FIG. 1A

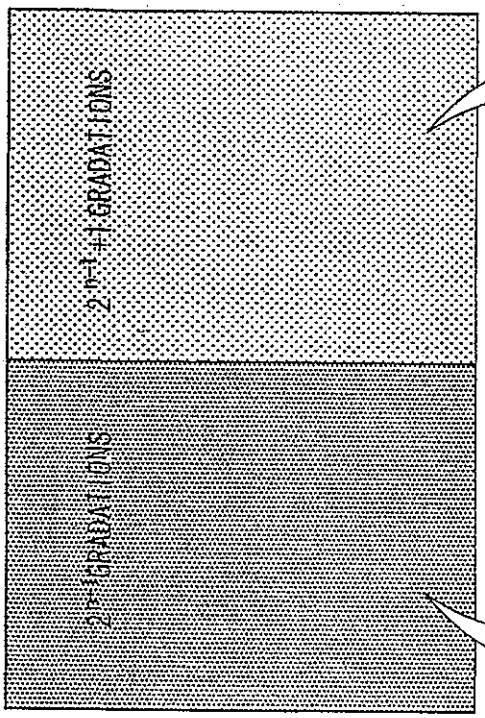
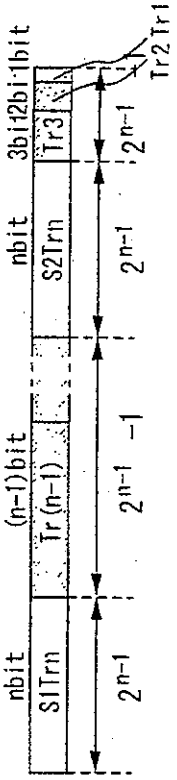
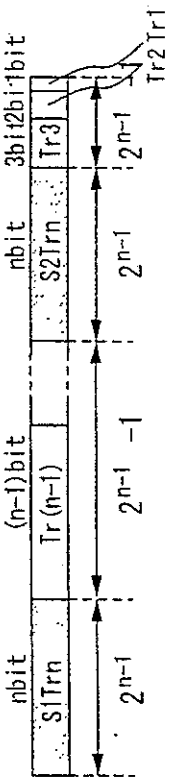

$2^{n-1}+1$ GRADATIONS
2^{n-1} GRADATIONS

FIG. 1B


nbit
S1Trn
(n-1)bit
Tr(n-1)
nbit
S2Trn
3bit2bit1bit
Tr3
Tr2Tr1
2^{n-1}
$2^{n-1}-1$


nbit
S1Trn
(n-1)bit
Tr(n-1)
nbit
S2Trn
3bit2bit1bit
Tr3
Tr2Tr1
2^{n-1}
$2^{n-1}-1$

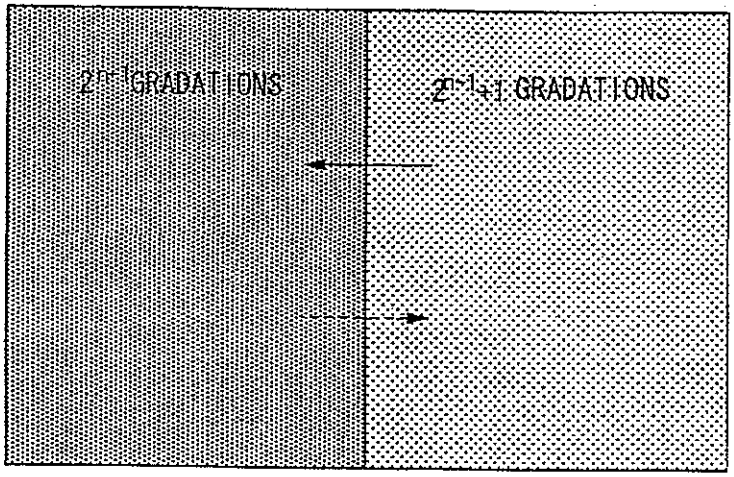

2^{n-1}GRADATIONS
2^{n-1}+1 GRADATIONS

FIG. 2A

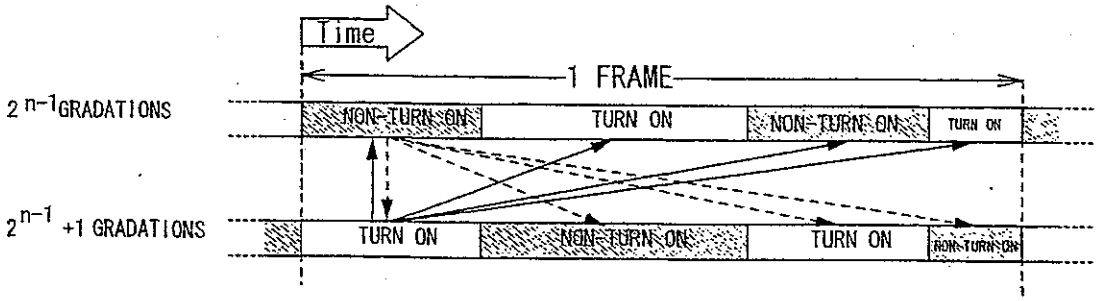

Time
1 FRAME
2^{n-1}GRADATIONS
NON-TURN ON
TURN ON
NON-TURN ON
TURN ON
2^{n-1} +1 GRADATIONS
TURN ON
NON-TURN ON
TURN ON
NON-TURN ON

FIG. 2B

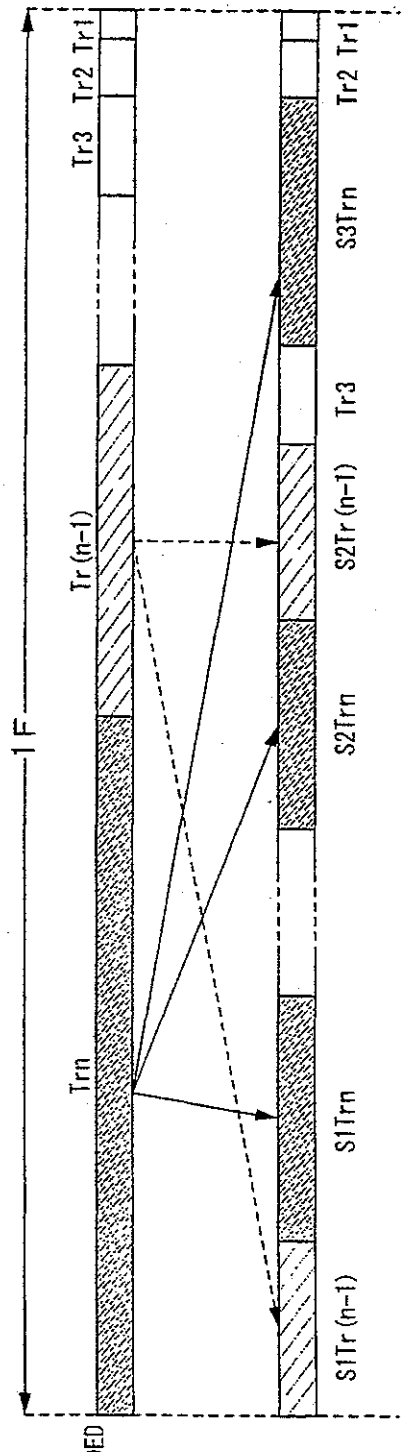

1F
Tr1
Tr2
Tr3
Tr(n-1)
Trn
S1Tr(n-1)
S1Trn
S2Trn
S2Tr(n-1)
Tr3
S3Trn
Tr2
Tr1
NON-DIVIDED DISPLAY PERIOD
DIVIDED DISPLAY PERIODS

FIG. 3

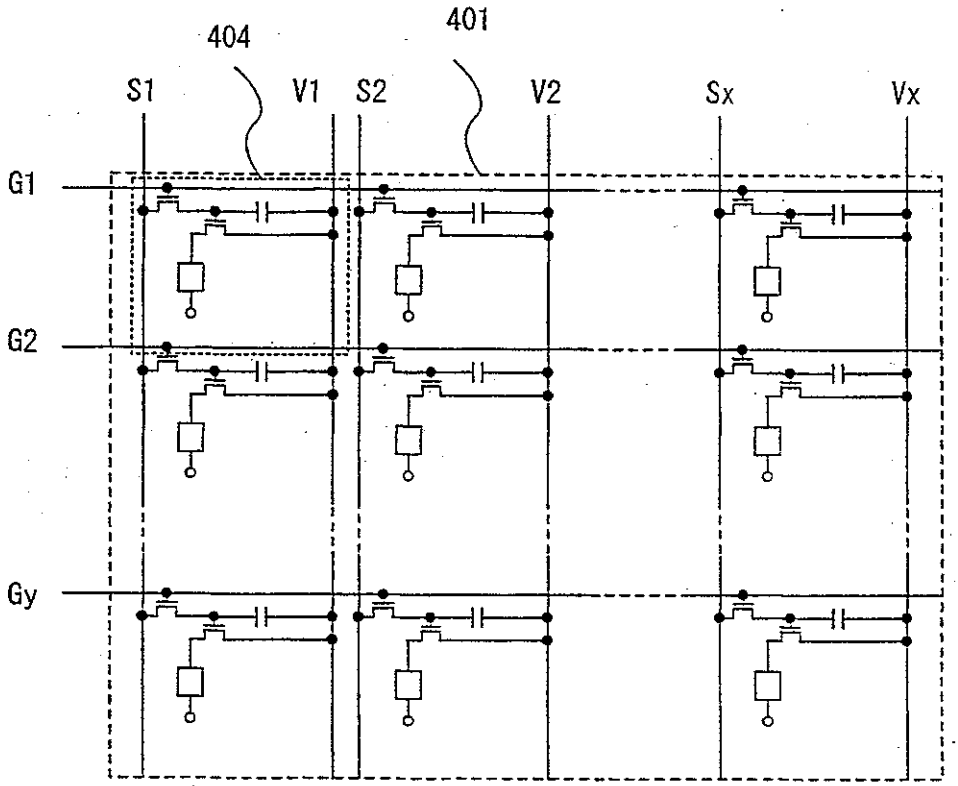


FIG. 4

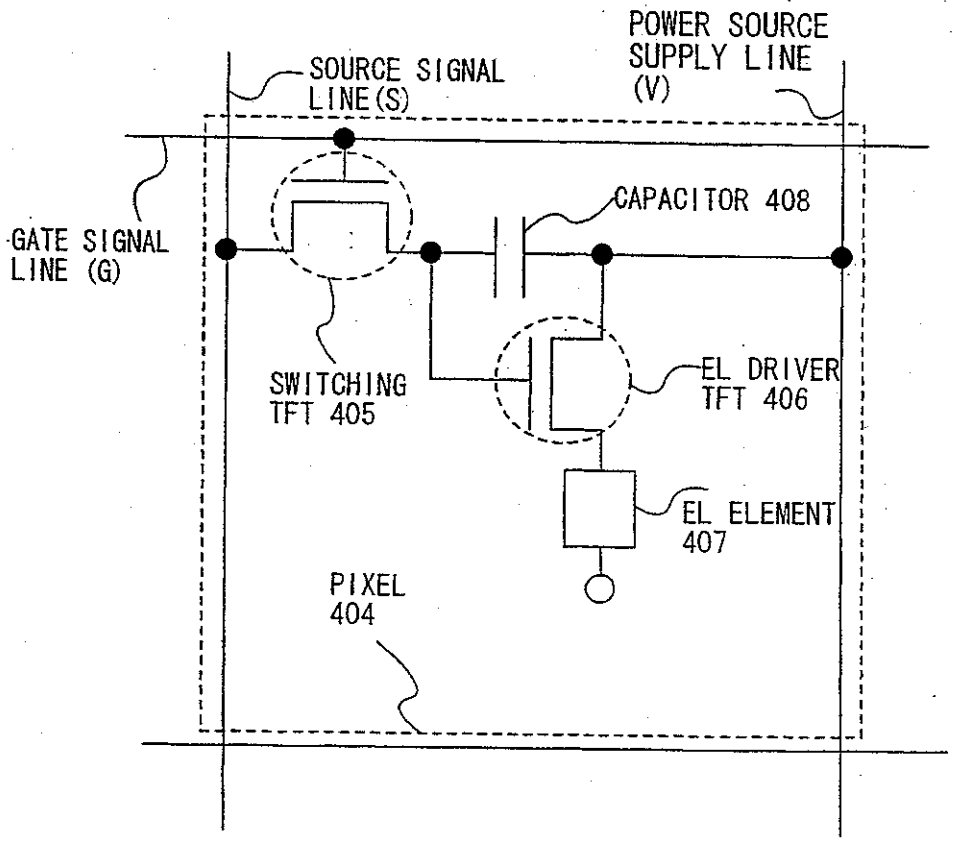

POWER SOURCE
SUPPLY LINE
(V)
SOURCE SIGNAL
LINE(S)
GATE SIGNAL
LINE (G)
CAPACITOR 408
SWITCHING
TFT 405
EL DRIVER
TFT 406
EL ELEMENT
407
PIXEL
404

FIG. 5

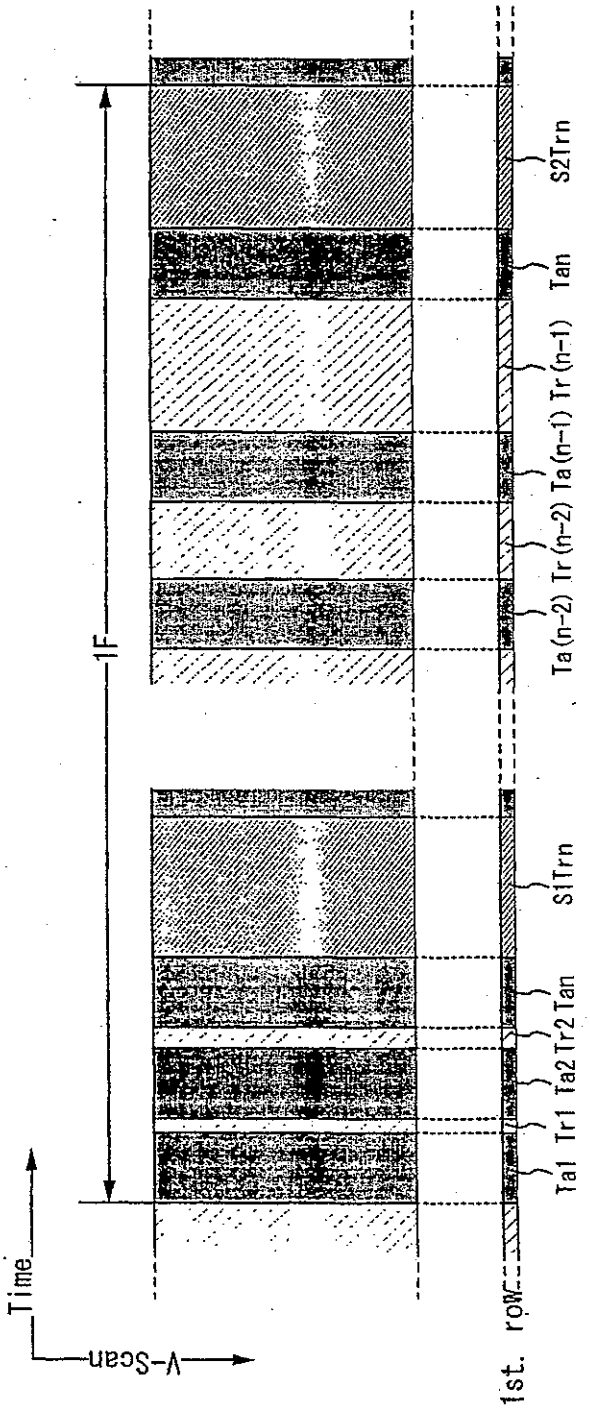

Time
V-Scan
1F
1st. row
Ta1 Tr1 Ta2 Tr2 Tan S1Trn
Ta(n-2) Tr(n-2) Ta(n-1) Tr(n-1) Tan S2Trn

FIG. 6

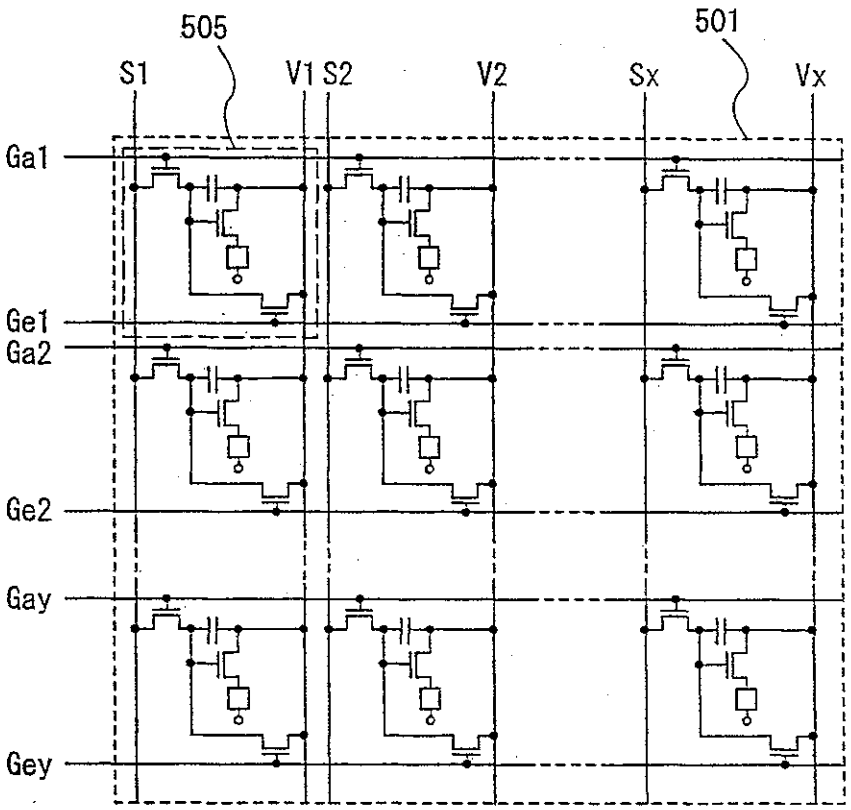


FIG. 7

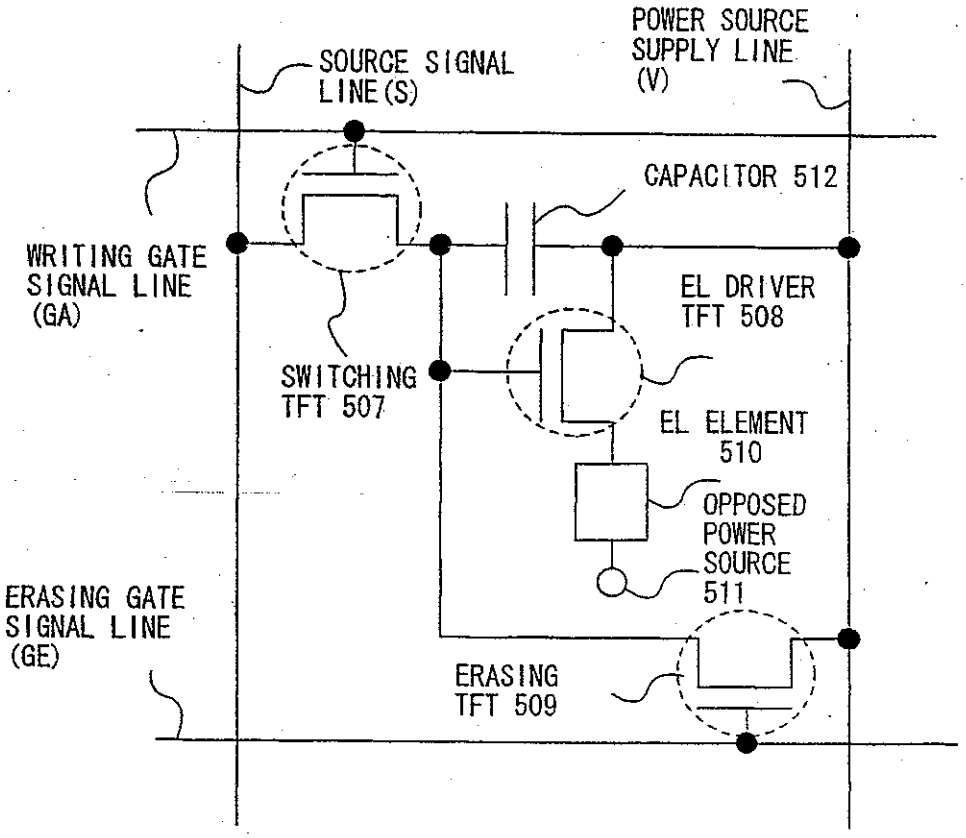

POWER SOURCE
SUPPLY LINE
(V)
SOURCE SIGNAL
LINE (S)
CAPACITOR 512
WRITING GATE
SIGNAL LINE
(GA)
EL DRIVER
TFT 508
SWITCHING
TFT 507
EL ELEMENT
510
OPPOSED
POWER
SOURCE
511
ERASING GATE
SIGNAL LINE
(GE)
ERASING
TFT 509

FIG. 8

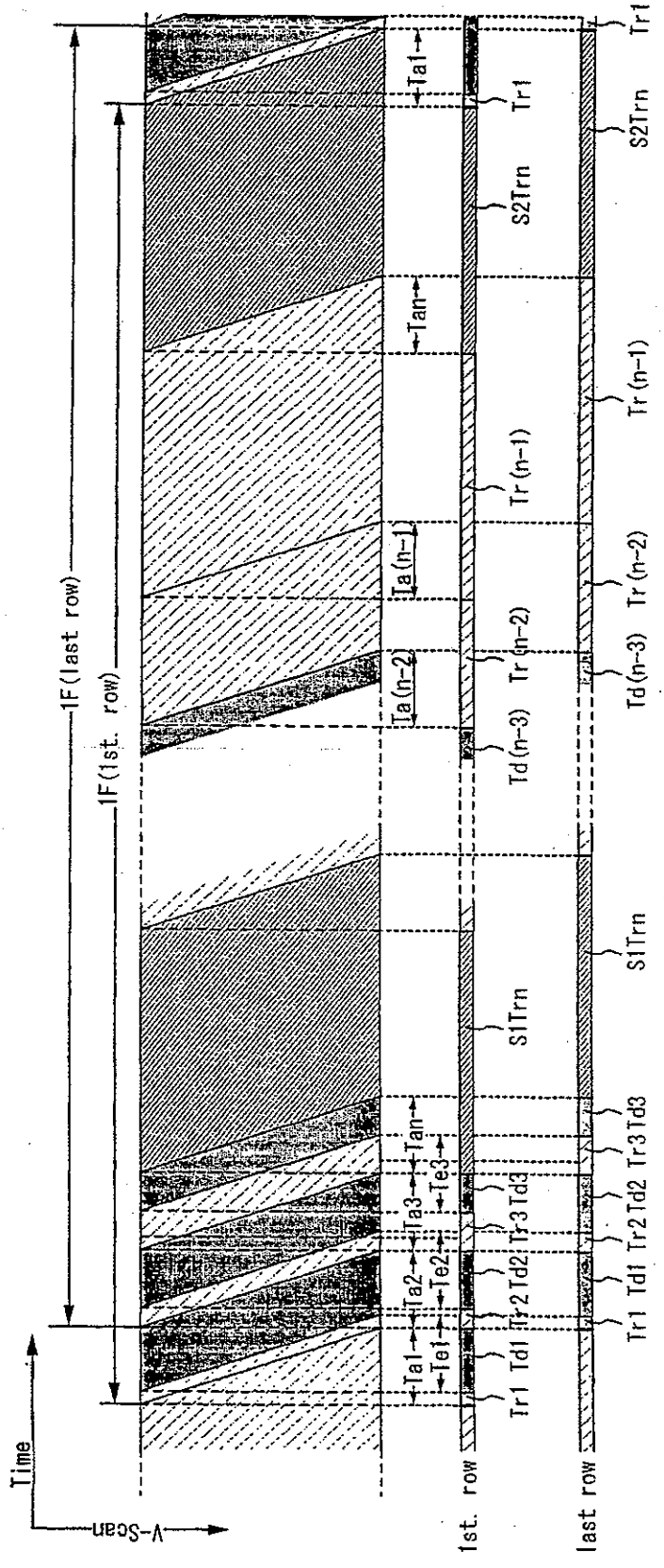

1F(last row)
1F(1st. row)
Time
V-Scan
1st. row
last row
Ta1
Tan
Ta(n-1)
Ta(n-2)
Ta3
Ta2
Te3
Te2
Te1
Tr1
Td1
Tr2
Td2
Tr3
Td3
Tr(n-1)
Tr(n-2)
Td(n-3)
S1Trn
S2Trn

FIG. 9

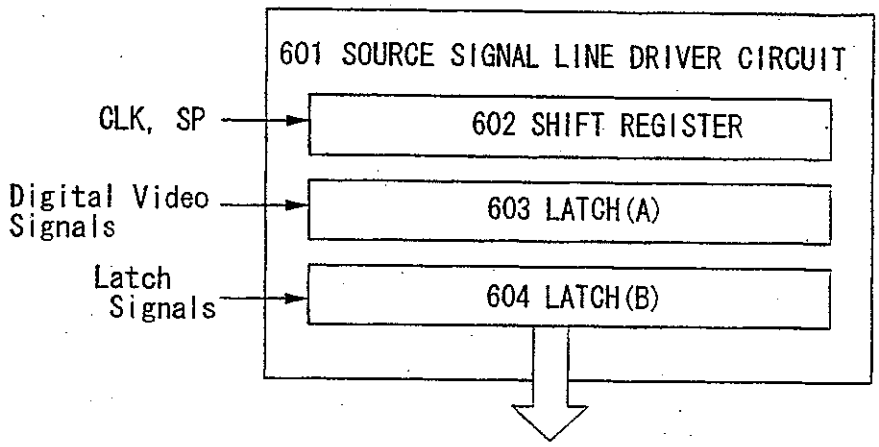


FIG. 10A

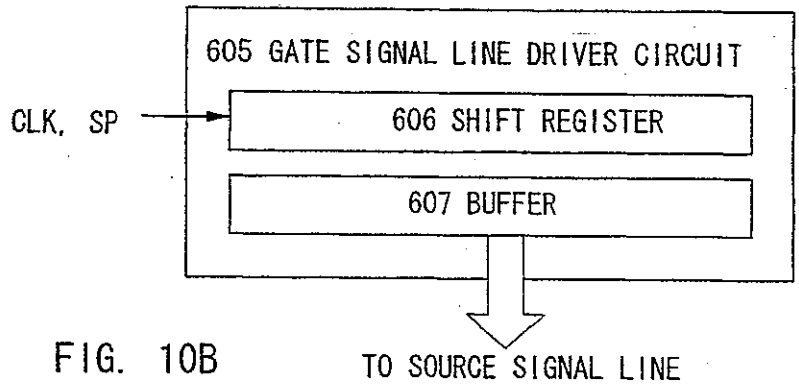


FIG. 10B

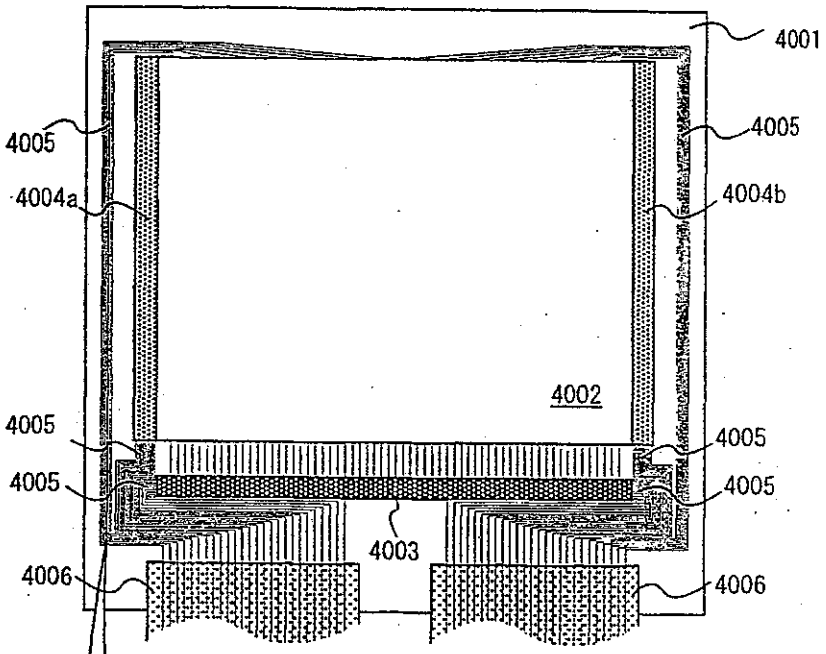


FIG. 11A

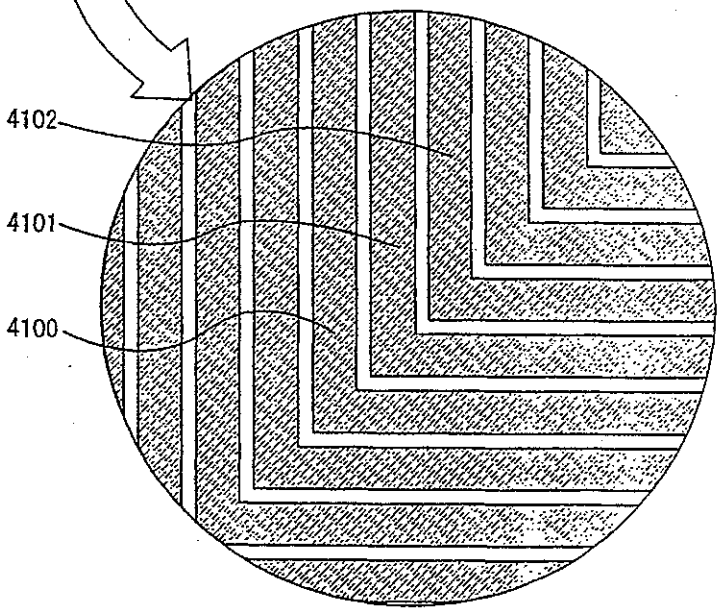


FIG. 11B

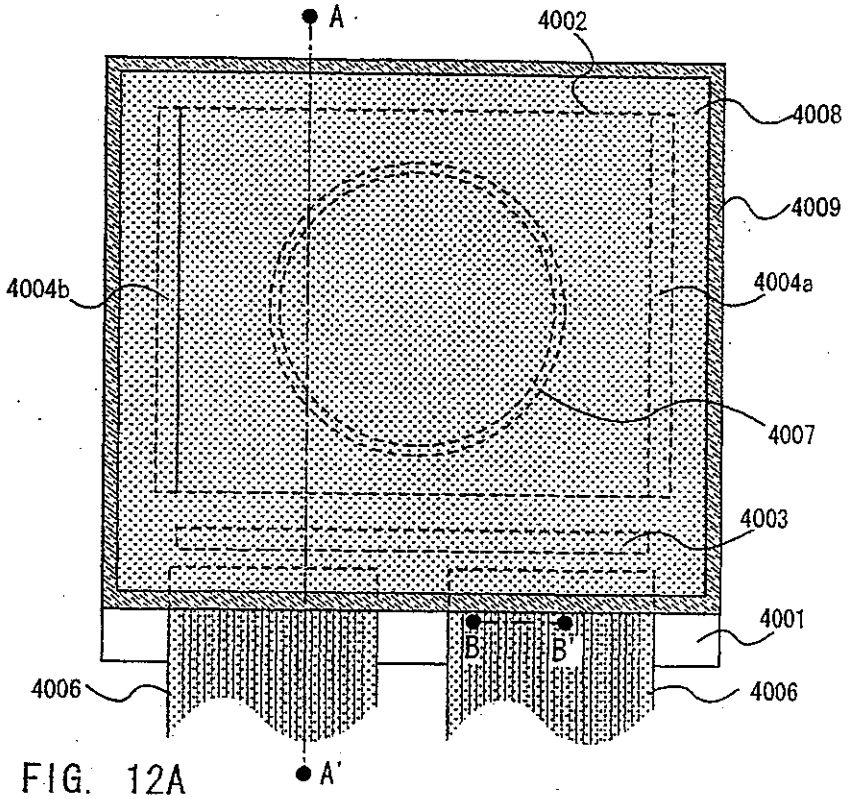


FIG. 12A

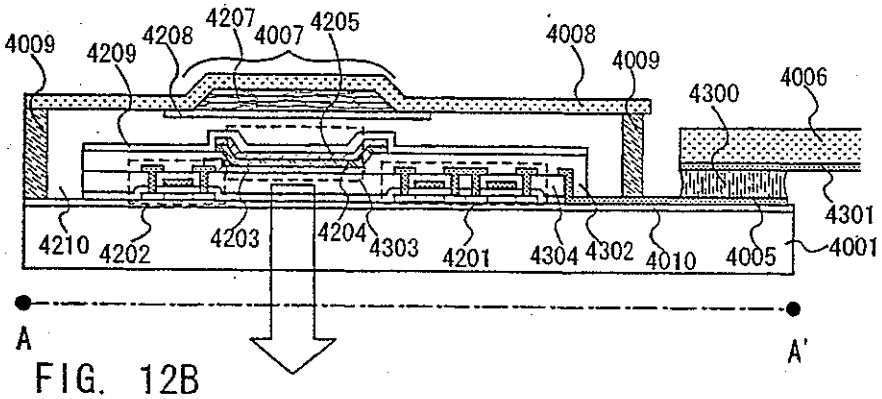


FIG. 12B

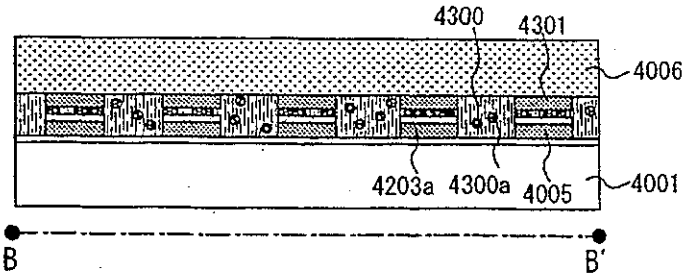


FIG. 12C

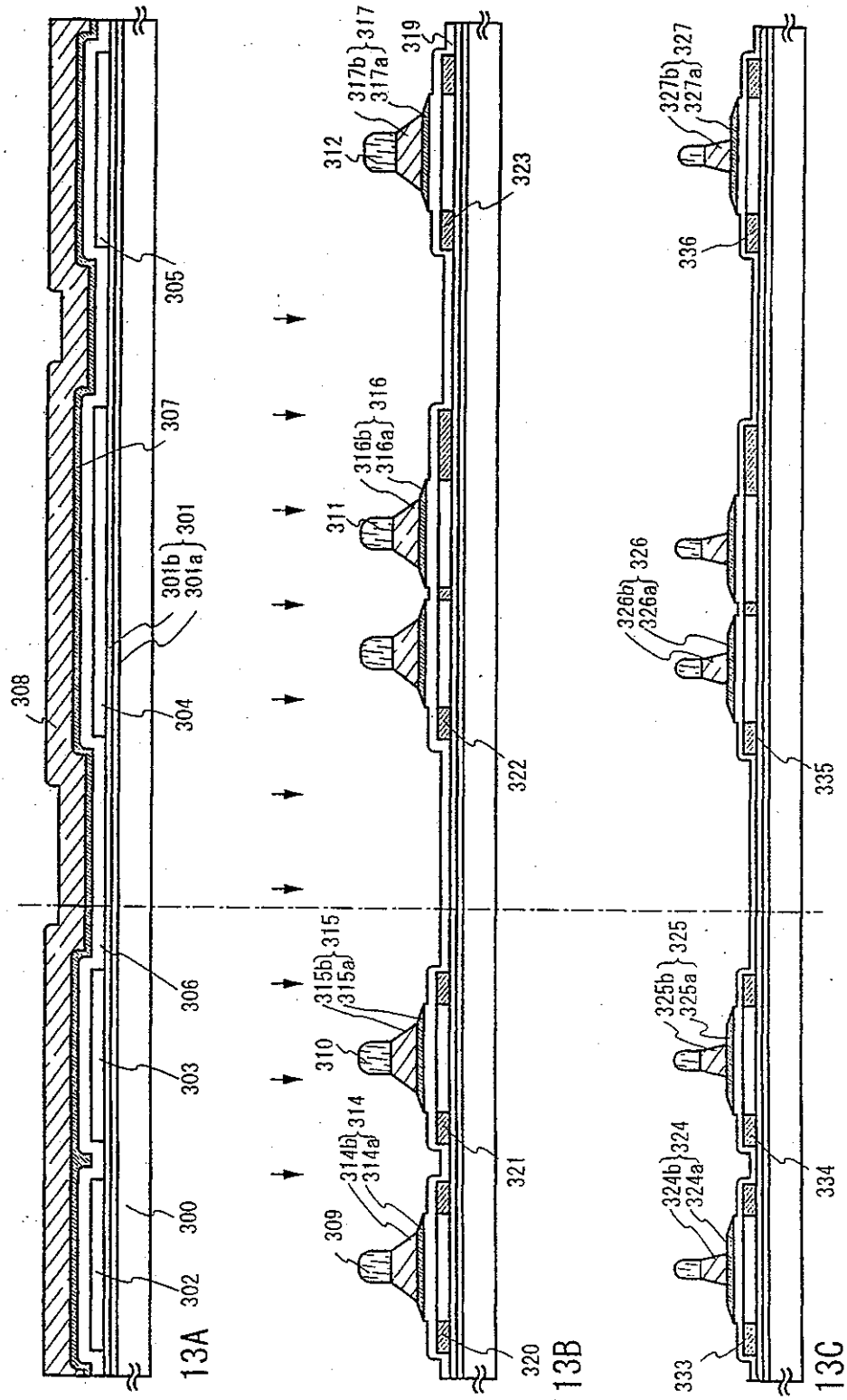


FIG. 13A FIG. 13B FIG. 13C

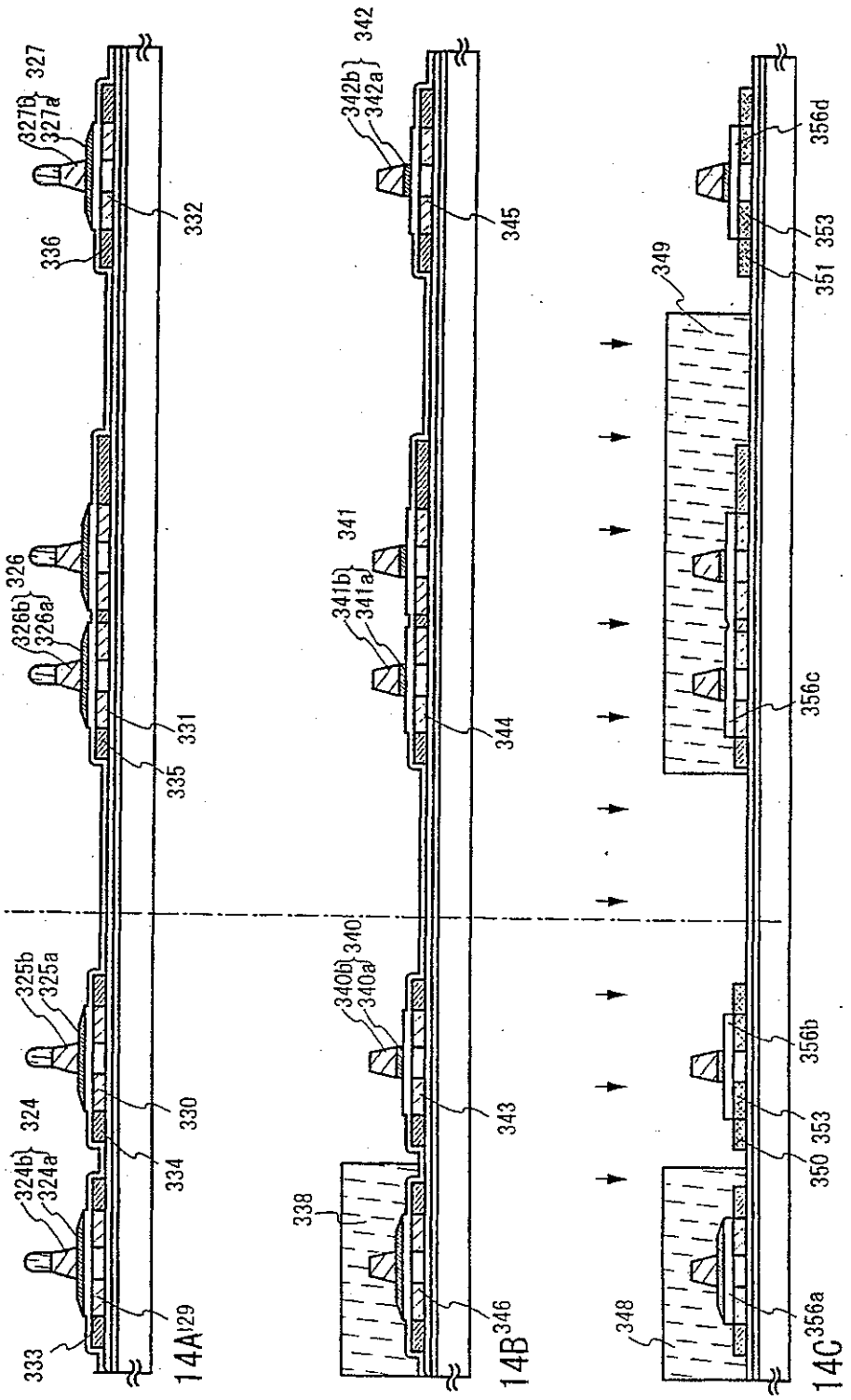


FIG. 14A FIG. 14B FIG. 14C

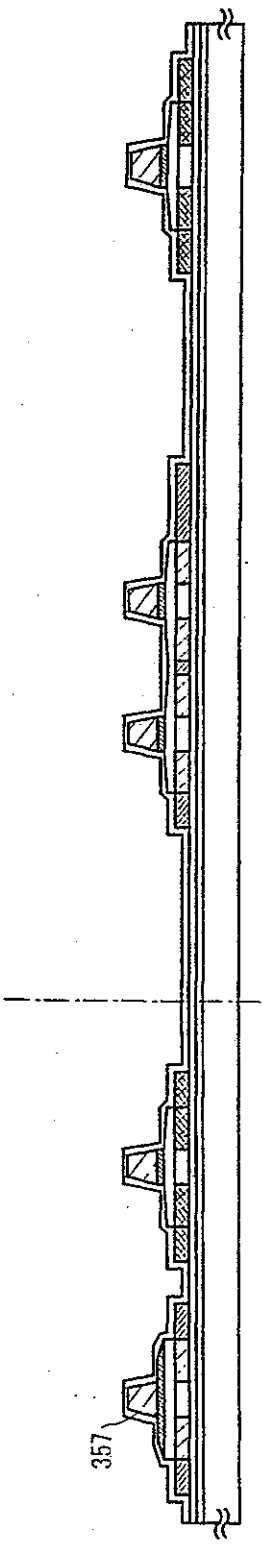


FIG. 15A

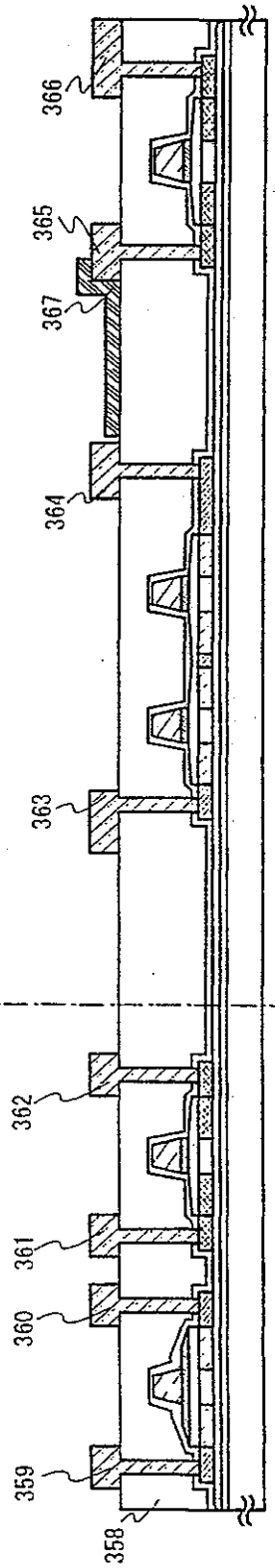


FIG. 15B

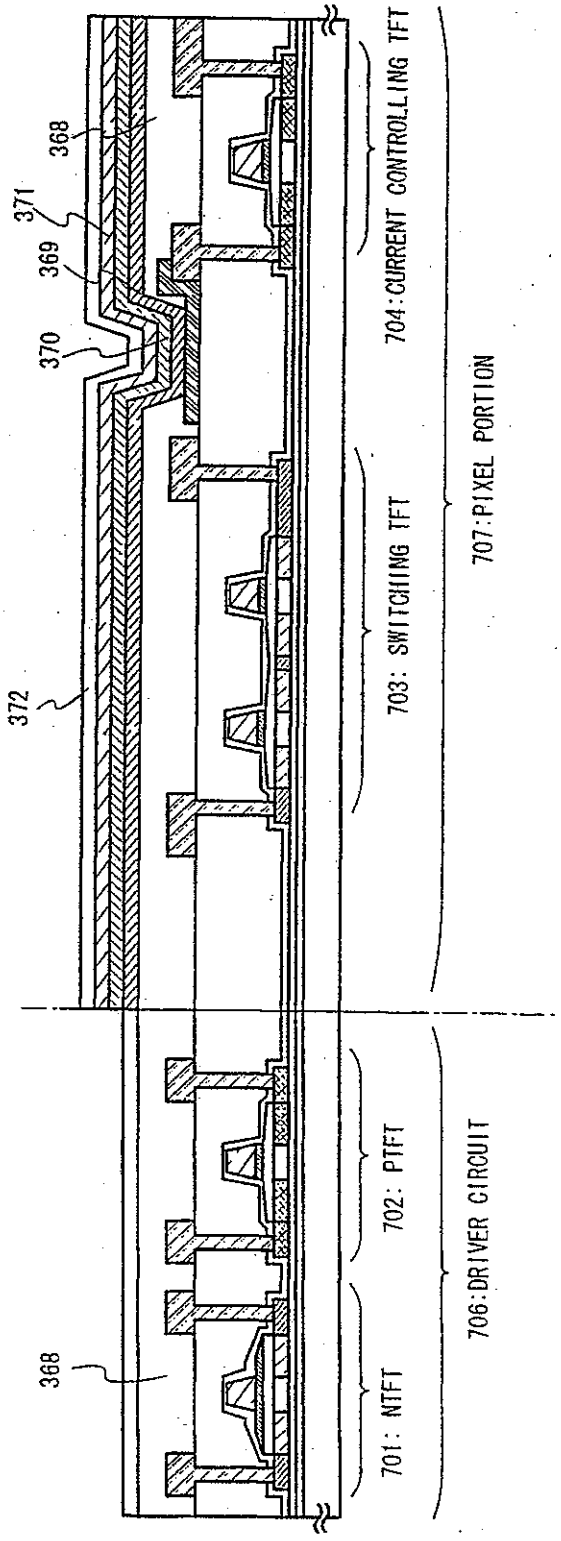

368
371
369
370
372
368
704:CURRENT CONTROLLING TFT
703: SWITCHING TFT
707:PIXEL PORTION
702: PTFT
701: NTFT
706:DRIVER CIRCUIT

FIG. 16

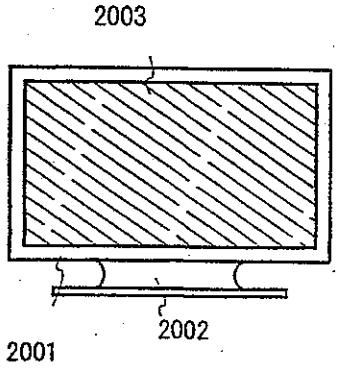


FIG. 17A

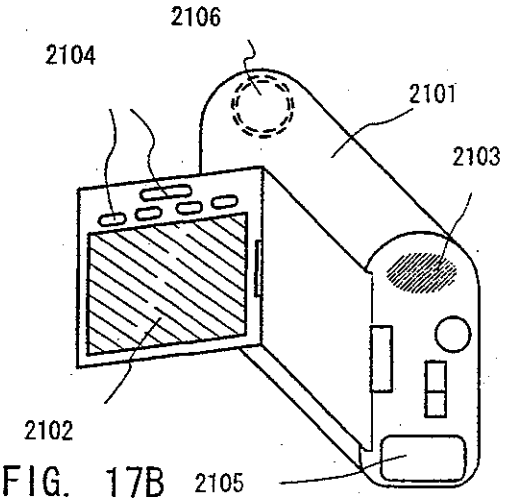


FIG. 17B

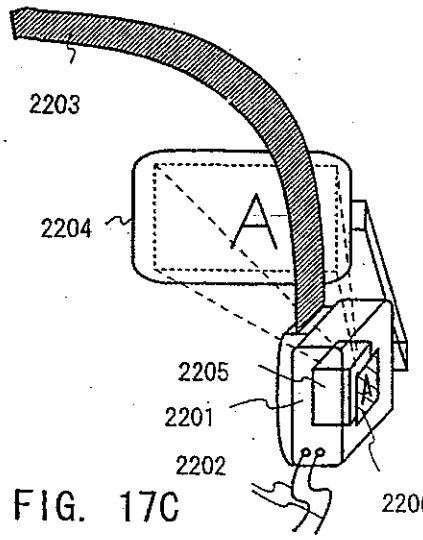


FIG. 17C

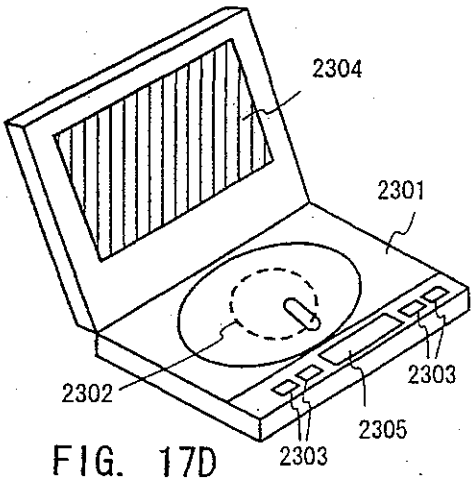


FIG. 17D

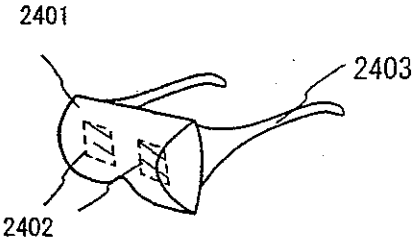


FIG. 17E

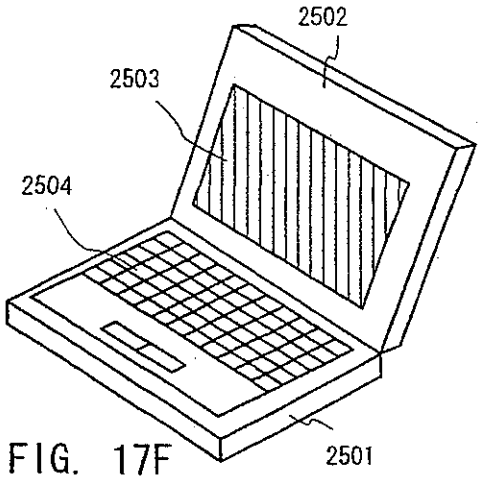


FIG. 17F

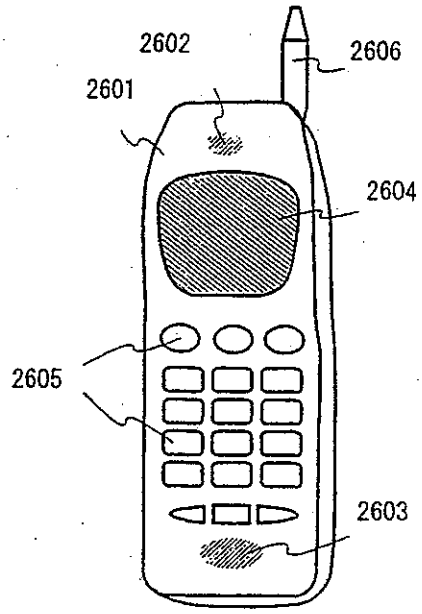


FIG. 18A

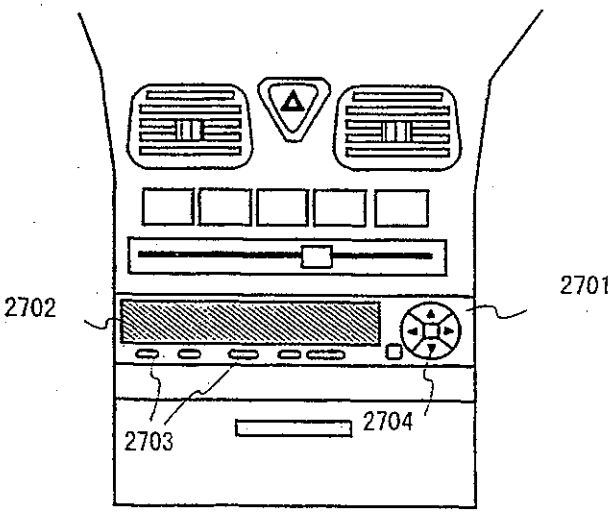


FIG. 18B

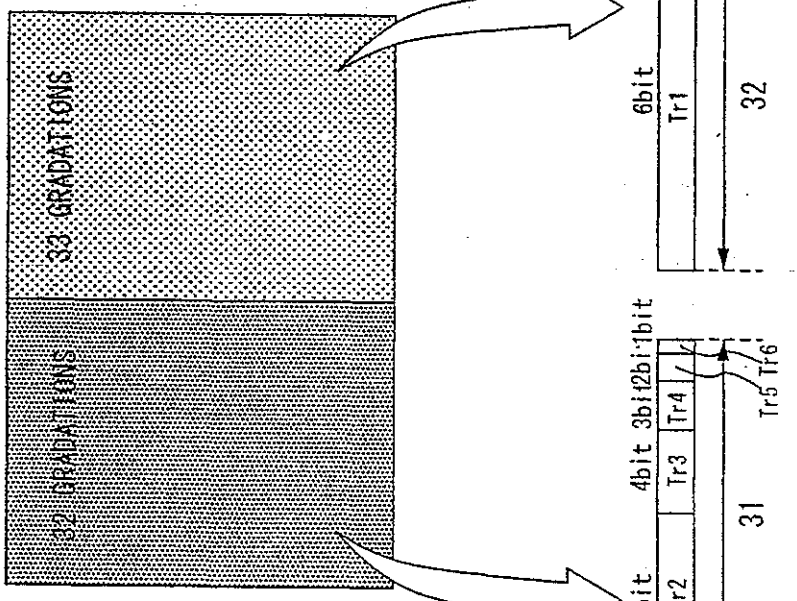


FIG. 19A

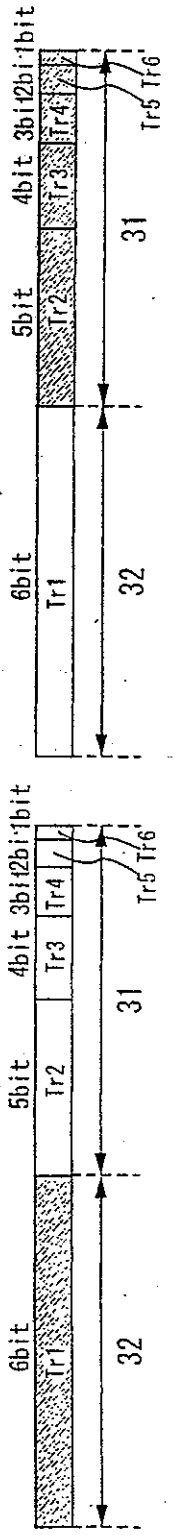


FIG. 19B

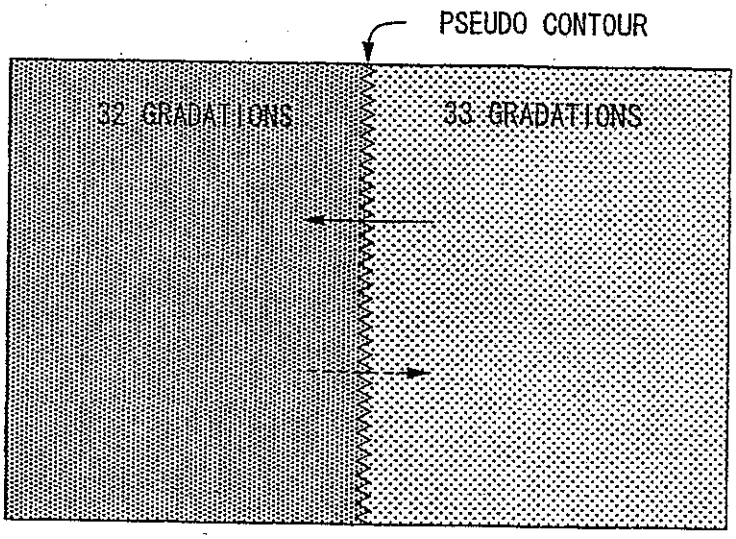


FIG. 20A

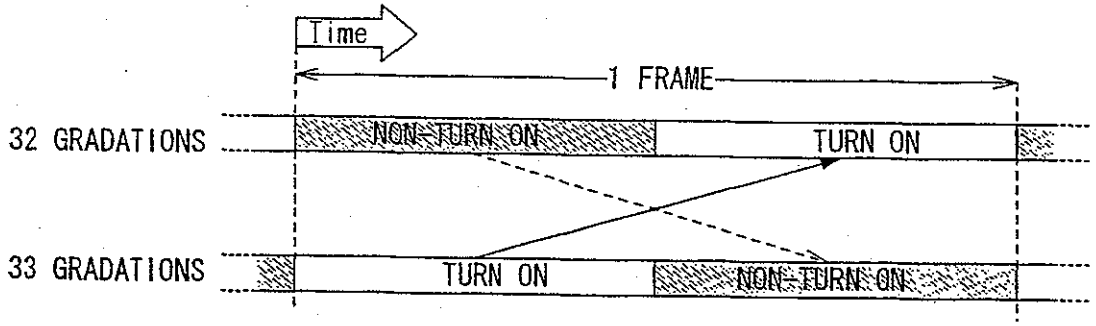


FIG. 20B