FIG. 1A

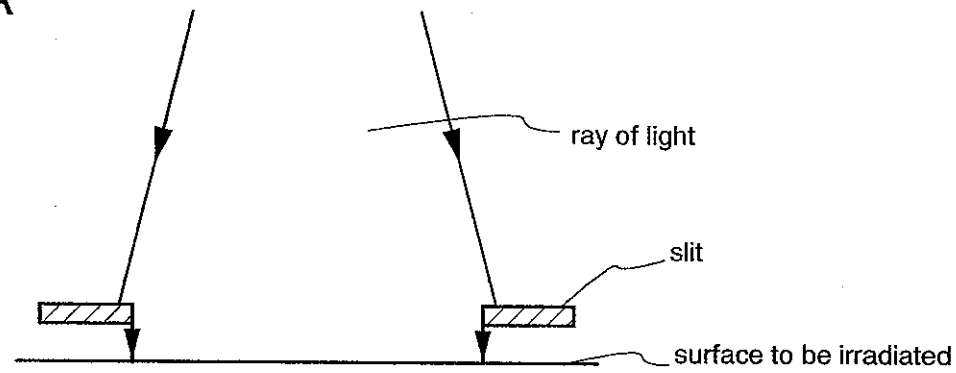

ray of light
slit
surface to be irradiated

FIG. 1B

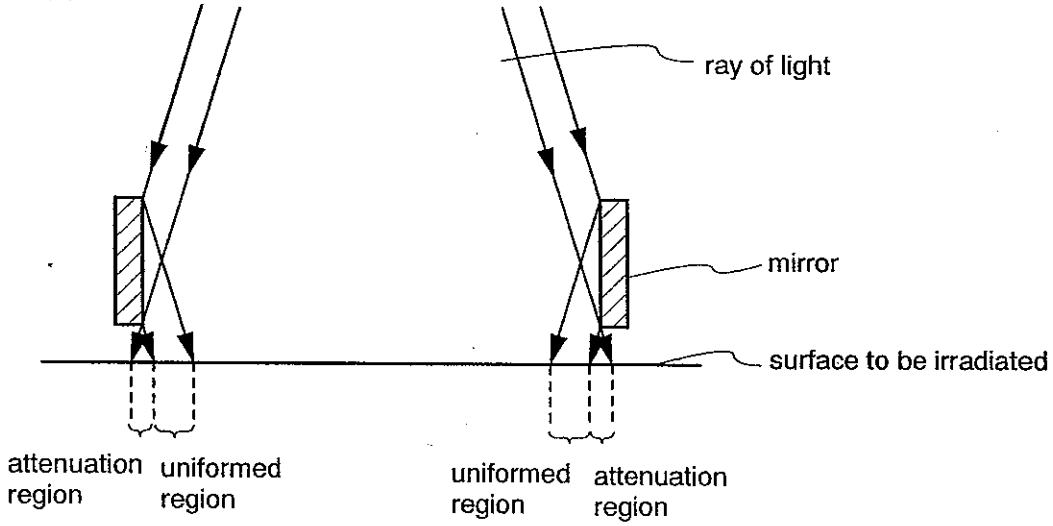

ray of light
mirror
surface to be irradiated
attenuation region
uniformed region
uniformed region
attenuation region

FIG. 2A

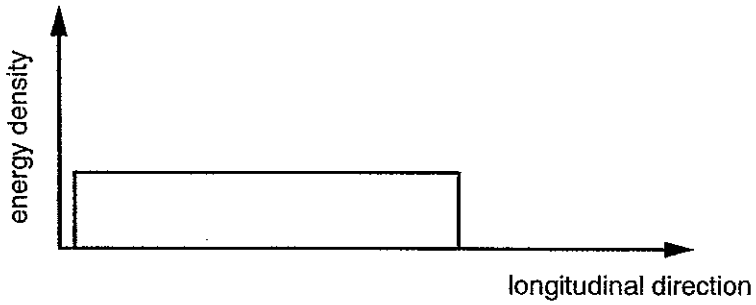
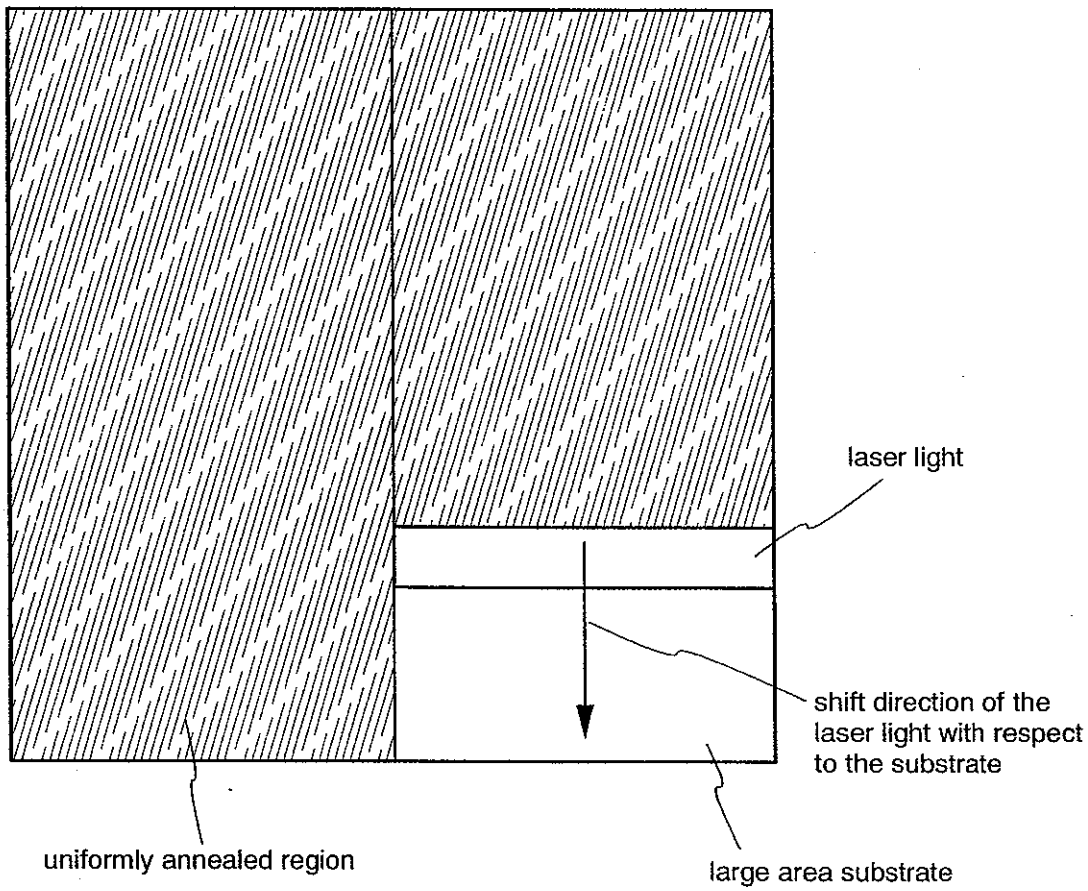

energy density
longitudinal direction

FIG. 2B


laser light
shift direction of the laser light with respect to the substrate
uniformly annealed region
large area substrate

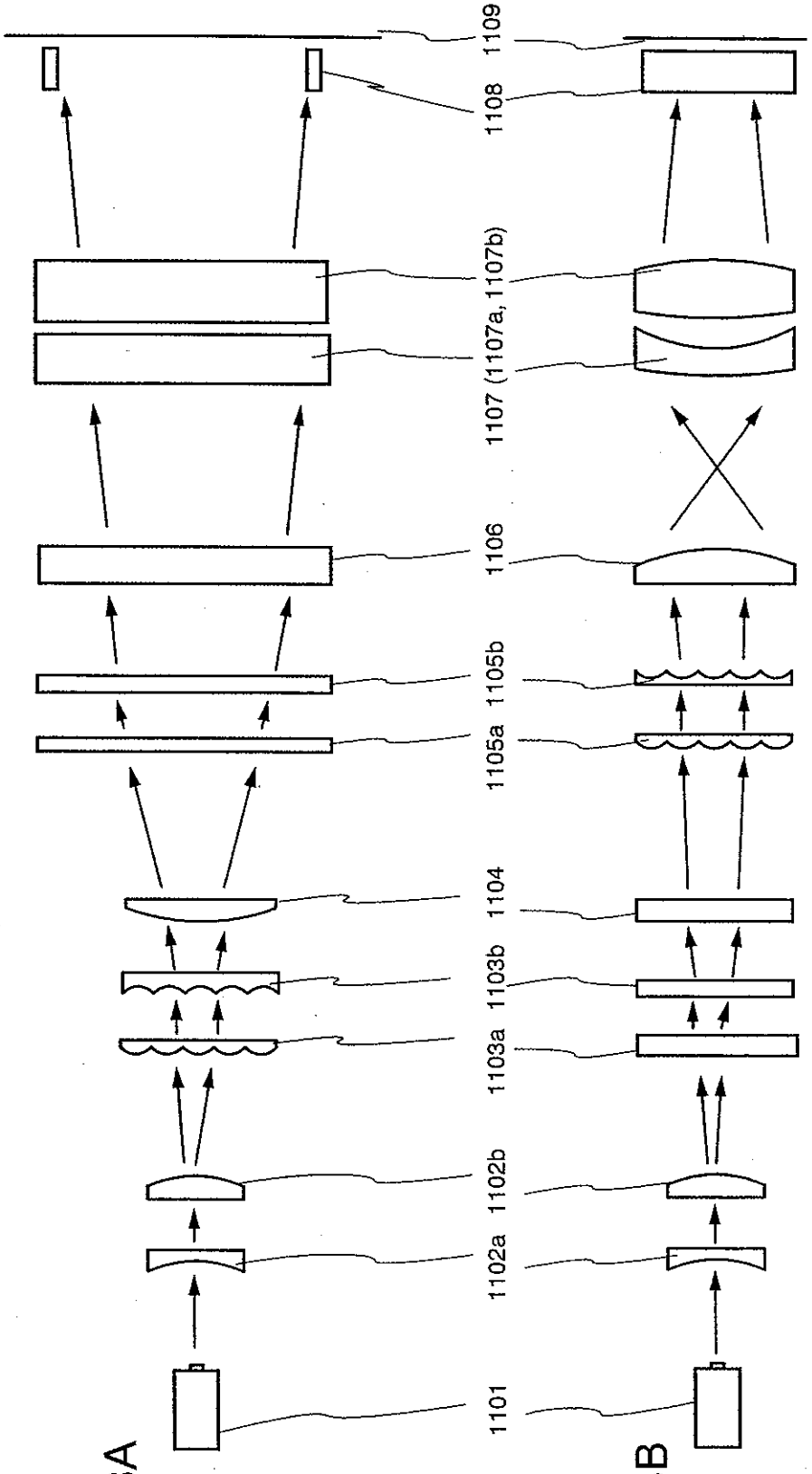

1109
1108
1107 (1107a, 1107b)
1106
1105b
1105a
1104
1103b
1103a
1102b
1102a
1101

FIG. 3A

FIG. 3B

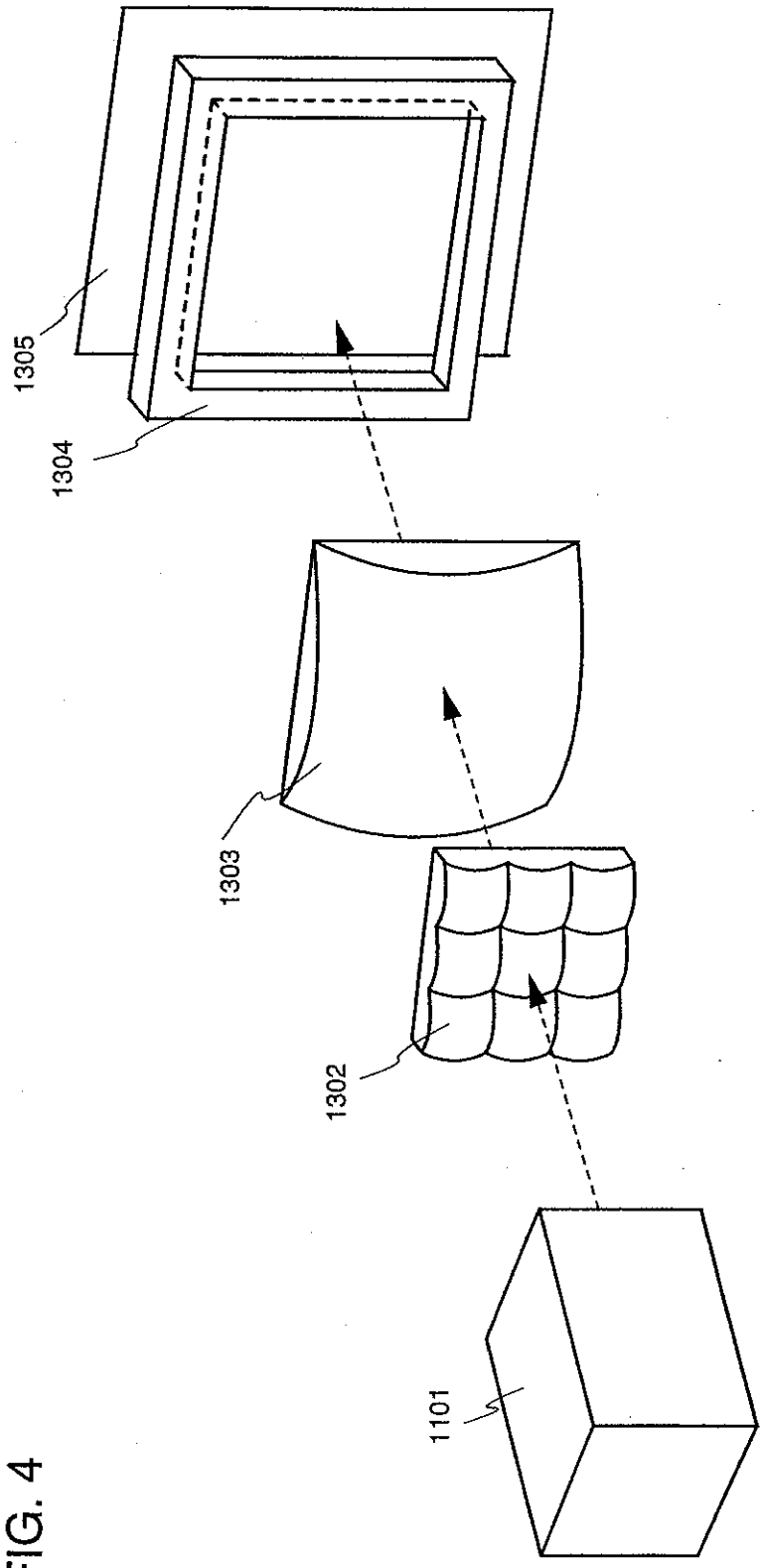


FIG. 4

FIG. 5A

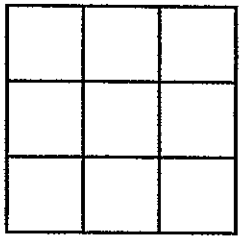


FIG. 5B

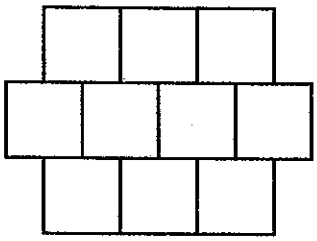


FIG. 5C

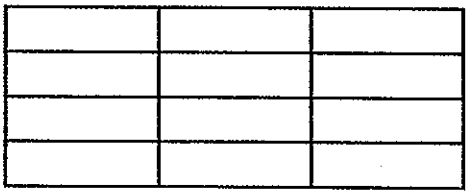


FIG. 5D

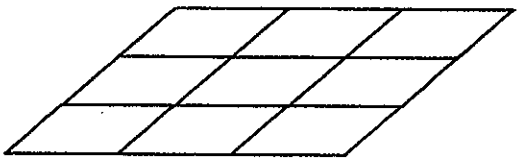


FIG. 5E

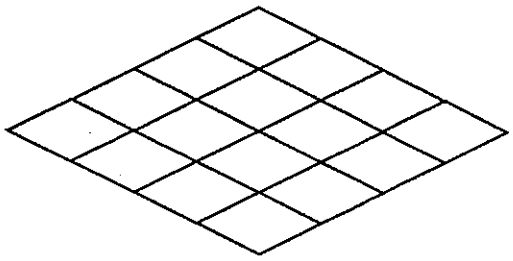


FIG. 5F

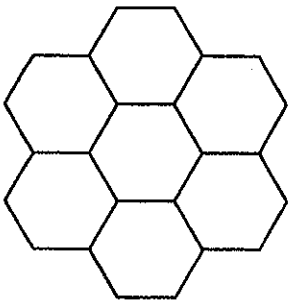


FIG. 6A

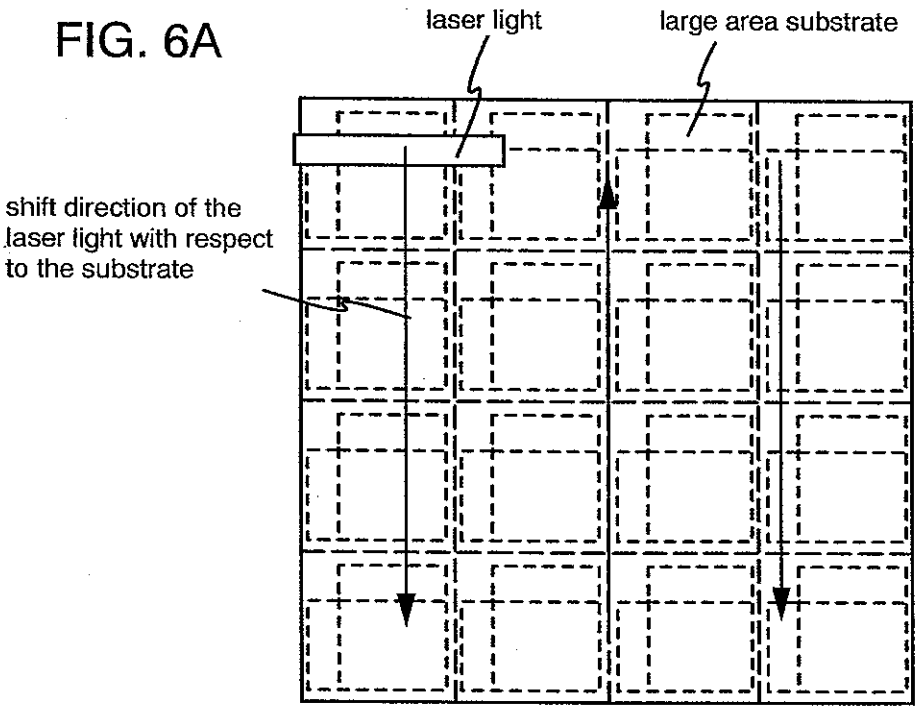

laser light
large area substrate
shift direction of the laser light with respect to the substrate

FIG. 6B

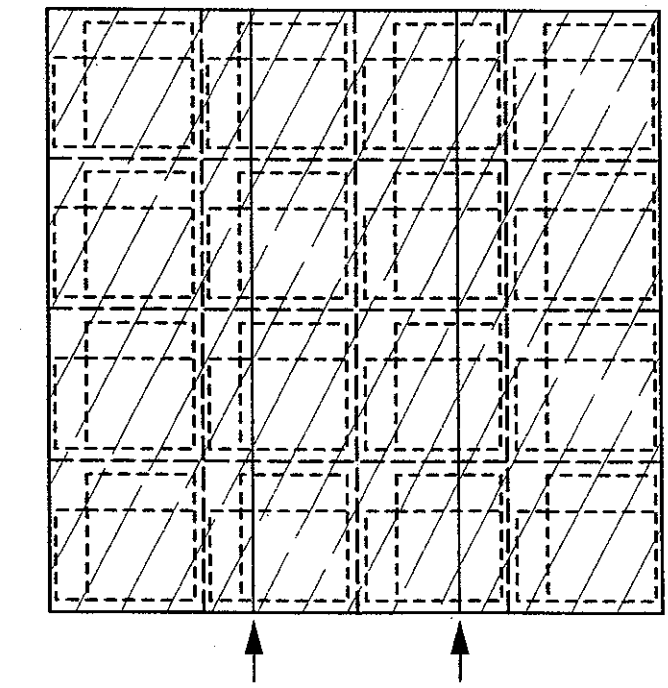

a portion in which the laser scannings are adjacent to each other
a portion in which the laser scannings are adjacent to each other

FIG. 7A prior art

top view

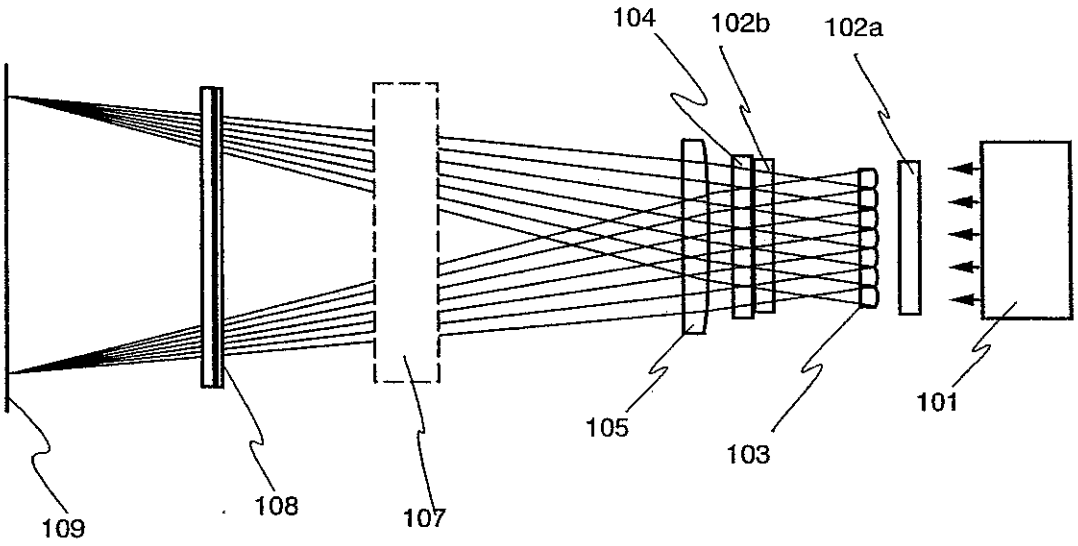


FIG. 7B prior art

side view

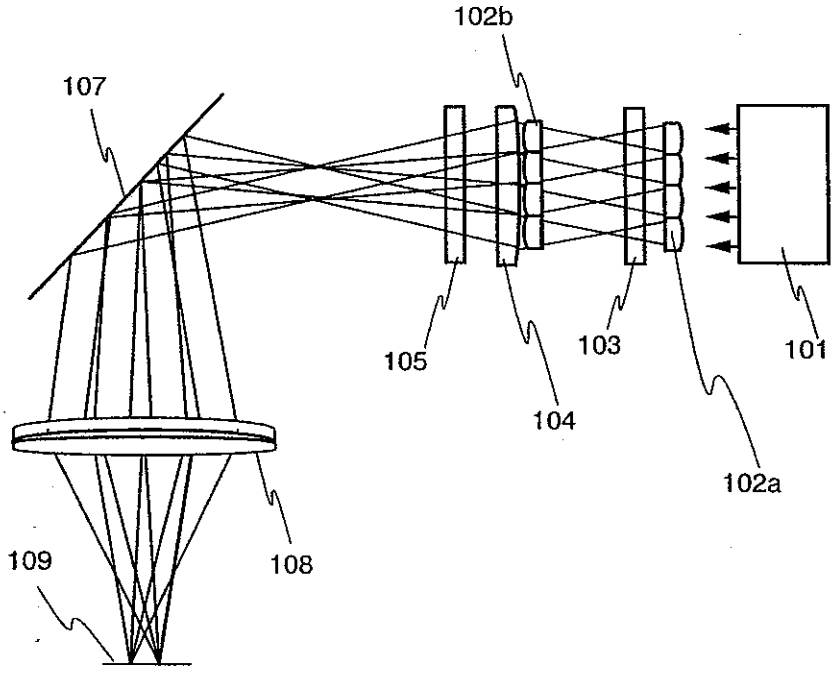


FIG. 8A prior art

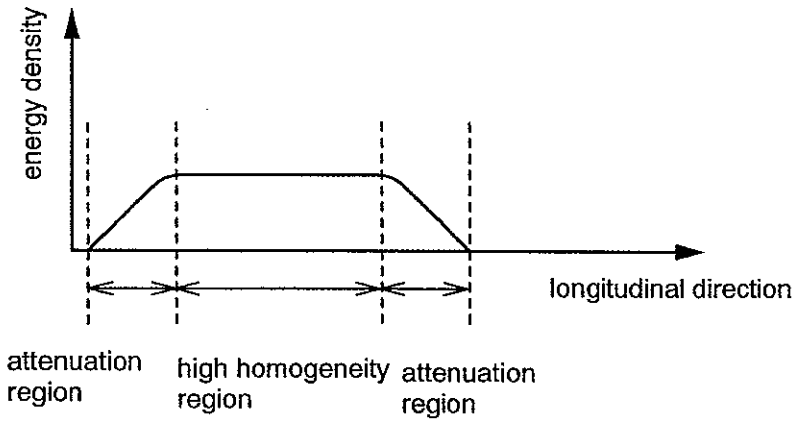


FIG. 8B prior art

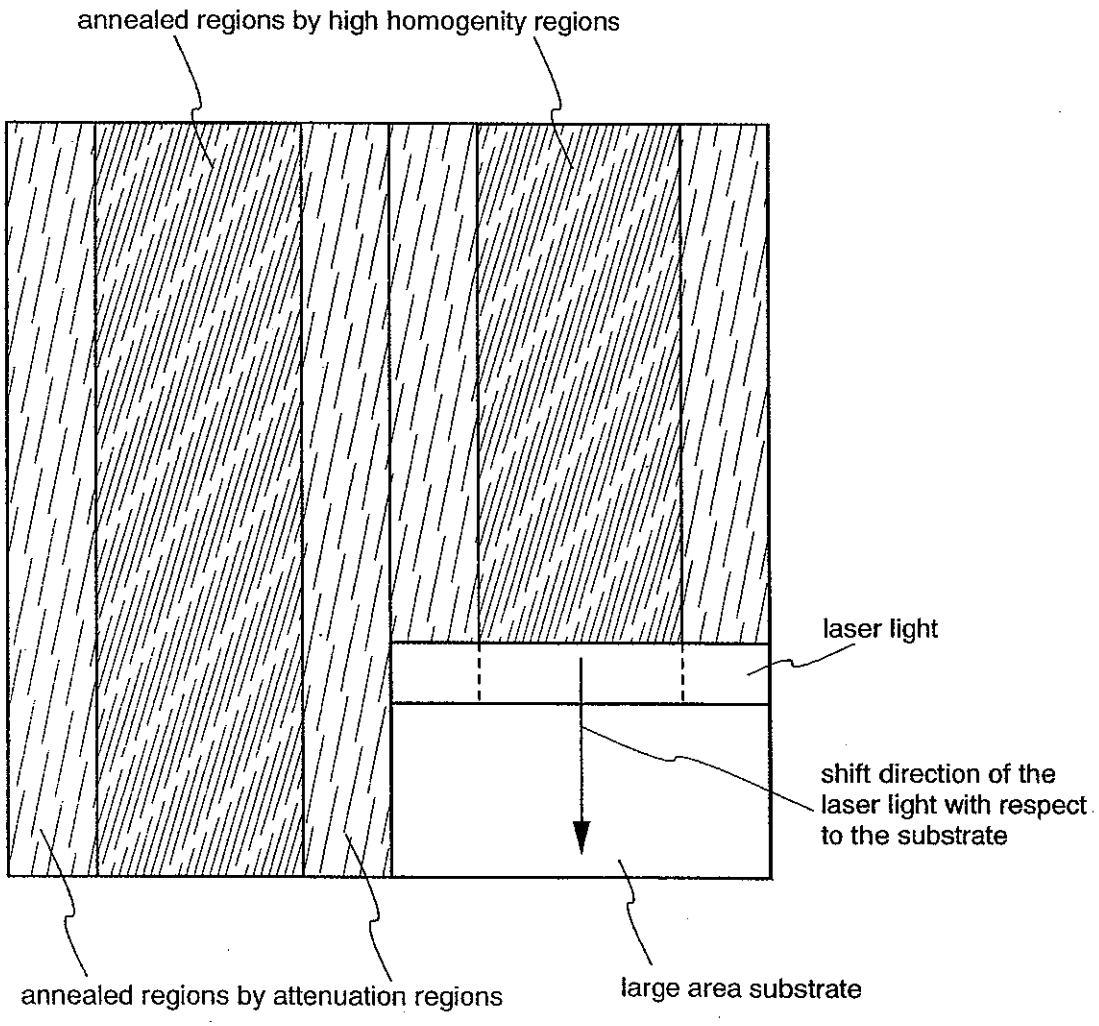


FIG. 9A

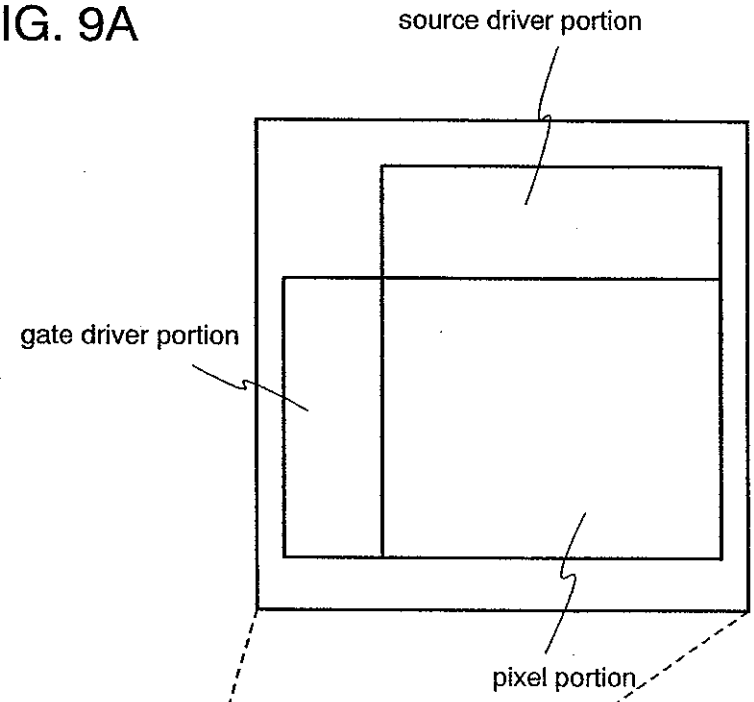

source driver portion
gate driver portion
pixel portion

FIG. 9B

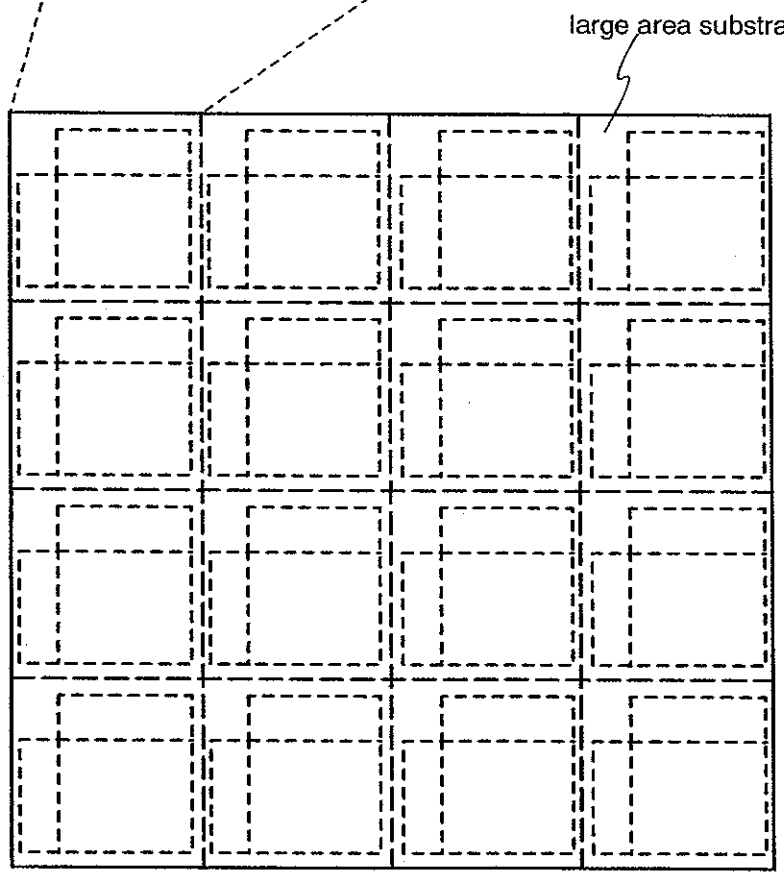

large area substrate

FIG. 10A

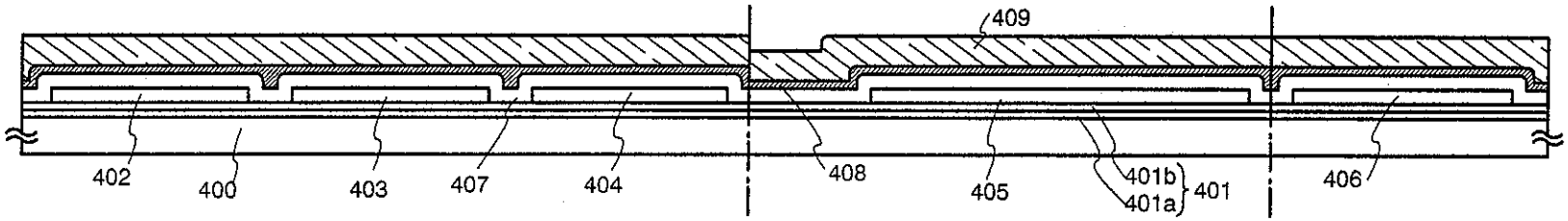


FIG. 10B

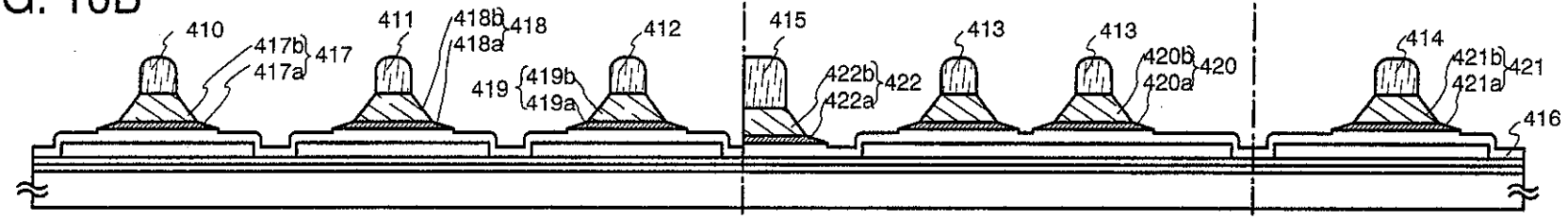
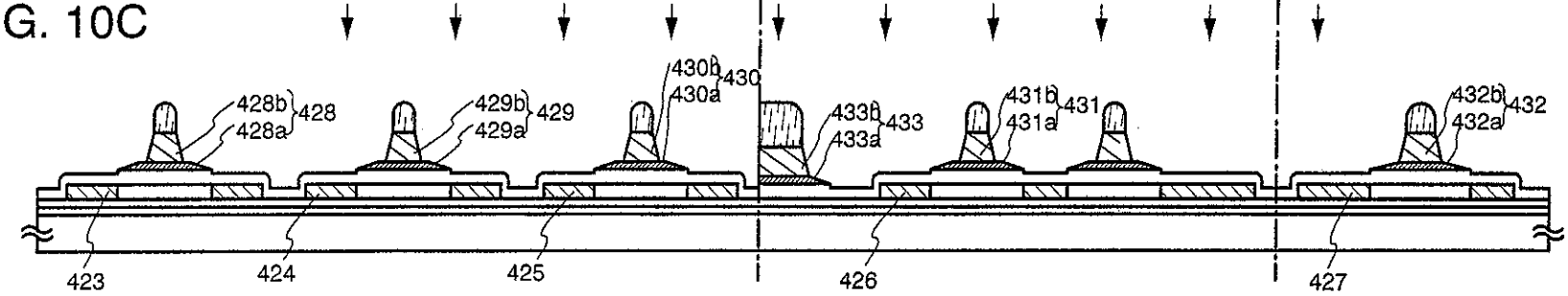


FIG. 10C



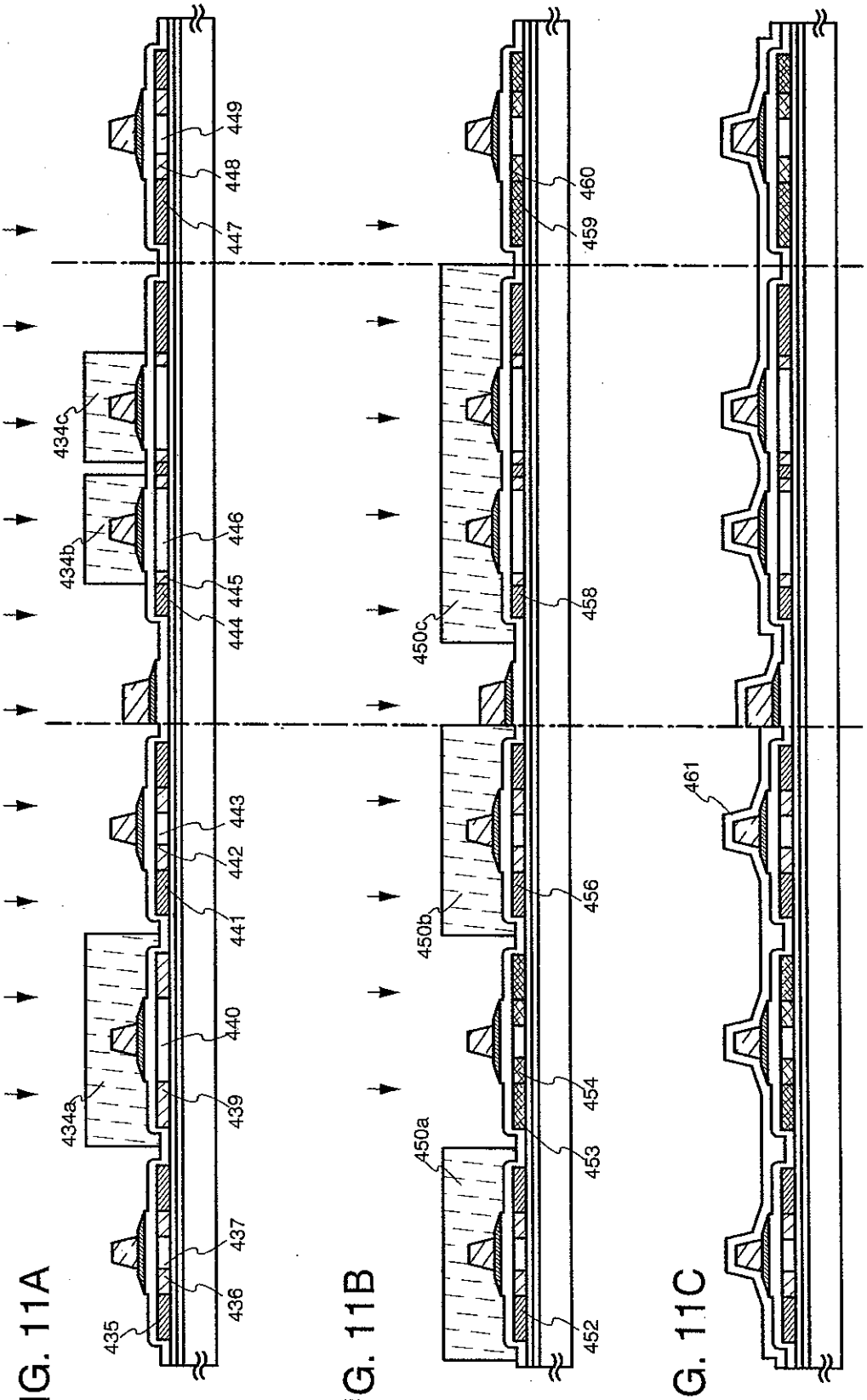


FIG. 11A

FIG. 11B

FIG. 11C

FIG. 12

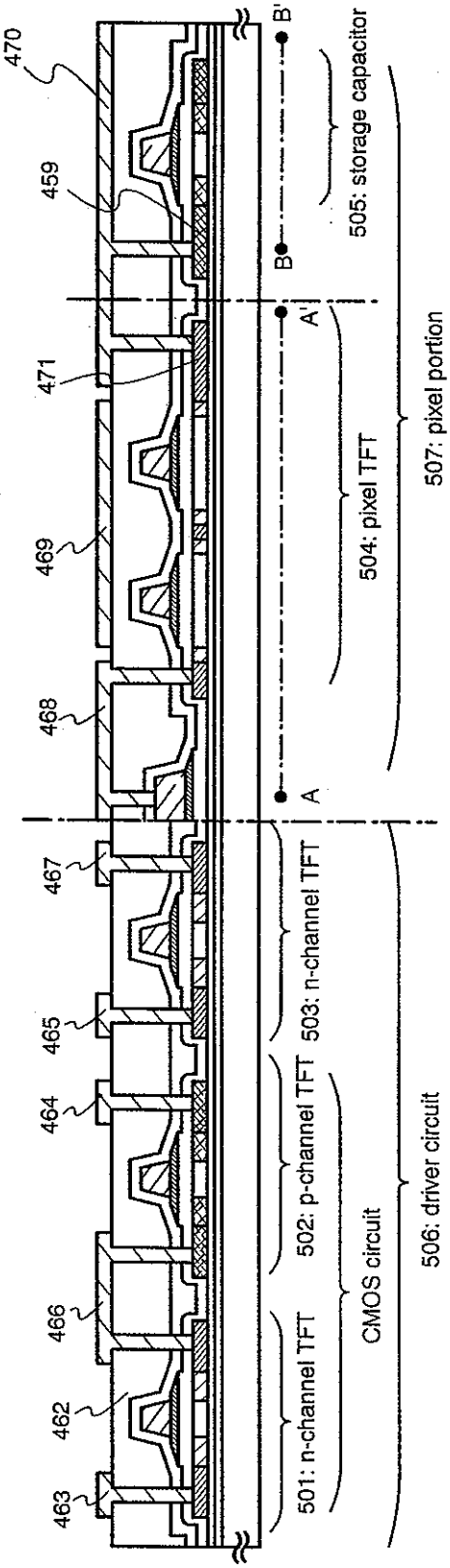

470
459
471
469
468
467
465
464
466
462
463
B'
B
A'
A
505: storage capacitor
504: pixel TFT
507: pixel portion
503: n-channel TFT
502: p-channel TFT
501: n-channel TFT
CMOS circuit
506: driver circuit

FIG. 13

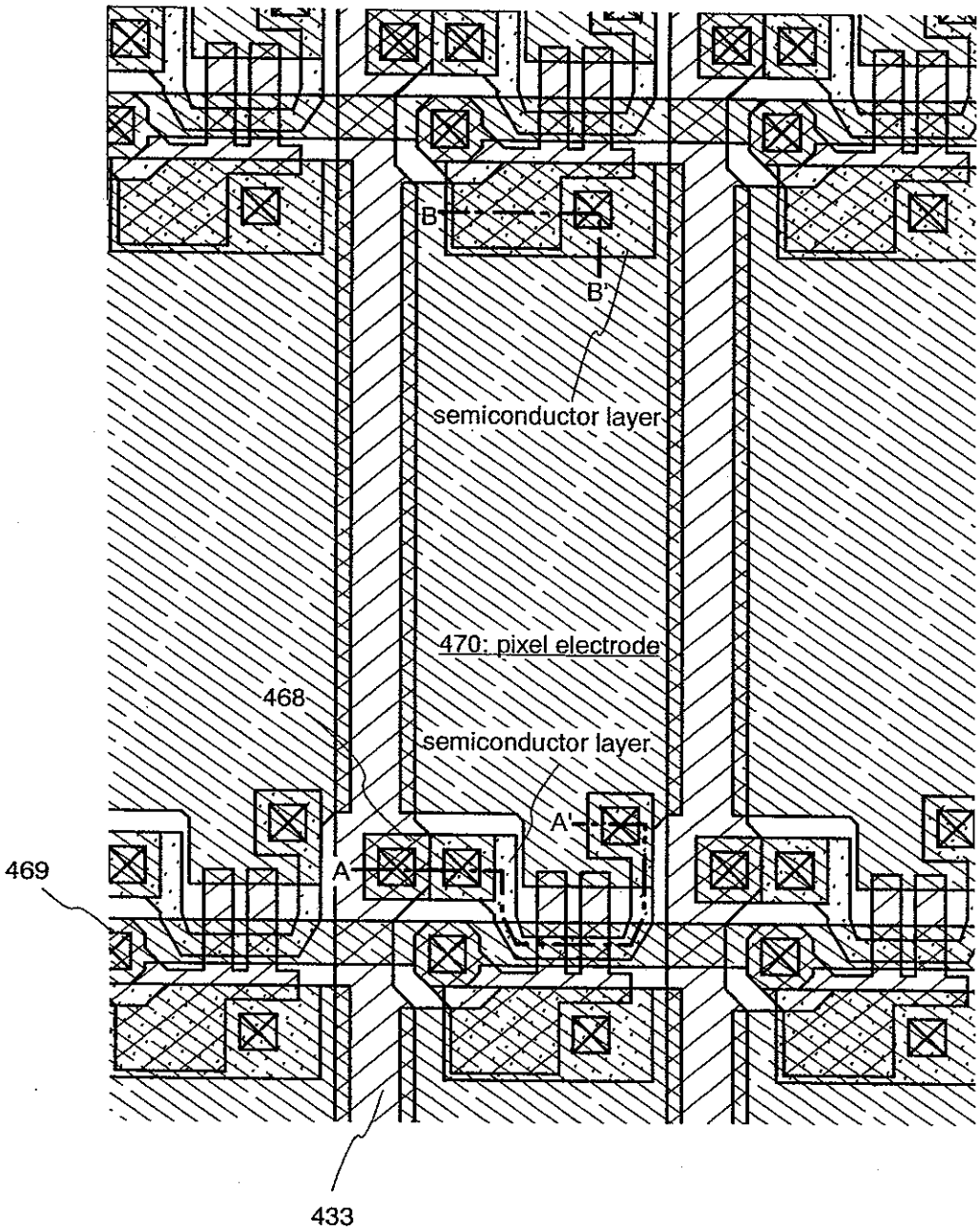

B
B'
semiconductor layer
470: pixel electrode
468
semiconductor layer
A'
A
469
433

FIG. 14

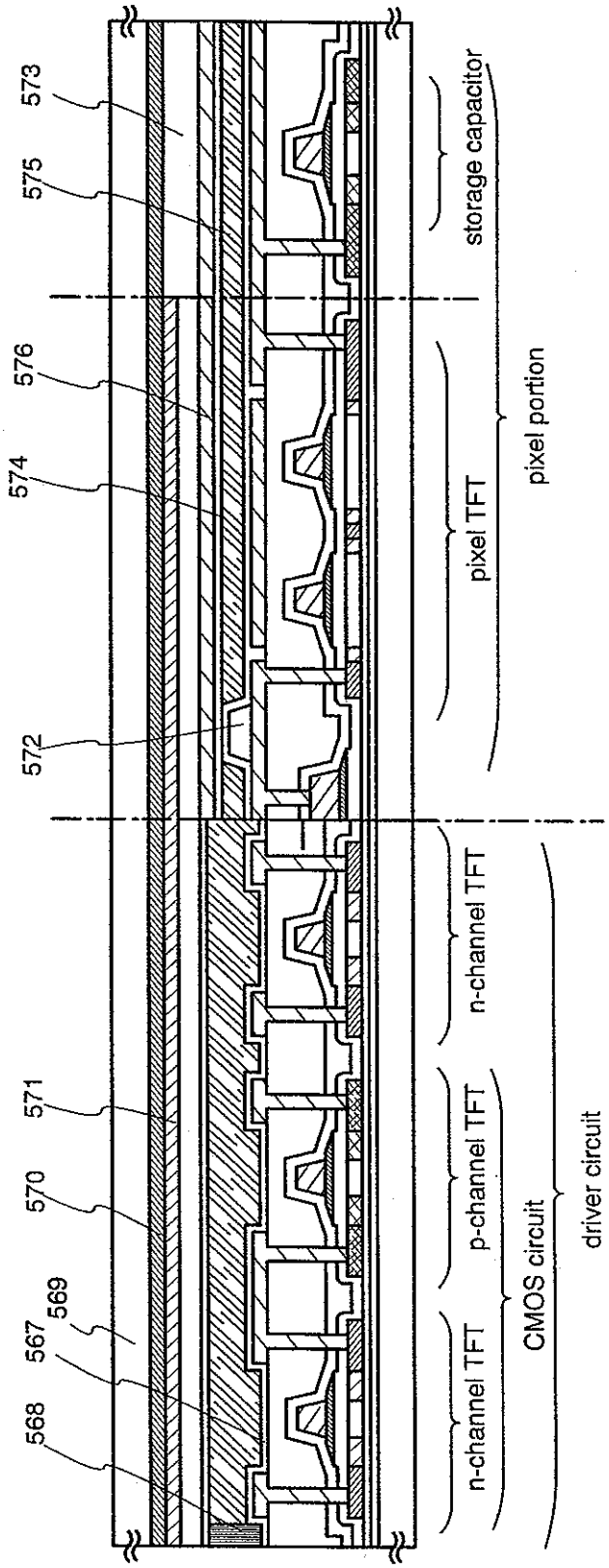
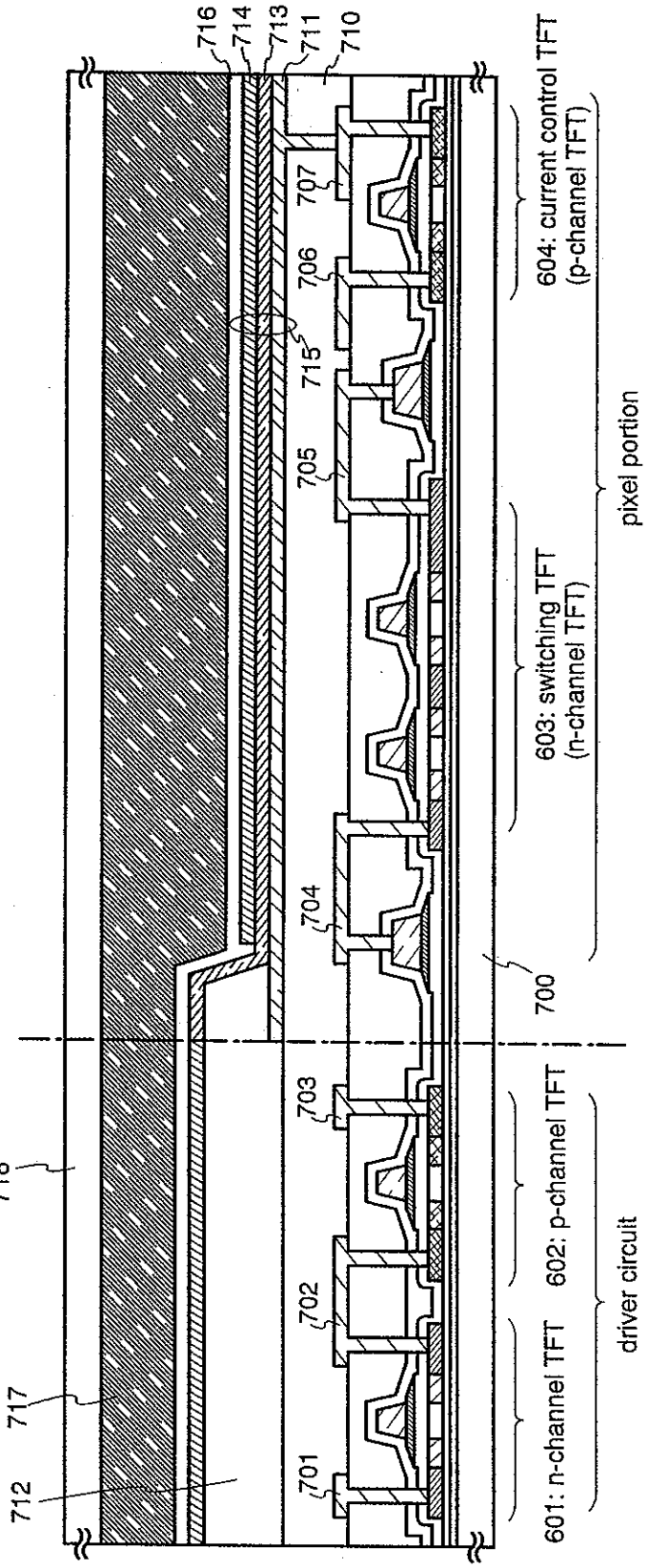

573
575
576
574
572
571
570
569
567
568
storage capacitor
pixel TFT
pixel portion
n-channel TFT
p-channel TFT
n-channel TFT
CMOS circuit
driver circuit

FIG. 15


716
714
713
711
710
707
706
715
705
704
703
702
701
718
717
712
700
604: current control TFT
(p-channel TFT)
603: switching TFT
(n-channel TFT)
pixel portion
601: n-channel TFT
602: p-channel TFT
driver circuit

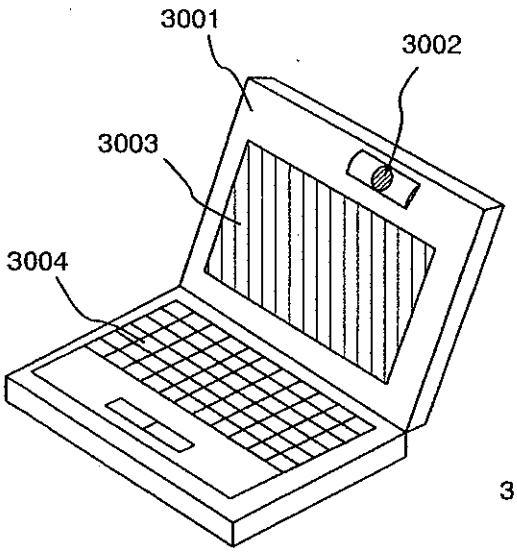


FIG. 16A

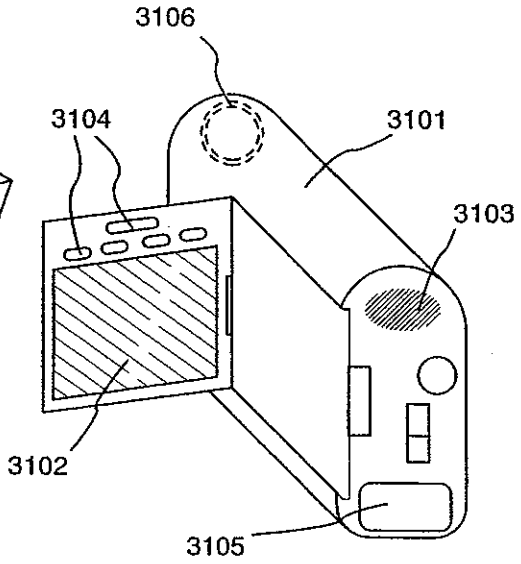


FIG. 16B

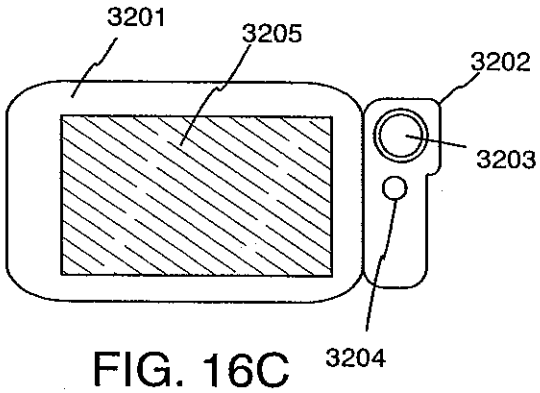


FIG. 16C

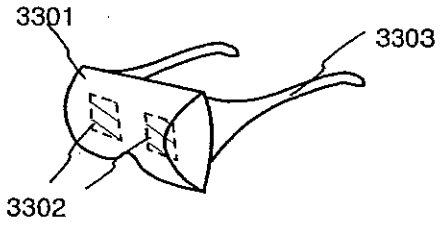


FIG. 16D

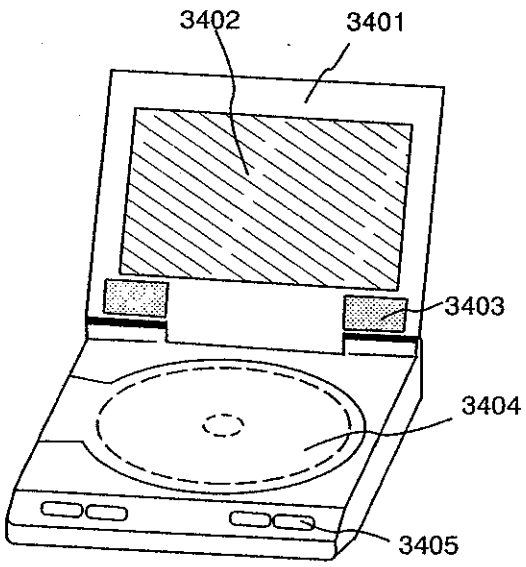


FIG. 16E

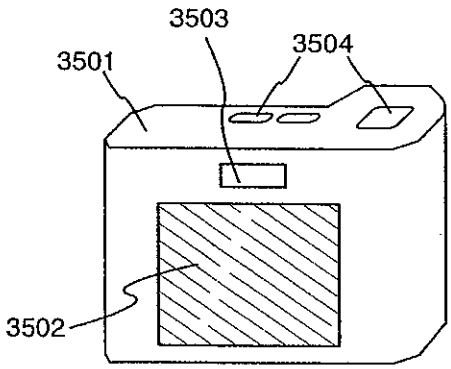


FIG. 16F

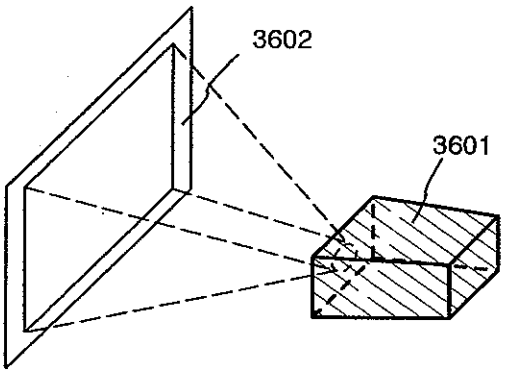


FIG. 17A

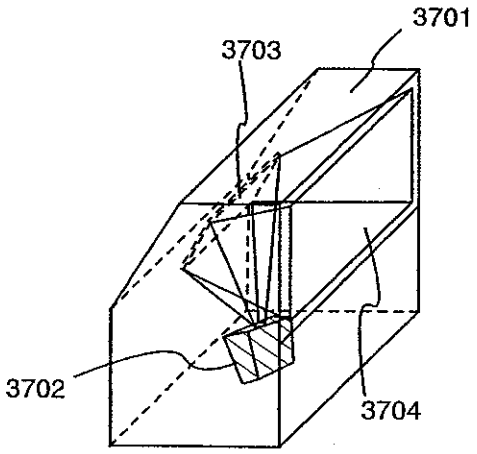


FIG. 17B

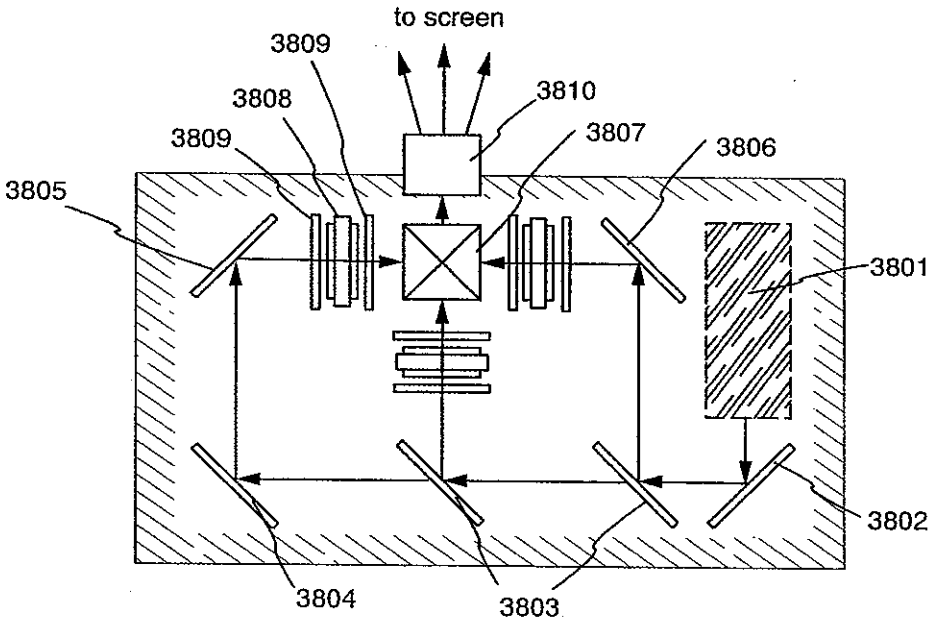


FIG. 17C

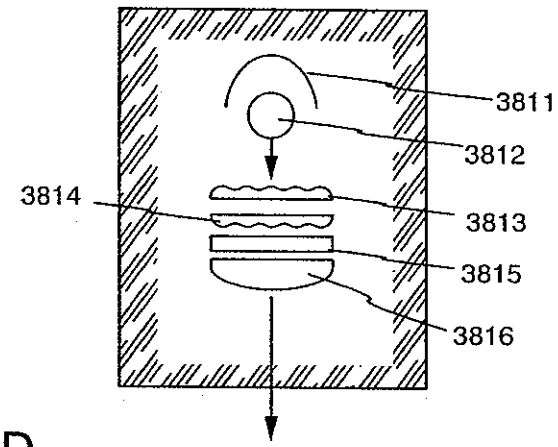


FIG. 17D

FIG. 18A

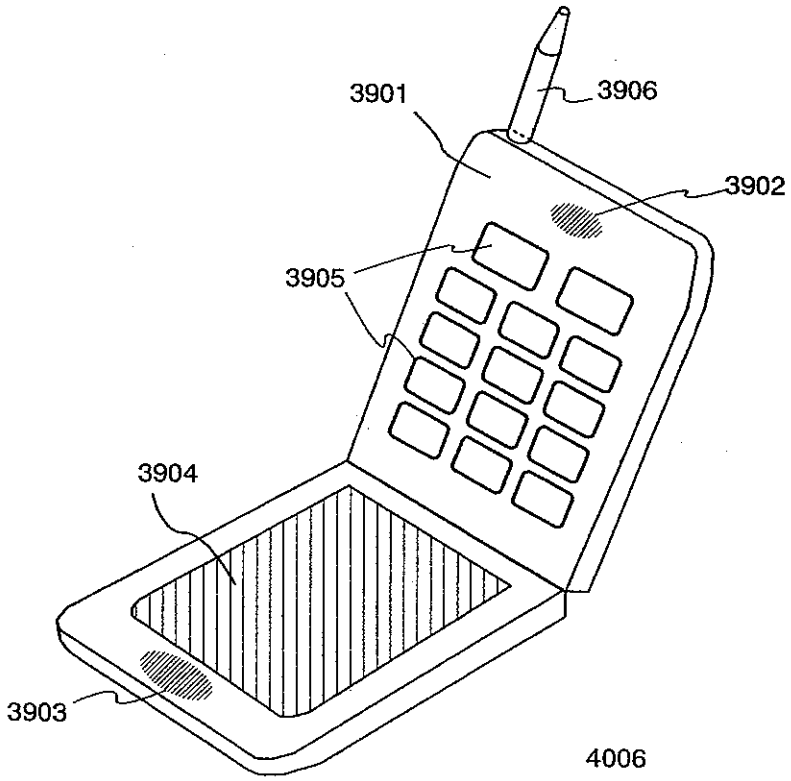


FIG. 18B

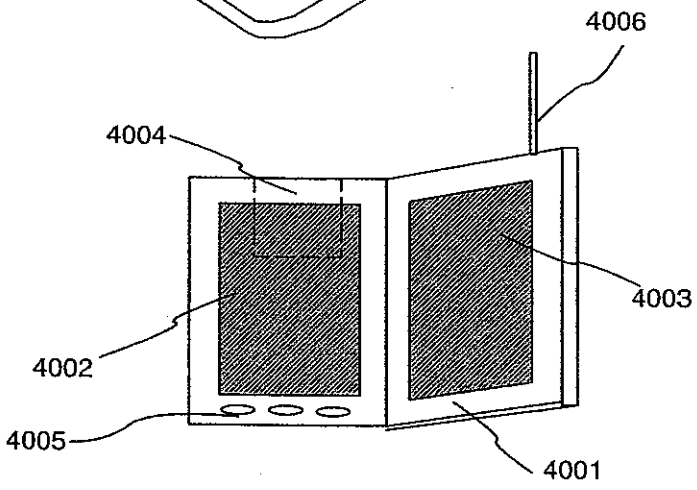


FIG. 18C

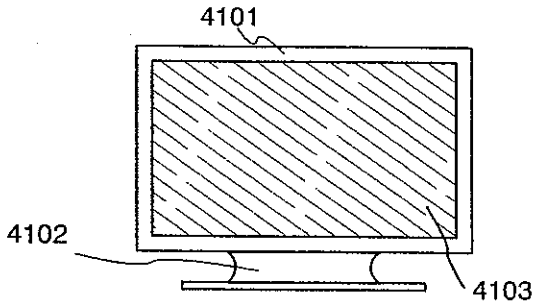


FIG. 19

