ,	patent number(s): If	this document is be	eing filed tog	gether with a	new application, th	ne execution date of the
A.	Patent.	Application Numb	er(s):		B. Patent	Number(s):		
		09/284,252						
			Additio	onal numbers attac	hed? □ Yes	s ⊠ No		
5.		and address of pa ning document sh	rty to whom correspo ould be mailed:	ndence	6. 1		r of applications an	d registrations involved:
Name:	Mr. Er	nest F. Chapman			7. □	Fotal fee (37	CFR 3.41): \$40	
Internal	Address		HENDERSON, FARA L.P.	BOW, GARRETT	Enclosed	(Please cha	rge deficiency to d	eposit account)
					Authorize	d to be char	ged to deposit acco	ount
Street A	ddress:	1300 I Street,	N.W.			D ''		046
City:	-	Washington			8. 	Deposit acco	ount number: <u>06-09</u>	<u>a 10</u>
State:	<u> </u>	DC	Zip: 20005	-3315				
9.	To the	ent and signature best of my knowle I document.	edge and belief, the f	oregoing informatio	on is true an	d correct an	d any attached cop	y is a true copy of the
		Ernest F. Chapm	nan (Mont 1	Mo		November 9, 199	99
1/12/1 99	9 DNGUYE	N 00000009 09284		Sign	ature		Date	
1 FC:581		Tota	al Mumber of pages in	cluding cover shee	et, attachme	ents and doc	uments: 4	

PATENT REEL: 010366 FRAME: 0111 FORM PTO-1594 1-31-92

RECORDATION FORM COVER SHEET PATENTS ONLY

U.S. Department of Commerce Patent and Trademark Office Attorney Docket No. 05986.0008 PAGE 2 OF 2

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

ATTN. BOX ASSIGNMENTS

2.	Name and address of receiving party(ies):					
Name:	(2) INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE (INSERM)					
Internal.	Internal Address:					
Stree Address: (2) 101 rue de Tolbiac 75654 Paris cedex 13, France						
City:	City:					
State:	Zip Code:					
Additional name(s) & Address(es) attached?						
□ Yes ⊗ No						

PATENT REEL: 010366 FRAME: 0112 Fax émis par: 33 01 53 04 64 00 HARLE & PHELIP le 05/11/99 14:27 A4 NORM Pg: 6/7

Fax émis par: 33 01 53 04 64 00

HARLE & PHELIP le 02/09/99 18:08 A4 NORM Pg: 6/7

ATTORNEY DOCKET NO.: 05986,0008

SOLE/JOINT INVENTION (U.S. Rights Only)

ASSIGNMENT

WHEREAS I/we, the below named inventor(s), [hereinafter referred to as Assignor(s)], have made an invention entitled:

BORDETELLA STRAIN EXPRESSING THE FWA HYBRID, LIPOSOMES AND VACCINES

for which I/WE executed an application for United States Letters Patent concurrently herewith or on ______ or filed an application for United States Letters Patent on April 09, 1999, (Serial No. 09/284,252); and

WHEREAS, 1) INSTITUT PASTEUR DE LILLE and 2) INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE HEBUCALE (INSERM), corporations of France, whose post office addresses are

1) 1 rue de Professeur Calmette, 59019 Lille, France and 2) 101 rue de Tolbiac, 75654 Paris cadex 13 France (hereinafter referred to as Assignee), are desirous of securing the entire right, title, and interest in and to this invention, the application for United States Letters Patent on this invention and the Letters Patent to be issued upon this application,

NOW THEREFORE, be it known that, for good and valuable consideration the receipt of which from assigned is hereby acknowledged, I/WB, as assigner(a), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the assignee, its lawful successors and assigns, my/our entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof; and I/WB hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue all Letters Patent for this invention to assignee, its successors and assigns, in accordance with the terms of this Assignment;

AMD, I/WE HEREBY further covenant and agree that I/We will, without further consideration, communicate with assignee, its successors and assigns, any facts known to me/us respecting this invention and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver all papers that may be necessary or desirable to perfect the titls to this invention in said assignee, its successors and assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States, it being understood that any expense incident to the execution of such papers shall be borne by the assignee, its successors and assigns.

AND, I/WE HERESY authorize and request the attorneys I/we have empowered in the Declaration and Power of Attorney in this application, to insert here in parentheses (Application No. 09/264,252, filed April 09, 1999) the filing date and application number of said application when known.

	IN TESTIMONY WHEREOF, I/We have hereunto set our hand	(s),
1.	. Full Name of Sole or First Assignor : Assignor's, Signat	
	Address 166 rue de Paris, 59000 Lille, France	Citizen of
2.	Full Name of Second Assignor : Assignor : Assignor : Camille LOCHT : (MINISTER)	ure : Date : 16.08.39
	Address 143 rue du Vert Pré, 59830 Wannehain, France	: Citizen of
	Full Name of Third Assignor Assignor's Signat	dre : Date /6/09/99
	Address 22 avenue Salomon, 59800 Lille, France	: Citizen of : France
_	FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.	P. WASHINGTON, D.C.

PATENT REEL: 010366 FRAME: 0113 Fax émis par: 33 01 53 04 64 00 HARLE & PHELIP le 05/11/99 14:27 A4 NORM Pg: 7/7

Fax émis par: 33 01 53 04 64 00 HARLE & PHELIP le 02/09/59 18:08 A4 NORM Pg: 7/7

Continued From First Page Of Assignme	ent ATTORNEY DOCKET No.:	05986,0008
. Full Name of Fourth Assignor Odile POULAIN-GODEFROY Address 11 avenue du Maréchal de	: Assignor's Signature	pate 16.8.99
Address 11 avanue du Maréchal de	e Lattre de Tassigny,	Citizen of
59130 Lambersart, France	<u>e</u>	France
Full Name of Fifth Assignor André CAPRON	: Assignog's Signituration	Date 9.00.99
Address 58 rue du Capitaine Jass 59113 Phalempin, Françe	•	: Citizen of : France
. Full Name of Sixth Assignor	: Assignor's Signature	ı Date
Address		; Citizen of
7. Full Name of Seventh Assignor	: Assignor's Signature	: Date
Address		1 Citizen of
. Full Name of Eighth Assignor	: Assignor's Signature	Date
Address		: Citizen of
). Full Name of Ninth Assignor	: Assignor's Signature	: Date
Address		: Citizen of
0.Full Name of Tenth Assignor	Aggigner's Signature	: Date
Address	-	: Citizen of
1.Full Name of Eleventh Assignor	: Assignor's Signature	: Date
Address		: Citizen of
2.Full Name of Twelfth Assignor	: Assignor's Signature	: Date
Address	1	: Citizen of
3. Pull Name of Thirteenth Assignor	: Assignor's Signature	: Date
Address		: Citizen of

RECORDED: 11/09/1999