

PATENT ASSIGNMENT

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| SUBMISSION TYPE: | NEW ASSIGNMENT |
| NATURE OF CONVEYANCE: | ASSIGNMENT |
| CONVEYING PARTY DATA | |
| Name | Execution Date |
| Shomir Ghosh | 07/28/2009 |
| RECEIVING PARTY DATA | |
| Name: | EPIX DELAWARE, INC. |
| Street Address: | Four Maguire Road |
| City: | Lexington |
| State/Country: | MASSACHUSETTS |
| Postal Code: | 02421 |
| PROPERTY NUMBERS Total: 2 | |
| Property Type | Number |
| Application Number: | 61029074 |
| PCT Number: | US0934018 |
| CORRESPONDENCE DATA | |
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| ATTORNEY DOCKET NUMBER: | MICRODOSE/EPIX 31 PCT |
| NAME OF SUBMITTER: | Norman P. Soloway |
| Total Attachments: 4 source=ASSIGN.GHOSH#page1.tif source=ASSIGN.GHOSH#page2.tif | |

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ASSIGNMENT BY INVENTOR

THIS ASSIGNMENT, made this 28th day of JULY, 2009, by
Shomir Ghosh (hereinafter referred to as Assignor), residing at 134 Sewall Avenue, Brookline,
Massachusetts 02446;

WHEREAS, Assignor has invented certain new and useful improvements in
METHODS OF MAKING NUCLEOSIDE TETRAPHOSPHATE ANALOGS, set forth in a
Patent application for Letters Patent, already filed on February 13, 2009 as International Patent
Application No. PCT/US2009/034018, claiming priority to United States Patent Application
No. 61/029,074, filed on February 15, 2008; and

WHEREAS, EPIX Delaware, Inc., a Corporation organized under and pursuant to
the laws of Delaware having its principal place of business at Four Maguire Road, Lexington,
Massachusetts 02421 (hereinafter referred to as Assignee), is desirous of acquiring the entire
right, title and interest in and to said inventions and said Application for Letters Patent, and in
and to any Letters Patent to be obtained therefore and thereon.

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and
sufficient consideration, the receipt of which is hereby acknowledged, Assignor has sold,
assigned, transferred and set over, and by these presents do sell, assign, transfer and set over,
unto Assignee, its successors, legal representatives and assigns, the entire right, title and
interest in and to the above-mentioned inventions and application for Letters Patent, and in and
to any and all direct and indirect divisions, continuations and continuations-in-part of said
application, and any and all Letters Patent in the United States and all foreign countries which
may be granted therefor and thereon, and reissues, reexaminations and extensions of said
Letters Patent, and any right, title and interest Assignor may have in provisional applications to
which said application claims priority (including U.S. Patent Application Serial No.
61/029,074, filed on February 15, 2008), and all rights under the International Convention for
the Protection of Industrial Property, the same to be held and enjoyed by Assignee, for its own
use and benefit and the use and benefit of its successors, legal representatives and assigns, to
the full end of the term or terms for which Letters Patent may be granted and/or extended, as

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fully and entirely as the same would have been held and enjoyed by Assignor, had this sale and assignment not been made.

AND for the same consideration, Assignor hereby represents and warrants to Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to Assignee under law or that have already been transferred to Assignee, Assignor is a lawful owner of a right, title and interest in and to the said inventions and application for Letters Patent above-mentioned, and that the same are unencumbered and that Assignor has good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, Assignor hereby covenants and agrees to and with Assignee, its successors, legal representatives and assigns, that Assignor will sign all papers and documents, take all lawful oaths and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of any Letters Patent and applications for Letters Patent for said inventions, without charge to Assignee, its successors, legal representatives and assigns, whenever counsel of Assignee, or counsel of its successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said Patent application for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions in any country, including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.

AND Assignor hereby requests the Commissioner of Patent and Trademarks to issue said Letters Patent of the United States to Assignee, as Assignee of said inventions and the Letters Patent to be issued thereon, for the sole use and benefit of Assignee, its successors, legal representatives and assigns.

AND Assignor hereby grants the following individuals 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 United States Patent and Trademark Office for recordation of this document:

GOODWIN PROCTER LLP

All practitioners at Customer Number 051414

AND Assignor acknowledges an obligation of assignment of this invention to
Assignee at the time the invention was made.

Shomir Ghosh

Shomir Ghosh

Date: July 28, 2009

United States of America)

State of Massachusetts) ss.:

County of Middlesex)

On this 28th day of July, 2009, before me
personally came Shomir Ghosh, to me known to be the individual
described in and who executed the foregoing instrument, and acknowledged execution
of the same.

Lori A. Dupuis
Notary Public

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LORI A. DUPUIS
Notary Public
Commonwealth of Massachusetts
My Commission Expires
December 19, 2014

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RECORDED: 02/25/2010

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