1-28-03



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I hereby certify that this paper is being deposited with the United States Postal Service as first class mail in an envelope addressed: BOX ASSIGNMENT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA. 22313-

July 25, 2003.

Gyne Risc

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

JOHN TELFORD, et al.

Int. Appl. No.: PCT/GB01/04789

Group Art: Unassigned

Int. Filed Date: October 29, 2001

Examiner: Unassigned

For

NUCLEIC ACIDS AND PROTEINS FROM STREPTOCOCCUS GROUPS

A & B

ASSIGNMENT DOCUMENT COVER LETTER

ssignment ant Commissioner of Patents and Trademarks angton, D.C. 20231

The accompanying assignment covers the patent or application identified above. Box Assignment Assistant Commissioner of Patents and Trademarks Washington, D.C. 20231

1.

No other patents or applications are covered by the assignment. \mathbf{X}

Other patents and/or applications are covered by the assignment as shown on the attached LIST OF PATENTS AND/OR APPLICATIONS COVERED BY ASSIGNMENT.

NAMES OF PARTY MAKING TRANSFER

2. Name 1: Claire Marie Fraser

Name 2:

Herve Tettelin

IDENTITY OF PARTY TO WHOM TRANSFER IS MADE

3. Transfer is being made to:

> The Institute for Genomic Research 9212 Medical Center Drive Rockville, Maryland 20850

07/29/2003 ECOOPER 00000189 PCT/6B01/04789

01 FC:8021

PATENT REEL: 014318 FRAME: 0947

INTENTION OF DOCUMENT

4.	The a	The accompanying document is an:		
	<u>X</u>	Assignment License Security Interest Other		
	<u>X</u>	Execution Date: July 18, 2003		
		FEE PAYMENT		
5.	<u>X</u>	Enclosed is a check for \$40.00.		
6.	<u>X</u>	The Commissioner is hereby authorized to charge any additional fees which may be required or credit any overpayment to Deposit Account No. 03-1664. THIS IS NOT AN AUTHORIZATION FOR PAYMENT OF ANY ISSUE FEES.		
	ADDI	RESS TO WHICH DOCUMENT SHOULD BE RETURNED AFTER RECORDAL BY PTO		

7. Please return the recorded document to:

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STATEMENT BY THE PARTY

8. I hereby submit that, to the best of my knowledge and belief, the foregoing information contained herein is true and correct and any copy submitted herewith is a true and correct copy of the original document.

Respectfully submitted,

Dated JUly 24, 2006

By: Hale M. Hale

Reg. No. 45,680

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Total number of pages comprising cover sheet: 4 (Cover Letter plus Original Assignment)

PATENT REEL: 014318 FRAME: 0948

ASSIGNMENT

WHEREAS, WE. CLAIRE FRASER and HERVE TETTELIN

hereinafter referred to as *ASSIGNORS*, have invented certain new and useful improvements as described and set forth in the below-identified application for United States Letters Patent:

Title of Invention: NUCLEIC ACIDS AND PROTEINS FROM STREPTOCOCCUS

GROUPS A & B

Date of Execution:

Serial No: PCT/GB01/04789 Filing Date: 04/28/2003

I.A. Filing Date: 10/29/2001

WHEREAS, THE INSTITUTE FOR GENOMIC RESEARCH, 9712 Medical Center Drive, Rockville, Maryland 20850, hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right, title and interest in the above invention and application and in any Letters Patent which may be granted on the same;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for and in consideration of the sum of One Dollar (\$1.00) lawful money paid to ASSIGNORS by ASSIGNEE, receipt of which is hereby acknowledged, ASSIGNORS have sold, assigned and transferred, and by these presents do sell, assign and transfer unto said ASSIGNEE, and ASSIGNEE'S successors and assigns, all right, title and interest in and to the said invention, said application for United States Letters Patent, and any Letters Patent which may hereafter be granted on the same in the United States and all countries throughout the world including any divisions, renewals, continuations in whole or in part, substitutions, conversions (including conversions claiming priority under 35 U.S.C. §119(e)), reissues, prolongations or extensions thereof, the said interest to be held and enjoyed by said ASSIGNEE as fully and exclusively as it would have been held and enjoyed by said ASSIGNORS had this assignment and transfer not been made, to the full end and term of any Letters Patent.

ASSIGNORS also agree that the U.S. serial number may be entered above by ASSIGNEE or its agents upon designation of the application number by the U.S. Patent and Trademark Office.

ASSIGNORS further agree that they will, without charge to said ASSIGNEE, but at ASSIGNEE'S expense, cooperate with ASSIGNEE in the prosecution of said application and/or applications, execute, verify, acknowledge and deliver all such further papers, including

1 of 2

PATENT Atty. Docket No. 16620.005

applications for Letters Patent and for the reissue thereof, and instruments of assignment and transfer thereof, and will perform such other acts as *ASSIGNEE* lawfully may request, to obtain or maintain Letters Patent for said invention and improvement in any and all countries, and to vest title thereto in said *ASSIGNEE*, or *ASSIGNEE'S* successors and assigns.

IN TESTIMONY WHEREOF, ASSIGNORS have hereunto signed their name to this assignment on the date indicated below.

DATE _	7/18/05 Claire FRASER
_	Witness Witness
_	Witness
DATE	07/18/03
	Amab. Kwamenalal.
-	Witness Winess

2 of 2

PATENT REEL: 014318 FRAME: 0950

RECORDED: 07/28/2003