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SUBMISSION TYPE:		NEW ASSIGNMENT	NEW ASSIGNMENT			
NATURE OF CONVEYANCE:		ASSIGNMENT	ASSIGNMENT			
CONVEYING PARTY DATA						
		Name	Execution Date			
Guido Grandi			09/01/2006			
John Telford			09/01/2006			
Giuliano Bensi			09/01/2006			
RECEIVING PARTY DATA						
Name:	Novartis Vaccin	Novartis Vaccines and Diagnostics, SRL				
Street Address:	Via Fiorentina 1					
City:	Siena	Siena				
State/Country:	ITALY					
Postal Code:	53100	53100				
PROPERTY NUMBERS Total: 1						
Property Ty		Number		10565126		
Property Type Application Number: 1056		0565126				
	JL					
CORRESPONDENCE DATA						
CORRESPONDENCE				0		
CORRESPONDENCE Fax Number:	(202)824-3	3001		\$40.00		
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Fax Number: <i>Correspondence will b</i> Phone:	(202)824-3 be sent via US M. 202824300	<i>lail when the fax attempt is unsuccessful.</i> 00		CH \$40.0		
Fax Number: <i>Correspondence will E</i> Phone: Email:	(202)824-3 be sent via US M 202824300 astanley@	<i>lail when the fax attempt is unsuccessful.</i> 00)bannerwitcoff.com				
Fax Number: <i>Correspondence will b</i> Phone: Email: Correspondent Name:	(202)824-3 be sent via US M. 20282430(astanley@ : Banner & V	<i>lail when the fax attempt is unsuccessful.</i> 00 Øbannerwitcoff.com Witcoff, Ltd.				
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REEL: 021453 FRAME: 0561

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PATENT REEL: 021453 FRAME: 0562

ASSIGNMENT

WHEREAS, WE, GUIDO GRANDI, JOHN TELFORD, AND GIULIANO BENSI,

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:

IMMUNOGENIC COMPOSITIONS FOR STREPTOCOCCUS PYOGENES

Date(s) of Execution:

U.S. Application No.: 60/491,822	Filing Date: July 31, 2003
U.S. Application No.: 60/541,565	Filing Date: February 3, 2004
International Application No. PCT/US04/24868	Filing Date: July 30, 2004
U.S. Application No.: 10/565,126	Filing Date: January 19, 2006

WHEREAS, NOVARTIS VACCINES AND DIAGNOSTICS SRL, Via Fiorentina 1, I-53100, Siena, Italy, 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.

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ASSIGNORS also agree that the U.S. application 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 agrees 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 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 names to this assignment on the date indicated below.

DATE <u>Septembr 1^V, 2006</u> SIGI <u>ADRIUL to Car</u> Witnessed by LORENZO TOLLERI	NED Child Crandi Guido Grandi — Cuidhais Gran Mitnessed by CRISCING GRASSING
DATE <u>1 Schlander 20006</u> SIGI <u>toreure</u> total Witnessed by LORENZO TOLLERI	NED John Telford John Telford Caisland Qu Witnessed by CRISCING GRASSI
DATE $09/01/2006$ SIGN	NED <u>Givlians beut</u> Giuliano Bensi

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Witnessed by LORENZO TULLER,

Witnessed by CRASSINI

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PATENT REEL: 021453 FRAME: 0564

RECORDED: 08/28/2008