FORM PTO-1595 [EET U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office		
$\gamma \mu \nu $		
To The Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.		
1.	Name of conveying party(ies):	2. Name and address of receiving party(ies)
	OraPharma, Inc.	Name: Mucosal Therapeutics LLC
Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No		Address: 277 Linden Street, Suite 201
3.	Nature of conveyance:	
	·	City: Wellesley State: Massachusetts
	■ Assignment	Country: U.S.A. Zip: 02482
	☐ Security Agreement ☐ Change of Name	
	□ Other	
Exe	cution Date: April 7, 2004	Additional name(s) & address(es) attached? □ Yes ☒ No
4.	Application number(s) or patent number(s):	F. Pic
	If this document is being filed together with a new application, the e	
Α.	Patent Application No.(s) Filing Date	B. Patent No.(s)
		6,893,665
İ	Additional numbers at	ttached? ☐ Yes ☒ No
5.	Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1
	Name: Steven J. Sarussi	
	Registration No.: 32,784	7. Total Fee (37 CFR 3.41)\$40.00
	Company Name: McDonnell, Boehnen, Hulbert & Berghoff LLP	☑ Enclosed
	Street Address: 300 South Wacker Drive	☐ Authorized to be charged to deposit account
	City: Chicago State: Illinois	8. Deposit account number:
	Country: U.S.A. ZIP: 60606	13-2490
DO NOT USE THIS SPACE		
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.		
	Steven J. Sarussi	Date: February 7, 2006
Printed Name of Person Signing Signature		
Total number of pages including cover sheet, attachments, and document:9		
Mail Stop Assignment Recorded over sheet information to:		
Mail Stop Assignment Recordation Services Director of the United States Patent and Trademark Office		
2/10/2006 DBYRHE 00000047 6893665 PO Box 1450		
1 FC:8021 40.00 00 Alexandria, Virginia 22313-1450		

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TERMINATION AGREEMENT

This TERMINATION AGREEMENT ("Agreement") is made effective as of the date of the last signature below ("Effective Date") by and between Mucosal Therapcutics LLC, a Massachusetts limited liability company with a principal place of business at 277 Linden Street, Suite 201, Wellesley, Massachusetts 02482 ("Mucosal"), and OraPharma, Inc. a Delaware corporation with a principal place of business at 732 Louis Drive, Warminster, PA 18974 ("Company").

WHEREAS, Mucosal and the Company entered into a License Agreement dated December 14, 1998 ("License Agreement") pursuant to which the Company licensed Mucosal Technology.

WHEREAS, on or about February 10, 2003 ("Acquisition Date"), the Company was acquired by Johnson & Johnson.

WHEREAS, from and after the execution of the License Agreement until the Effective Date, the Company exercised reasonable efforts and diligence in developing and commercializing Licensed Products and in undertaking investigations and actions required to obtain appropriate governmental approvals to market Licensed Products through a number of studies, analysis and experiments performed both in-house and through its third party vendors ("Program").

WHEREAS, because the Company no longer wishes to license Mucosal Technology, the parties now wish to terminate the License Agreement by mutual consent on the terms and conditions of this Agreement.

NOW, THEREFORE, in consideration of the premises and the mutual covenants set forth in this Agreement, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Mucosal and the Company agree as follows:

1. Definitions.

- "Company Technology" means Company Know-How and Company Patent Rights.
- "Company Know-How" means (i) any and all Improvements in tangible form principally related to Licensed Product that were discovered or developed by the Company during the term of the License Agreement based upon samples of Licensed Product obtained from Mucosal or its Affiliates; (ii) any and all inventions, discoveries or developments (including, without limitation, data, formulas and pre-clinical and clinical research results) generated in tangible form during the course of the Program; and (iii) any and all tangible information in Company's possession or control during the term of the License Agreement that solely relates to the commercialization of Licensed Products, including, but not limited to, research results, toxicology data, assays, preclinical data, prototypes, manufacturing processes, unused and/or unexpired amounts of Licensed Products, clinical results, regulatory submissions, and suppliers lists.

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- 1.3 "Company Patent Rights" means all Patents resulting from the License Agreement owned or controlled by Company claiming inventions necessary to the development, manufacture, use, or sale of Licensed Products (i) that have issued as of the date of this Agreement or that issue at any time from applications pending as of the date of this Agreement, which are listed in Appendix A hereto, or (ii) which have issued or which issue at any time in any foreign country and provide corresponding or equivalent patent protection to the Patents described in the foregoing clause (i).
- 1.4 "Net Sales" shall mean gross revenues received in the relevant quarter from sales to independent third parties, less the following deductions (if any of the following have been included in such revenues): (i) trade or quantity discounts, price concessions, or rebates actually allowed and/or taken in such amounts as are customary in the trade, (ii) commissions or other expenses paid or allowed to independent brokers and agents, (iii) value added, sales, and other turnover taxes and duties paid, absorbed, or allowed, but excluding income taxes, (iv) amounts billed to cover transportation charges, if such charges are not separately billed, and (v) credits or allowances actually granted or allocated upon claims or returns, regardless of the party requesting the return, to the extent included in revenue received. Any amount that would fall within more than one of the above clauses of this section shall be deducted only once.
- 1.5 "Net Revenues" means gross licensing revenue (including, but not limited to, license issue fees, license milestone payments, license maintenance fees, royalties on Net Sales and similar consideration, but excluding payments relating to research and development, received by Mucosal from third party licensees in consideration of the Mucosal Technology as existing as of the Effective Date of this Agreement.
- 1.6 Other Defined Terms. Unless specifically defined herein, all terms shall have the definition provided in the License Agreement.
- 2. Termination of License Agreement. Because the Company no longer wishes to license Mucosal Technology, the Company and Mucosal hereby terminate the License Agreement by mutual consent, except that the following provisions shall expressly survive and remain in full force and effect: 1, 7.2, 8,, 9.1, 10, 12.4 (except that subsection (ii) is hereby deleted and replaced with this Section 2), and 13.
- 3. Assignment of Intellectual Property Rights. The Company hereby assigns to Mucosal all right, title and interest in Company Technology, including the patents and patent applications listed in Schedule 1 attached hereto. The Company also hereby assigns to Mucosal all claims for past, present and future infringement of such Company Technology, including without limitation, all rights to recover damages and grant releases for past infringement.
- 4. Assistance. The Company agrees to promptly execute all patent assignments, patent applications and other documents relating to the Company Technology as reasonably requested by Mucosal. If Mucosal shall be unable to obtain the Company's execution of such documents for any reason, the Company hereby irrevocably appoints Mucosal and its agents as the Company's agents and attorneys-in-fact to execute such documents with the same legal effect as if the Company shall have executed them. The Company shall provide all assistance reasonably requested by Mucosal in the application for registration, prosecution, maintenance, defense and

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enforcement of the Intellectual Property Rights in the Company Technology and similar activities. The Company further agrees to provide information and reasonable assistance to Mucosal in connection with the continued development and commercialization of Licensed Products to Mucosal upon request (with reasonable notice) and at Mucosal's sole expense (including reasonable travel, out-of-pocket, and time expenses). Mucosal shall pay all travel, time, and related out-of pockets expenses incurred by the Company in connection with this Section 4 on or after the date hereof.

- 5. Delivery/Return. On or within thirty days (30) after the Effective Date, the Company shall deliver to Mucosal copies of the Company Technology and shall return all Mucosal Know-How and Confidential Information of Mucosal provided to the Company in the performance of the License Agreement.
- 6. Consideration. In consideration for the rights conveyed and granted to Mucosal herein, Mucosal shall pay the Company royalties on Net Revenues as follows:
- 6.1 Royalties. Mucosal shall pay the Company Revenues.
- 6.2 No Obligation. Mucosal shall have no obligation whatsoever to: maintain, enforce or defend the Mucosal Patent Rights; maintain any trade secrets in its Confidential Information of Mucosal Know-How; commercialize or license any Mucosal Technology or Company Technology, or generate any Net Revenues.

7. Payment Terms.

- 7.1 Payments. Royalty payments shall be made to the Company not later than forty-five (45) days following receipt by Mucosal. A reconciliation of Royalty payments shall be prepared by Mucosal and forwarded to the Company not later than ninety (90) days after the end of each calendar year with a report showing a calculation of Net Revenues for the year.
- 7.2 Records. Mucosal shall maintain its accounting records for calculation of Net Revenues for five (5) years after the due date as to each payment. The Company shall have the right to have an independent auditor perform periodic audits of such records, no more than once in any twelve-month period, during normal business hours and on ten (10) business days' notice.
- 8. Warranty and Indemnity. The Company represents and warrants that no sublicenses were granted under the License Agreement, that the Company owns all right, title and interest in the Company Technology, that to the Company's knowledge, Company Technology is free and clear of all liens, claims, encumbrances or demands of third parties, that to the Company's knowledge, Company Technology does not infinge any third party valid U.S. patent rights, and that to the Company's knowledge, the Company has not previously assigned, licensed or transferred any of its rights in the Company Technology. The Company shall indemnify, defend and hold harmless Mucosal, its Affiliates (as defined in the License Agreement) and licensees from and against any claim, loss, judgement or expense (including reasonable attorneys' and expert witnesses' fees and costs) resulting from or arising in any way out of any such claims by any third parties that shall be based on or the result of any breach of the representations or warranties contained in this Section.

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- Confidentiality. The Company agrees to maintain the confidentiality of any Company Know-How assigned to Mucosal hereunder.
- Disclaimer. MUCOSAL AGREES THAT THE COMPANY TECHNOLOGY IS PROVIDED "AS IS" AND THAT EXCEPT AS EXPRESSLY PROVIDED IN ARTICLE 8 THERE ARE NO OTHER EXPRESS OR IMPLIED WARRANTIES WITH RESPECT TO THE COMPANY TECHNOLOGY, INCLUDING WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Any materials given to Mucosal by Company ("Transferred Materials") are experimental in nature, are provided "as is" and solely for research purposes, and ARE NOT TO BE USED FOR TESTING IN OR TREATMENT OF HUMANS. Transferred Materials are provided by Company and accepted by Mucosal with the understanding that no warranties, express or implied, are given concerning any such materials, including any warranties of merchantability or fitness for a particular purpose. Company makes no representation that use of the Transferred Materials will not infringe any patent, copyright, trademark or other rights of third parties.

Mucosal shall bear all risk to its employees, agents and/or others resulting from any use, directly or indirectly, to which Transferred Materials are put. Recipient agrees that Recipient will indemnify and hold Orapharma harmless from any and all expenses, claims or liability that might result from Mucosal's use of Transferred Materials.

11. Miscellaneous.

Notices. All notices, reports and/or other communications made in accordance with this Agreement, shall be deemed to be duly made or given when received by the addressee, if sent by facsimile transmission, with confirmation of receipt, or by Express Mail, Federal Express or other express delivery service (receipt requested), in each case addressed to such party as its address set forth below (or to such other address as such party may hereafter designate by notice to the other parties):

In the case of the Company:

In the case of Mucosal:

OraPharma, Inc. 732 Louis Drive

Mucosal Therapeutics LLC 277 Linden Street, Suite 201

Warminster, PA 18974

Wellcsley, Massachusetts 02482

Attention: Fax:

Attention: Manager Fax: (781) 235-3811

with a copy to:

with a copy to:

Johnson & Johnson

One Johnson & Johnson

Testa, Hurwitz & Thibeault LLP

Plaza

High Street Towcr 125 High Street

New Brunswick, NJ 08933

Boston, Massachusetts 02110

Attention: Chief Patent

Attention: B. Jean Weidemier, Esq.

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Counsel

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Fax: (617) 248-7100

Fax: (732) 524-2138

- Amendments/Waivers. This Agreement may not be amended or modified, nor may any right or remedy of any party be waived, unless the same is in writing and signed by a duly authorized representative of each party. The waiver by any party of the breach of any term or provision hereof by any other party shall not be construed as a waiver of any other breach.
- No Waiver; Remedies. No failure or delay by any party in exercising any of its rights or remedies hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such right or remedy proclude any other or further exercise thereof or the exercise of any other right or remedy. The rights and remedies of the parties provided in this Agreement are cumulative and not exclusive of any rights or remedies provided by law or equity.
- Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their respective heirs, legal representatives, successors and assigns.
- Entire Agreement. This Agreement constitutes the entire agreement between the parties and supersedes all prior proposals, communications, representations and agreements. whether oral or written, with respect to the subject matter hereof.
- Severability. Any term or provision of this Agreement that is invalid or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such invalidity or unenforceability without rendering invalid or unenforceable the remaining terms and provisions of this Agreement or affecting the validity or enforceability of any of the terms or provisions hereof in any other jurisdiction.
- Headings. The headings used in this Agreement are for convenience of reference only and shall not affect the meaning or construction of this Agreement.
- 11.8 Dispute Resolution/Arbitration. Any controversy or claim arising out of or relating to this Agreement shall be resolved by arbitration before a single arbitrator in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("AAA") then pertaining (available at www.adr.org), except where those rules conflict with this provision, in which case this provision controls. Any court with jurisdiction shall enforce this clause and enter judgment on any award. The arbitrator shall be selected within twenty business days from commencement of the arbitration from the AAA's National Roster of Arbitrators pursuant to agreement or through selection procedures administered by the AAA. Within 45 days of initiation of arbitration, the parties shall reach agreement upon and thereafter follow procedures, including limits on discovery, assuring that the arbitration will be concluded and the award rendered within no more than eight months from selection of the arbitrator or, failing agreement, procedures meeting such time limits will be designed by the AAA and adhered to by the parties. The arbitration shall be held in New York and the arbitrator shall apply the substantive law of New York, except that the interpretation and enforcement of this arbitration provision shall be governed by the Federal Arbitration Act. Prior to commencement of arbitration, emergency relief is available from any court to avoid irreparable harm. THE ARRITRATOR SHALL NOT

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AWARD EITHER PARTY PUNITIVE, EXEMPLARY, MULTIPLIED OR CONSEQUENTIAL DAMAGES, OR ATTORNEYS FEES OR COSTS.

Prior to commencement of arbitration, the parties must attempt to mediate their dispute using a professional mediator from AAA, the CPR Institute for Dispute Resolution, or like organization selected by agreement or, absent agreement, through selection procedures administered by the AAA. Within a period of 45 days after the request for mediation, the parties agree to convene with the mediator, with business representatives present, for at least one session to attempt to resolve the matter. In no event will mediation delay commencement of the arbitration for more than 45 days absent agreement of the parties or interfere with the availability of emergency relief.

- 11.9 Rules of Construction. Each party agrees that it has participated in the formation of this Agreement and that the language and terms of this Agreement shall not be presumptively construed against any party.
- 11.10 Governing Law. This Agreement, including the performance and enforceability hereof, shall be governed by and construed in accordance with the laws of the State of New York, without reference to choice of law doctrine.

IN WITNESS WHEREOF, each party has executed this Agreement by its duly authorized representative.

MUCOSAL THERAPEUTICS LLC

Name: Home Barnet

Title: / Marager Date: Mara 26,2004

ORAPHARMA, INC.

By: MICHAEL KISHBAUGH

Title: PRESIDENT

Date: 4-7.04

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Schedule 1

All patents and pending patent application in whatever country claiming the benefit of priority to any of the following US patents and US patent applications:

ORA5001 Family

- USSN 09/661,836 FORMULATIONS FOR TREATING OR PREVENTING **MUCOSITIS**
- US Pat. No. 6,683,067 **MUCOSITIS COMPOSITIONS**
- USSN 10/007,197 FORMULATIONS FOR TREATING OR PREVENTING **MUCOSITIS**

ORA5003 Family

 USSN 10/601259 RAPID RELEASE TETRACYCLINE FORMULATIONS FOR TREATING OR PREVENTING MUCOSITIS

ORA5005 Family

USSN 10/679,913 MUCOADHESIVE TETRACYCLINE FORMULATIONS

ORA5012 Family

RECORDED: 02/09/2006

- USSN 10/260,093 METHODS AND COMPOSITIONS FOR TREATING AND PREVENTING MUCOSITIS
- US Pat. No. 6,458,777 METHODS AND COMPOSITIONS FOR TREATING AND PREVENTING MUCOSITIS
- USSN 09/800,855 METHODS AND COMPOSITIONS FOR TREATING AND PREVENTING MUCOSITIS

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