FIG. 1

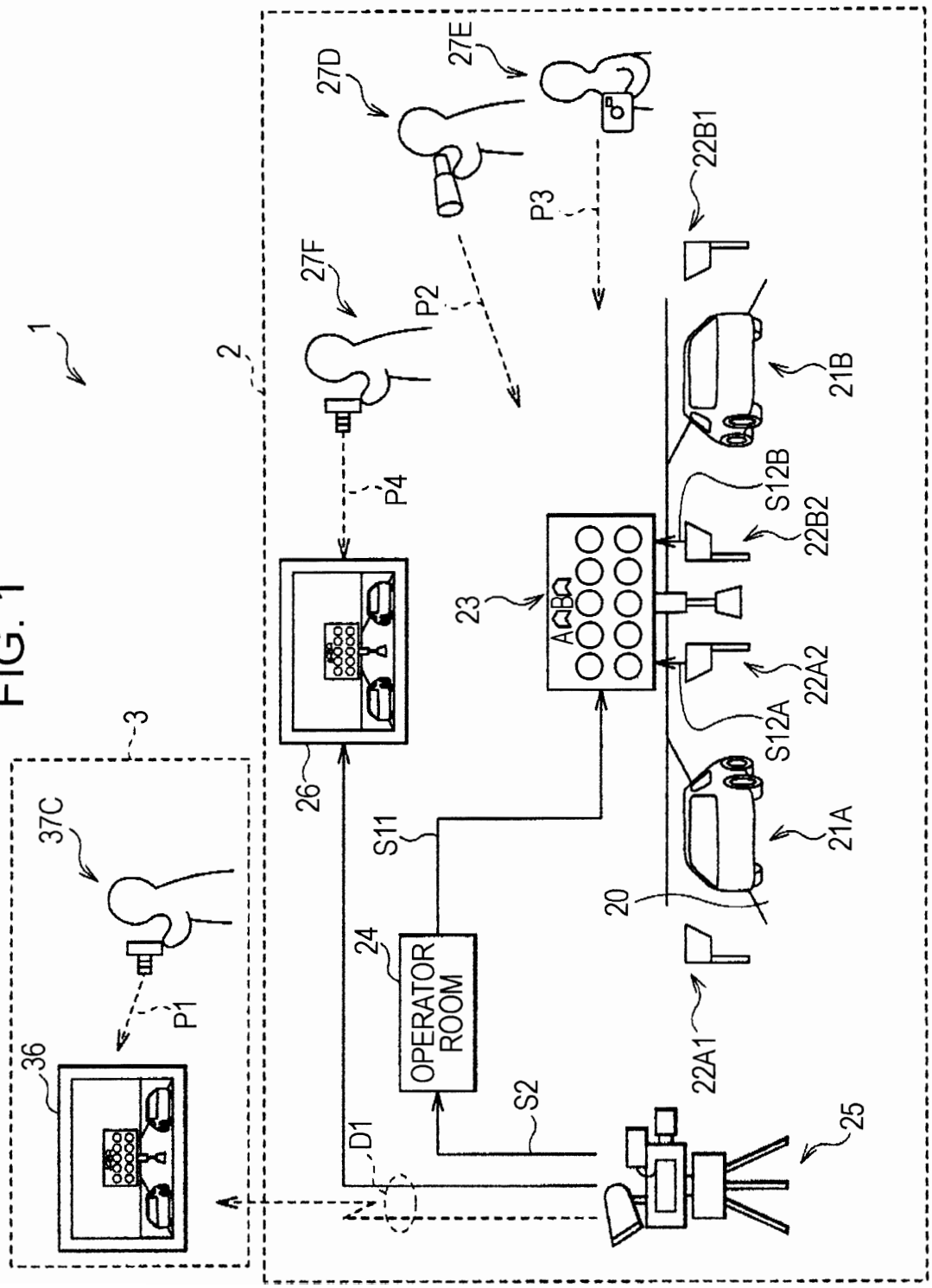
1
2
3
36
37C
P1
26
27F
P2
P4
27D
27E
P3
22B1
21B
S12B
22B2
23
22A2
S12A
21A
20
22A1
S11
24
OPERATOR ROOM
S2
D1
25

FIG. 2

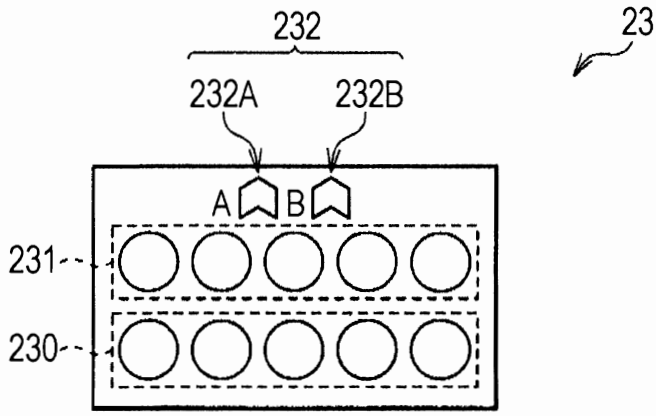
232
23
232A
232B
A
B
231
230

FIG. 3

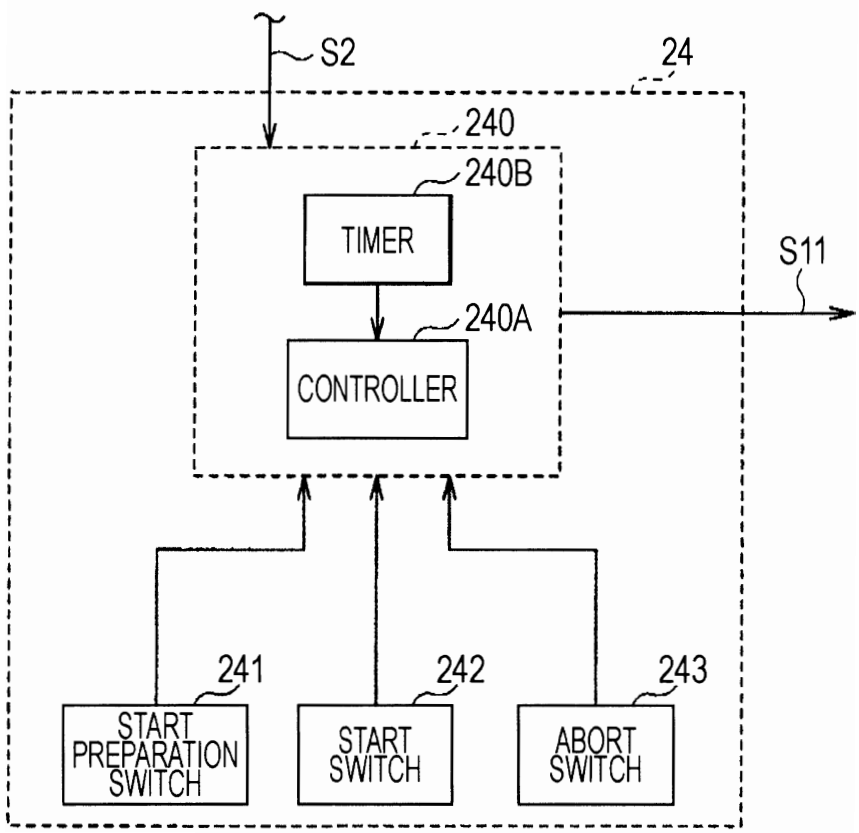
S2
24
240
240B
TIMER
S11
240A
CONTROLLER
241
242
243
START PREPARATION SWITCH
START SWITCH
ABORT SWITCH

FIG. 4

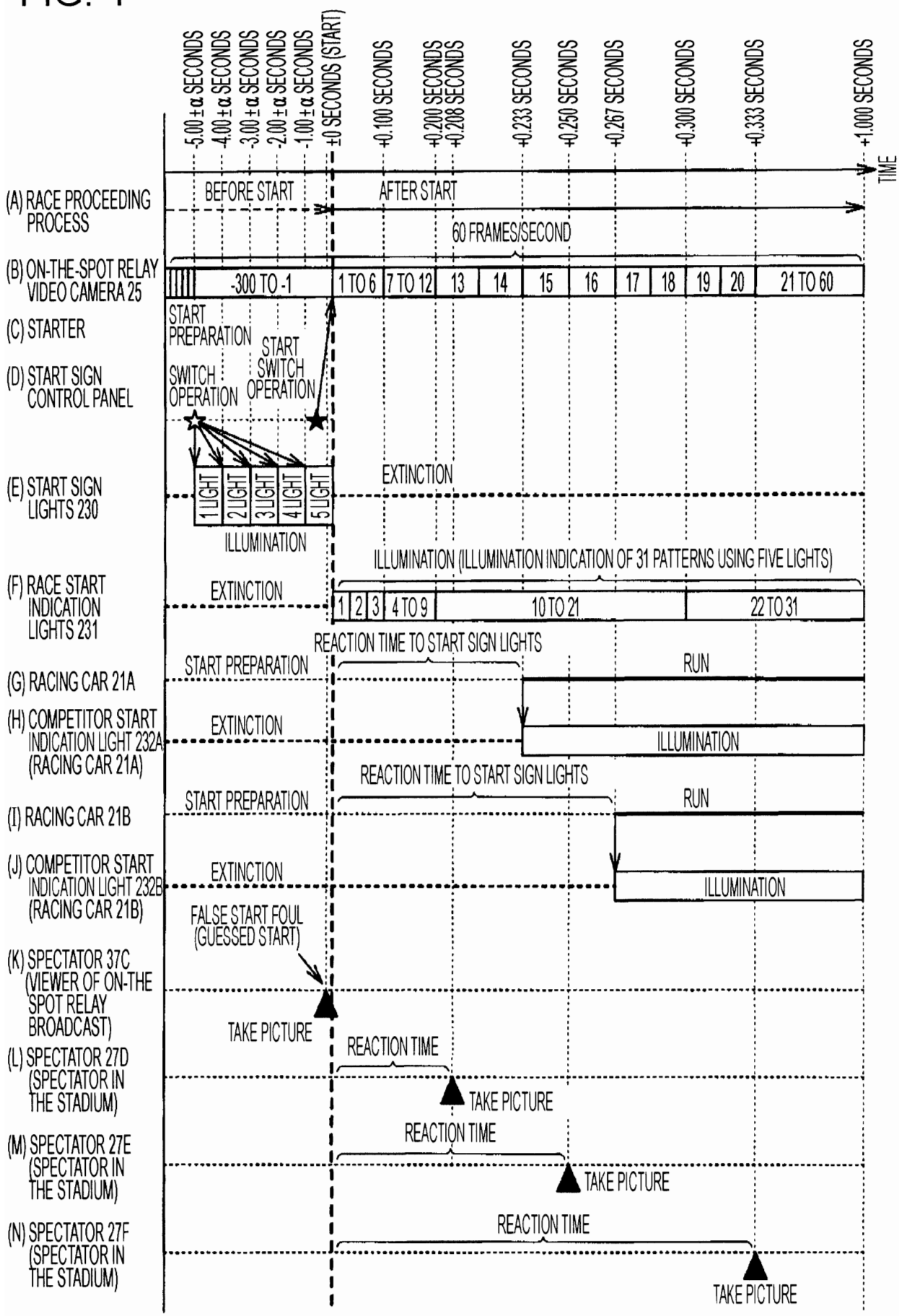
-5.00 ± α SECONDS
-4.00 ± α SECONDS
-3.00 ± α SECONDS
-2.00 ± α SECONDS
-1.00 ± α SECONDS
±0 SECONDS (START)
+0.100 SECONDS
+0.200 SECONDS
+0.208 SECONDS
+0.233 SECONDS
+0.250 SECONDS
+0.267 SECONDS
+0.300 SECONDS
+0.333 SECONDS
+1.000 SECONDS
TIME
(A) RACE PROCEEDING PROCESS
BEFORE START
AFTER START
60 FRAMES/SECOND
(B) ON-THE-SPOT RELAY VIDEO CAMERA 25
-300 TO -1
1 TO 6
7 TO 12
13
14
15
16
17
18
19
20
21 TO 60
(C) STARTER
START PREPARATION
(D) START SIGN CONTROL PANEL
SWITCH OPERATION
START SWITCH OPERATION
(E) START SIGN LIGHTS 230
1 LIGHT
2 LIGHT
3 LIGHT
4 LIGHT
5 LIGHT
EXTINCTION
ILLUMINATION
(F) RACE START INDICATION LIGHTS 231
EXTINCTION
ILLUMINATION (ILLUMINATION INDICATION OF 31 PATTERNS USING FIVE LIGHTS)
1
2
3
4 TO 9
10 TO 21
22 TO 31
REACTION TIME TO START SIGN LIGHTS
(G) RACING CAR 21A
START PREPARATION
RUN
(H) COMPETITOR START INDICATION LIGHT 232A (RACING CAR 21A)
EXTINCTION
ILLUMINATION
REACTION TIME TO START SIGN LIGHTS
(I) RACING CAR 21B
START PREPARATION
RUN
(J) COMPETITOR START INDICATION LIGHT 232B (RACING CAR 21B)
EXTINCTION
ILLUMINATION
FALSE START FOUL (GUESSED START)
(K) SPECTATOR 37C (VIEWER OF ON-THE SPOT RELAY BROADCAST)
TAKE PICTURE
REACTION TIME
(L) SPECTATOR 27D (SPECTATOR IN THE STADIUM)
TAKE PICTURE
REACTION TIME
(M) SPECTATOR 27E (SPECTATOR IN THE STADIUM)
TAKE PICTURE
REACTION TIME
(N) SPECTATOR 27F (SPECTATOR IN THE STADIUM)
TAKE PICTURE

FIG. 5A

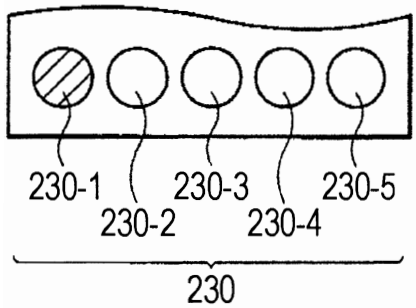

FIG. 5D

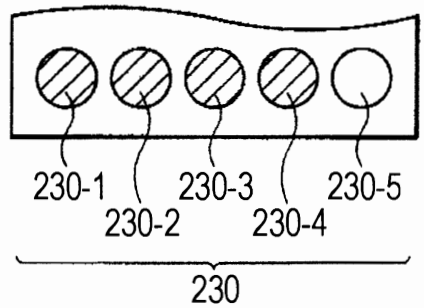

FIG. 5B

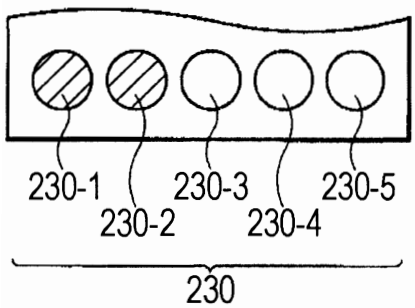

FIG. 5E

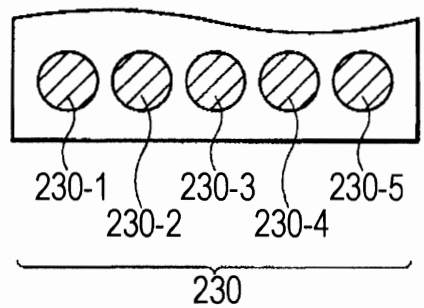

FIG. 5C

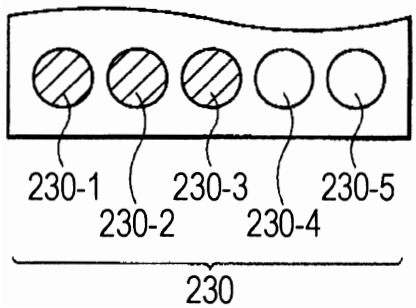

FIG. 5F

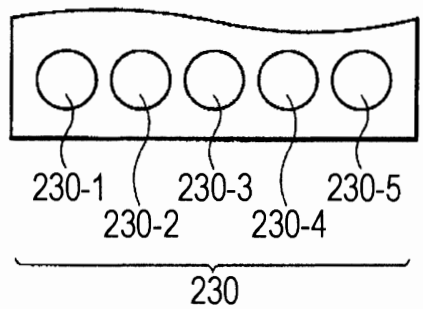

FIG. 6

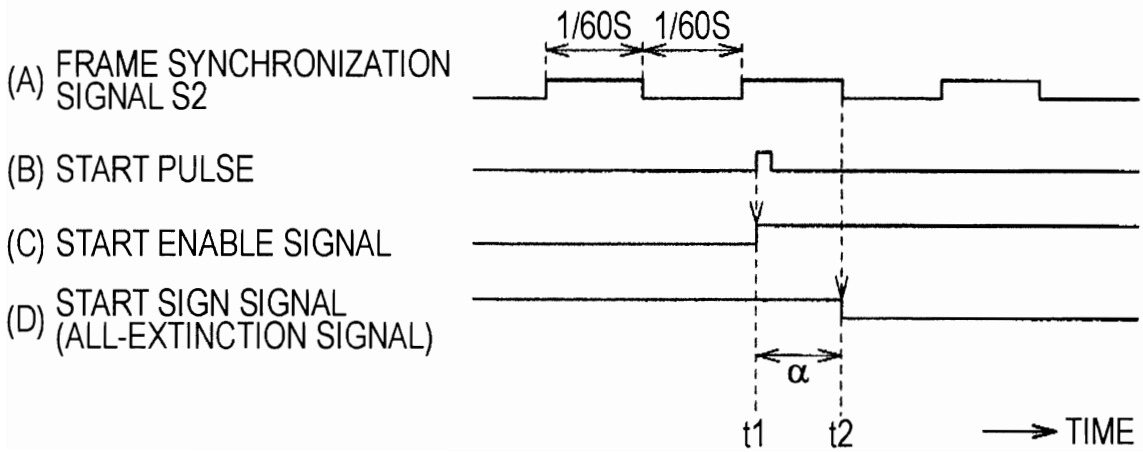
1/60S
1/60S
(A) FRAME SYNCHRONIZATION SIGNAL S2
(B) START PULSE
(C) START ENABLE SIGNAL
(D) START SIGN SIGNAL (ALL-EXTINCTION SIGNAL)
α
t1
t2
TIME

FIG. 7A

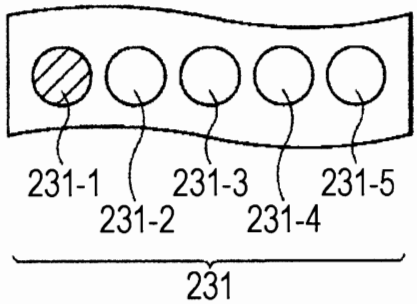

FIG. 7D

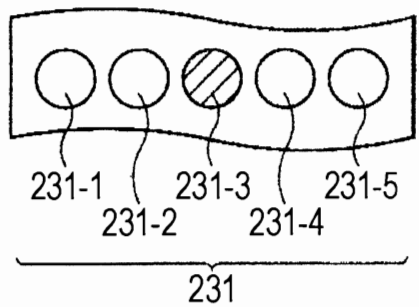

FIG. 7B

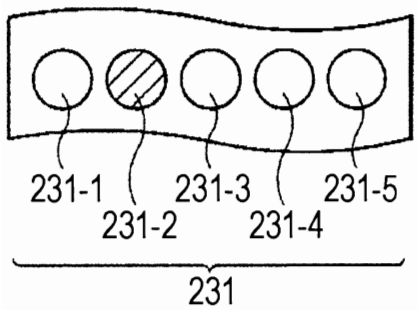

FIG. 7E

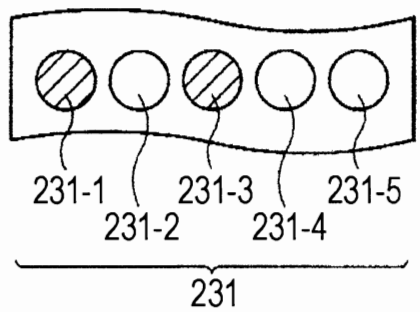

FIG. 7C

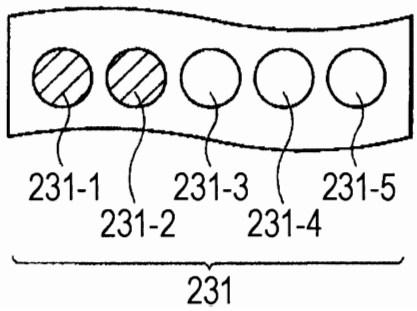

FIG. 7F

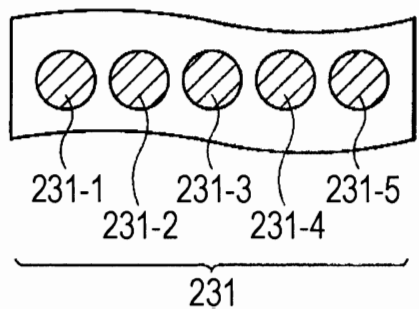

FIG. 8

1	~0.033 SECONDS (Z)	11	~0.217 SECONDS (X)	21	~0.300 SECONDS (X)
2	~0.067 SECONDS (Z)	12	~0.225 SECONDS (X)	22	~0.317 SECONDS (Y)
3	~0.100 SECONDS (Z)	13	~0.233 SECONDS (X)	23	~0.333 SECONDS (Y)
4	~0.117 SECONDS (Y)	14	~0.242 SECONDS (X)	24	~0.350 SECONDS (Y)
5	~0.133 SECONDS (Y)	15	~0.250 SECONDS (X)	25	~0.367 SECONDS (Y)
6	~0.150 SECONDS (Y)	16	~0.258 SECONDS (X)	26	~0.383 SECONDS (Y)
7	~0.167 SECONDS (Y)	17	~0.267 SECONDS (X)	27	~0.400 SECONDS (Y)
8	~0.183 SECONDS (Y)	18	~0.275 SECONDS (X)	28	~0.500 SECONDS (V)
9	~0.200 SECONDS (Y)	19	~0.283 SECONDS (X)	29	~0.600 SECONDS (V)
10	~0.208 SECONDS (X)	20	~0.292 SECONDS (X)	30	~0.700 SECONDS (V)
ILLUMINATION PATTERNS OF FIVE LIGHTS: $2^5 - 1 = 31$				31	~1.000 SECONDS (W)

(X): EVERY 0.0083 SECONDS, (Y): EVERY 0.0166 SECONDS,
(Z): EVERY 0.033 SECONDS, (V): EVERY 0.1 SECONDS, (W): EVERY 0.3 SECONDS

FIG. 9A

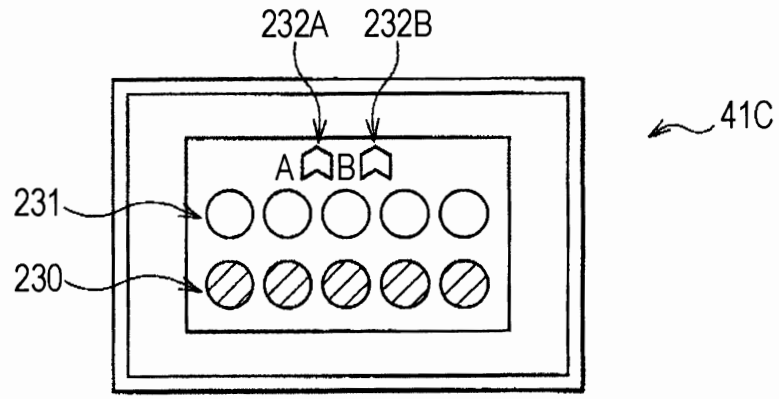

FIG. 9B

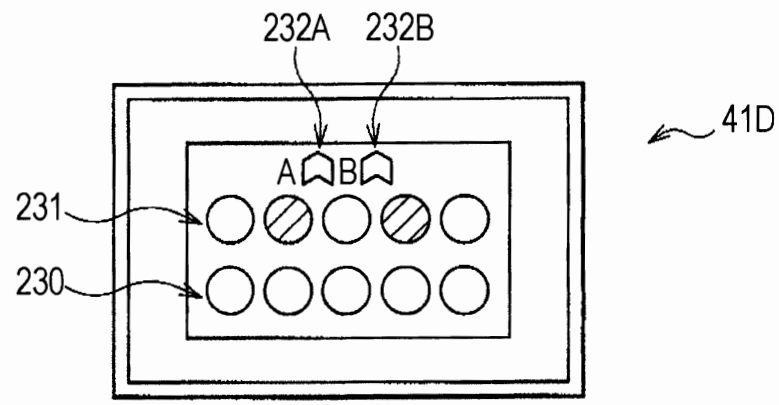

FIG. 9C

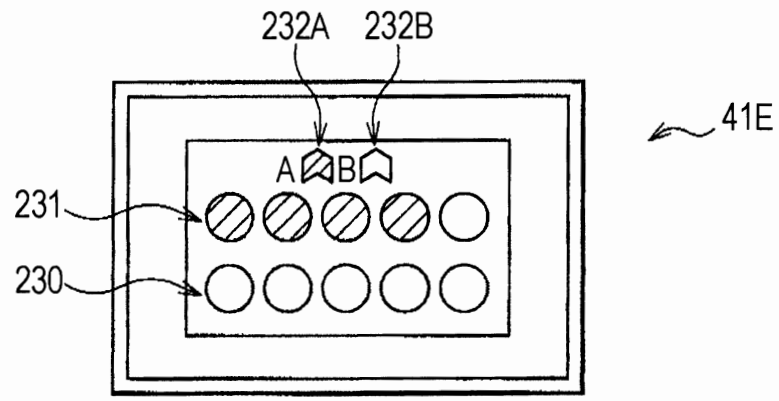

FIG. 9D

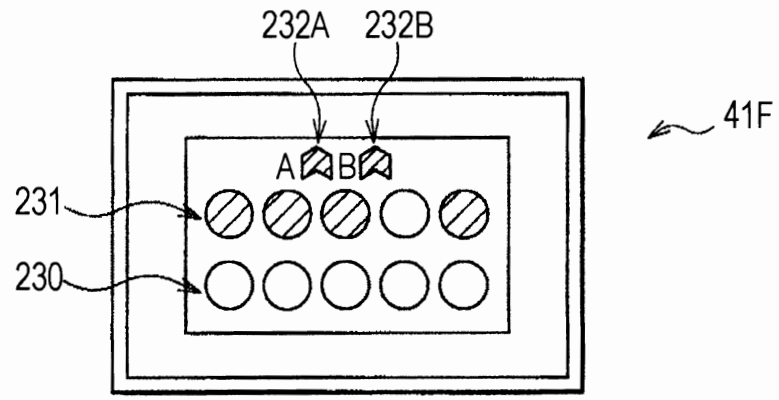

FIG. 10

RANKING	ENTRIES	CLASSIFICATIONS OF ENTRIES	PHOTOGRAPHING EQUIPMENT	REACTION TIME
1	27D	SPECTATOR IN THE STADIUM	SINGLE-LENS REFLEX CAMERA MANUFACTURED BY W COMPANY	0.208 SECONDS
2	21A	RACE COMPETITOR (RACING CAR)	——	0.233 SECONDS
3	27E	SPECTATOR IN THE STADIUM	DIGITAL CAMERA MANUFACTURED BY X COMPANY	0.250 SECONDS
4	21B	RACE COMPETITOR (RACING CAR)	——	0.267 SECONDS
5	27F	SPECTATOR IN THE STADIUM	INSTANT CAMERA MANUFACTURED BY Y COMPANY	0.333 SECONDS
6	37C	VIEWER OF ON-THE-SPOT RELAY BROADCAST	CELL PHONE CAMERA MANUFACTURED BY Z COMPANY	FALSE START DISQUALIFICATION

FIG. 11

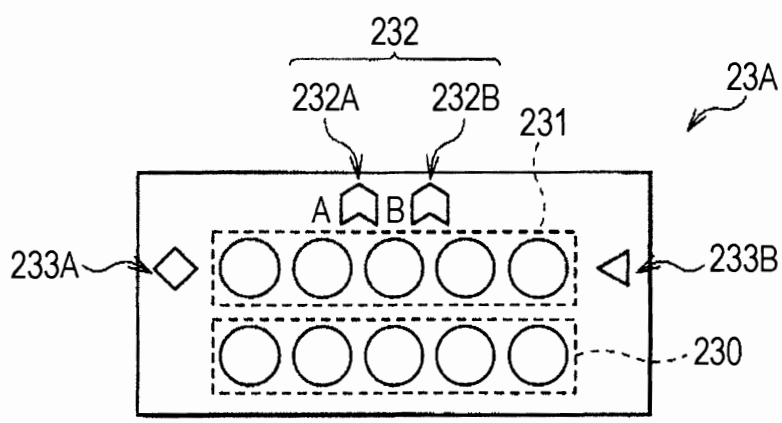

FIG. 12

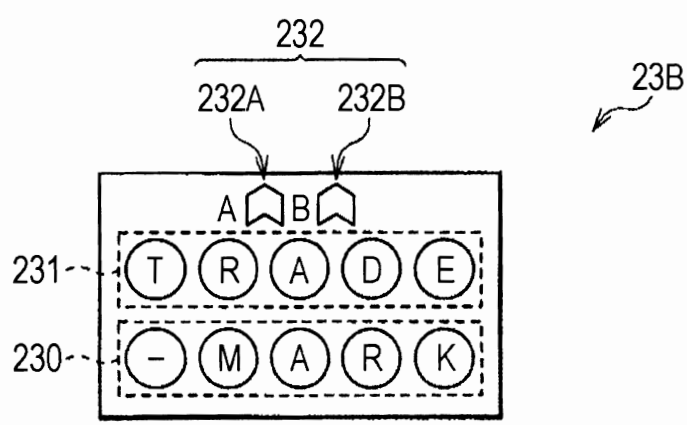

FIG. 13A

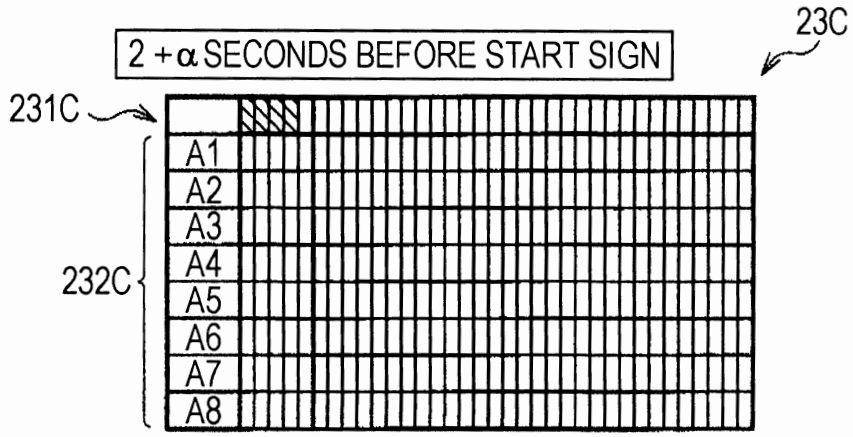

FIG. 13B

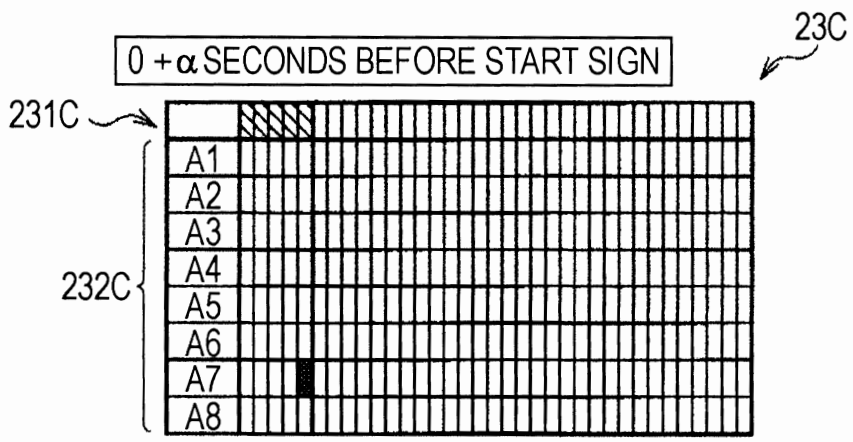

FIG. 13C

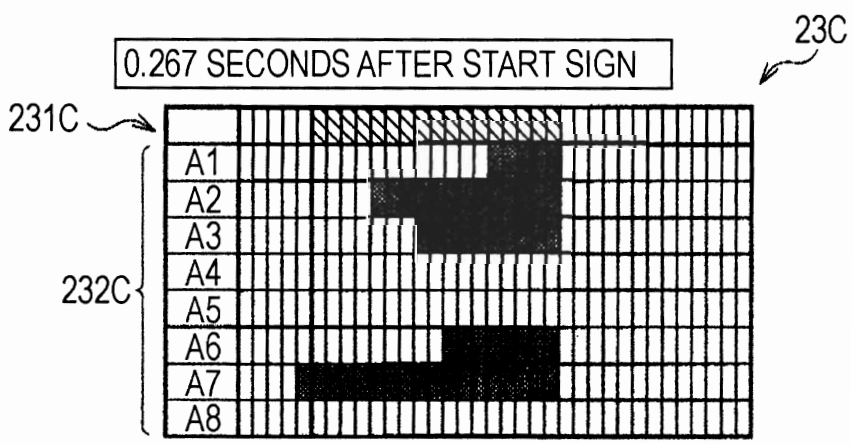

FIG. 13D

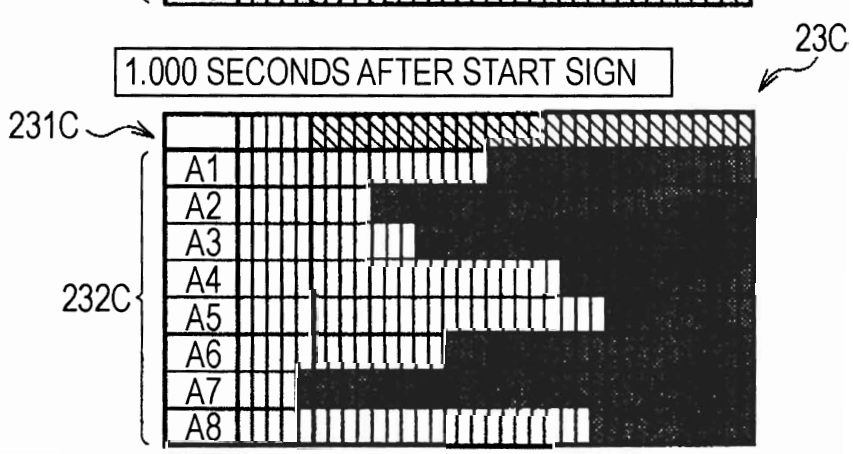

FIG. 14

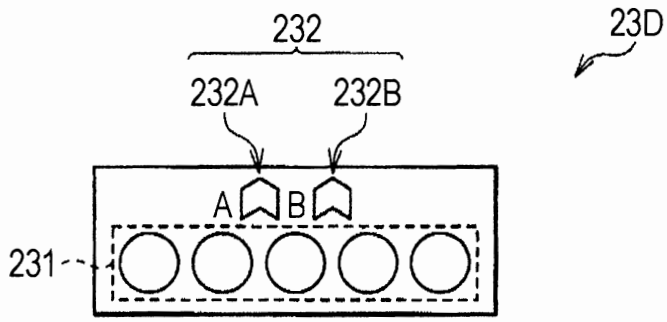

FIG. 15

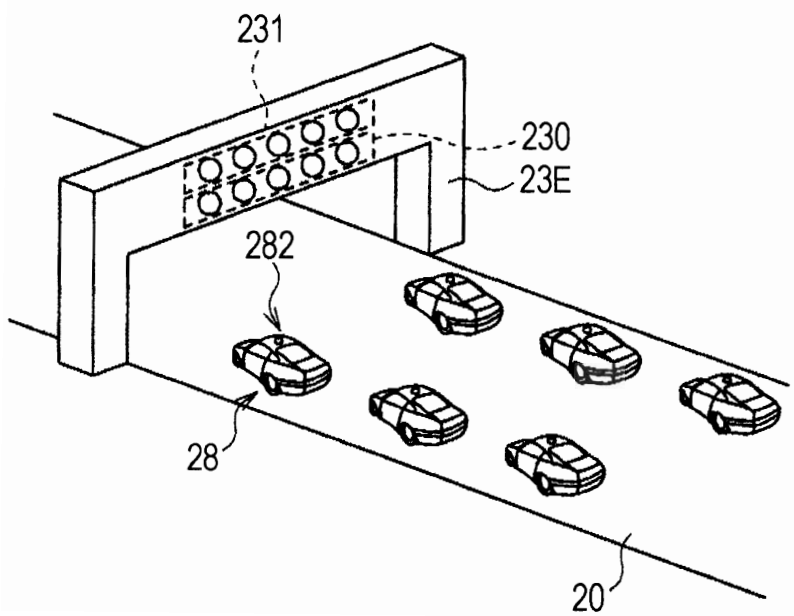

FIG. 16

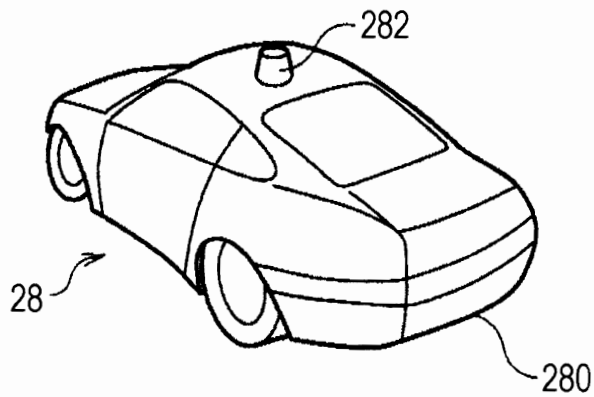

FIG. 17

