504162775 01/04/2017

PATENT ASSIGNMENT COVER SHEET

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| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|---------------------|----------------|
| STEPHEN J. BENKOVIC | 06/21/2002 |
| FRANK SALINAS | 06/10/2002 |

RECEIVING PARTY DATA

| Name: | THE PENN STATE RESEARCH FOUNDATION | | |
|-----------------|------------------------------------|--|--|
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| City: | UNIVERSITY PARK | | |
| State/Country: | PENNSYLVANIA | | |
| Postal Code: | 16802-7000 | | |

PROPERTY NUMBERS Total: 1

| Property Type | Number | |
|---------------------|----------|--|
| Application Number: | 15070401 | |

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| ATTORNEY DOCKET NUMBER: | 307418-70 |
|-------------------------|--------------------|
| NAME OF SUBMITTER: | LAURA A. LABEOTS |
| SIGNATURE: | /Laura A. Labeots/ |
| DATE SIGNED: | 01/04/2017 |

Total Attachments: 2

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PATENT 504162775 REEL: 040840 FRAME: 0416

ASSIGNMENT

Docket No. 7418/87191

Serial No. 10/125,973

Filed: April 19, 2002

Stephen J. Benkovic and Frank Salinas, hereinafter the assignors, for good and valuable consideration, hereby assign to THE PENN STATE RESEARCH FOUNDATION, a not-for-profit corporation, having an office at 304 Old Main, University Park, PA 16802-7000 hereinafter the assignee, its successors and assigns, the entire right, title and interest in the invention or improvements disclosed in an application for Patent in the United States, identified as Case No. 7418/87191 in the offices of Welsh & Katz, Ltd., 120 S. Riverside Plaza, 22nd Floor, Chicago, Illinois 60606 and entitled METHODS FOR NUCLEIC ACID MANIPULATION, and in any and all other applications, both United States and foreign, which the assignors or assignee may file, either solely or jointly with others, on said invention or improvements, and in any and all patents of the United States and foreign countries which may be obtained on any of said applications and in any reissue or extension of such patents.

The assignors authorize the law firm of Welsh & Katz, Ltd. to enter the Serial No. and filing date of said application for patent in the spaces provided above.

The assignors hereby authorize and request the Commissioner of Patents and Trademarks to issue said Patent to said assignee.

The assignors warrants themselves to be the owners of the entire right, title and interest in said invention or improvements and to have the right to make this assignment, and further warrants that there are no outstanding prior assignments, licenses, or other encumbrances on the interest herein assigned.

For said considerations the assignors hereby agree, upon the request and at the expense of said assignee, its successors and assigns, to execute any and all divisional, continuation and substitute applications for said invention or improvements, and any necessary declaration, oath, or affidavit relating thereto, and any application for the reissue or extension of any Patent that may be granted upon said application, and any and all applications and other documents for Patent in foreign countries on said invention or improvements that said assignee, its successors, or assigns may deem necessary or expedient, and for the said considerations the assignor further agrees, upon the request of said assignee, its successors, or assigns, to cooperate to the best of the ability of the assignors with said assignee, its successors, or assigns, in any proceedings or transactions involving such application or patents, including the preparation and execution of preliminary statements, giving and producing evidence, and performing any and all other acts necessary to obtain and enforce said Patent, both United States and foreign, and vest all rights therein hereby conveyed in the assignee, its successors, and assigns, whereby said patent will be

PATENT REEL: 040840 FRAME: 0417 held and enjoyed by the said assignee, its successors and assigns to the full end of the term for which said Patent will be granted, as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment had not been made.

| Date: 6/21/6 |) 2 | | Stept ! | \(\(\) |
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| State of PA |) | , | Stephen J. Ber | nkovic |
| County of Cont |) SS (****) | | | |
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