



To the Honorable Commissioner of Patents :

101484547

including the attached original documents or copy thereof.

1. Name of conveying party(ies):

Dr. Yair Ben-Ziony

Dr. Boaz Arzi

8-29-00

2. Name and address of receiving party(ies)

Name: Novartis Animal Health Inc.

Internal Address: P. O. Box, CH-4002

Street Address: _____

City: Basel State: Switzerland ZIP: _____

Additional name(s) of conveying party(ies) attached? Yes No

3. Nature of conveyance:

Assignment

Merger

Security Agreement

Change of Name

Other _____

Execution Date: _____

Additional name(s) & address(es) attached? Yes No

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

If this document is being filed together with a new application, the execution date of the application is: _____

A. Patent Application No.(s)

09/244,013

B. Patent No.(s)

Additional numbers attached? Yes No

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

Name: Thomas Hoxie

Internal Address: Novartis Corporation

Patent and Trademark Dept.

Street Address: 564 Morris Avenue

City: Summit State: NJ ZIP: 07901-1027

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41) \$ 40

Enclosed

Authorized to be charged to deposit account and any other additional fees required.

8. Deposit account number:

19-0134 (in the name of Novartis Corporation)

(Attach duplicate copy of this page if paying by deposit account)

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.

Michael P. Morris

Name of Person Signing
Reg. No. 34,513

Michael P. Morris

Signature

AUG 25 2000

Date

Certificate of mailing on reverse side

Total number of pages including cover sheet, attachments, and document: 7

Mail documents to be recorded with required cover sheet information to:
Commissioner of Patents & Trademarks, Box Assignments
Washington, D.C. 20231

10/10/2000 6TON11 00000171 190134 09244013

01 FC:581 40.00 CH

ABSTRACT OF AGREEMENT

1. AGREEMENT NUMBER, SUBJECT MATTER

- 1.1 Agreement No. **AH 113**
- 1.2 Subject Matter / Type of Agreement: Research Agreement

2. PARTIES

- 2.1 Novartis Party: **Novartis Animal Health Inc.**
- 2.2 Counterparty: **Dr. Yair Ben-Ziony**
Hacarmel St. 19A, P.O. Box 156,
Kiryat Tivot 36081, Israel
&
Dr. Boaz Arzi
131 S, Love St., Thomasville,
GA 31792, USA

Abbreviation: The Researchers

3. TERRITORY

- Agreement is applicable for the following country(ies): Worldwide

4. TERM AND TERMINATION

- Date of signature: day month year
12./16. 08. 1999
- Effective date: day month year
16. 08. 1999
- Duration: Unlimited

5. BACKGROUND AND SUMMARY OF THE AGREEMENT

Novartis acquires lufenuron anti-fungal activity patents from Israeli researches against payment of CHF 140'000.-- plus a success fee based on incremental PROGRAM sales (if any) in US during the 2 years following the publication of an article by the Israeli researches in a US vet journal.

6. DISTRIBUTION

Ch. Hildenbrand
R. Schenker
R. Steiger
S. Towers
H. Lesiecki



Sabine Blum
AH 5.1

AGREEMENT

between

Dr Yair Ben-Ziony, Hacarmel St. 19A, P.O. Box 156, Kiryat Tivot 36081, Israel
&

Dr Boaz Arzi, 131 S, Love St., Thomasville, GA 31792, USA
("Researchers")

and

Novartis Animal Health Inc.
P.O. Box, CH-4002 Basel, Switzerland
("Novartis")

Whereas, the Researchers have conducted certain studies regarding the anti-fungal activity of Novartis' proprietary veterinary substance lufenuron and filed patent applications in this context; and

Whereas, Novartis is interested in obtaining the exclusive right to use the results of these studies for its own purposes as well as to acquire the respective patents;

Now, therefore, the parties have agreed as follows:

1. Definitions

- 1.1 "Patents" shall mean the Israeli Patent Applications Nos. 123517, dated 2 Mar 98, and 124128, dated 16 Apr 98; the PCT Patent Application No. PCT/IL 99/00048, dated 26 Jan 99; the US Patent Application No. 09/244,013, dated 4 Feb 99; and all patents granted on the basis of these applications, as well as any other related patents.
- 1.2 "Program" shall mean Novartis' flea control products containing the sole active ingredient lufenuron, irrespective of whether such products are marketed under the trademark PROGRAM (i.e. generic lufenuron sales shall be included).
- 1.3 "Study" or "Studies" shall mean all studies regarding the anti-fungal activity of Program that the Researchers are conducting or have conducted and completed.
- 1.4 "Study Results" shall mean all information pertaining to and all results (data, conclusions, etc.) obtained during or derived from the Studies.
- 1.5 "Renowned Journal" shall mean the "Journal of the American Veterinary Medical Association", "Veterinary Medicine", "The Compendium", or any other renowned, refereed veterinary journal in the United States.

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- 1.6 "Reference Period" shall mean the 12 calendar months preceding the first publication of an article of the Researchers about the Studies in a Renowned Journal. Said publication is anticipated to appear before the end of 2000.
- 1.7 "First Bonus Period" shall mean the 12 months period starting with the calendar month following the first publication of an article of the Researchers about the Studies in a Renowned Journal.
- 1.8 "Second Bonus Period" shall mean the 12 months period following the end of the First Bonus Period.

2. Obligations of the Researchers

- 2.1 The Researchers shall transfer to Novartis the exclusive, unfettered, and full ownership of the following:
 - a) The right to use the Study Results; and
 - b) the Patents.
- 2.2 The Researchers shall hand over all Study Results to Novartis and assist Novartis in the prompt transfer of the Patents. This means that the patent rights have to be assigned to Novartis AG within 30 days after the effective date of this Agreement. Patent related documents, such as the above-mentioned patent applications and a copy of each and any communication to any patent office have to be transmitted to Novartis within the same time frame. Moreover, the Researchers undertake to support Novartis in all patent related matters, i.e. to provide additional data, arguments and declarations if necessary for getting a local patent granted.

3. Obligations of Novartis

In consideration for the rights mentioned under Clause 2 above, Novartis shall pay the Researchers the amounts mentioned in Clauses 3.1 to 3.4 below (the amounts mentioned in 3.2 only if and when the stated conditions are met):

- 3.1 A basic compensation of CHF 140,000.- (payable within 30 days from the date of execution of this Agreement).
- 3.2 (i) A bonus (as shown below) if Novartis' Program net sales in the United States in local currency during the First Bonus Period show, when compared to Novartis' Program net sales in the United States in local currency during the Reference Period, an increase by a certain percentage (as shown below):
 - a) CHF 200'000.- if the respective net sales increase by more than 20 %; and
 - b) CHF 8'000.- for each percent of increase of the respective net sales over and above 20 %;

and

(ii) a further bonus (as shown below) if Novartis' Program net sales in the United States in local currency during the Second Bonus Period show, when compared to Novartis' Program net sales in the United States in local currency during the Reference Period, an increase by a certain percentage (as shown below):

a) CHF 200'000.- if the respective net sales increase by more than 20 %; and
b) CHF 8'000.- for each percent of increase of the respective net sales over and above 20 %.

Novartis shall inform the Researchers of the respective annual net sales developments within two months from the end of each Bonus Period. Upon request of the Researchers, Novartis shall also provide a certified confirmation from its auditors re the accuracy of said information.

- 3.3 Novartis shall a) reimburse the Researchers for documented out-of-pocket expenses for a maximum of 2'000 reprints of the publication mentioned in Clause 1.7 above, b) bear the cost related to the transfer of the Patents under Clause 2.2 above, and c) bear the cost of the installation by the Researchers of a specific internet website aimed at divulging the Study Results and patent information as well as exchanging relevant information with interested parties, however, only in coordination with and subject to pre-approval by Novartis.
- 3.4 Subject to Novartis' pre-approval in writing (concerning type of conference and disclosure), Novartis shall bear the Researchers' extra expenses related to presentations of the Study Results at conferences (including business class air tickets and payment of CHF 500.- per person per day).
- 3.5 All amounts payable under above Clauses 3.1 to 3.4 shall be transferred by Novartis into a bank account to be designated by the Researchers, within 30 days from the receipt of a corresponding invoice.

4. Confidentiality

- 4.1 Both parties shall treat the terms of this Agreement strictly confidential unless disclosure is necessary (i) by Novartis to effect the transfer of the rights provided in Clause 2 above, or to (ii) for either party to enforce a right granted under this Agreement against the other party.
- 4.2 The Researchers shall keep strictly confidential any and all sensitive commercial and technical information that they will receive or may have received from Novartis in connection with the performance and negotiation for this Agreement.
- 4.3 The obligations in this confidentiality clause shall survive an early termination of this Agreement in perpetuity.

5. Duration

- 5.1 This Agreement shall come into force on the day of its signature by both parties and, subject to the early termination clause below, shall remain in force in perpetuity.
- 5.2 Either party shall have the right to terminate this Agreement with immediate effect by giving written notice thereof (i) if the other party commits a breach of any provision of this Agreement and fails to remedy such breach within one month from the receipt of a written request from the non-defaulting party, or (ii) if the other party goes bankrupt or gets into a bad financial situation of similarly serious nature.

6. Miscellaneous Provisions

- 6.1 This Agreement is entered into by the Researchers jointly and severally. The internal allocation among the Researchers of any benefits under this Agreement shall be the sole responsibility of the Researchers and shall not impact in any way on Novartis' position.
- 6.2 If any provisions of this Agreement are invalid, the remaining provisions shall not be affected on that account.
- 6.3 This Agreement and all rights and obligations hereunder are personal to the parties hereto and may not be assigned without the express prior written consent of the other.
- 6.4 Modifications to this Agreement shall not be valid unless made in writing and duly signed by both parties.

7. Governing Law and Venue

- 7.1 This Agreement shall be governed by and interpreted in accordance with the laws of Switzerland.
- 7.2 All disputes arising out of or in connection with this Agreement shall be finally settled under the Rules of Arbitration of the International Chamber of Commerce by three arbitrators appointed in accordance with said Rules. The place of arbitration shall be Zurich, the language shall be English.

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Kiryat Tivon, *16/8/99*.....

Dr Yair Ben-Ziony

Dr. Yair Ben-Ziony.....

Dr Boaz Arzi

Boaz Arzi.....

Basel, *12 August 1999*.....

Novartis Animal Health Inc.

P. Howler

Dr Peter Kornicker
Legal Counsel

R. Steiger

Dr Rolf F. Steiger
R&D Alliance Manager