

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT7113767

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	NUNC PRO TUNC ASSIGNMENT	
<b>EFFECTIVE DATE:</b>	04/01/2020	
<b>CONVEYING PARTY DATA</b>		
<b>Name</b>		<b>Execution Date</b>
ELITECHGROUP, INC.		12/20/2021
<b>RECEIVING PARTY DATA</b>		
<b>Name:</b>	ELITECHGROUP MDX LLC	
<b>Street Address:</b>	21720 23RD DRIVE SE	
<b>City:</b>	BOTHELL	
<b>State/Country:</b>	WASHINGTON	
<b>Postal Code:</b>	98021	
<b>PROPERTY NUMBERS Total: 42</b>		
<b>Property Type</b>	<b>Number</b>	
Patent Number:	6972339	
Patent Number:	7252940	
Patent Number:	7319022	
Patent Number:	7348146	
Patent Number:	7381818	
Patent Number:	7541454	
Patent Number:	7553643	
Patent Number:	7582739	
Patent Number:	7601851	
Patent Number:	7671218	
Patent Number:	7718374	
Patent Number:	7723038	
Patent Number:	7759126	
Patent Number:	7767834	
Patent Number:	7851606	
Patent Number:	7790385	
Patent Number:	8008522	
Patent Number:	8067177	
Patent Number:	8163910	

Property Type	Number
Patent Number:	8389745
Patent Number:	8569516
Patent Number:	8969003
Patent Number:	8980855
Patent Number:	9056887
Patent Number:	9085800
Patent Number:	9169256
Patent Number:	9328384
Patent Number:	9334495
Patent Number:	9677142
Patent Number:	9932643
Patent Number:	9988670
Patent Number:	10127349
Patent Number:	10266903
Patent Number:	10590474
Patent Number:	10677728
Patent Number:	10738346
Patent Number:	10890529
Patent Number:	10975423
Patent Number:	11155713
Application Number:	16844223
Application Number:	17066623
Application Number:	17482611

#### CORRESPONDENCE DATA

**Fax Number:** (214)661-6876

***Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.***

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**Email:** sborrelliipdocket@jw.com

**Correspondent Name:** JACKSON WALKER LLP

**Address Line 1:** SARA K. BORRELLI

**Address Line 2:** 2323 ROSS AVENUE, SUITE 600

**Address Line 4:** DALLAS, TEXAS 75201

<b>ATTORNEY DOCKET NUMBER:</b>	160796.00001
<b>NAME OF SUBMITTER:</b>	SARA K. BORRELLI
<b>SIGNATURE:</b>	/Sara K. Borrelli/
<b>DATE SIGNED:</b>	01/11/2022

**Total Attachments: 13**

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## NUNC PRO TUNC PATENT ASSIGNMENT AGREEMENT

This Nunc Pro Tunc Patent Assignment Agreement (this "Agreement") is made and entered into effective April 1, 2020 by and between ELITechGroup, Inc., a United States company, with an address at 370 West 1700 South, Logan, UT 84321 ("Assignor") and ELITechGroup MDX LLC, a United states limited liability company, with an address at 21720 23<sup>rd</sup> Dr SE Bothell WA 98021 ("Assignee"). Assignor and Assignee may each be referred to herein individually as a "Party" and collectively as the "Parties."

**WHEREAS**, effective April 1, 2020, Assignor and Assignee entered into that certain Asset Transfer Agreement by and between ELITechGroup, Inc. and ELITechGroup MDX LLC, in which Assignor transferred to Assignee assets and goodwill relating to the molecular business;

**WHEREAS**, effective April 1, 2020, Assignor has agreed to transfer and assign unto Assignee all of Assignor's right, title and interest in, to and under those issued U.S. and foreign patents identified in Exhibit A hereto and patent applications pending in the U.S. and foreign countries identified in Exhibit B hereto (collectively, "the Patents"); and

**WHEREAS**, Assignor and Assignee are related companies, both directly or indirectly owned by TecBid sarl, a company organized and existing under the laws of Grand-Duchy of Luxembourg;

**NOW, THEREFORE**, subject to the terms, conditions, covenants and provisions of this Agreement, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereto, intending legally to be bound, agree as follows:

1. Assignment. Assignor hereby assigns, transfers and conveys to Assignee, its successors and assigns forever, and Assignee does hereby accept, (i) all of Assignor's right, title and interest in, to and under the Patents listed in Exhibit A and Exhibit B, including all later-filed applications claiming prior to any of the Patents, all patents which may be granted for any pending applications, and all divisions, reissues, reexaminations, substitutions, continuations, and extensions thereof, free from encumbrances; and (ii) all causes of action, past, present, and future, for infringement, unfair competition or otherwise with respect to the Patents. This assignment is effective as of the date set forth above.
2. Further Assurances. Assignor will, upon the written request of Assignee, its successors or assigns, execute all documents, prepared at the expense of Assignee, its successors or assigns, necessary or practicable in order to perfect Assignee's foreign and domestic title to any and all rights in the Patents conveyed hereunder, including, but not limited to, recordal of this Agreement to reflect Assignee's ownership therein. Assignor will not do or omit to do any act, matter or thing whereby the rights or the assignability of the rights in the Patents may be prejudicially affected. In the event that the validity or effect of the rights in the Patents is challenged on any point on which Assignor has or can procure information or advice which may assist in meeting, defeating or reducing the effect of such challenge, Assignor agrees and undertakes to supply, or procure the supply of, such information or advice without unreasonable delay but subject to the right to charge Assignee out-of-pocket expenses properly and reasonably incurred by Assignor in so doing.
3. Representations and Warranties. Assignor hereby represents and warrants that it is the owner of and has the full right to convey the entire interest herein assigned, and further that it has



not executed and will not execute any agreement in conflict herewith and that it has not done or omitted and will not do or omit to be done any act, matter or thing whereby the rights in the Patents or the rights granted herein may be challenged or otherwise damaged or eroded.

4. Prior Agreements. This Agreement merges and supersedes all prior and contemporaneous agreements, assurances, representations, and communications between or among the parties hereto concerning the matters set forth herein.

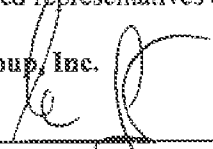
5. Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall be deemed to be one and the same agreement. A signed copy of this Agreement delivered by facsimile, e-mail or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this Agreement.

6. Successors and Assigns. This Agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and assigns.

*[Signature Page Follows]*

IN WITNESS WHEREOF, the parties have caused this Agreement to be duly executed by their duly authorized representatives as of the day and year written below.

ELITechGroup, Inc.

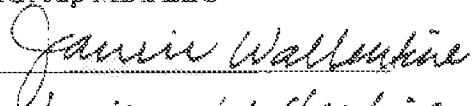
By: 

Execution Date: 12-20-21

Name: Christopher Gauer

Title: President

ELITechGroup MDx LLC

By: 

Execution Date: 12-20-21

Name: Janice Wallentine

Title: Manager

## EXHIBIT A (Issued Patents)

NO.	TITLE	ISSUE DATE	PATENT NO.
1.	COMPOUNDS AND METHODS FOR FLUORESCENT LABELING	December 6, 2005	6,972,339
2.	ABASIC SITE ENDONUCLEASE ASSAY	August 7, 2007	7,252,940
3.	AMPLIFICATION METHODS	January 15, 2008	7,319,022
4.	SINGLE NUCLEOTIDE POLYMORPHISM ANALYSIS OF HIGHLY POLYMORPHIC TARGET SEQUENCES	March 25, 2008	7,348,146
5.	FLUORESCENT PROBES CONTAINING 5'-MINOR GROOVE BINDER, FLUOROPHORE AND QUENCHING MOIETIES AND METHODS OF USE THEREOF	June 3, 2008	7,381,818
6.	COMPOUNDS AND METHODS FOR FLUORESCENT LABELING	June 2, 2009	7,541,454
7.	METHOD FOR AMPLIFYING TARGET NUCLEIC ACID SEQUENCES USING 03-11-A PRIMER COMPRISING AN AP ENDONUCLEASE CLEAVABLE LINKER	June 30, 2009	7,553,643
8.	NEGATIVELY CHARGED MINOR GROOVE BINDERS	September 1, 2009	7,582,739
9.	COMPOUNDS AND METHODS FOR FLUORESCENT LABELING	October 13, 2009	7,601,851
10.	PHOSPHONATE FLUORESCENT DYES AND CONJUGATES	March 2, 2010	7,671,218
11.	SINGLE NUCLEOTIDE POLYMORPHISM ANALYSIS OF HIGHLY POLYMORPHIC TARGET SEQUENCES	May 18, 2010	7,718,374
12.	AMPLIFICATION METHODS	May 25, 2010	7,723,038
13.	REAL-TIME LINEAR DETECTION PROBES: SENSITIVE 5'-MINOR GROOVE BINDER-CONTAINING PROBES FOR AMPLIFICATION (OR PCR) ANALYSIS	July 20, 2010	7,759,126
14.	PHOSPHONYLATED FLUORESCENT DYES AND CONJUGATES	August 3, 2010	7,767,834
15.	NEGATIVELY CHARGED MINOR GROOVE BINDERS	December 14, 2010	7,851,606
16.	ABASIC SITE ENDONUCLEASE ASSAY	September 7, 2010	7,790,385
17.	PHOSPHONATE FLUORESCENT DYES AND CONJUGATES	August 30, 2011	8,008,522
18.	AMPLIFICATION METHODS	November 29, 2011	8,067,177
19.	AMIDE-SUBSTITUTED XANTHENE DYES	April 24, 2012	8,163,910
20.	PHOSPHONATE FLUORESCENT DYES AND CONJUGATES	March 5, 2013	8,389,745

## EXHIBIT A (Issued Patents)

NO.	TITLE	ISSUE DATE	PATENT NO.
21.	COMPOUNDS AND METHODS FOR FLUORESCENT LABELING	October 29, 2013	8,569,516
22.	FUNCTIONALIZED 3-ALKYNYL PYRAZOLOPYRIMIDINE ANALOGUES AS UNIVERSAL BASES AND METHODS OF USE	March 3, 2015	8,969,003
23.	MINOR GROOVE BINDER (MGB)-OLIGONUCLEOTIDE MIRNA ANTAGONISTS	March 17, 2015	8,980,855
24.	MINOR GROOVE BINDER PHOSPHORAMIDITES AND METHODS OF USE	June 16, 2015	9,056,887
25.	FUNCTIONALIZED 3-ALKYNYL PYRAZOLOPYRIMIDINE ANALOGUES AS UNIVERSAL BASES AND METHODS OF USE	July 21, 2015	9,085,800
26.	ARTIFICIAL NUCLEIC ACIDS	October 27, 2015	9,169,256
27.	DROPLET DIGITAL PCR WITH SHORT MINOR GROOVE PROBES	May 3, 2016	9,328,384
28.	MINOR GROOVE BINDER (MGB)-OLIGONUCLEOTIDE MIRNA ANTAGONISTS	May 10, 2016	9,334,495
29.	DETECTION OF METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS	June 13, 2017	9,677,142
30.	DETECTION OF METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS	April 3, 2018	9,932,643
31.	METHODS AND COMPOSITIONS FOR DETECTING ANTIBIOTIC RESISTANT BACTERIA	June 5, 2018	9,988,670
32.	ORTHOGONAL NUCLEIC ACID AFFINITY PAIRS	November 13, 2018	10,127,349
33.	METHODS AND COMPOSITIONS FOR DETECTING ANTIBIOTIC RESISTANT BACTERIA	April 23, 2019	10,266,903
34.	METHODS FOR TRUE ISOTHERMAL STRAND DISPLACEMENT AMPLIFICATION	March 17, 2020	10,590,474
35.	DUPLEX STABILIZING FLUORESCENCE QUENCHERS FOR NUCLEIC ACID PROBES	June 9, 2020	10,677,728
36.	NITRODIARYLETHENES AS FLUORESCENCE QUENCHERS FOR NUCLEIC ACID PROBES	August 11, 2020	10,738,346
37.	DUPLEX STABILIZING FLUORESCENCE QUENCHERS FOR NUCLEIC ACID PROBES	January 12, 2021	10,890,529



## EXHIBIT A

### (Issued Patents)

NO.	TITLE	ISSUE DATE	PATENT NO.
38.	METHODS FOR TRUE ISOTHERMAL STRAND DISPLACEMENT AMPLIFICATION	April 13, 2021	10,975,423
39.	CARBORHODAMINE COMPOUNDS AND METHODS OF PREPARATION THEREOF	October 26, 2021	11,155,713
40.	Albania - FLUORESCENT PROBES FOR DNA DETECTION BY HYBRIDIZATION WITH IMPROVED SENSITIVITY AND LOW BACKGROUND	December 10, 2014	1687609
41.	Belgium - FLUORESCENT PROBES FOR DNA DETECTION BY HYBRIDIZATION WITH IMPROVED SENSITIVITY AND LOW BACKGROUND	December 10, 2014	1687609
42.	Belgium - MINOR GROOVE BINDER (MGB)-OLIGONUCLEOTIDE MIRNA ANTAGONISTS	April 6, 2016	2547769
43.	Canada - DETECTION OF METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS	August 6, 2019	2,835,283
44.	Czech Republic - FLUORESCENT PROBES FOR DNA DETECTION BY HYBRIDIZATION WITH IMPROVED SENSITIVITY AND LOW BACKGROUND	December 10, 2014	1687609
45.	Denmark - FLUORESCENT PROBES FOR DNA DETECTION BY HYBRIDIZATION WITH IMPROVED SENSITIVITY AND LOW BACKGROUND	December 10, 2014	1687609
46.	Europe - FLUORESCENT QUENCHING DETECTION REAGENTS AND METHODS	May 22, 2013	1430147
47.	Europe - FLUORESCENT PROBES FOR DNA DETECTION BY HYBRIDIZATION WITH IMPROVED SENSITIVITY AND LOW BACKGROUND	December 10, 2014	1687609
48.	Europe - AMPLIFICATION METHODS	May 4, 2011	1789587
49.	Europe - PHOSPHONATE FLUORESCENT DYES AND CONJUGATES	March 26, 2014	1781675
50.	Europe - MINOR GROOVE BINDER PHOSPHORAMIDITES AND METHODS OF USE	May 22, 2019	2736916
51.	Europe - DETECTION OF METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS	April 15, 2015	2714939
52.	Europe - DETECTION OF METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS	April 6, 2016	2801626
53.	Europe - DROPLET DIGITAL PCR WITH SHORT MINOR GROOVE PROBES	September 27, 2017	2997161

## EXHIBIT A (Issued Patents)

NO.	TITLE	ISSUE DATE	PATENT NO.
54.	Europe - MINOR GROOVE BINDER (MGB)- OLIGONUCLEOTIDE MIRNA ANTAGONISTS	April 6, 2016	2547769
55.	Europe - FUNCTIONALIZED 3-ALKYNYL PYRAZOLOPYRIMIDINE ANALOGUES AS UNIVERSAL BASES AND METHODS OF USE	October 19, 2016	2689031
56.	Europe - METHODS FOR TRUE ISOTHERMAL STRAND DISPLACEMENT AMPLIFICATION	February 26, 2020	2971106
57.	Europe - METHODS AND COMPOSITIONS FOR DETECTING ANTIBIOTIC RESISTANT BACTERIA	September 16, 2020	3230468
58.	France - FLUORESCENT QUENCHING DETECTION REAGENTS AND METHODS	May 22, 2013	1430147
59.	France - FLUORESCENT PROBES FOR DNA DETECTION BY HYBRIDIZATION WITH IMPROVED SENSITIVITY AND LOW BACKGROUND	December 10, 2014	1687609
60.	France - AMPLIFICATION METHODS	May 4, 2011	1789587
61.	France - PHOSPHONATE FLUORESCENT DYES AND CONJUGATES	March 26, 2014	1781675
62.	France - MINOR GROOVE BINDER PHOSPHORAMIDITES AND METHODS OF USE	May 22, 2019	2736916
63.	France - DETECTION OF METHICILLIN- RESISTANT STAPHYLOCOCCUS AUREUS	April 15, 2015	2714939
64.	France - DETECTION OF METHICILLIN- RESISTANT STAPHYLOCOCCUS AUREUS	April 6, 2016	2801626
65.	France - DROPLET DIGITAL PCR WITH SHORT MINOR GROOVE PROBES	September 27, 2017	EP2997161
66.	France - MINOR GROOVE BINDER (MGB)- OLIGONUCLEOTIDE MIRNA ANTAGONISTS	April 6, 2016	2547769
67.	France - FUNCTIONALIZED 3-ALKYNYL PYRAZOLOPYRIMIDINE ANALOGUES AS UNIVERSAL BASES AND METHODS OF USE	October 19, 2016	2689031
68.	France - METHODS FOR TRUE ISOTHERMAL STRAND DISPLACEMENT AMPLIFICATION	February 26, 2020	2971106
69.	France - METHODS AND COMPOSITIONS FOR DETECTING ANTIBIOTIC RESISTANT BACTERIA	September 16, 2020	3230468

## EXHIBIT A (Issued Patents)

NO.	TITLE	ISSUE DATE	PATENT NO.
70.	Germany - FLUORESCENT QUENCHING DETECTION REAGENTS AND METHODS	May 22, 2013	60244997.9
71.	Germany - FLUORESCENT PROBES FOR DNA DETECTION BY HYBRIDIZATION WITH IMPROVED SENSITIVITY AND LOW BACKGROUND	December 10, 2014	1687609
72.	Germany - AMPLIFICATION METHODS	May 4, 2011	602005027856.7
73.	Germany - PHOSPHONATE FLUORESCENT DYES AND CONJUGATES	March 26, 2014	602005043109.8
74.	Germany - MINOR GROOVE BINDER PHOSPHORAMIDITES AND METHODS OF USE	May 22, 2019	2736916
75.	Germany - DETECTION OF METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS	April 15, 2015	602012006777.2
76.	Germany - DETECTION OF METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS	April 6, 2016	2801626
77.	Germany - DROPLET DIGITAL PCR WITH SHORT MINOR GROOVE PROBES	September 27, 2017	EP2997161
78.	Germany - MINOR GROOVE BINDER (MGB)-OLIGONUCLEOTIDE MIRNA ANTAGONISTS	April 6, 2016	2547769
79.	Germany - FUNCTIONALIZED 3-ALKYNYL PYRAZOLOPYRIMIDINE ANALOGUES AS UNIVERSAL BASES AND METHODS OF USE	October 19, 2016	602012024298.1
80.	Germany - METHODS FOR TRUE ISOTHERMAL STRAND DISPLACEMENT AMPLIFICATION	February 26, 2020	602014061493.0
81.	Germany - METHODS AND COMPOSITIONS FOR DETECTING ANTIBIOTIC RESISTANT BACTERIA	September 16, 2020	602015059257.3
82.	Greece - FLUORESCENT PROBES FOR DNA DETECTION BY HYBRIDIZATION WITH IMPROVED SENSITIVITY AND LOW BACKGROUND	December 10, 2014	3085574
83.	Hungary - FLUORESCENT PROBES FOR DNA DETECTION BY HYBRIDIZATION WITH IMPROVED SENSITIVITY AND LOW BACKGROUND	December 10, 2014	1687609
84.	Ireland - FLUORESCENT PROBES FOR DNA DETECTION BY HYBRIDIZATION WITH IMPROVED SENSITIVITY AND LOW BACKGROUND	December 10, 2014	1687609

## EXHIBIT A (Issued Patents)

NO.	TITLE	ISSUE DATE	PATENT NO.
85.	Italy - FLUORESCENT QUENCHING DETECTION REAGENTS AND METHODS	May 22, 2013	502013902179217
86.	Italy - FLUORESCENT PROBES FOR DNA DETECTION BY HYBRIDIZATION WITH IMPROVED SENSITIVITY AND LOW BACKGROUND	December 10, 2014	1687609
87.	Italy - AMPLIFICATION METHODS	May 4, 2011	502011901967168
88.	Italy - PHOSPHONATE FLUORESCENT DYES AND CONJUGATES	March 26, 2014	502014902272011
89.	Italy - MINOR GROOVE BINDER PHOSPHORAMIDITES AND METHODS OF USE	May 22, 2019	2736916
90.	Italy - DETECTION OF METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS	April 15, 2015	502015000031569
91.	Italy - DETECTION OF METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS	April 6, 2016	502016000049661
92.	Italy - DROPLET DIGITAL PCR WITH SHORT MINOR GROOVE PROBES	September 27, 2017	502017000143820
93.	Italy - MINOR GROOVE BINDER (MGB)-OLIGONUCLEOTIDE MIRNA ANTAGONISTS	April 6, 2016	502016000063980
94.	Italy - FUNCTIONALIZED 3-ALKYNYL PYRAZOLOPYRIMIDINE ANALOGUES AS UNIVERSAL BASES AND METHODS OF USE	October 19, 2016	502017000004608
95.	Italy - METHODS FOR TRUE ISOTHERMAL STRAND DISPLACEMENT AMPLIFICATION	February 26, 2020	502020000048136
96.	Italy - METHODS AND COMPOSITIONS FOR DETECTING ANTIBIOTIC RESISTANT BACTERIA	September 16, 2020	502020000114464
97.	Japan - ABASIC SITE ENDONUCLEASE ASSAY	May 14, 2010	4510626
98.	Japan - MINOR GROOVE BINDER PHOSPHORAMIDITES AND METHODS OF USE	July 28, 2017	6182529
99.	Japan - DETECTION OF METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS	August 25, 2017	6196968
100.	Luxembourg - FLUORESCENT PROBES FOR DNA DETECTION BY HYBRIDIZATION WITH IMPROVED SENSITIVITY AND LOW BACKGROUND	December 10, 2014	1687609

## EXHIBIT A

### (Issued Patents)

NO.	TITLE	ISSUE DATE	PATENT NO.
101.	Monaco - FLUORESCENT PROBES FOR DNA DETECTION BY HYBRIDIZATION WITH IMPROVED SENSITIVITY AND LOW BACKGROUND	December 10, 2014	1687609
102.	Netherlands - FLUORESCENT PROBES FOR DNA DETECTION BY HYBRIDIZATION WITH IMPROVED SENSITIVITY AND LOW BACKGROUND	December 10, 2014	1687609
103.	Netherlands - MINOR GROOVE BINDER (MGB)-OLIGONUCLEOTIDE MIRNA ANTAGONISTS	April 6, 2016	2547769
104.	Poland - FLUORESCENT PROBES FOR DNA DETECTION BY HYBRIDIZATION WITH IMPROVED SENSITIVITY AND LOW BACKGROUND	December 10, 2014	1687609
105.	Portugal - FLUORESCENT PROBES FOR DNA DETECTION BY HYBRIDIZATION WITH IMPROVED SENSITIVITY AND LOW BACKGROUND	December 10, 2014	1687609
106.	Slovakia - FLUORESCENT PROBES FOR DNA DETECTION BY HYBRIDIZATION WITH IMPROVED SENSITIVITY AND LOW BACKGROUND	December 10, 2014	1687609
107.	Slovenia - FLUORESCENT PROBES FOR DNA DETECTION BY HYBRIDIZATION WITH IMPROVED SENSITIVITY AND LOW BACKGROUND	December 10, 2014	1687609
108.	Spain - FLUORESCENT QUENCHING DETECTION REAGENTS AND METHODS	May 22, 2013	1430147
109.	Spain - FLUORESCENT PROBES FOR DNA DETECTION BY HYBRIDIZATION WITH IMPROVED SENSITIVITY AND LOW BACKGROUND	December 10, 2014	1687609
110.	Spain - AMPLIFICATION METHODS	May 4, 2011	1789587
111.	Spain - PHOSPHONATE FLUORESCENT DYES AND CONJUGATES	March 26, 2014	1781675
112.	Spain - MINOR GROOVE BINDER (MGB)-OLIGONUCLEOTIDE MIRNA ANTAGONISTS	April 6, 2016	2547769
113.	Spain - FUNCTIONALIZED 3-ALKYNYL PYRAZOLOPYRIMIDINE ANALOGUES AS UNIVERSAL BASES AND METHODS OF USE	October 19, 2016	2689031

## EXHIBIT A (Issued Patents)

NO.	TITLE	ISSUE DATE	PATENT NO.
114.	Sweden - FLUORESCENT PROBES FOR DNA DETECTION BY HYBRIDIZATION WITH IMPROVED SENSITIVITY AND LOW BACKGROUND	December 10, 2014	1687609
115.	Switzerland - FLUORESCENT PROBES FOR DNA DETECTION BY HYBRIDIZATION WITH IMPROVED SENSITIVITY AND LOW BACKGROUND	December 10, 2014	1687609
116.	Turkey - FLUORESCENT PROBES FOR DNA DETECTION BY HYBRIDIZATION WITH IMPROVED SENSITIVITY AND LOW BACKGROUND	December 10, 2014	1687609
117.	United Kingdom - FLUORESCENT QUENCHING DETECTION REAGENTS AND METHODS	May 22, 2013	1430147
118.	United Kingdom - FLUORESCENT PROBES FOR DNA DETECTION BY HYBRIDIZATION WITH IMPROVED SENSITIVITY AND LOW BACKGROUND	December 10, 2014	1687609
119.	United Kingdom - AMPLIFICATION METHODS	May 4, 2011	1789587
120.	United Kingdom - PHOSPHONATE FLUORESCENT DYES AND CONJUGATES	March 26, 2014	1781675
121.	United Kingdom - MINOR GROOVE BINDER PHOSPHORAMIDITES AND METHODS OF USE	May 22, 2019	2736916
122.	United Kingdom - DETECTION OF METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS	April 15, 2015	2714939
123.	United Kingdom - DETECTION OF METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS	April 6, 2016	2801626
124.	United Kingdom - DROPLET DIGITAL PCR WITH SHORT MINOR GROOVE PROBES	September 27, 2017	EP2997161
125.	United Kingdom - MINOR GROOVE BINDER (MGB)-OLIGONUCLEOTIDE MIRNA ANTAGONISTS	April 6, 2016	2547769
126.	United Kingdom - FUNCTIONALIZED 3-ALKYNYL PYRAZOLOPYRIMIDINE ANALOGUES AS UNIVERSAL BASES AND METHODS OF USE	October 19, 2016	2689031
127.	United Kingdom - METHODS FOR TRUE ISOTHERMAL STRAND DISPLACEMENT AMPLIFICATION	February 26, 2020	2971106

**EXHIBIT A**  
**(Issued Patents)**

NO.	TITLE	ISSUE DATE	PATENT NO.
128.	United Kingdom - METHODS AND COMPOSITIONS FOR DETECTING ANTIBIOTIC RESISTANT BACTERIA	September 16, 2020	3230468

**EXHIBIT B**  
**(Pending Patent Applications)**

NO.	TITLE	FILE DATE	APP. NO.
1.	NITRODIARYLETHENES AS FLUORESCENCE QUENCHERS FOR NUCLEIC ACID PROBES	April 9, 2020	16/844,223
2.	DUPLEX STABILIZING FLUORESCENCE QUENCHERS FOR NUCLEIC ACID PROBES	October 9, 2020	17/066,623
3.	CARBORHODAMINE COMPOUNDS AND METHODS OF PREPARATION THEREOF	September 23, 2021	17/482,611
4.	Belgium - DUPLEX STABILIZING FLUORESCENCE QUENCHERS FOR NUCLEIC ACID PROBES	August 7, 2018	18759216.7
5.	Europe - CARBORHODAMINE COMPOUNDS AND METHODS OF PREPARATION THEREOF	May 6, 2019	19725001.2
6.	Europe - NITRODIARYLETHENES AS FLUORESCENCE QUENCHERS FOR NUCLEIC ACID PROBES	March 1, 2018	18723950.4
7.	Europe - DUPLEX STABILIZING FLUORESCENCE QUENCHERS FOR NUCLEIC ACID PROBES	August 7, 2018	18759216.7
8.	Hong Kong - COMPOUNDS AND METHODS FOR FLUORESCENT LABELING	February 13, 2007	09104581.8