

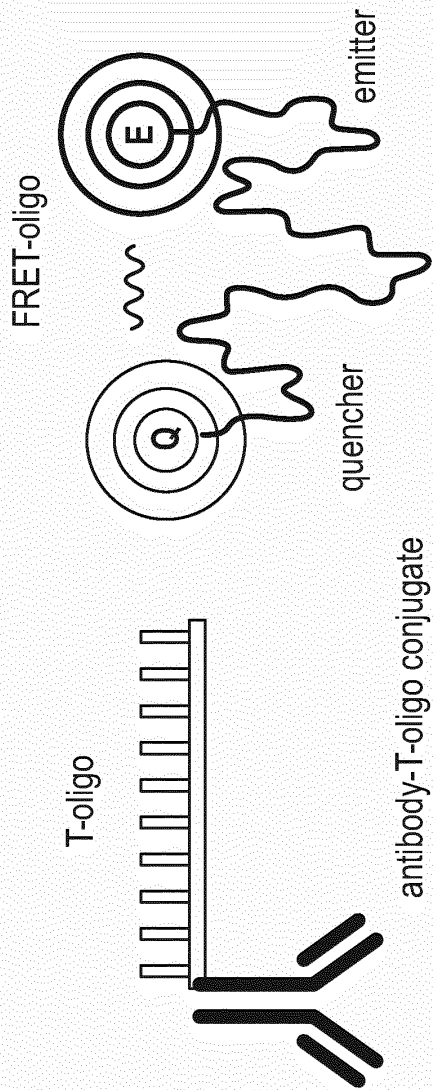


FIG. 1A

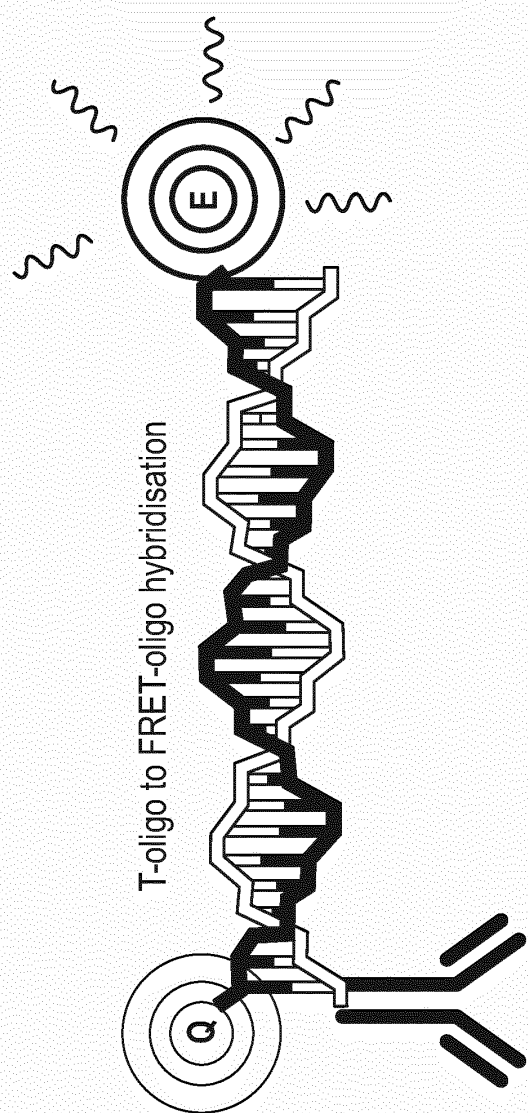


FIG. 1B

FIG. 2A

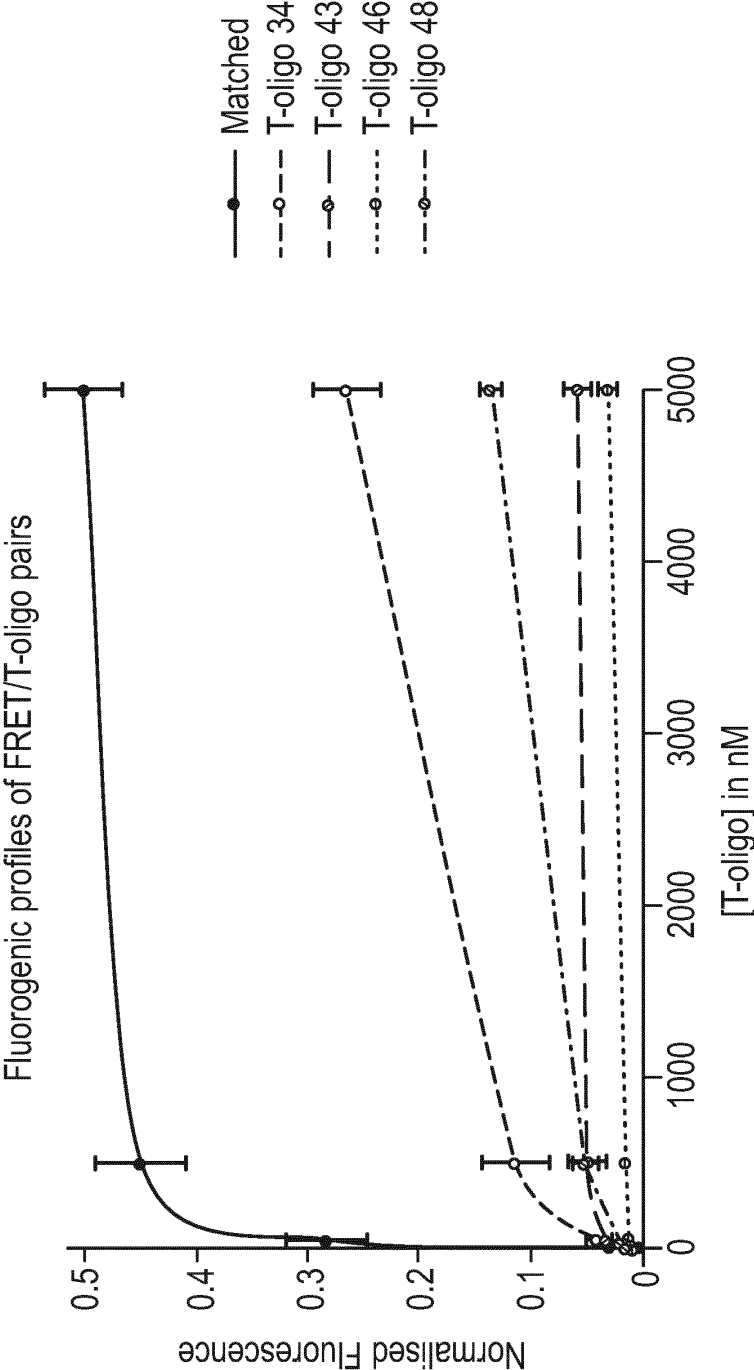


FIG. 2B
Blinking profiles of FRET/T-oligo pairs

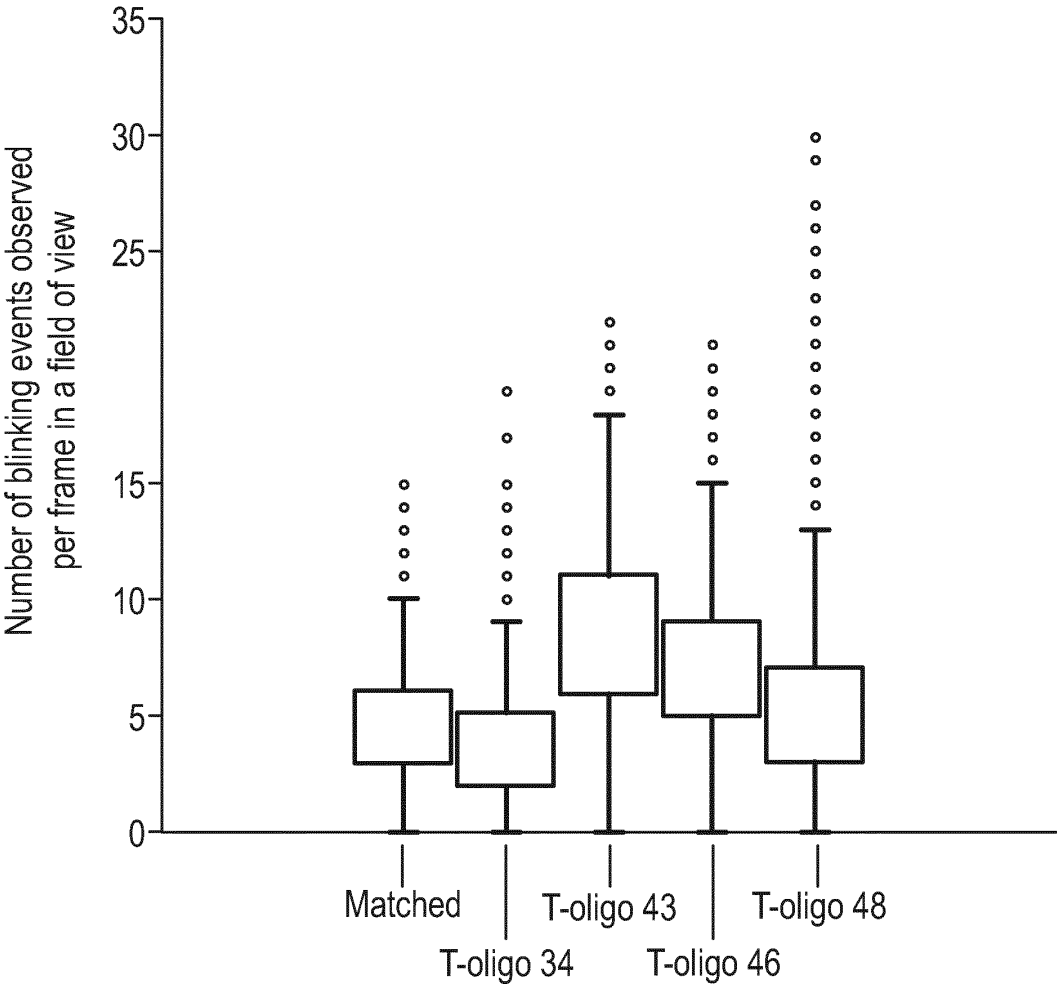


FIG. 3A

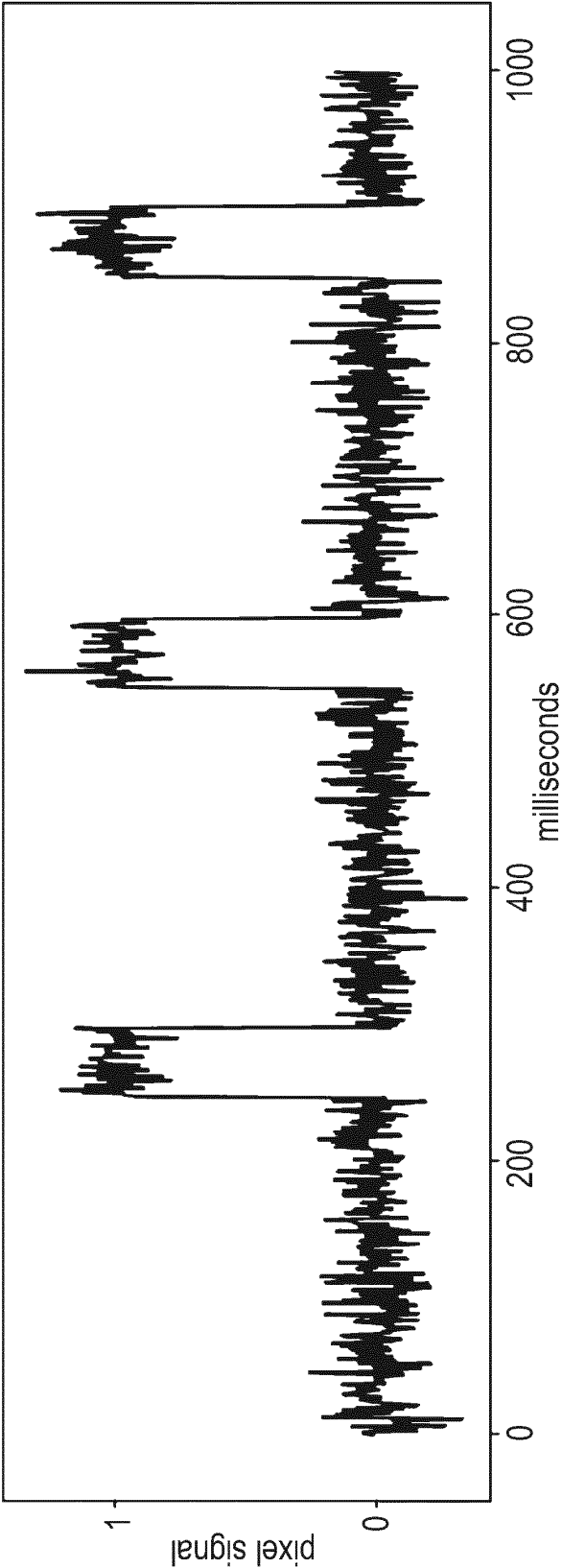


FIG. 3B

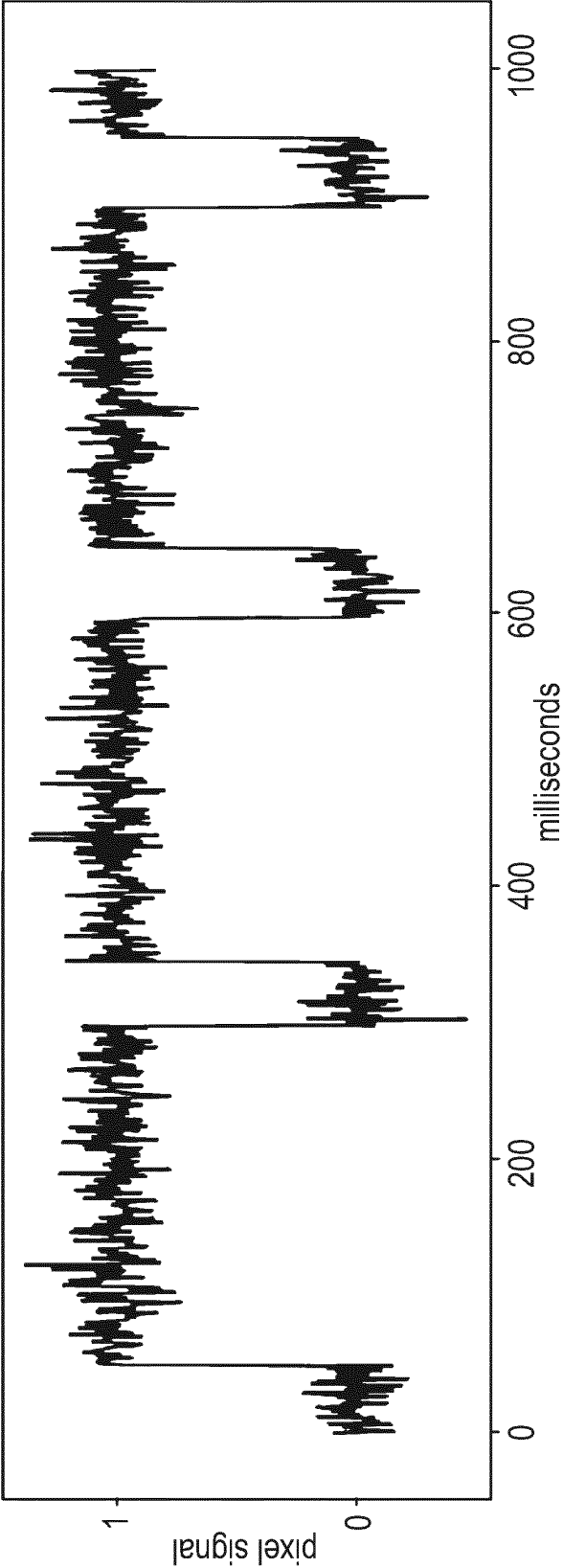


FIG. 3C

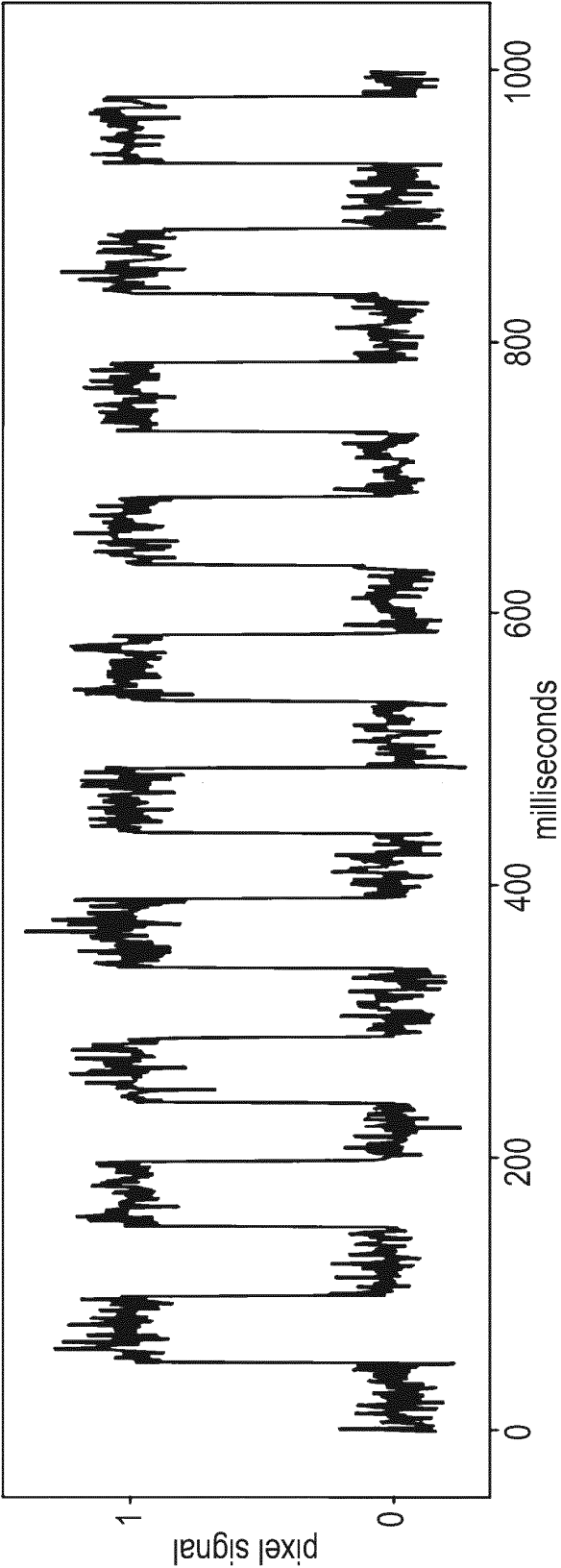


FIG. 3D

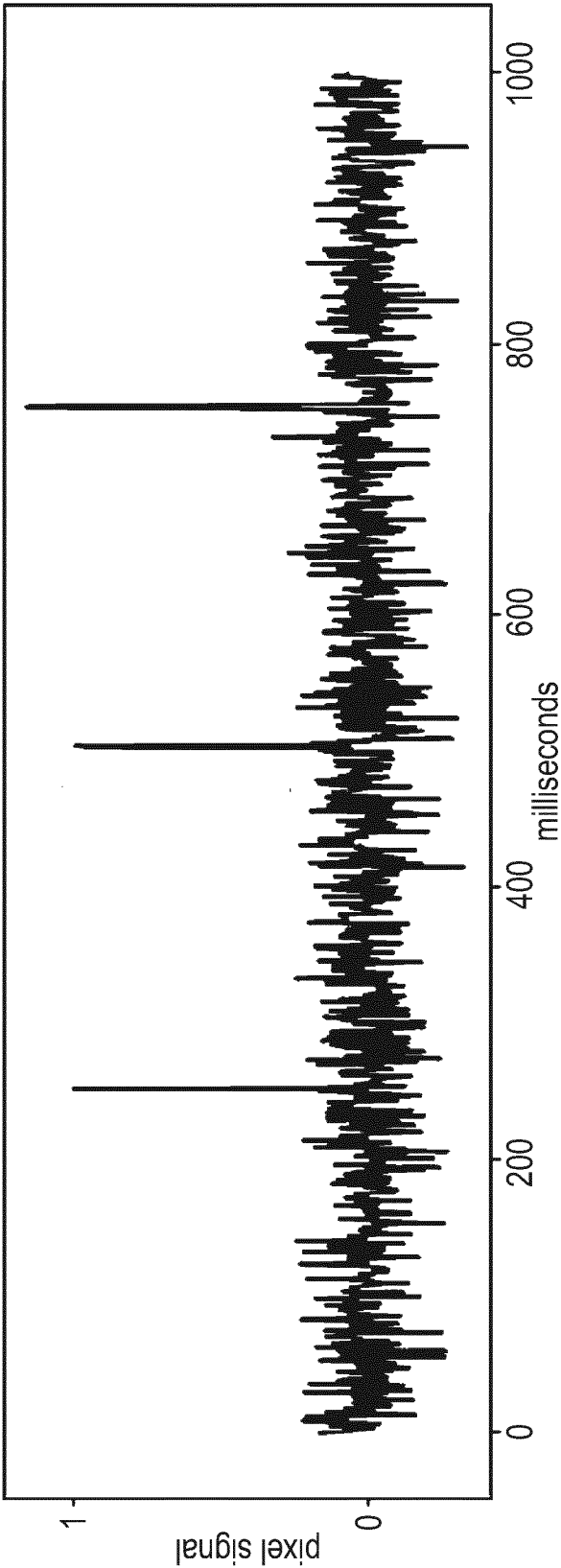


FIG. 4A

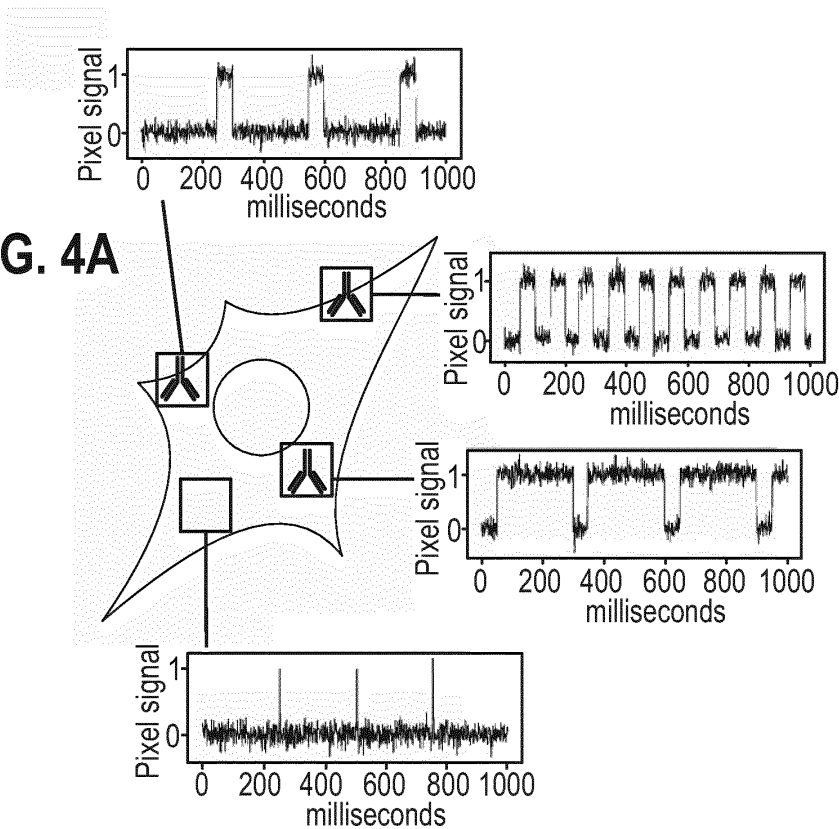
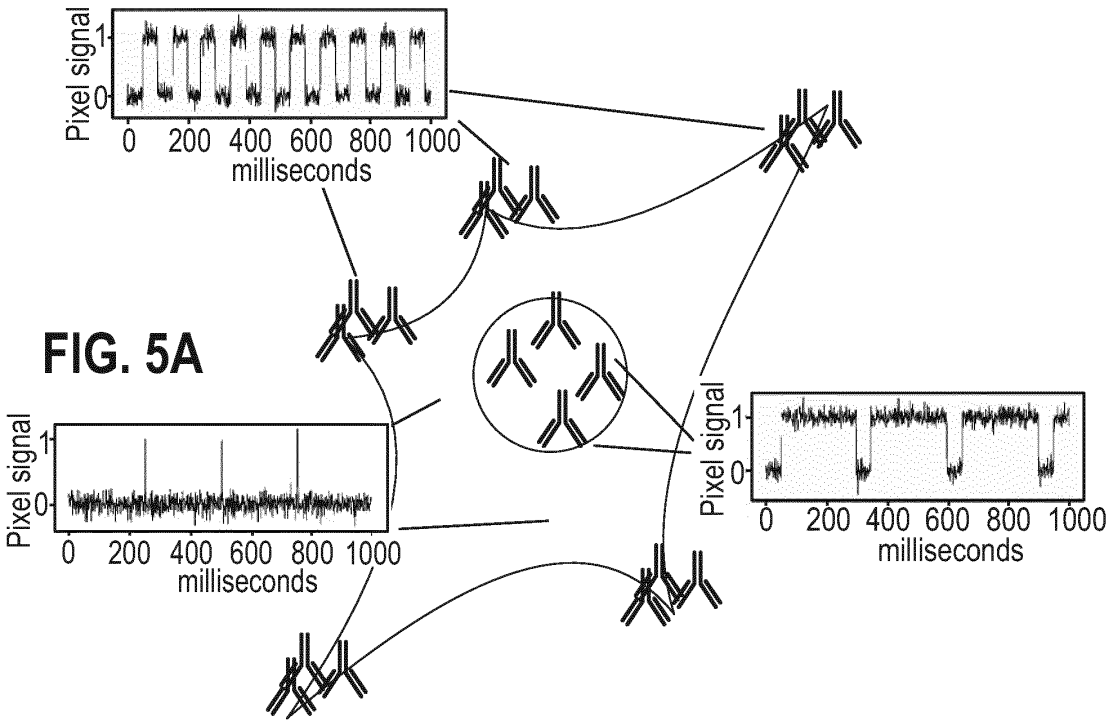
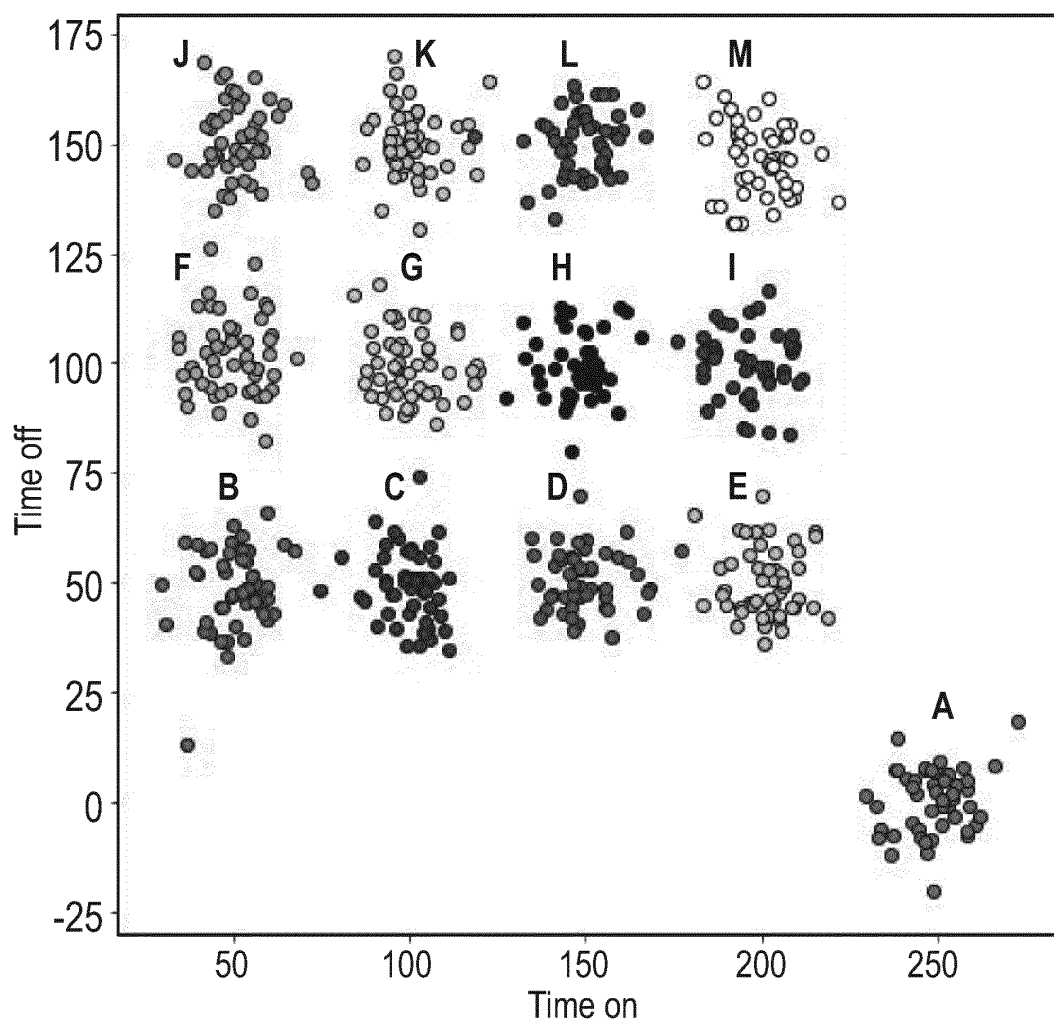
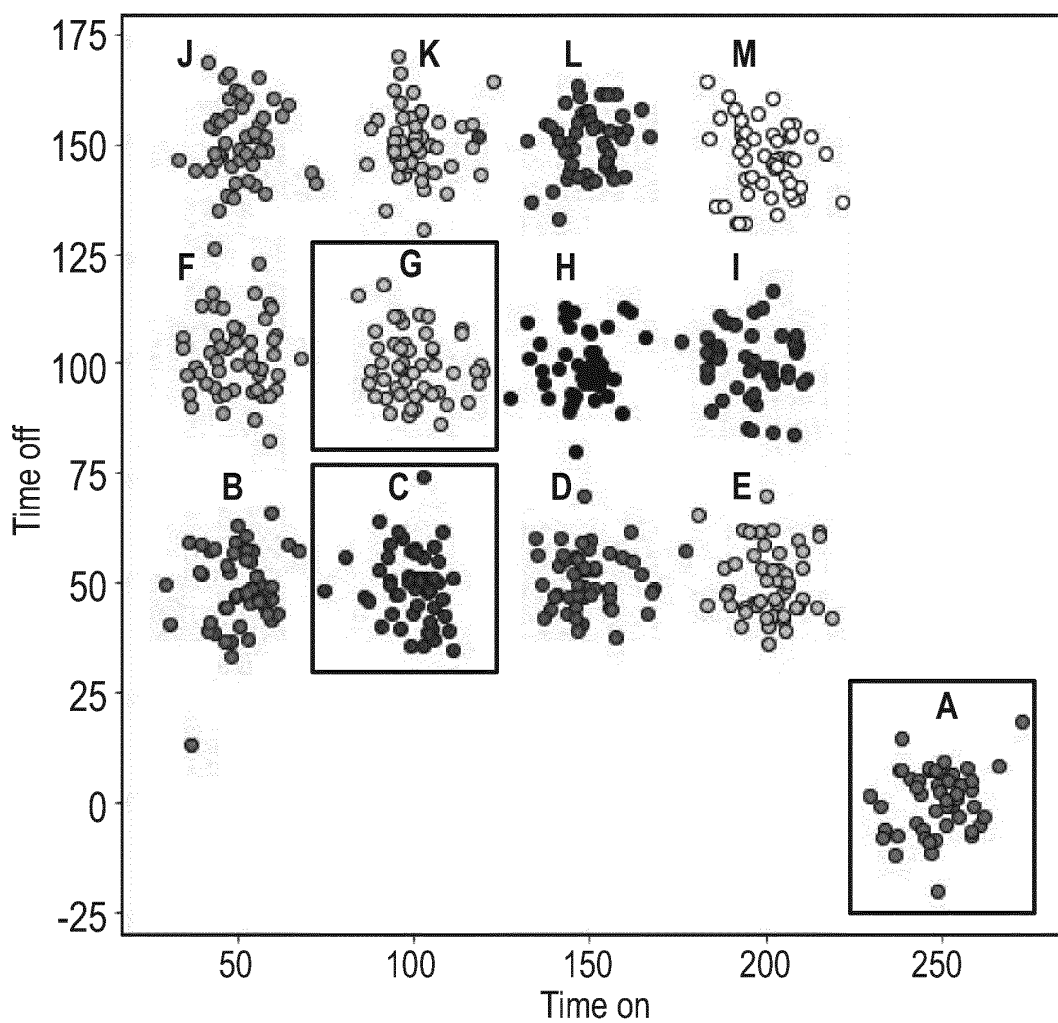


FIG. 5A



**FIG. 4B**

A: background
B: T-oligonucleotide 0
C: T-oligonucleotide 1
D: T-oligonucleotide 2
E: T-oligonucleotide 3
F: T-oligonucleotide 4
G: T-oligonucleotide 5
H: T-oligonucleotide 6
I: T-oligonucleotide 7
J: T-oligonucleotide 8
K: T-oligonucleotide 9
L: T-oligonucleotide 10
M: T-oligonucleotide 11

**FIG. 5B**

A: background

B: T-oligonucleotide 0

C: T-oligonucleotide 1

D: T-oligonucleotide 2

E: T-oligonucleotide 3

F: T-oligonucleotide 4

G: T-oligonucleotide 5

H: T-oligonucleotide 6

I: T-oligonucleotide 7

J: T-oligonucleotide 8

K: T-oligonucleotide 9

L: T-oligonucleotide 10

M: T-oligonucleotide 11

FIG. 5C

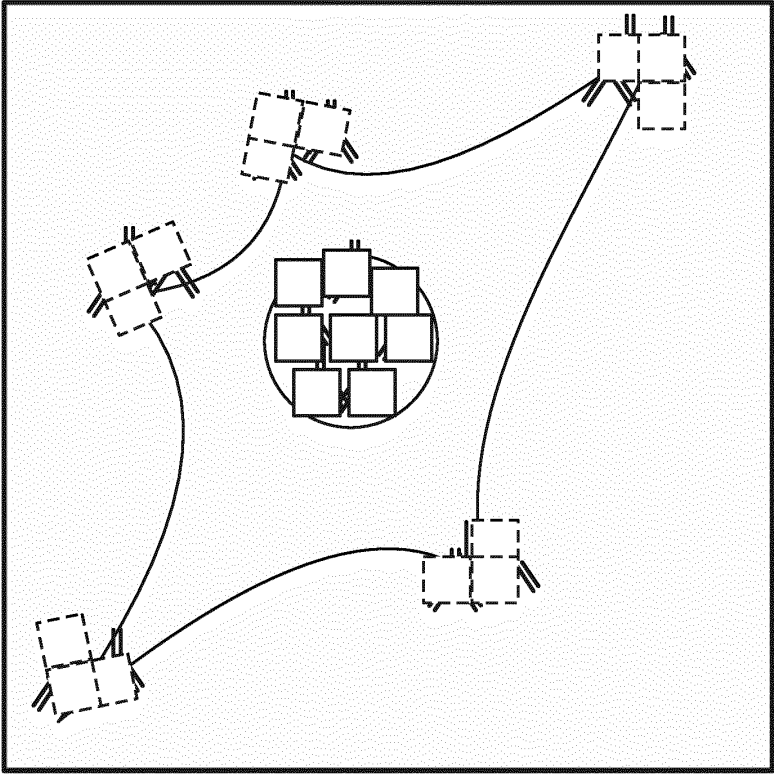
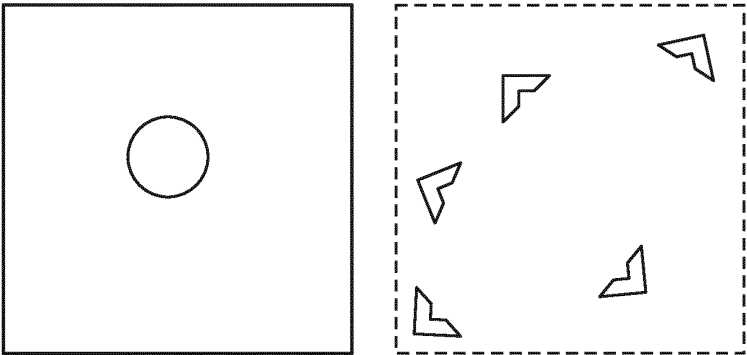


FIG. 5D



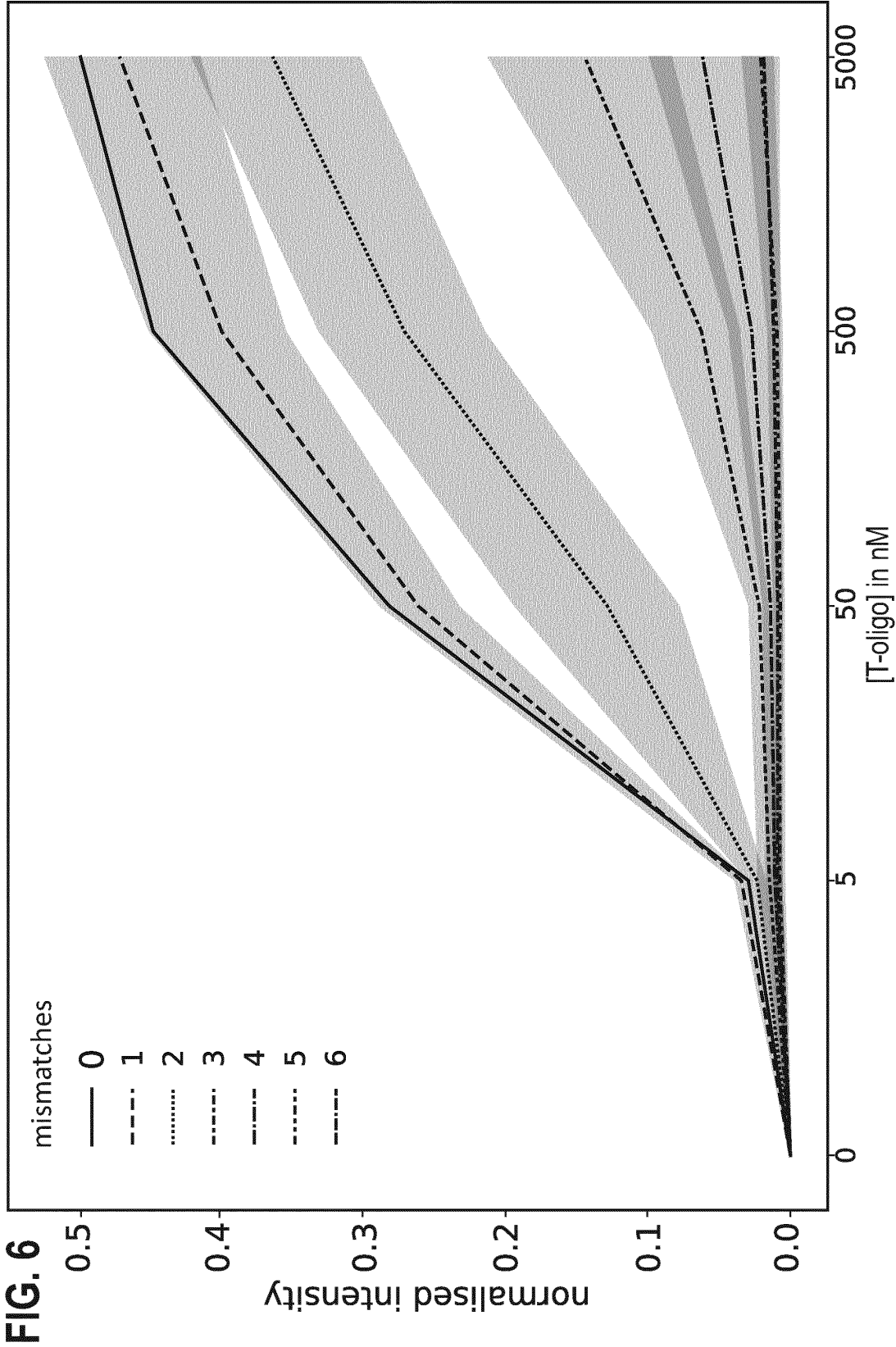


FIG. 7A Effect of introducing three mismatches in T-oligo on the FRET-oligo fluorescence

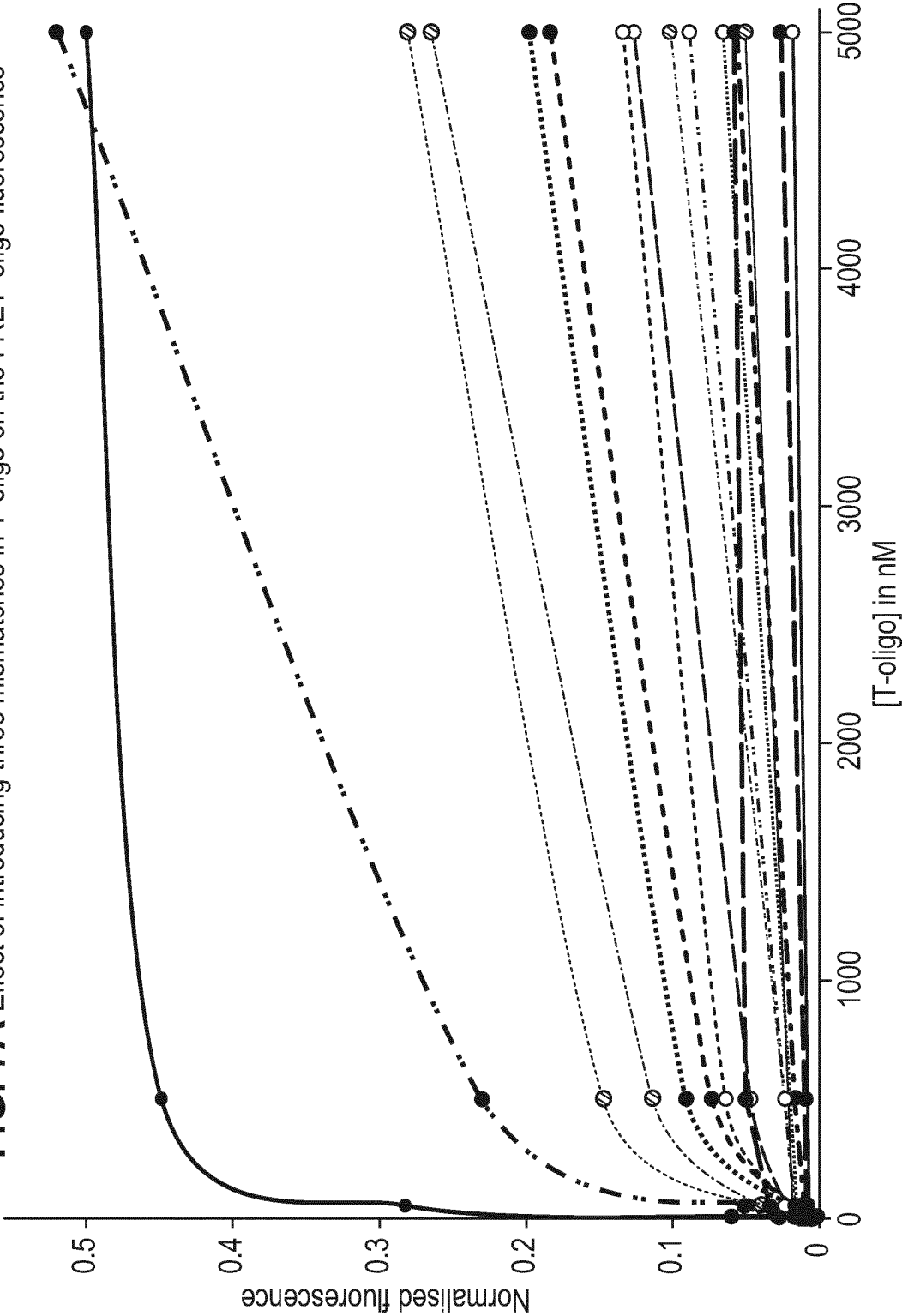


FIG. 7B

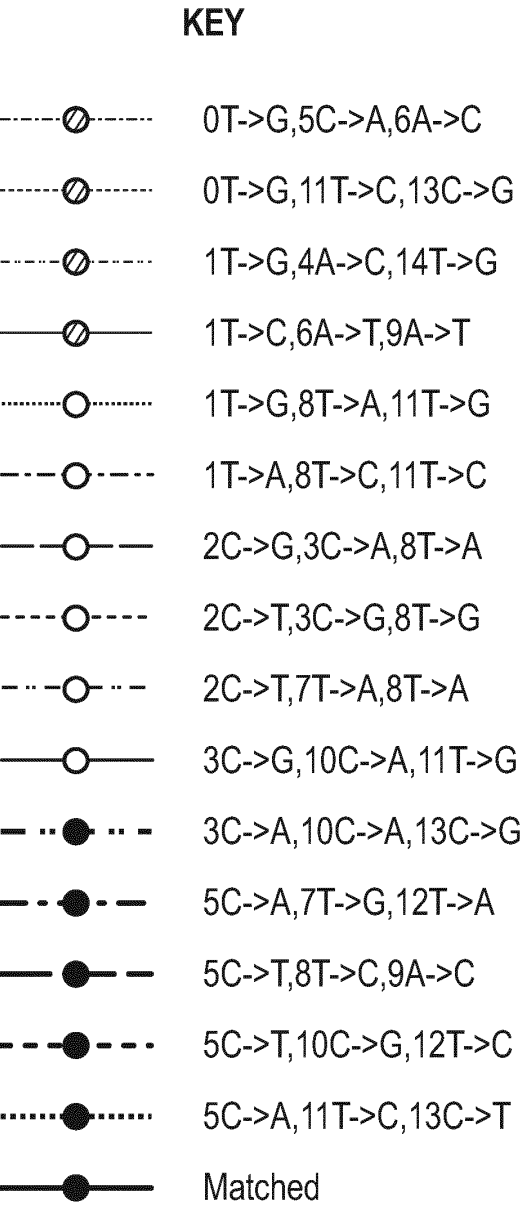
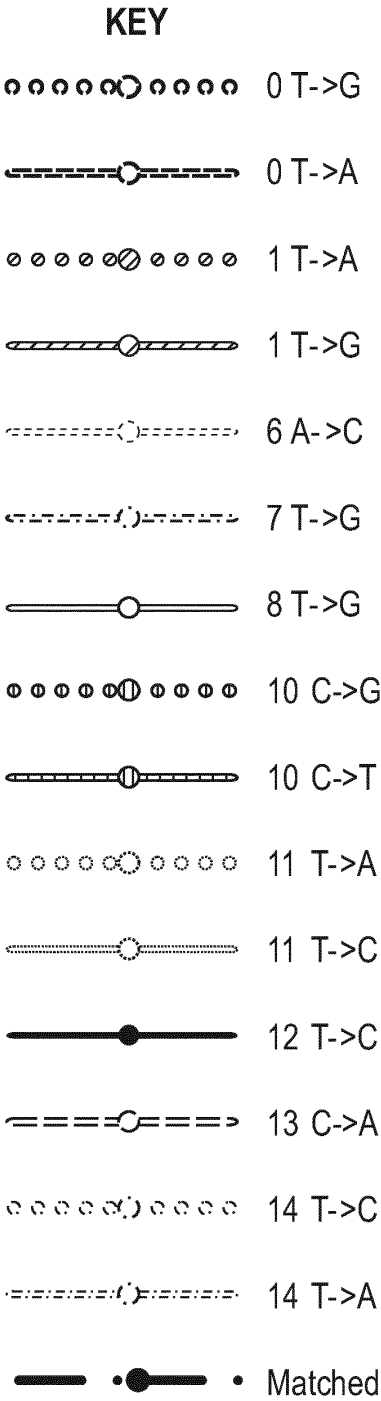


FIG. 9B



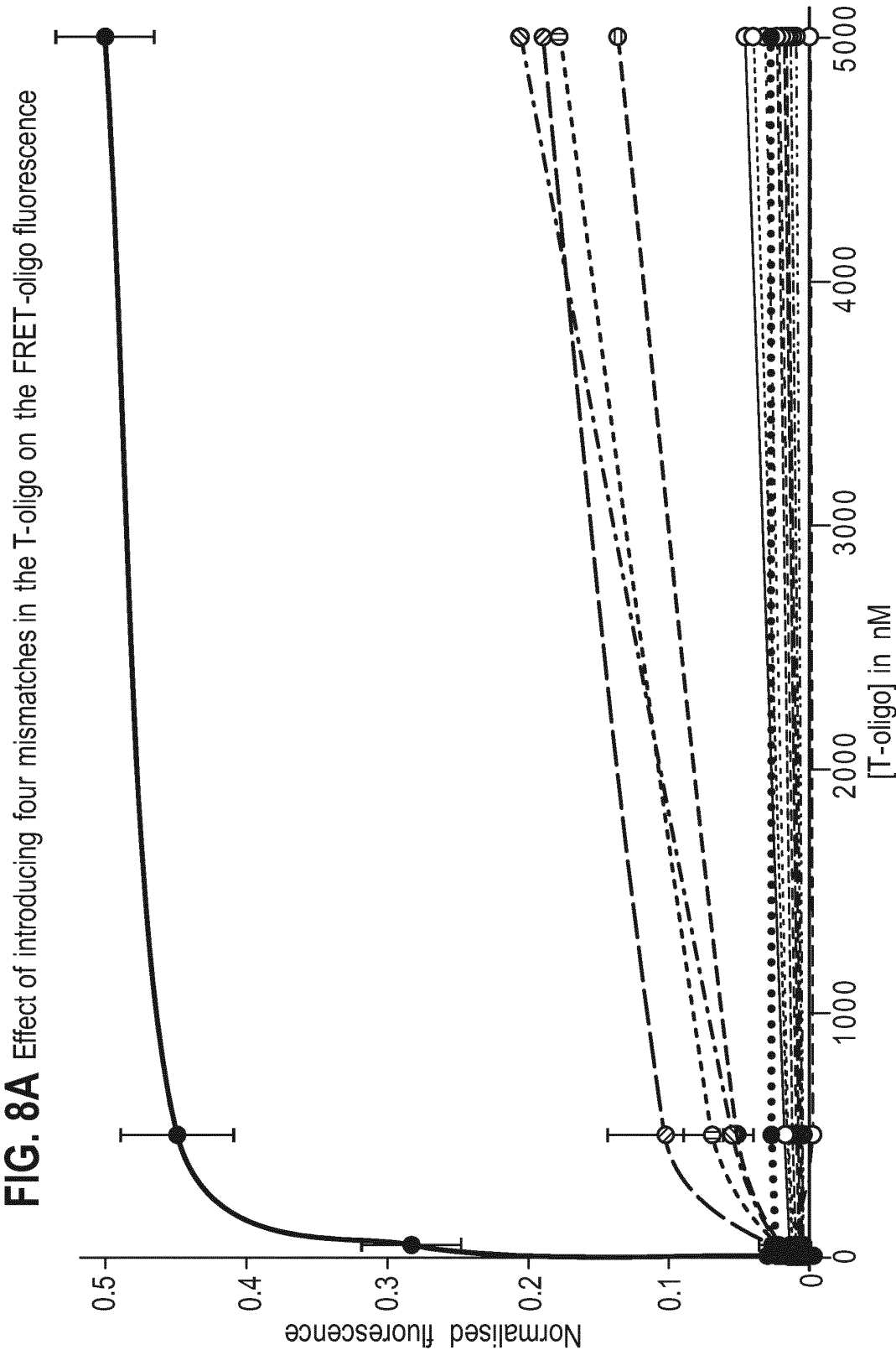


FIG. 8B**KEY**

-----⊙-----	1T->A,3C->G,8T->G,14T->A
-----⊖-----	2C->G,4A->C,12T->G,14T->G
-----⊗-----	7T->G,8T->A,12T->A,14T->G
-----⊘-----	0T->C,1T->A,5C->G,9A->G
-----○-----	1T->G,4A->C,5C->A,13C->G
-----○-----	2C->T,8T->G,10C->T,13C->T
-----○-----	2C->T,5C->G,6A->T,14T->G
-----○-----	2C->G,5C->G,6A->C,12T->G
-----○-----	5C->A,7T->A,8T->A,10C->G
-----○-----	0T->G,1T->C,6A->T,11T->C
-----○-----	4A->T,5C->A,6A->T,12T->C
-----○-----	3C->G,4A->G,9A->C,12T->A
-----○-----	2C->G,5C->G,6A->G,8T->C
-----○-----	3C->A,6A->T,9A->G,13C->A
-----○-----	6A->C,7T->G,8T->G,13C->A
.....●.....	Fast-blinking (3C->A, 8T->A,9A->T,11T->C)
-----●-----	Matched

FIG. 9A Effect of introducing a single mismatch in the T-oligo on the FRET-oligo fluorescence

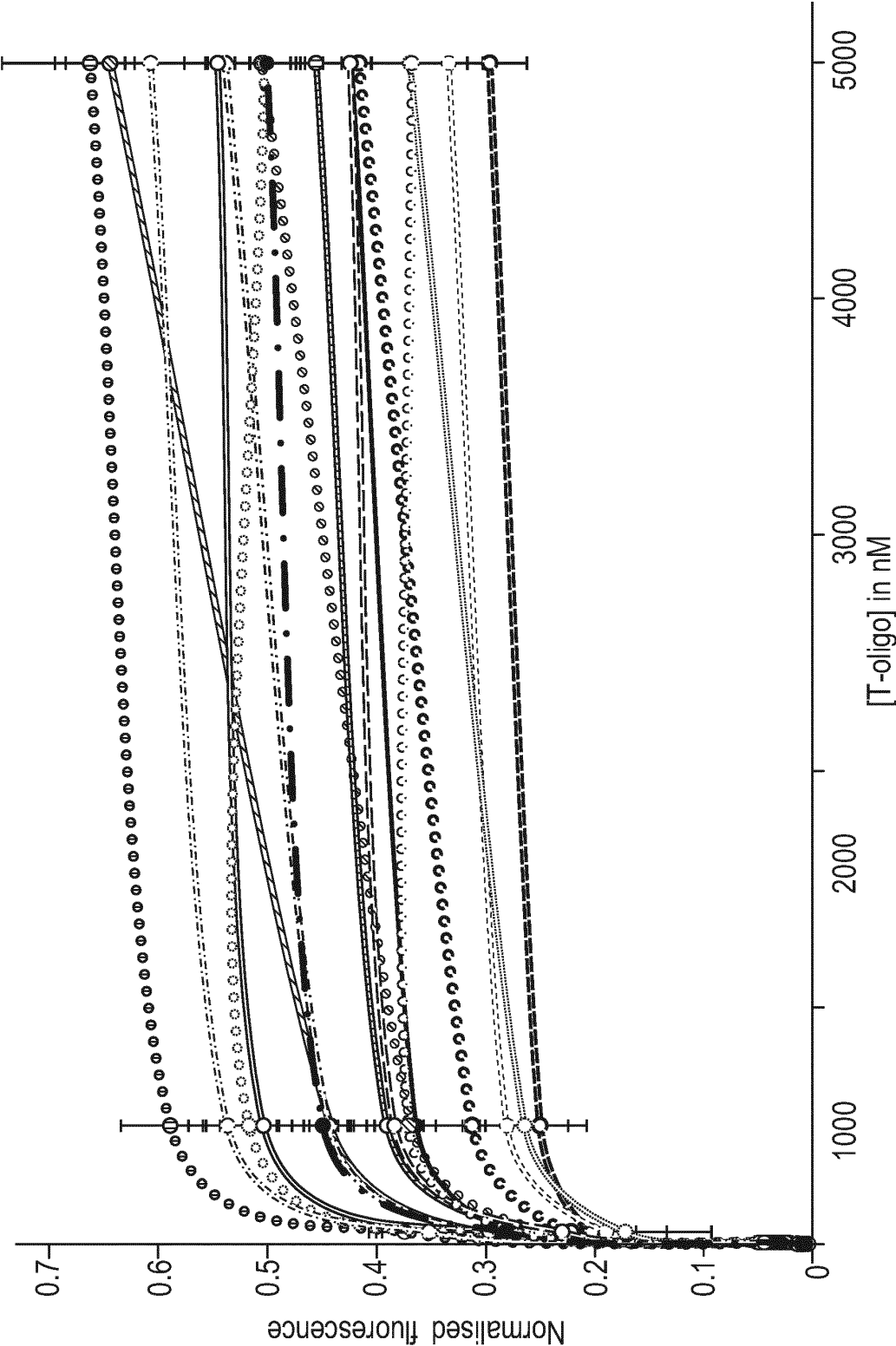


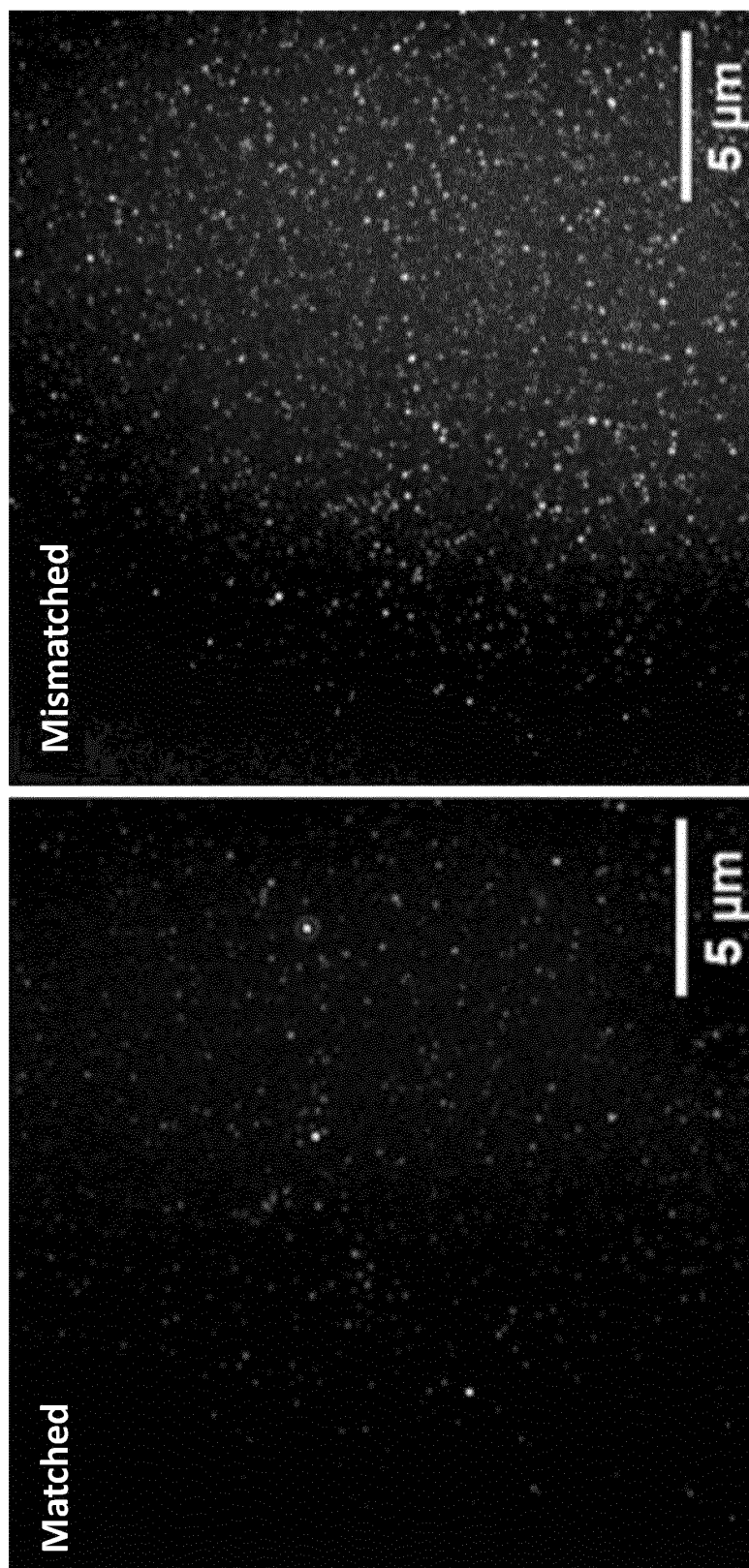
FIG. 10

FIG. 11 Analysis/kinetic profiling

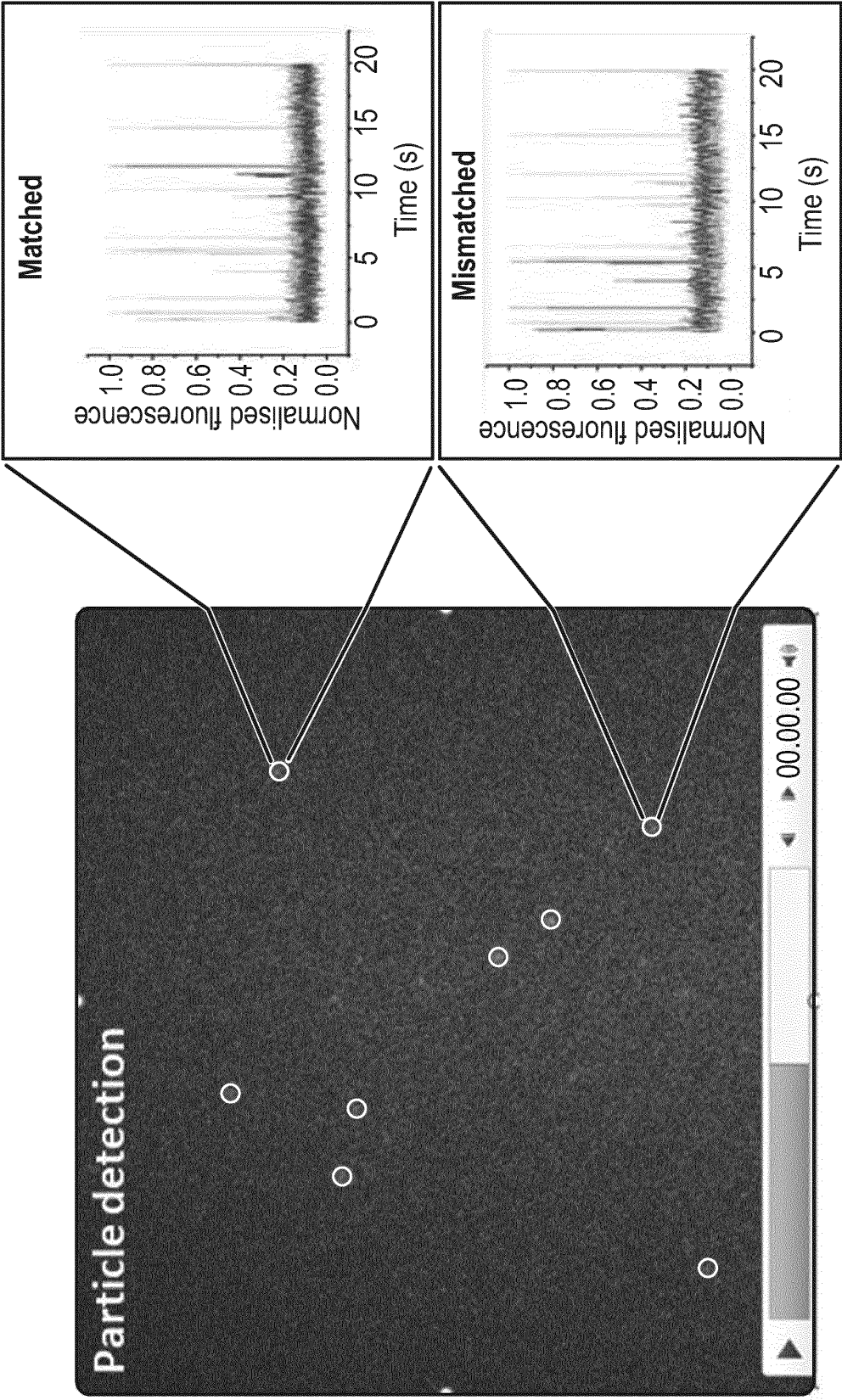
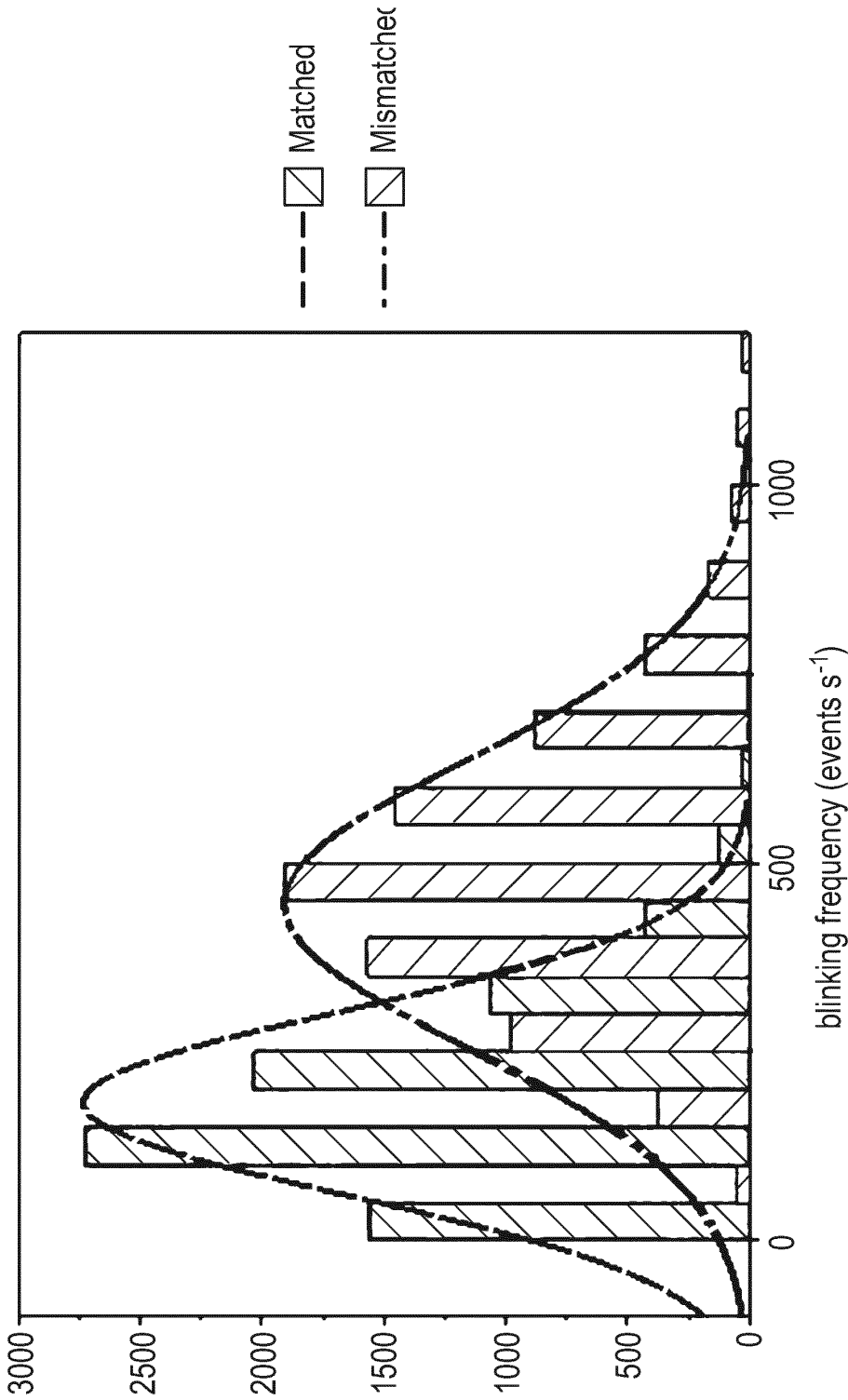


FIG. 11(contd) Analysis/kinetic profiling



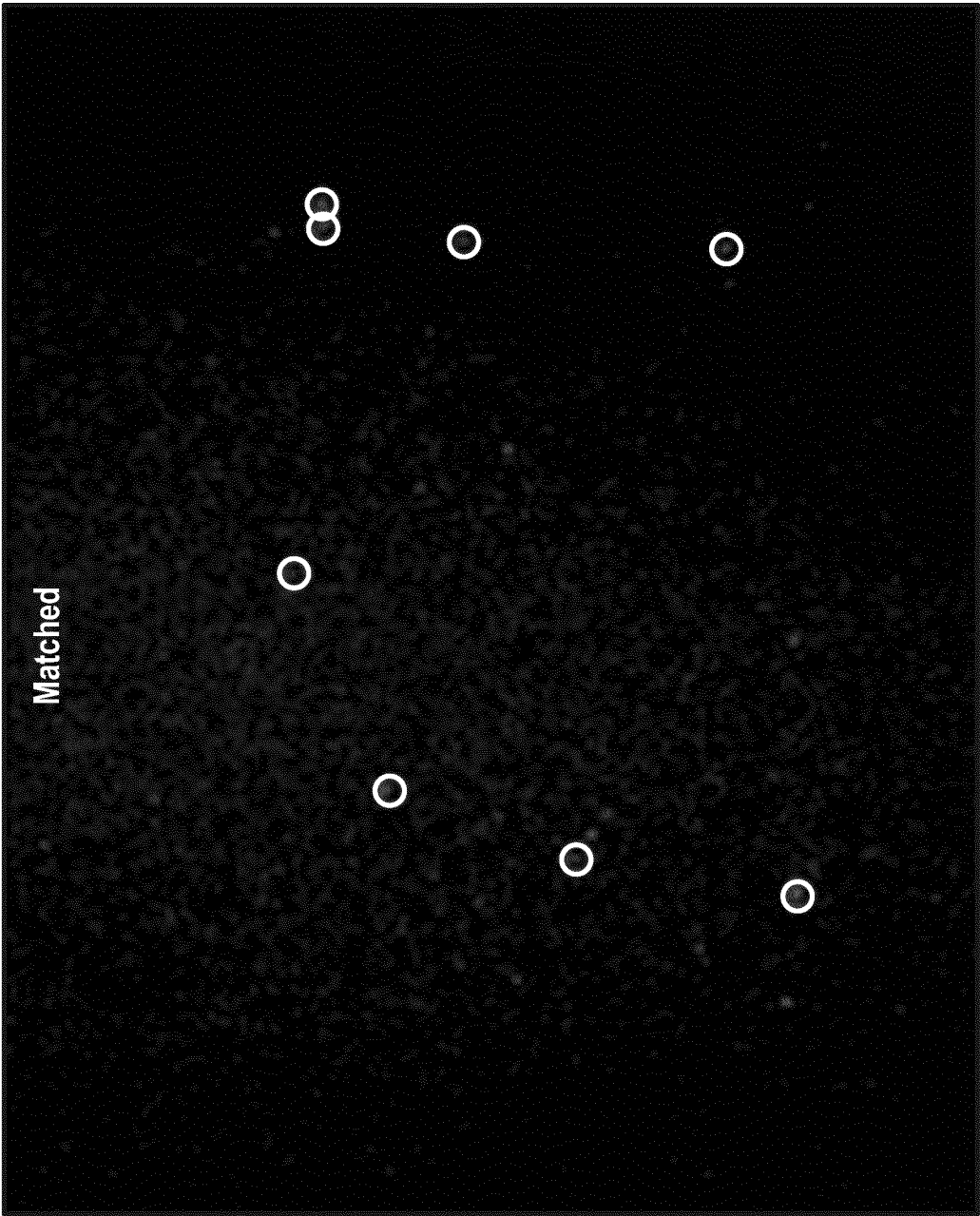


FIG. 12A

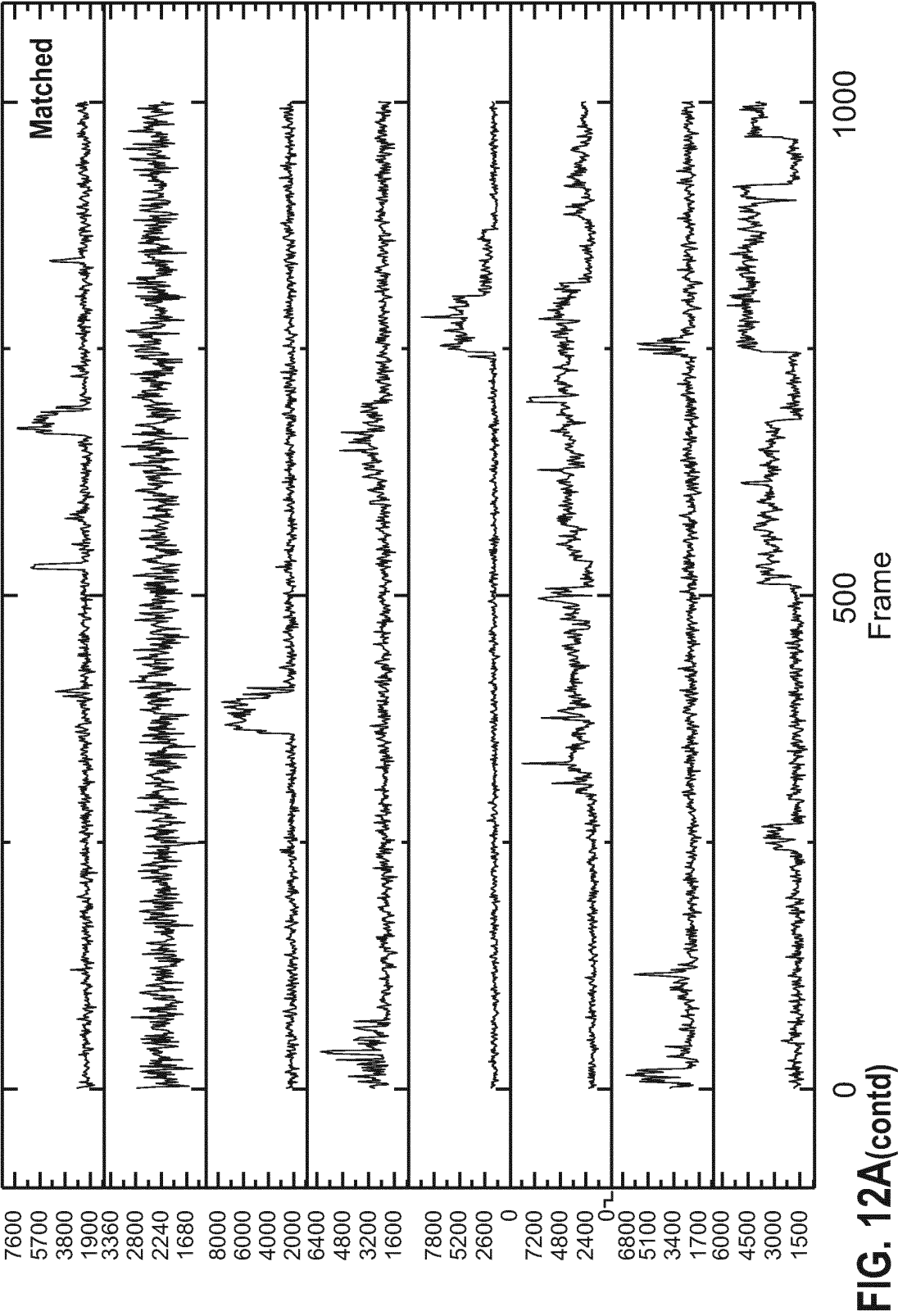


FIG. 12A(contd)

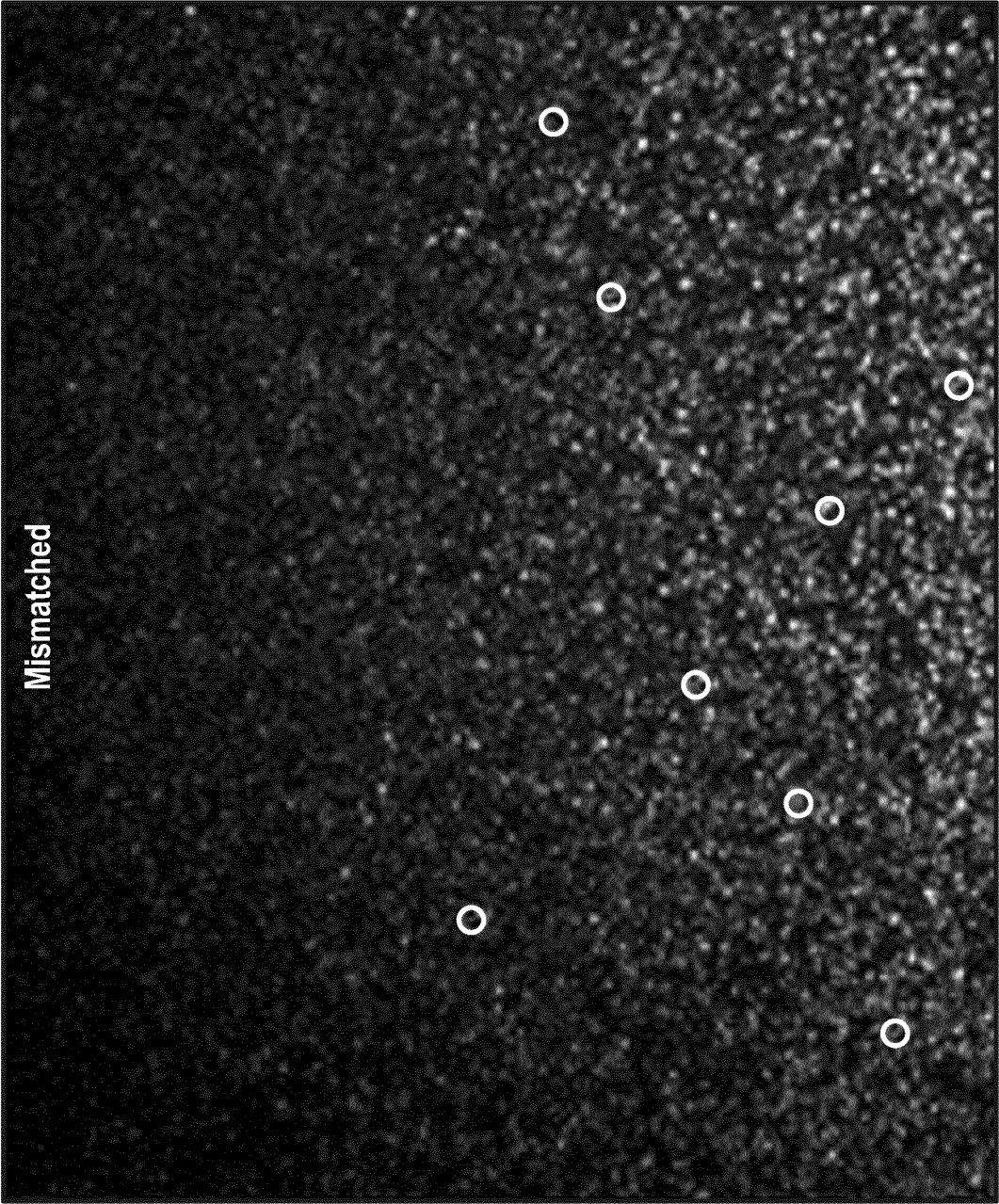


FIG. 12B

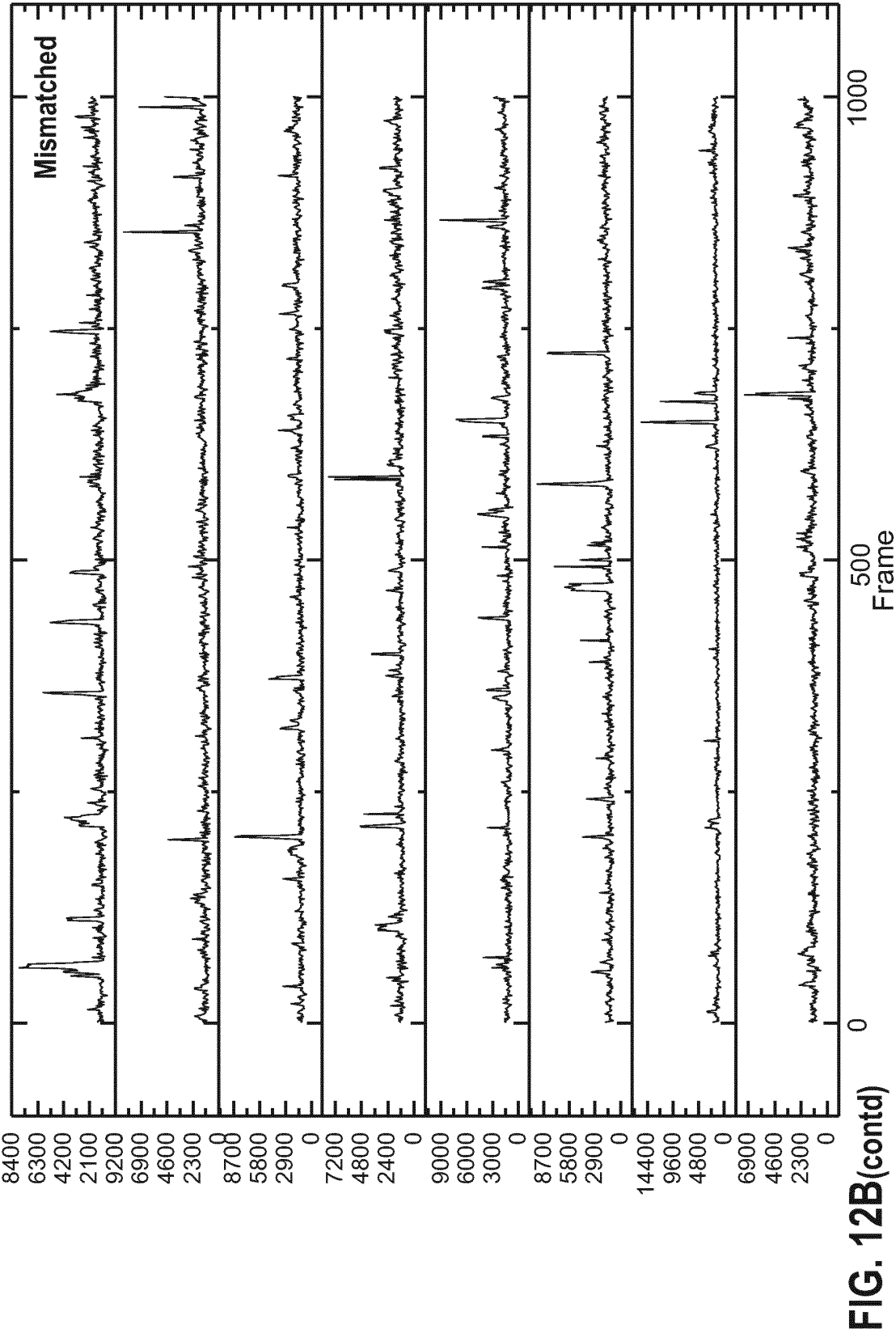


FIG. 13

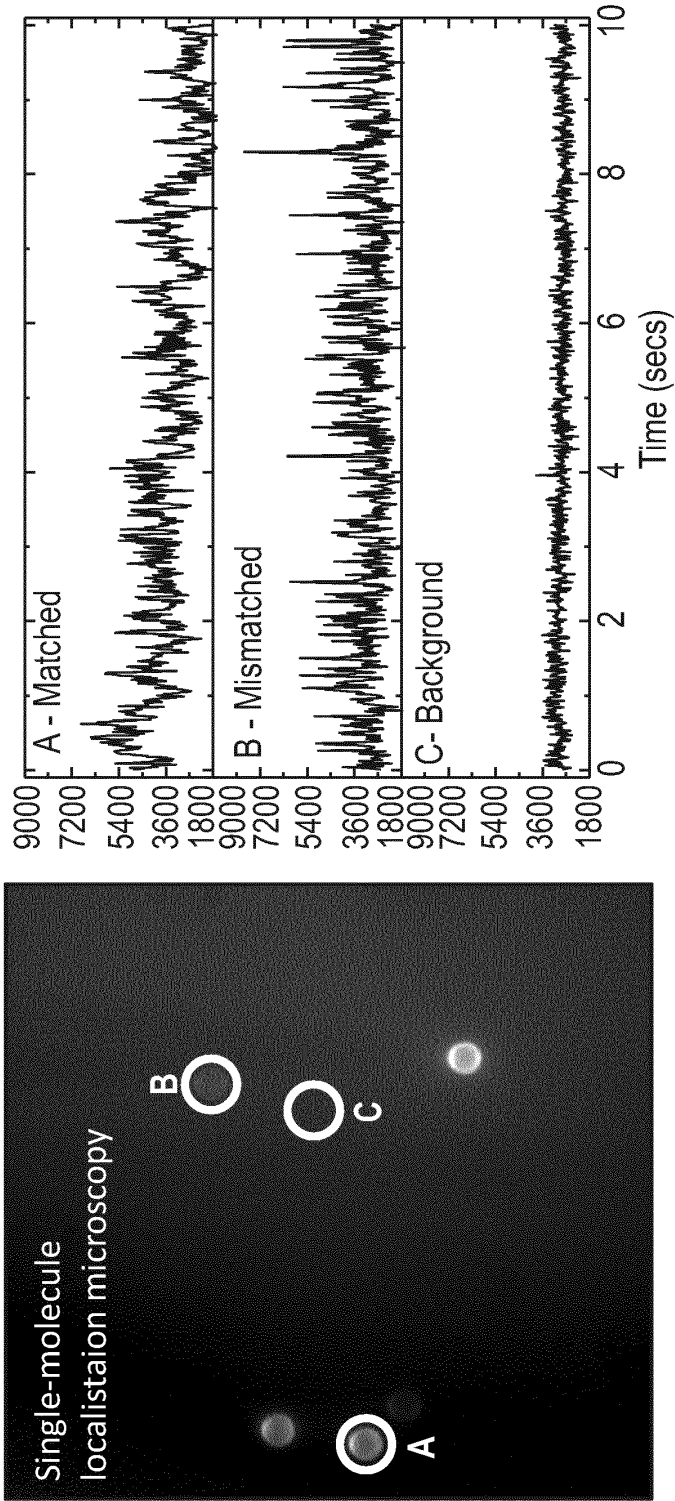


FIG. 14A

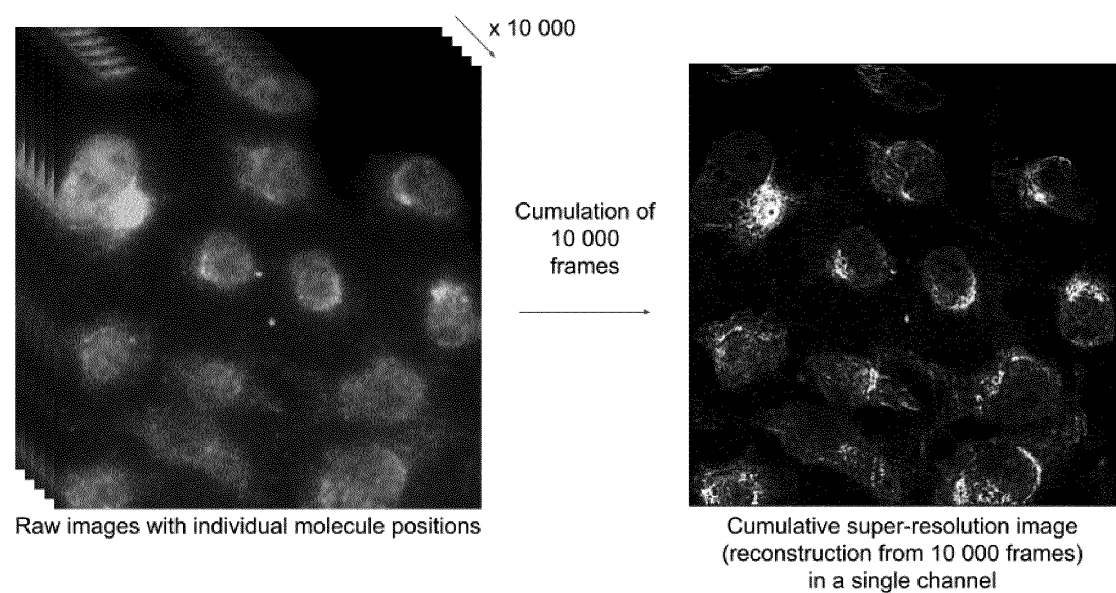
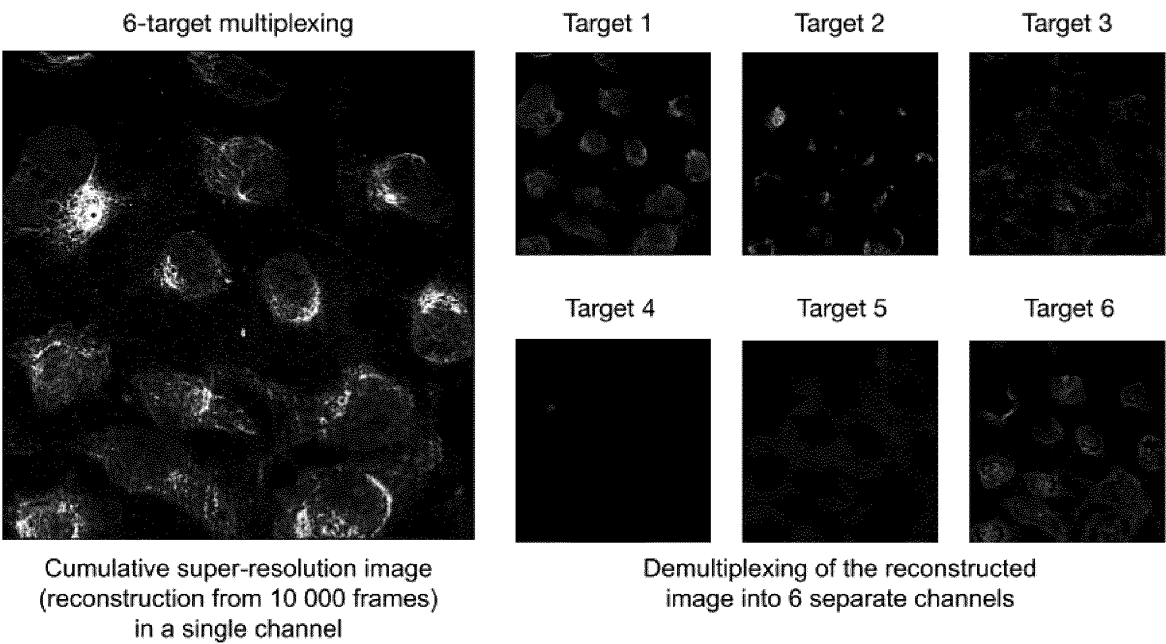


FIG. 14B



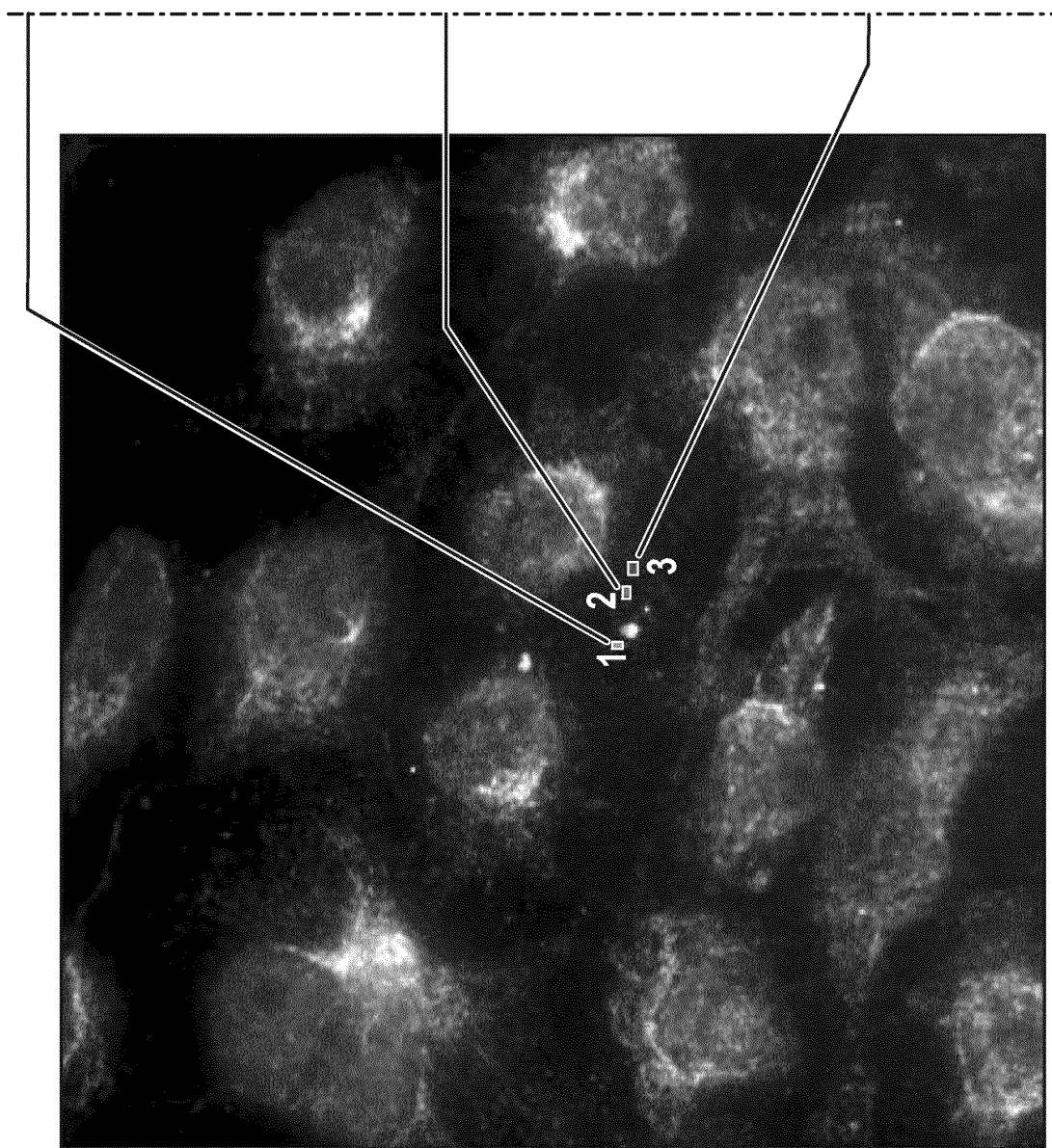


FIG 14C

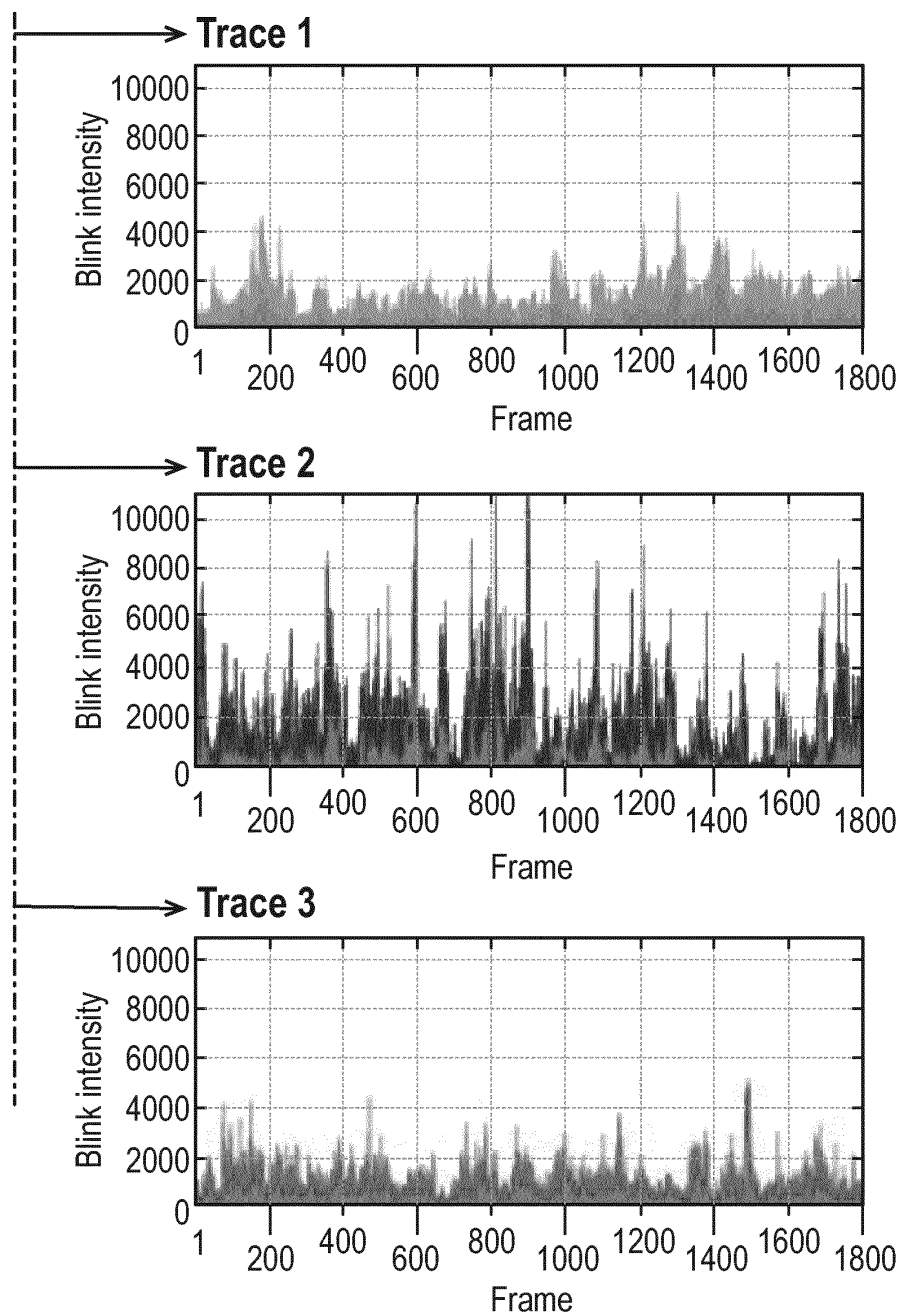
FIG 14C(contd)

FIG 14D Pixel classification and target assignment

