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DEPARTMENT OF COMMERCE  
Patent and Trademark Office



11/29/05

PA 103129531

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

**1. Name of conveying party(ies):**  
Ichiro HIRAO (09/28/2005), Shigeyuki YOKOYAMA (09/28/2005), Michiko HIRAO (09/28/2005), and Tsuneo MITSUI (09/28/2005)  
Additional name(s) of conveying party(ies) attached?  Yes  No

**2. Name and address of receiving party(ies)**  
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Country: \_\_\_\_\_ Zip: \_\_\_\_\_  
Additional name(s) & address(es) attached:  Yes  No

**3. Nature of conveyance/Execution Date(s):**  
Execution Date(s): in parentheses after inventor name  
 Assignment  Merger  Change of Name  
 Security Agreement  Joint Research Agreement  
 Government Interest Assignment  
 Executive Order 9424, Confirmatory License  
 Other \_\_\_\_\_

**4. Application or patent number(s):**  
A. Patent Application No.(s)  
10/521,454  
Additional numbers attached?  Yes  No

This document is being filed together with a new application.  
B. Patent No.(s)  
 Yes  No

**5. Name and address to whom correspondence concerning document should be mailed:**  
Name: Gerald M. Murphy, Jr.  
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**6. Total number of applications and patents involved:**   
**7. Total fee (37 CFR 1.21(h) & 3.41) \$** 40.00  
 Authorized to be charged by credit card  
 Authorized to be charged to deposit account  
 Enclosed  
 None required (government interest not affecting title)

**8. Payment Information**  
a. Credit Card Last 4 Numbers \_\_\_\_\_  
Expiration Date \_\_\_\_\_  
b. Deposit Account Number \_\_\_\_\_  
Authorized User Name \_\_\_\_\_

**9. Signature:**  
[Signature] #42874  
Signature \_\_\_\_\_ Date November 29, 2005  
Gerald M. Murphy, Jr. - 28,977  
Name of Person Signing \_\_\_\_\_ Total number of pages including cover sheet, attachments, and documents:

12/01/2005 ECOOPER 00000151 10521454  
01 FC:8021 40.00 DP  
Birch, Stewart, Kolasch & Birch, LLP

GMM/CAM: bmp

PATENT  
REEL: 017258 FRAME: 0382

Additional Conveying Party(ies)/Execution Date(s) (1. Continued):

Additional Assignees (2. Continued):

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Assignee Name: \_\_\_\_\_

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Assignee Name: \_\_\_\_\_

Internal Address:

Street Address:

City: \_\_\_\_\_ State: \_\_\_\_\_ Country: \_\_\_\_\_ Zip: \_\_\_\_\_

Additional Applications and/or Patents (4. Continued):

Additional Patent Application Numbers  
4A. Continued:

Additional Patent Numbers  
4B. Continued:

Additional numbers attached?

Yes  No

BIRCH, STEWART, KOLASCH & BIRCH, LLP

UNITED STATES PATENT RIGHTS, OR  
UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS

ATTORNEY DOCKET NO.  
0230-0222PUS1

ASSIGNMENT

Application No. 10/521,454

Filed January 14, 2005

Insert Name(s) of Inventor(s)

WHEREAS, Ichiro HIRAO, Shigeyuki YOKOYAMA, Michiko HIRAO and  
Tsuneo MITSUI

Insert Title of Invention

(hereinafter designated as the undersigned) has (have) invented certain new and useful improvements in  
NUCLEOSIDES OR NUCLEOTIDES HAVING NOVEL UNNATURAL BASES AND USE THEREOF

for which an application for Letters Patent of the United States of America has been executed by the undersigned (except in the case of a provisional application).

Insert Date of Signing of Application

on September 28, 2005; and

Insert Name of Assignee

WHEREAS, RIKEN and JAPAN SCIENCE AND TECHNOLOGY AGENCY

Insert Address of Assignee

of 2-1, Hirosawa, Wako-shi, Saitama 351-0198 Japan and 4-1-8, Honcho,  
Kawaguchi-shi, Saitama 332-0012 Japan

its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor in the United States of America and

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in any and all foreign countries.

NOW, THEREFORE, in consideration of the sum of Ten Dollars (\$10.00) to the undersigned in hand paid, the receipt of which is hereby acknowledged, and other good and valuable consideration, the undersigned has (have) sold, assigned and transferred, and by these presents does sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States of America, its territories, dependencies and possessions and the entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America, its territories, dependencies and possessions, and if the box above is designated, in any and all foreign countries;

and to any and all divisions, reissues, continuations, conversions and extensions thereof for the full term or terms for which the same may be granted.

The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional, conversion or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division, conversion or reissue thereof or Letter Patent(s) or reissue patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

The undersigned agree(s) to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

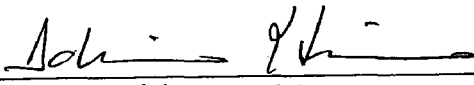
The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States of America patent(s) or a grant of a valid United States of America and any foreign patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

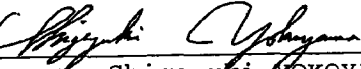
The undersigned hereby authorize(s) and request(s) the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patents resulting from said application or any continuing, divisional conversion or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) the full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the law firm of Birch, Stewart, Kolasch & Birch, LLP the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

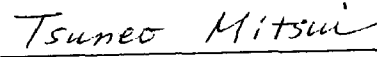
The undersigned hereby covenant(s) that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date September 28, 2005 Name of Inventor   
(signature) Ichiro HIRAO

Date September 28, 2005 Name of Inventor   
(signature) Shigeyuki TOKOYAMA

Date September 28, 2005 Name of Inventor   
(signature) Michiko HIRAO

Date September 28, 2005 Name of Inventor   
(signature) Tsuneco MITSUI

Date \_\_\_\_\_, Name of Inventor \_\_\_\_\_  
(signature)

Date \_\_\_\_\_, Name of Inventor \_\_\_\_\_  
(signature)