

12-04-2001

Docket No 0575/58715-A-PCT-US/  
JPW/ADM

FORM PTO-1595 (Substitute)  
(Rev. 8-06)



101907546

U.S. DEPARTMENT OF COMMERCE  
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10.26.01

1. Name of conveying party(ies):  
Leslie B. Vosshall, Hubert O. Amrein  
and Richard Axel

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

3. Nature of Conveyance:  
 Assignment  Merger  
 Security Agreement  Change of Name  
 Other \_\_\_\_\_

Execution Date(s): August 31, 2001; September  
10, 2001; September 5, 2001.

2. Name and address of receiving party(ies):  
Name: The Trustees of Columbia University in  
the City of New York  
Internal Address: \_\_\_\_\_

Street Address: West 116th Street and Broadway

City/State/Zip: New York, New York 10027

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(s) of the application is(are): \_\_\_\_\_

A. Patent Application No.(s) U.S. Serial No.  
09/932,227 filed August 17, 2001

B. Patent No.(s) \_\_\_\_\_

Additional numbers attached?  Yes  No

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

Name: John P. White

Internal Address: Cooper & Dunham LLP

Street Address: 1185 Avenue of the Americas

City/State/Zip: New York, New York 10036

6. Total number of applications and patents involved: \_\_\_\_\_

7. Total fee (37 CFR §3.41): ..... \$ 40.00

Enclosed  
 Authorized to be charged to deposit account

8. Deposit account number:  
03-3125

12/03/2001 6TOM11 00000042 033125 09932227  
01 FC:581 40.00 CH

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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.

John P. White  
Name of Person Signing

John P. White  
Signature

November 21, 2001  
Date

Reg. No. 28,678

Total Number of pages including cover sheet, attachments and document: 4

I hereby certify that this correspondence is being deposited this date with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents and Trademarks, 2900 Crystal Drive, Arlington, VA 22202-3513  
John P. White  
Reg. No. 28,678  
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Date

OMB No. 0651-0011 (exp. 4/94)

Mail documents to be recorded with required cover sheet information to:  
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PATENT

REEL: 012327 FRAME: 0364

# Assignment

In consideration of One Dollar (\$1.00), and other good and valuable considerations, the receipt of which is hereby acknowledged, we, the undersigned, Leslie B. Vosshall residing at 601 West 113th Street, Apt. 3H, New York, NY 10027, USA; Hubert O Amrein residing at 604 Carved Oak Drive, Durham, NC 27707, USA; and Richard Axel residing at 435 Riverside Drive, Apt. 62, New York, NY 10027, USA

Hereby sell, assign and transfer to The Trustees of Columbia University in the City of New York a corporation of the State of New York having a place of business at West 116th Street and Broadway in the County of New York and State of New York 10027 its successors, assigns and legal representatives, the entire right, title and interest for all countries, in and to any and all inventions which are disclosed and claimed, and any and all inventions which are disclosed but not claimed, in the application for United States Patent, which has been executed by the undersigned on August 31, 2001; September 10, 2001; and is entitled September 5, 2001,

GENES ENCODING INSECT ODORANT RECEPTORS AND USES THEREOF


(U.S. Serial No. 09/932,227 filed August 17, 2001, a continuation of PCT International Application No. PCT/US00/04995, filed February 25, 2000, claiming priority and a continuation-in-part of U.S. Serial No. 09/257,706, filed February 25, 1999)

and in and to said application and all divisional, continuing, substitute, renewal, reissue, and all other applications for U.S. Letters Patent or other related property rights in any and all foreign countries which have been or shall be filed on any of said inventions disclosed in said application; and in and to all original and reissued patents or related foreign documents which have been or shall be issued on said inventions;

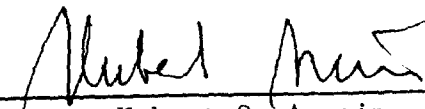
Authorize and request the Commissioner of Patents of the United States to issue to said Assignee, the corporation above named, its successors, assigns and legal representatives, in accordance with this assignment, any and all United States Letters Patent on said inventions or any of them disclosed in said application;

Agree that said Assignee may apply for and receive foreign Letters Patent or rights of any other kind for said inventions, or any of them; and may claim, in applications for said foreign Letters Patent or other rights, the priority of the aforesaid United States patent application under the provisions of the International Convention of 1883 and later modifications thereof, under the Patent Cooperation Treaty, under the European Patent Convention or under any other available international agreement; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this assignment, the undersigned or the undersigned's executors or administrators will, for the United States and all foreign countries execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications or other documents on any and all said inventions; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee, its successors, assigns and representatives, all facts known and documents available to the undersigned relating to said inventions and the history thereof; testify in all legal proceedings; and generally do everything possible which said Assignee, its successors, assigns or representatives shall consider desirable for aiding in securing, maintaining and enforcing proper patent protection for said inventions and for vesting title to said inventions and all applications for patents or related foreign rights and all patents on said inventions, in said Assignee, its successors, assigns and legal representatives; and

**Covenant** with said Assignee, its successors, assigns and legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

 [L.S.]  
Leslie B. Vosshall

Date: 8/31 2001  
Witness: Miriam Gutierrez  
Miriam Gutierrez  
45 Park Terrace West  
New York, NY 10034

 [L.S.]  
Hubert O. Amrein

Date: 9/10/2001 2001  
Witness: St Bray  
STEVEN BRAY  
2103 Ruffin St.  
Durham, NC 27704

*Richard Axel*

[L.S.]

Date: 9-05-01 2001

Richard Axel

Witness: Miriam Gutierrez  
Miriam Gutierrez  
45 Park Terrace West  
New York, NY 10034

\_\_\_\_\_ [L.S.]

Date: \_\_\_\_\_ 20

Witness: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
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