

<b>PATENT ASSIGNMENT COVER SHEET</b>
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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
LUKE T. DAUM	12/22/2016
GERALD W. FISCHER	01/04/2017
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	LONGHORN VACCINES AND DIAGNOSTICS, LLC
<b>Street Address:</b>	2 BETHESDA METRO CENTER
<b>Internal Address:</b>	SUITE 910
<b>City:</b>	BETHESDA
<b>State/Country:</b>	MARYLAND
<b>Postal Code:</b>	20814
<b>PROPERTY NUMBERS Total: 4</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	62161527
<b>Application Number:</b>	62232666
<b>Application Number:</b>	15152871
<b>PCT Number:</b>	US2016032033
<b>CORRESPONDENCE DATA</b>	
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<b>Address Line 4:</b>	WASHINGTON, D.C. 20007
<b>ATTORNEY DOCKET NUMBER:</b>	3022.034.US
<b>NAME OF SUBMITTER:</b>	JAMES REMENICK
<b>SIGNATURE:</b>	/James Remenick/
<b>DATE SIGNED:</b>	01/04/2017

**Total Attachments: 6**

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## ASSIGNMENT

WHEREAS, we, Gerald W. Fischer, with a residence address at 6417 Lybrook Drive, Bethesda, MD 20817, and Luke T. Daum, with a residence address at 318 Larkwood Drive, San Antonio, Texas 78209 (the "Assignors") are the inventors and owners of all right, title, and interest in and to the improvements entitled:

### **RAPID METHODS FOR THE IDENTIFICATION OF NUCLEIC ACIDS FROM BIOLOGICAL SAMPLES**

which is disclosed and described in United States Patent Application No. 15/152,871, filed May 12, 2016, which claims priority to U.S. Provisional Application No. 62/232,666 filed September 25, 2015, and U.S. Provisional Application No. 62/161,527 filed May 14, 2015, and International Application No. PCT/US2016/32033, filed May 12, 2016, and any and all national stage applications corresponding thereto (the "Applications").

WHEREAS, Longhorn Vaccines and Diagnostics, LLC, a company having a place of business located at 2 Bethesda Metro Center, Suite 910, Bethesda, MD 20814 (the "Assignee"), is desirous of acquiring all rights to the improvements and under the application;

NOW, THEREFORE, in view of good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by Assignors, Assignors do hereby sell, assign and transfer unto said Assignee, its successors, assigns and legal representatives, Assignors' entire right, title, and interest in the above-referenced Applications, including any non-provisional applications that claim priority thereto, all right to claim priority and all right of recovery for prior infringement, in and throughout the United States of America (including its territories and dependencies) and all countries foreign thereto in and to said improvements, said United States application, any other United States applications, including any other provisional, and any non-provisional, divisional, renewal, substitute, continuation, reexamination and reissue applications, based in whole or in part on said United States provisional application or in whole or in part on said invention, any right of priority based in whole or in part on any of the aforesaid United States provisional applications or in whole or in part on said improvements, any foreign applications, including international and regional applications, based in whole or in part on any of the aforesaid United States applications or in whole or in part on said improvements, and in and to any and all letters patent, including extensions thereof, of any country which have been or may be granted on any of the aforesaid applications or on said improvements or any parts thereof;

AND Assignee hereby authorizes and requests its agents, Remenick PLLC, whose address is 1025 Thomas Jefferson Street, N.W., Suite 175, Washington, D.C. 20007, to insert hereon any identification necessary or desirable for recordation of this document or any information necessary to correct typographical, grammatical or other errors in this document, including the filing date and application number of said application when known;

AND Assignors hereby agree for themselves and their heirs, executors, administrators, successors and assigns to execute without further consideration any further documents and instruments which may be necessary, lawful and proper in the prosecution of said above-referenced application or in the preparation or prosecution of any continuing, substitute, divisional, renewal, reexamination or reissue application or in any amendments, extensions or





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