Attorney Docket No. PAT051700-US-PCT PP028120,0004

FORM PTO-1595 (Rev. 6-93)	Recordation Form Cover Sheet (Patents Only)	U.S. Department of Commerce Patent and Trademark Office
To the Honorable Asst. Commissioner for Patents. Please record the attached original documents or copy thereof		
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Guido GRANDI Giulio RATTI	NOVARTIS VA Via Fiorentina 1 Siena, ITALY	CCINES & DIAGNOSTICS SRL , I-53100
Additional name(s) of conveying parties atta		and addresses attached?
Yes 🗵 No.		53 v
Nature of conveyance:	Yes	⊠ No
	ger	
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Other:		
Execution Dates: August 2, 2007 and Augurespectively	ust 7, 2007	
4. Application Number(s) or Patent Numbers.		
If this document is being filed together with a	a new application, the execution date of the	application is:
A. Patent Application No(s): 12/	086,571 B. Patent No(s):
Additional numbers attached?	∕es ⊠ No	•
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Name and address of party to whom corresp concerning document should be mailed:	pondence 6. Total number of a	pplications and patents involved: 1
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PATENT REEL: 024440 FRAME: 0230

Attorney Docket No. PP028120,0003

<u>ASSIGNMENT</u>

WHEREAS, we, Guido Grandi and Giulio Ratti (deceased) (ASSIGNORS), are the inventors of certain inventions and improvements described and set forth in the below identified U.S. and foreign applications and having the title

CHLAMYDIA ANTIGENS

Application Nos: Filing Date:

US 60/753,305 22 December 2005

US 60/795,857 28 April 2006

PCT/IB2006/004121 19 December 2006

and WHEREAS

NOVARTIS VACCINES AND DIAGNOSTICS SRL Via Fiorentina 1, I-53100 Siena, ITALY

ASSIGNEE, desires to acquire the entire right, title and interest in and to the above said applications, inventions and improvements and any patents that may be granted on or as a result thereof in the United States of America (U.S.) and in any and all foreign countries;

NOW. THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged,

We hereby assign, to the above named ASSIGNEE, its successors, assigns and legal representatives (NOMINEES) the entire right, title and interest in and to said applications, inventions and improvements throughout the world and to any and all patents, petty patents and utility model patents which may be granted therefor, and all continuations, continuations-in-part, divisions, reissues, extensions, renewals, and any non-provisional based on a provisional thereof (LETTERS PATENT).

And we covenant that we have full right to convey the entire interest herein assigned, and that we have not executed and will not execute any agreement or do anything in conflict herewith;

And we further covenant and agree that we will without undue delay execute without further consideration all such papers as may be necessary to perfect the title to said applications, inventions and improvements, and LETTERS PATENT in the ASSIGNEE or its NOMINEES, and we agree to communicate to said ASSIGNEE or its NOMINEES all known facts respecting said applications, inventions, improvements, and LETTERS PATENT, to testify in any legal proceedings, to sign all lawful papers, and generally to do all things necessary to aid ASSIGNEE or its NOMINEES to obtain and enforce for their own benefit patent protection for said applications, inventions and improvements in any and all countries, all at the expense, however, of the ASSIGNEE or its NOMINEES;

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Attorney Docket No. PP028120.0003

And we authorize the ASSIGNEE or its NOMINEES to file in our names or their own, as appropriate, application for LETTERS PATENT in any and all countries of the world, and we authorize and request the Commissioner of Patents and Trademarks of the United States, and any proper official of any country, to issue to said ASSIGNEE or its NOMINEES any and all LETTERS PATENT for said applications, inventions and improvements, for their sole use, to the full end of the term for which such LETTERS PATENT may be granted;

Date: August 2nd, 2007

Inventor:

Guido Grandi

Date: August 7th 2007

Inventor: Giulio Ratti (deceased)

Signature of Legal Representative of Giulio Ratti

Printed Name: Lehutous Livis

Note: No legalization or other witness required.

Page 2 of 2

PATENT REEL: 024440 FRAME: 0232

RECORDED: 05/25/2010