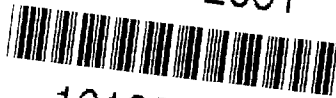


09-05-2001

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101833238

To The Honorable Commissioner of Patents and Trademarks:  
Please record the attached original documents(s) or copy(ies) thereof.

Docket No.:

1. Name of conveying party(ies)

- |                               |                         |
|-------------------------------|-------------------------|
| 1. Luc AUJAME                 | 2. Annabelle BOUCHARDON |
| 3. Genevieve RENAULD-MONGENIE | 4. Bachra ROKBI         |
| 5. Xavier NASSIF              | 6. Colin TINSLEY        |
| 7. Anges PERRIN               |                         |

08/16/01

2. Name and address of receiving party(ies):

1. Name: AVENTIS PASTEUR  
Street Address: 2, avenue Pont Pasteur  
City + Address: 69007 Lyon, FRANCE
2. Name: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE (INSERM)  
Street Address: 101 Rue de Tolbiac  
City + Address: 75013 Paris, FRANCE

3. Nature of conveyance:

- Assignment                       Merger                       Security Agreement
- Change of Name                       Other:

Execution Date: 31 July 2001

4. Application number(s) or patent number(s)

..... This document is filed together with a new application whose execution date is:

- |                              |                  |
|------------------------------|------------------|
| A. Patent Application No.(s) | B. Patent No.(s) |
| 09/830,433      09/830433    |                  |

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

Name: B. Aaron Schulman                      Tel.: 703-739-4900  
LARSON & TAYLOR, PLC • 1199 North Fairfax St. • Suite 900 • Alexandria, VA 22314-1437

6. Total number of applications and patents involved:

#1

7. Total fee (37 CFR 3.41)

Enclosed

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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.

B. Aaron Schulman  
Name of person signing

*B. Aaron Schulman*  
Signature

August 16, 2001  
Date

Total number of pages including cover sheet, attachments and documents: 3

ASSIGNMENT

In consideration of the sum of One dollar (US\$ 1.00) in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, the undersigned,

- 1) Luc AUJAME  
a French citizen residing at :  
477, Chemin du Puits  
69210 FLEURIEUX SUR L'ARBRESLE - FRANCE
- 2) Annabelle BOUCHARDON  
a French citizen residing at :  
7, rue Nicolai  
69007 LYON - FRANCE
- 3) Geneviève RENAULD-MONGENIE  
a French citizen residing at :  
24,rue des Framboisiers  
69630 CHAPONOST - FRANCE
- 4) Bachra ROKBI  
a French citizen residing at :  
254, rue Vendôme  
69003 LYON - FRANCE

hereby sell, assign and transfer to:

- 1) AVENTIS PASTEUR  
2, avenue Pont Pasteur 69007 LYON - FRANCE
- 2) INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE (INSERM)  
101 Rue de Tolbiac, 75013 PARIS - FRANCE

(hereinafter called the Assignee) the entire right, title and interest in and to any and all improvements which are disclosed in the application for United States Letters Patent entitled



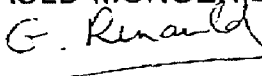

Nucleic acids and polypeptides specific of the Neisseria genus pathogenic strains

which application was filed by the undersigned on 28 October 1999 as PCT application No. PCT/FR9902643, including any and all United States Letters Patent which may be granted therefor and any and all extensions, divisions, reissues, substitutes, renewals or continuations thereof, and the right to all benefits under the International Convention for the Protection of Industrial property.

It is hereby authorized and requested that the Commissioner of Patents and Trademarks issue any and all said Letters Patent, when granted, to said Assignee.

Further, it is agreed that, when requested, without charge to but at the expense of said Assignee, the undersigned will execute all divisional, continuing, substitute, renewal, and reissue patent applications; execute all rightful other papers, and generally do everything possible which said Assignee shall consider desirable for aiding in securing and maintaining proper patent protection.

Signed at Lyon  
this 31 day of July, 2004  
Inventor(s)

- 1) Luc AUJAME, 
- 2) Annabelle BOUCHARDON, 
- 3) Geneviève RENAULD-MONGENIE 
- 4) Bachra ROKBI 

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ASSIGNMENT

In consideration of the sum of One dollar (US\$ 1.00) in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, the undersigned,

5) Xavier NASSIF  
a French citizen residing at :  
1, square Charles Laurent  
75015 PARIS - FRANCE

6) Colin TINSLEY  
a British citizen residing at :  
16, square Jean Thébaud  
75015 PARIS - FRANCE

7) Agnès PERRIN  
a French citizen residing at :  
33 bis, rue du Docteur Roux  
75015 PARIS - FRANCE

hereby sell, assign and transfer to:

1) AVENTIS PASTEUR  
2, avenue Pont Pasteur 69007 LYON - FRANCE

2) INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE (INSERM)  
101 Rue de Tolbiac - 75013 PARIS FRANCE

(hereinafter called the Assignee) the entire right, title and interest in and to any and all improvements which are disclosed in the application for United States Letters Patent entitled

Nucleic acids and polypeptides specific of the Neisseria genus pathogenic strains

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Signed at LYON  
this 31 day of July, 2001  
Inventor(s)

5) Xavier NASSIF

6) Colin TINSLEY

7) Agnès PERRIN

PATENT

RECORDED: 08/16/2001

REEL: 012125 FRAME: 0599