

FIG. 1A

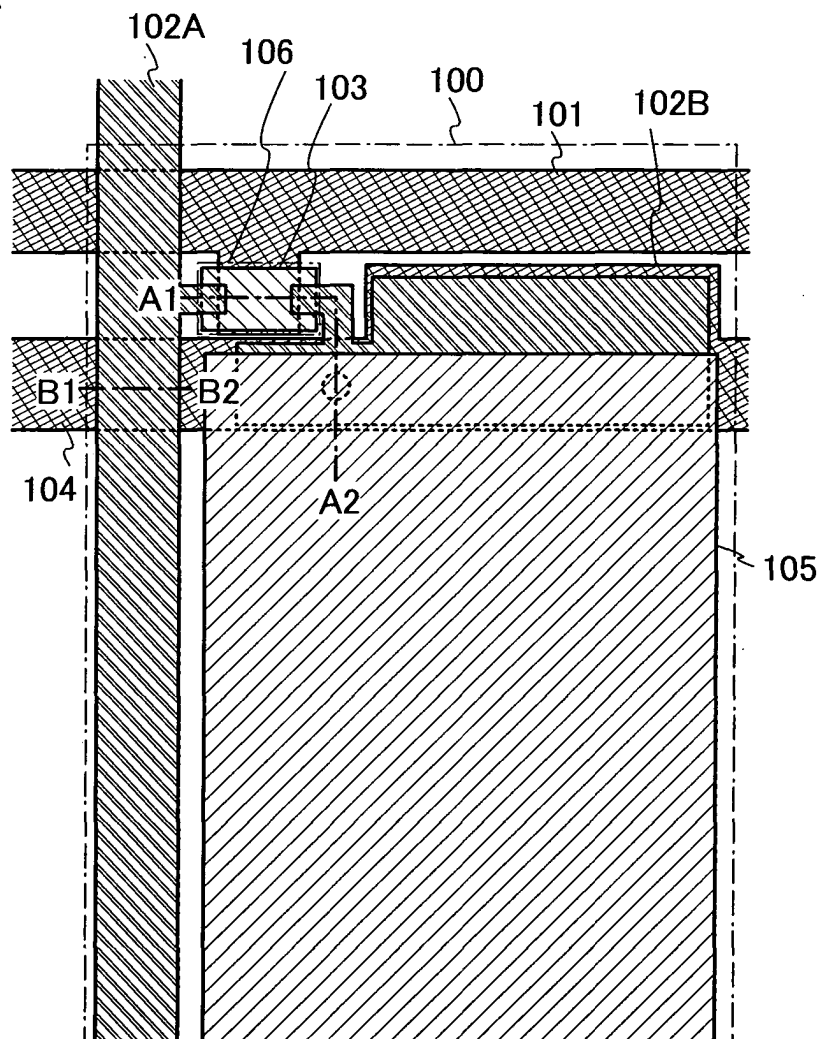


FIG. 1B

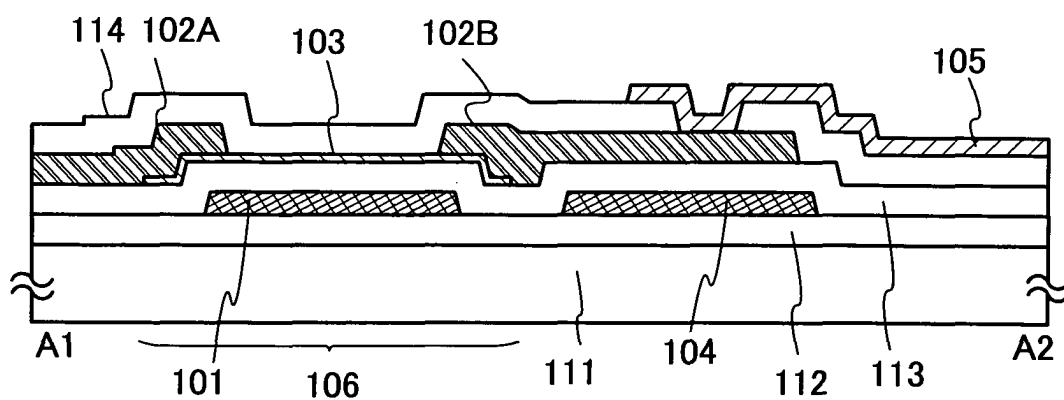


FIG. 1C

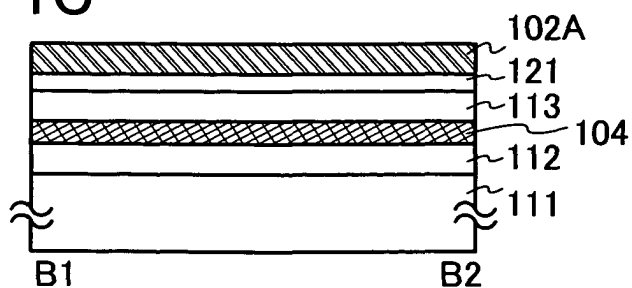


FIG. 2

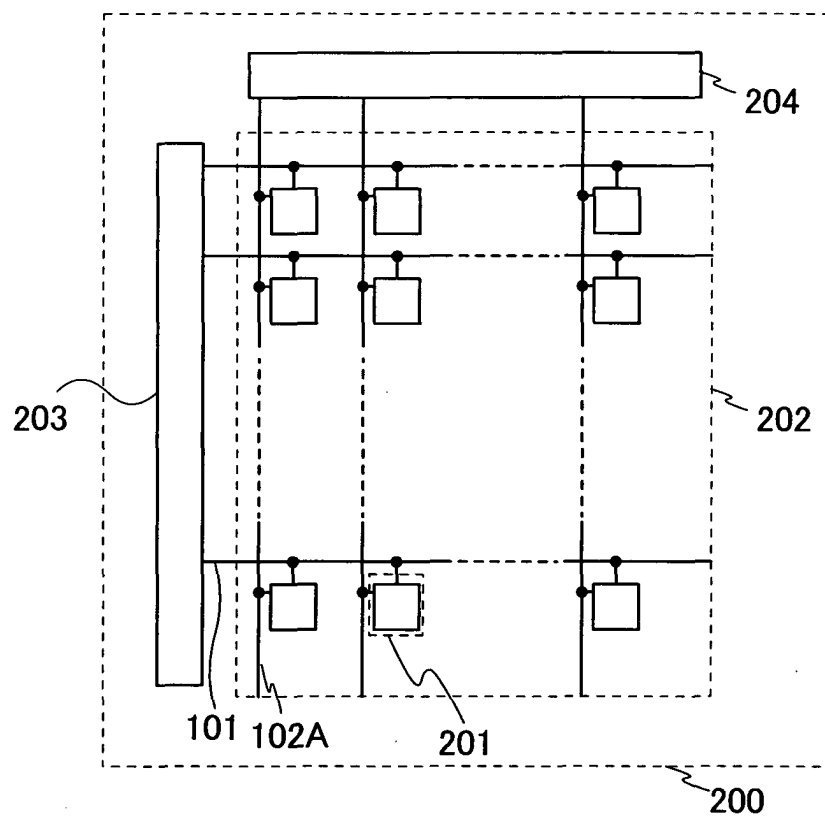


FIG. 3

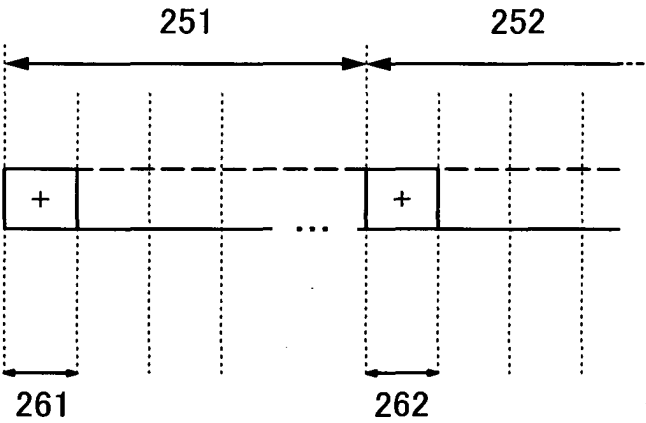


FIG. 4A

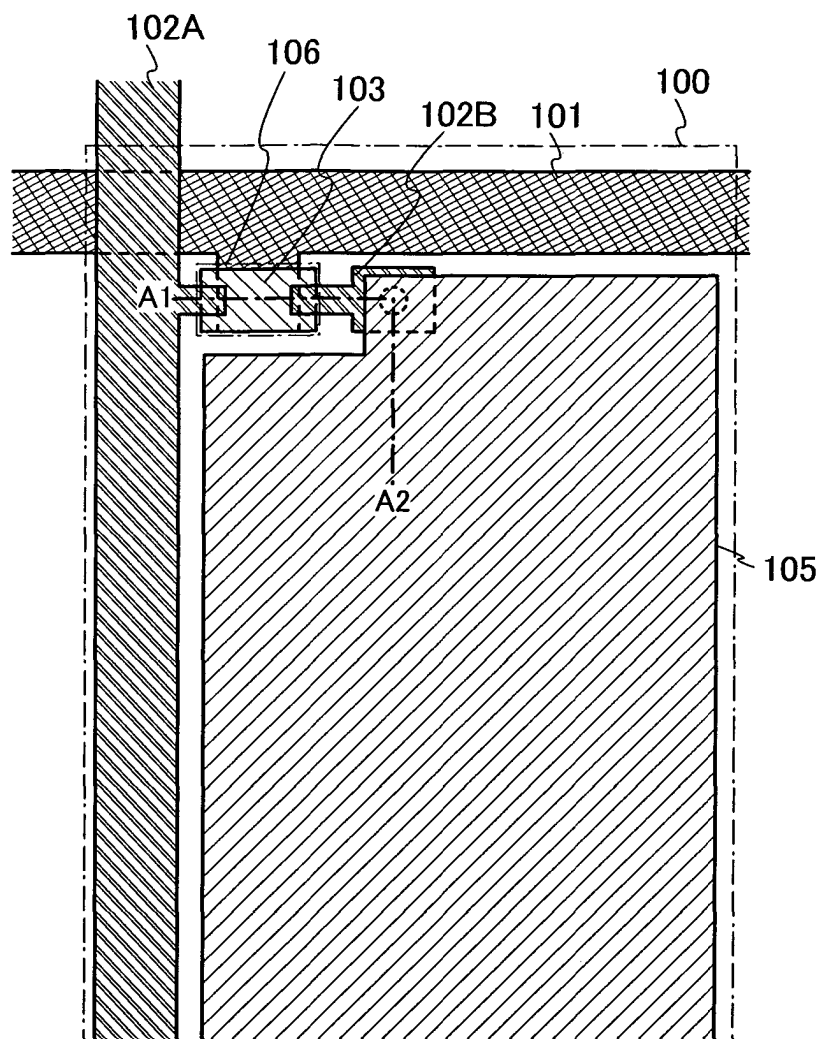


FIG. 4B

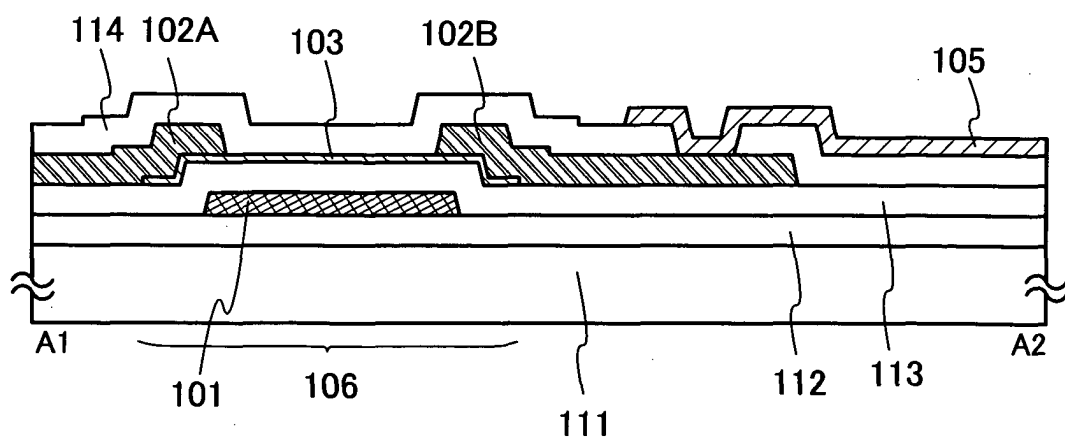


FIG. 5A

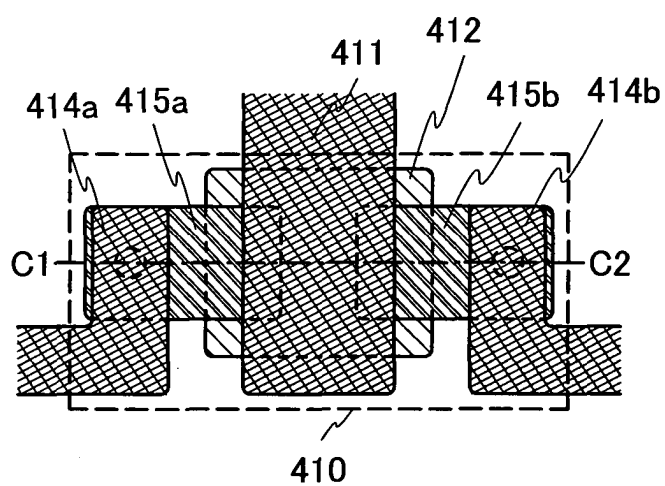


FIG. 5B

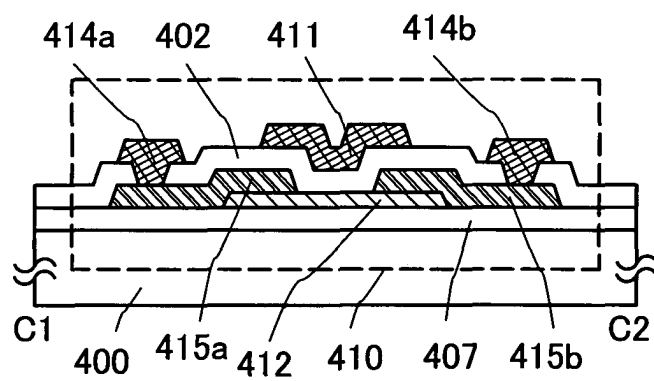


FIG. 6A

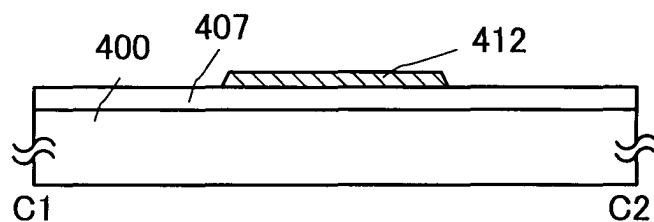


FIG. 6B

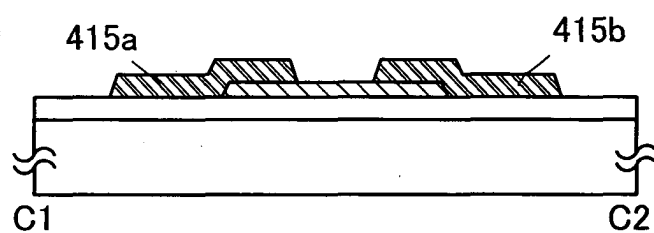


FIG. 6C

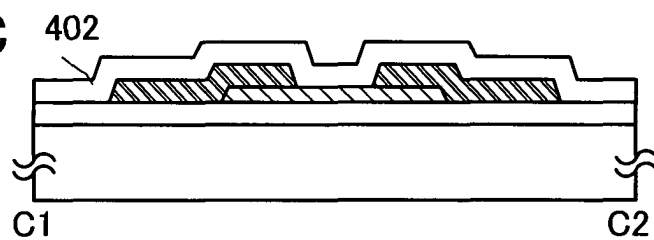


FIG. 6D

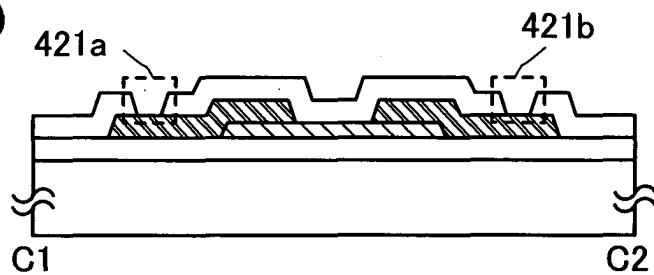


FIG. 6E

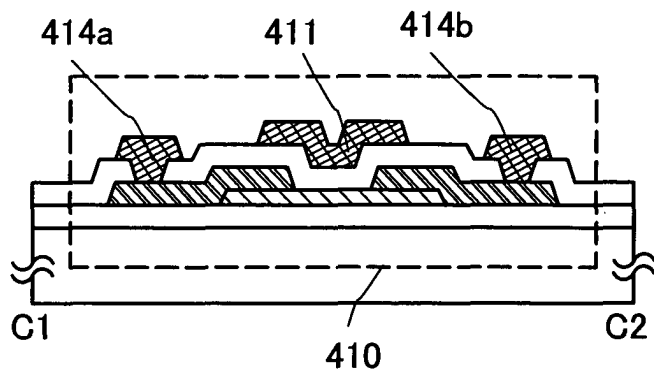


FIG. 7A

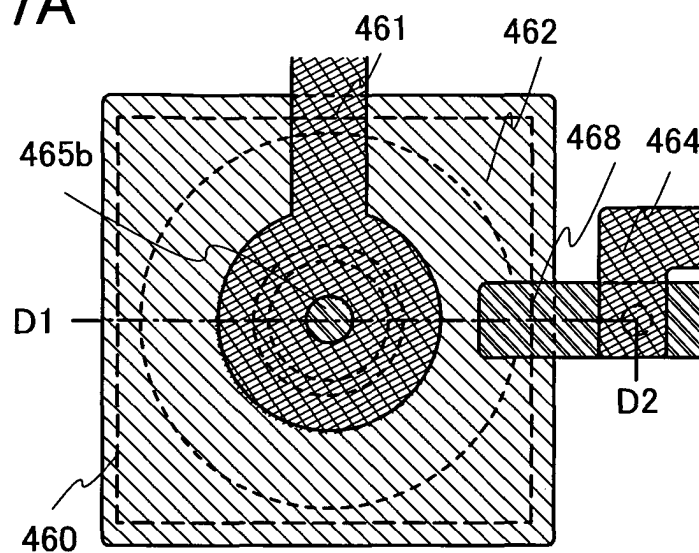


FIG. 7B

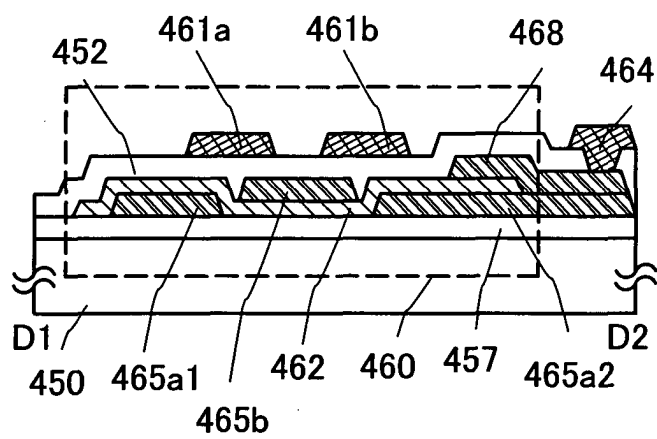


FIG. 8A

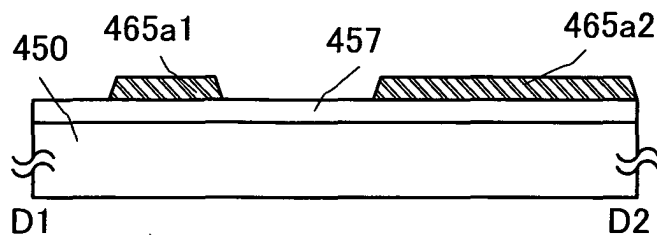


FIG. 8B

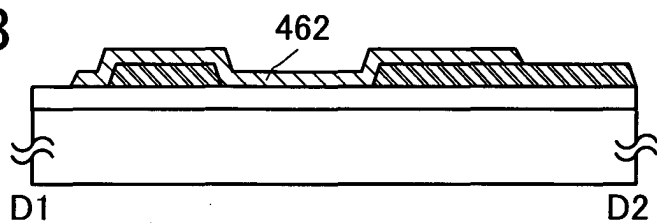


FIG. 8C

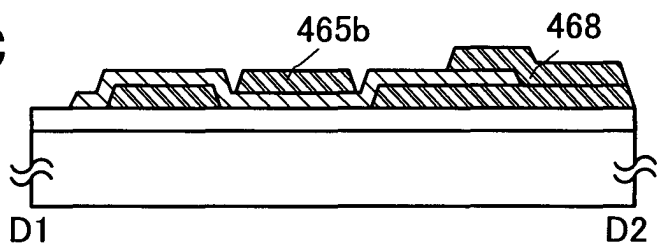


FIG. 8D

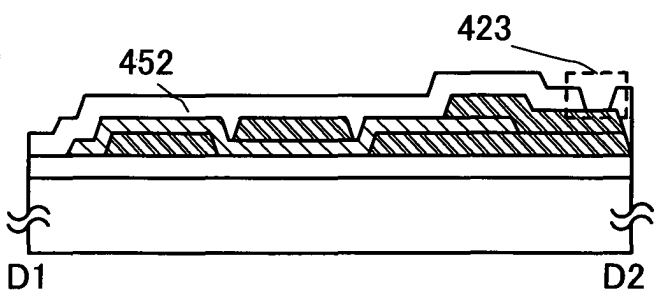


FIG. 8E

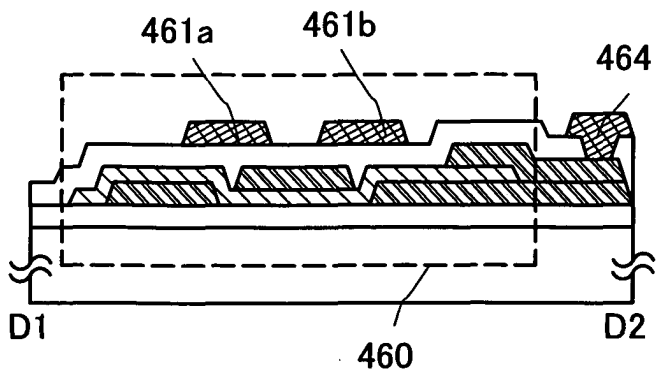


FIG. 9A

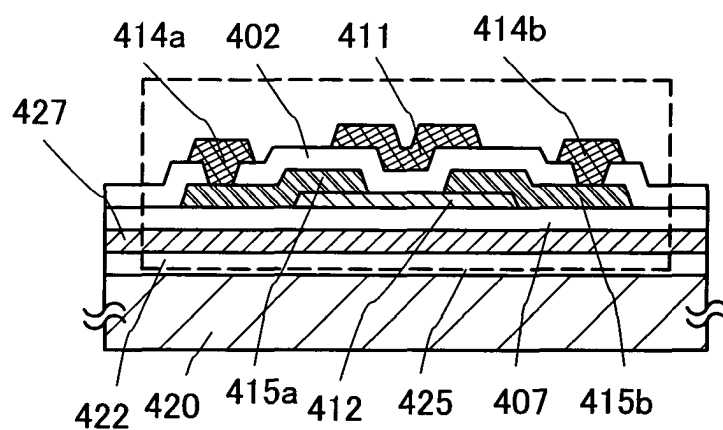


FIG. 9B

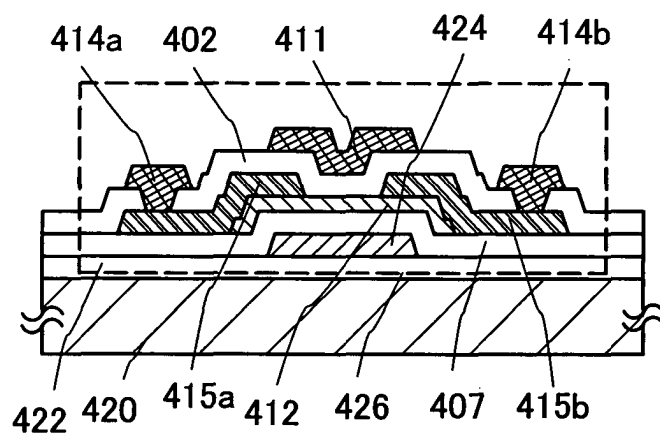


FIG. 10A

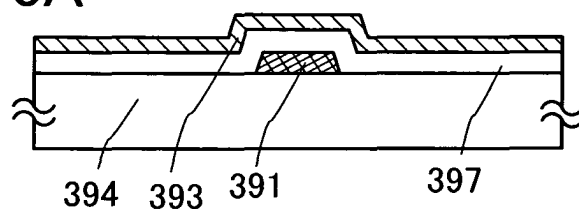


FIG. 10B

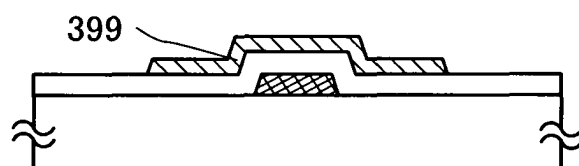


FIG. 10C

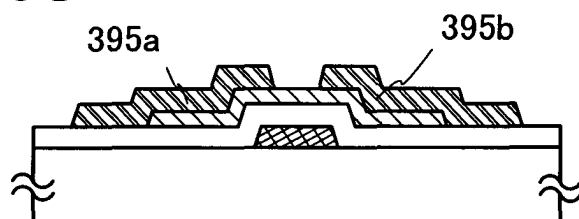


FIG. 10D

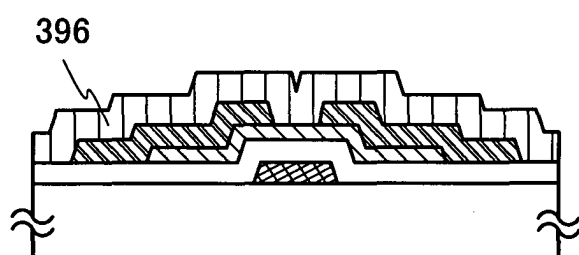


FIG. 10E

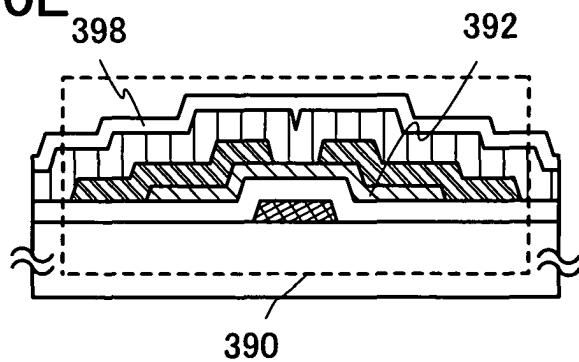


FIG. 11A

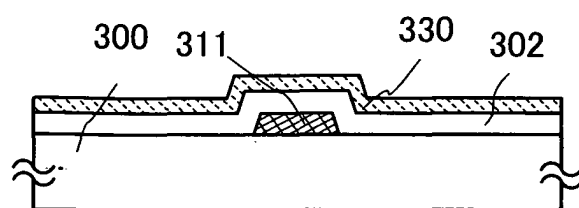


FIG. 11B

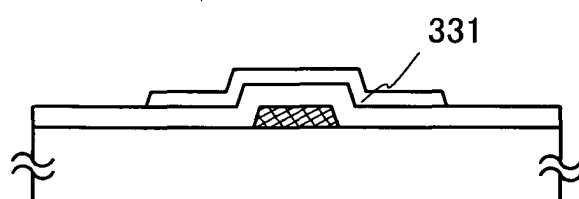


FIG. 11C

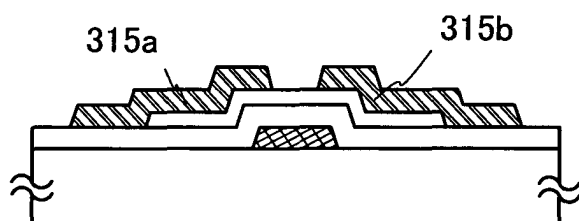


FIG. 11D

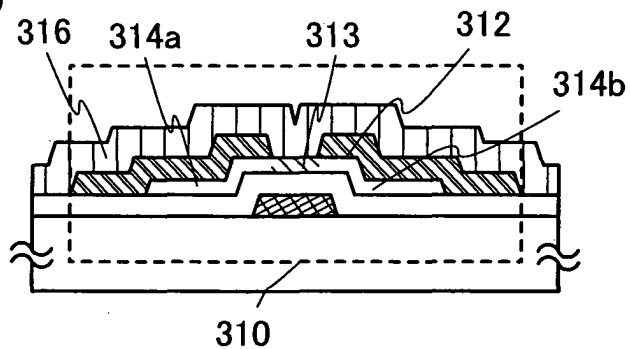


FIG. 11E

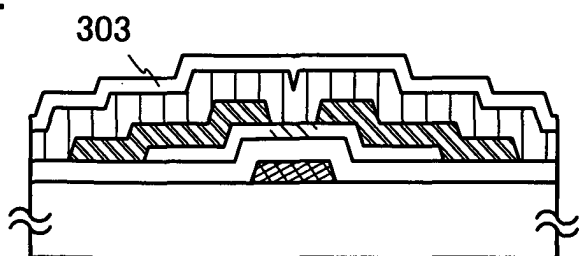


FIG. 12A

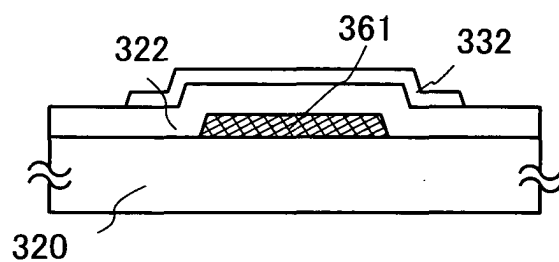


FIG. 12B

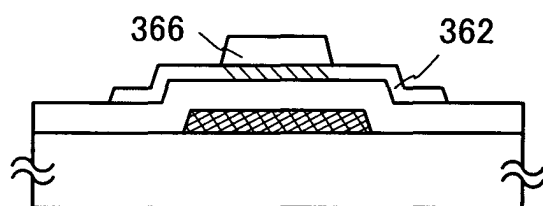


FIG. 12C

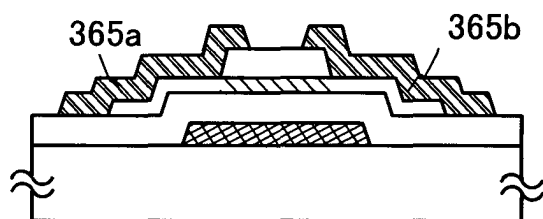


FIG. 12D

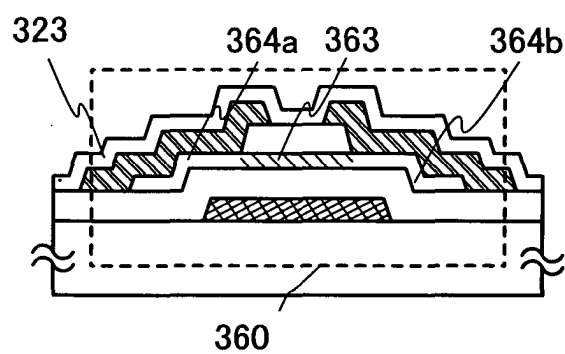


FIG. 13A

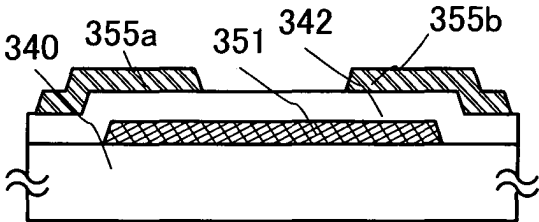


FIG. 13B

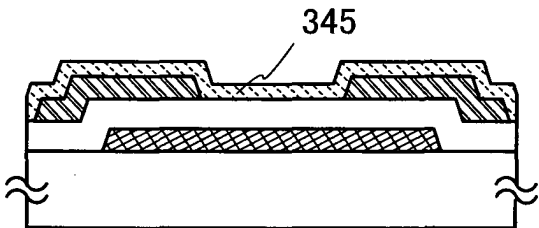


FIG. 13C

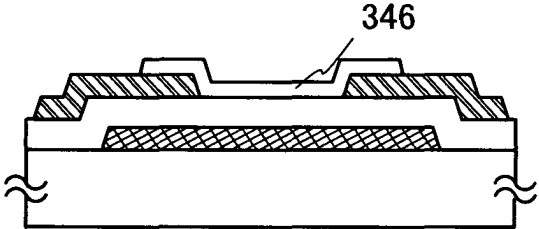


FIG. 13D

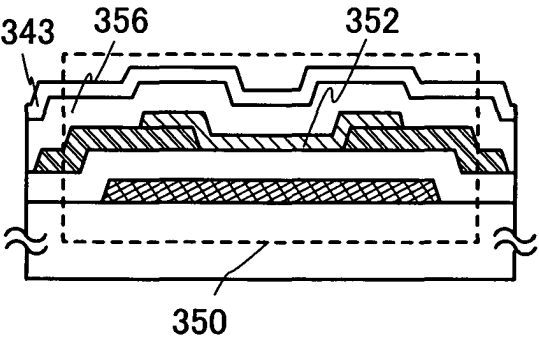


FIG. 14

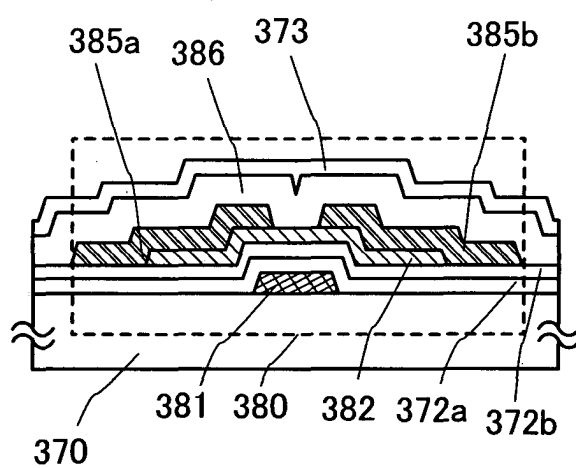


FIG. 15

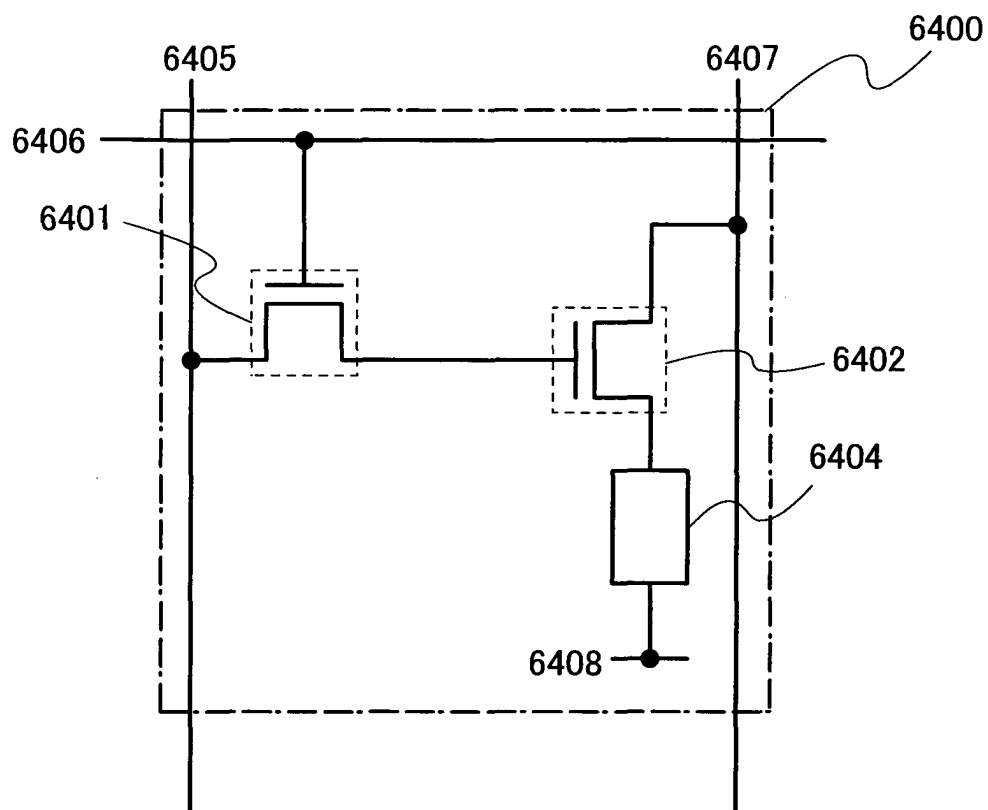


FIG. 16A

A cross-sectional view of a semiconductor device. A central bridge structure (7019) connects two main body portions (7012 and 7016). The bridge has a top layer (7015) and a bottom layer (7014). The main body portions have a top layer (7013) and a bottom layer (7017). The device is built on a substrate (7031) with a layer (7033) and a patterned layer (7034). A dashed line (7030) indicates a cross-section through the patterned layer. A dashed line (7011) indicates a cross-section through the main body portions. The device is shown with a break symbol at the bottom.

FIG. 16B

This cross-sectional view shows a semiconductor device with a bridge structure. A central bridge (7029) connects two main body regions (7022 and 7023). The bridge is formed by a top layer (7025) and a bottom layer (7024). The main body regions are formed by a top layer (7027) and a bottom layer (7026). The device is mounted on a substrate (7041) with a passivation layer (7043) and a contact layer (7044). A series of interdigitated structures (7040) are located beneath the main body regions. Dashed arrows indicate the direction of light emission or detection.

FIG. 16C

A cross-sectional view of a semiconductor device. A central opening is formed in a top layer (7002) and extends through a middle layer (7003) to a bottom layer (7001). The opening is defined by a raised structure (7009) on the top layer. The middle layer (7003) has a sawtooth pattern on its bottom surface, which is exposed through the opening. The bottom layer (7001) is a thin layer. The device is surrounded by a substrate (7051) and a passivation layer (7053). A dashed line (7050) indicates a cross-section of the sawtooth pattern. Arrows (7005, 7004, 7003) point to the top layer, middle layer, and bottom layer, respectively. A dashed arrow (7002) points to the opening. A dashed line (7055) indicates a cross-section of the top layer. A dashed line (7050) indicates a cross-section of the sawtooth pattern.

FIG. 17A

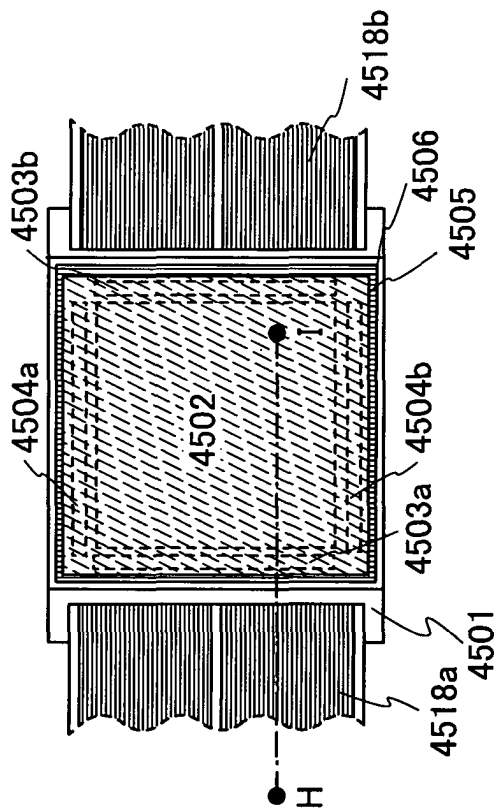


FIG. 17B

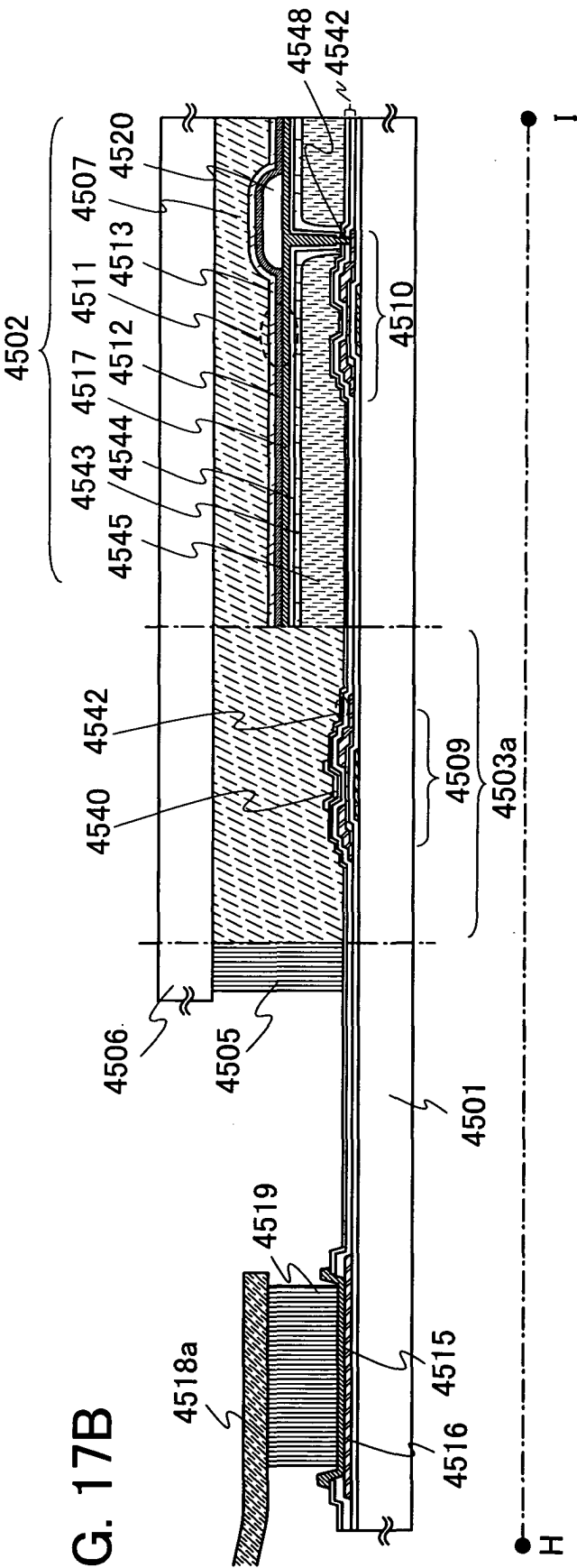


FIG. 19A

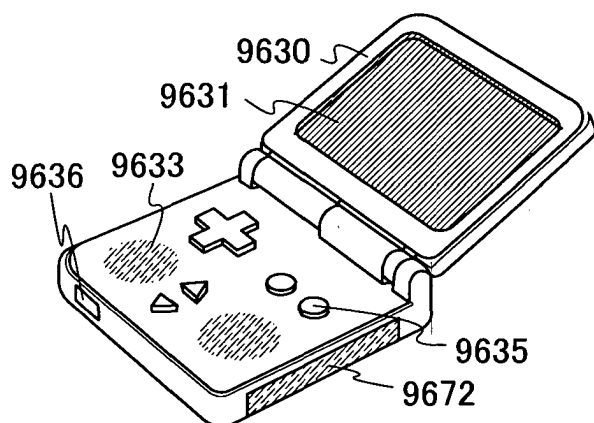


FIG. 19B

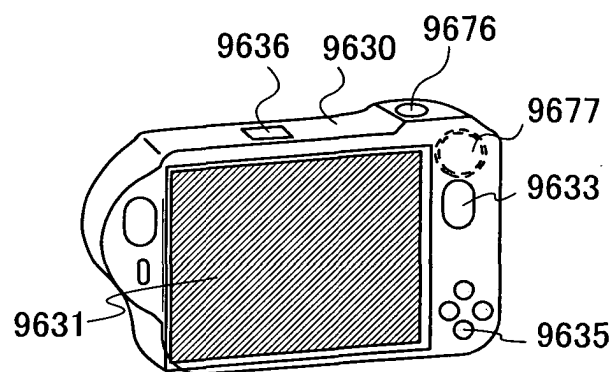


FIG. 19C

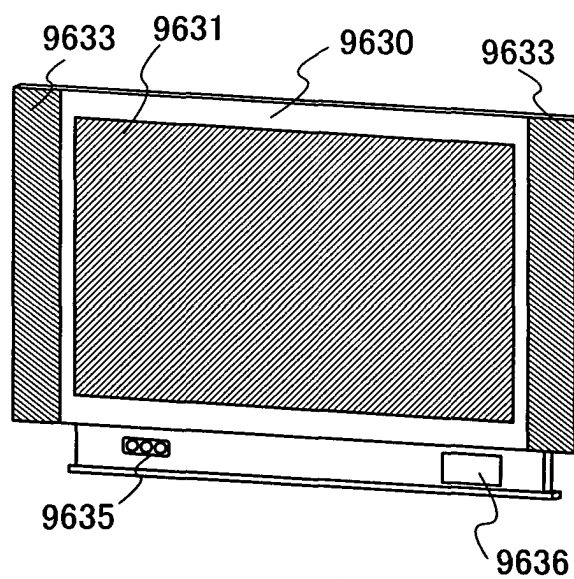


FIG. 20A

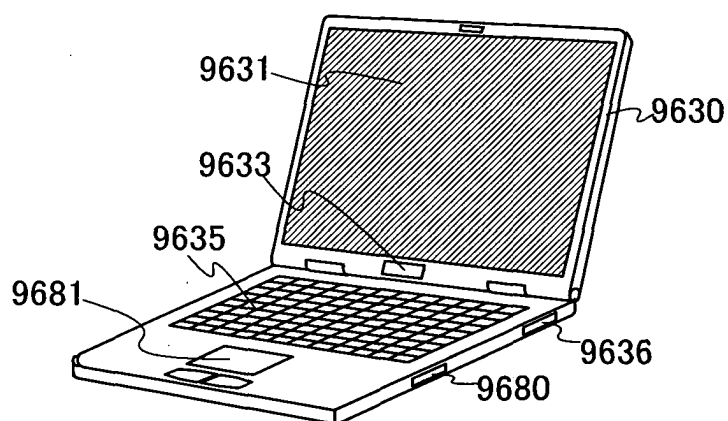


FIG. 20B

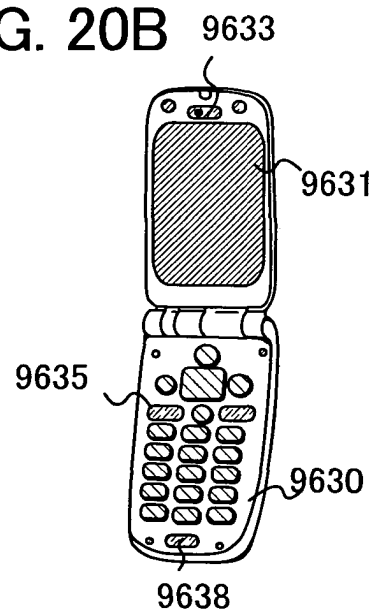


FIG. 20C

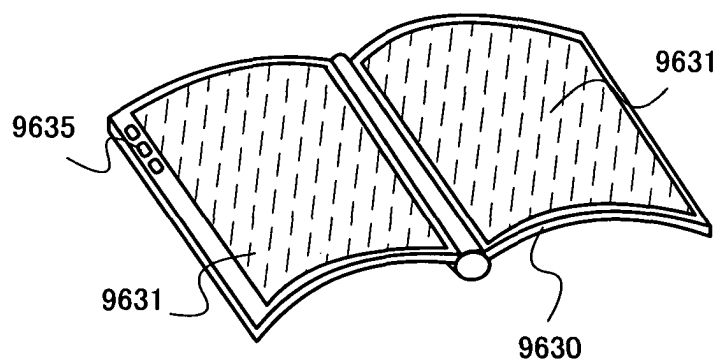


FIG. 21

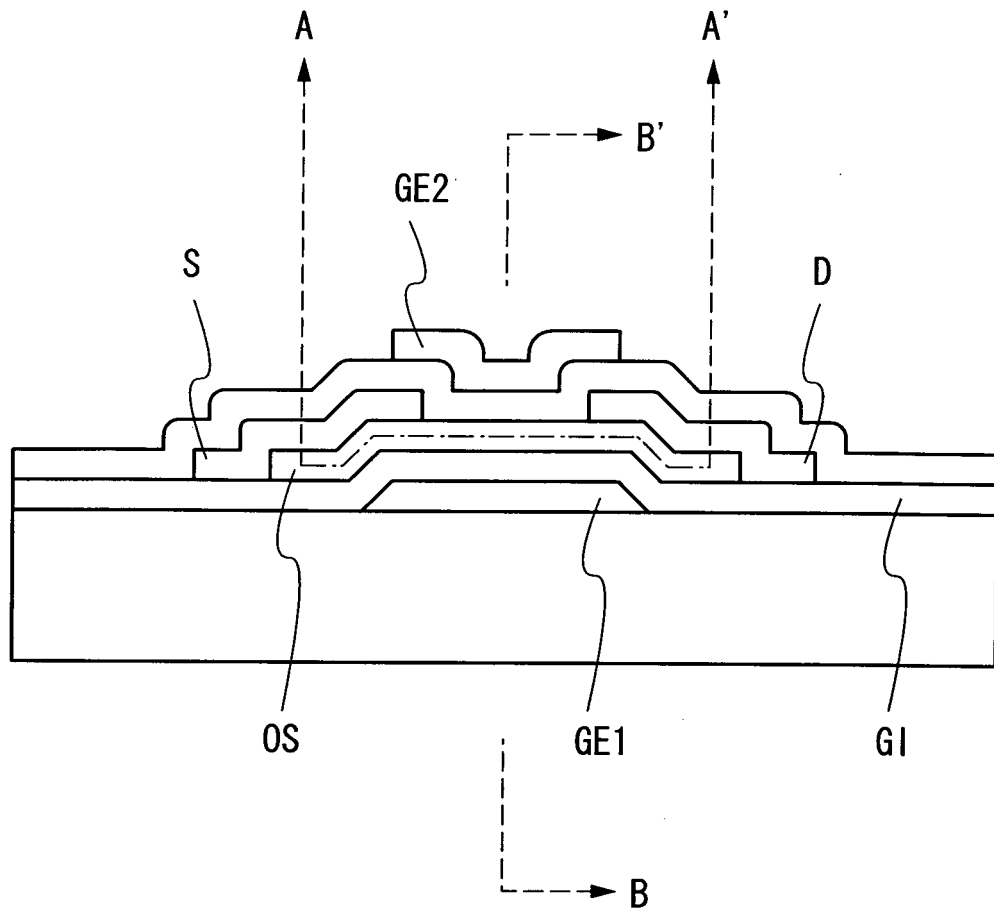


FIG. 22A

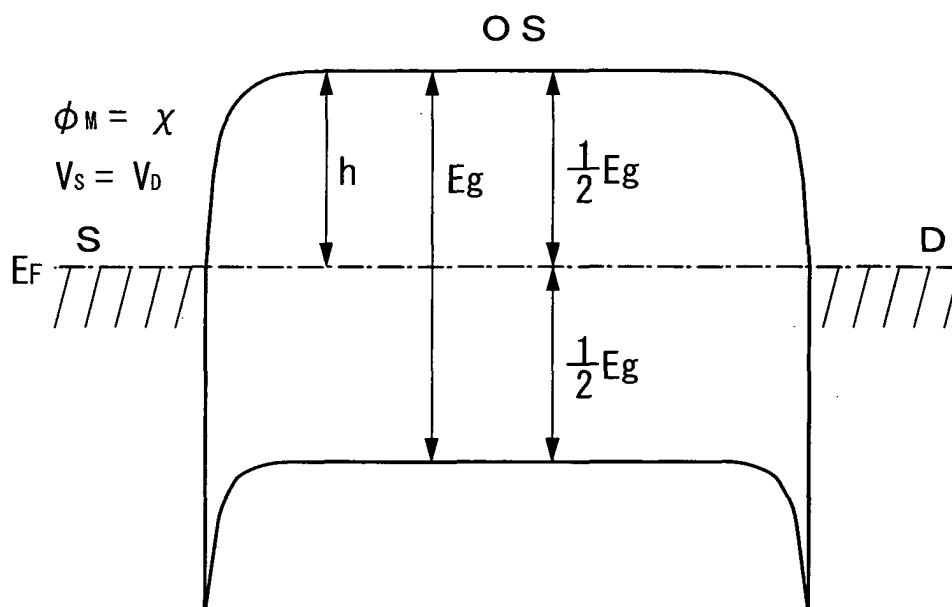


FIG. 22B

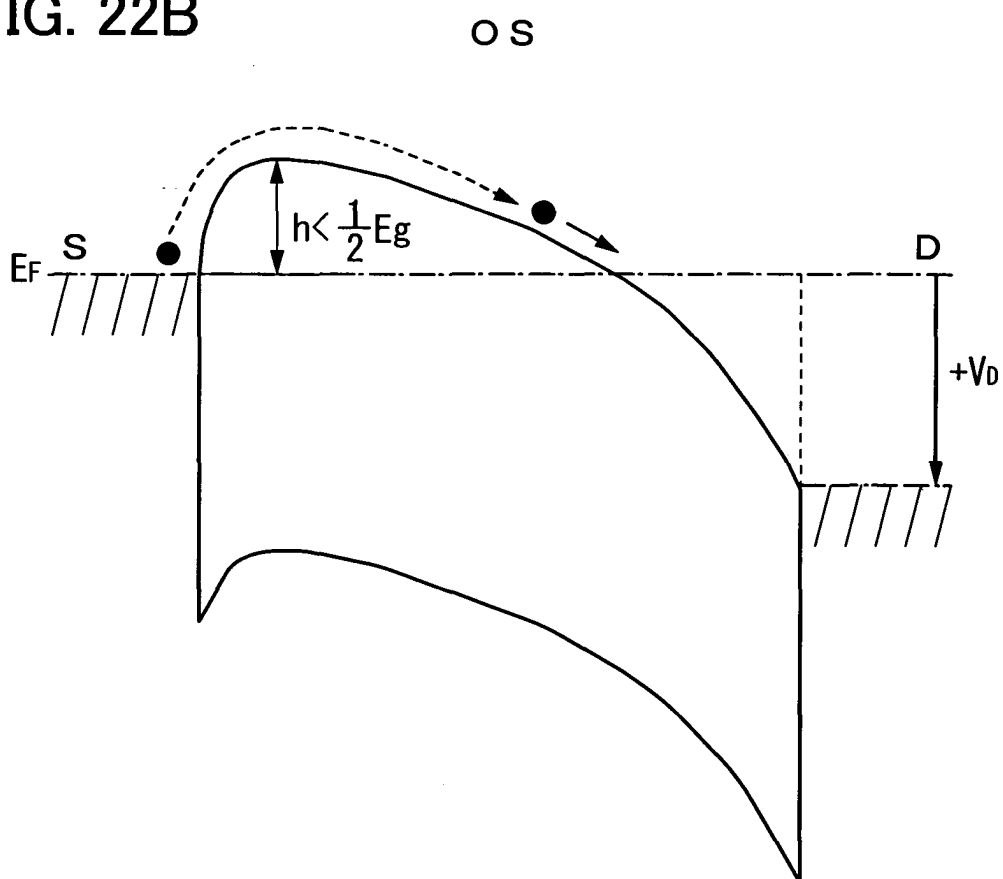


FIG. 23A

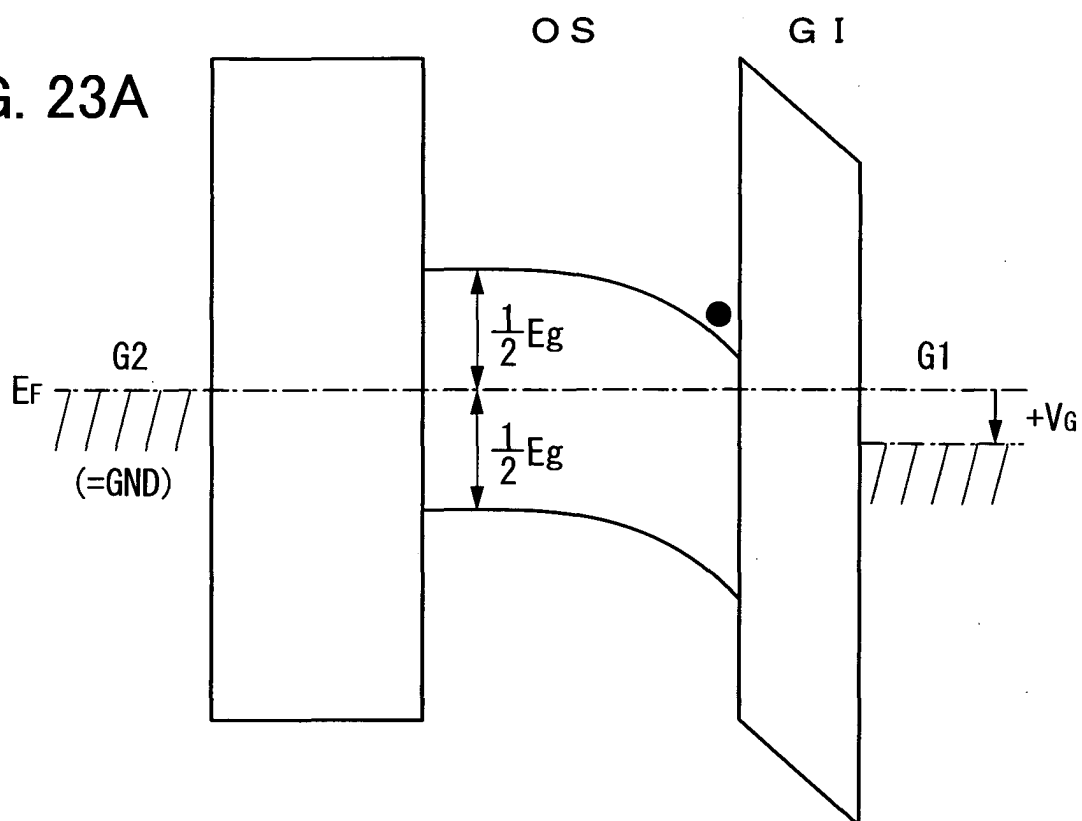


FIG. 23B

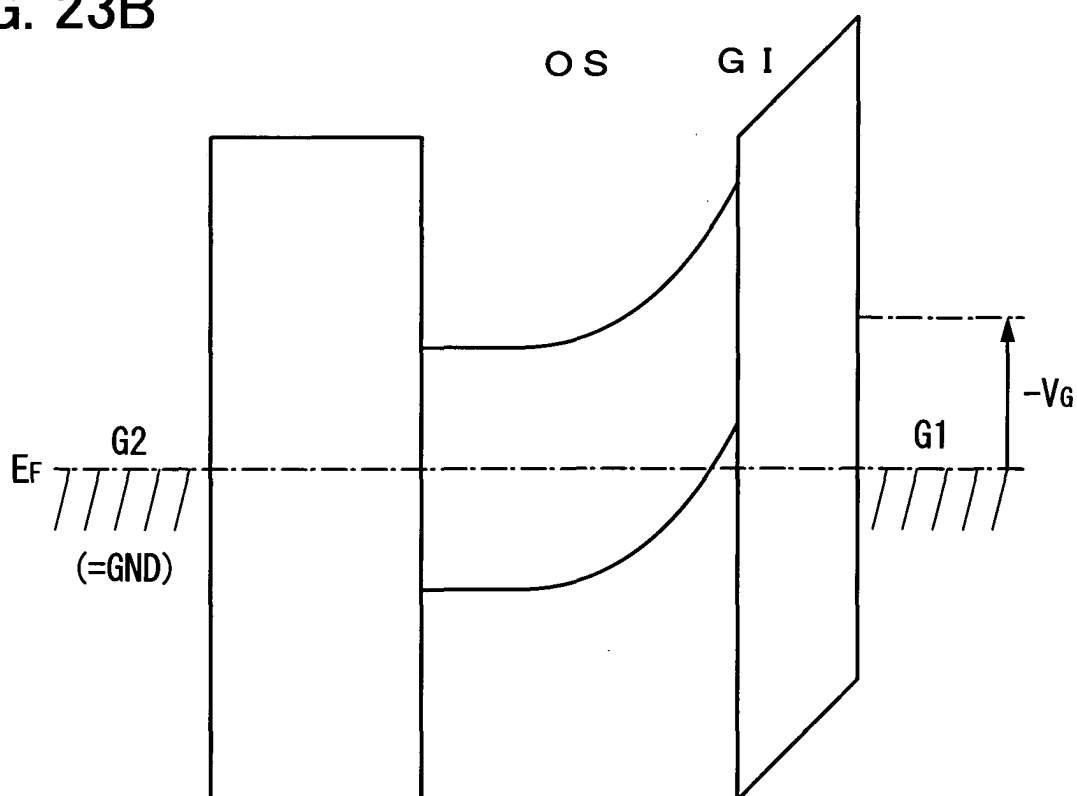


FIG. 24

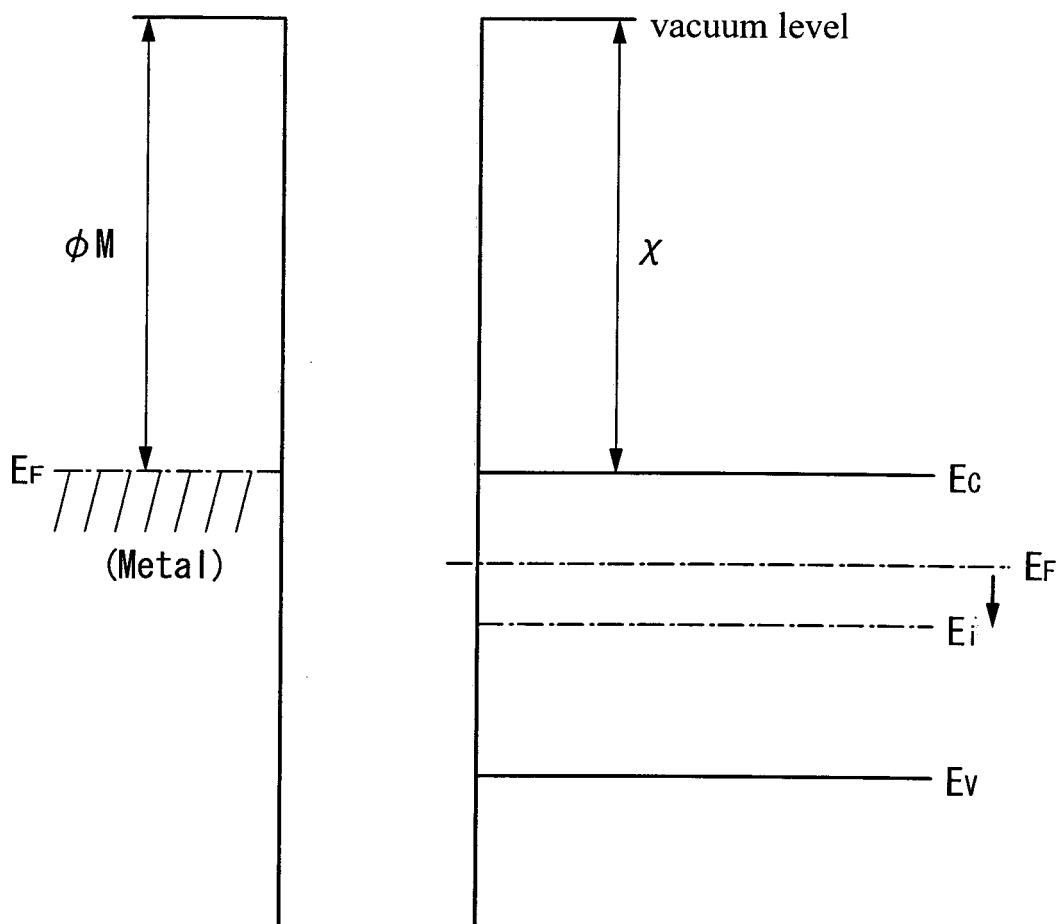


FIG. 25

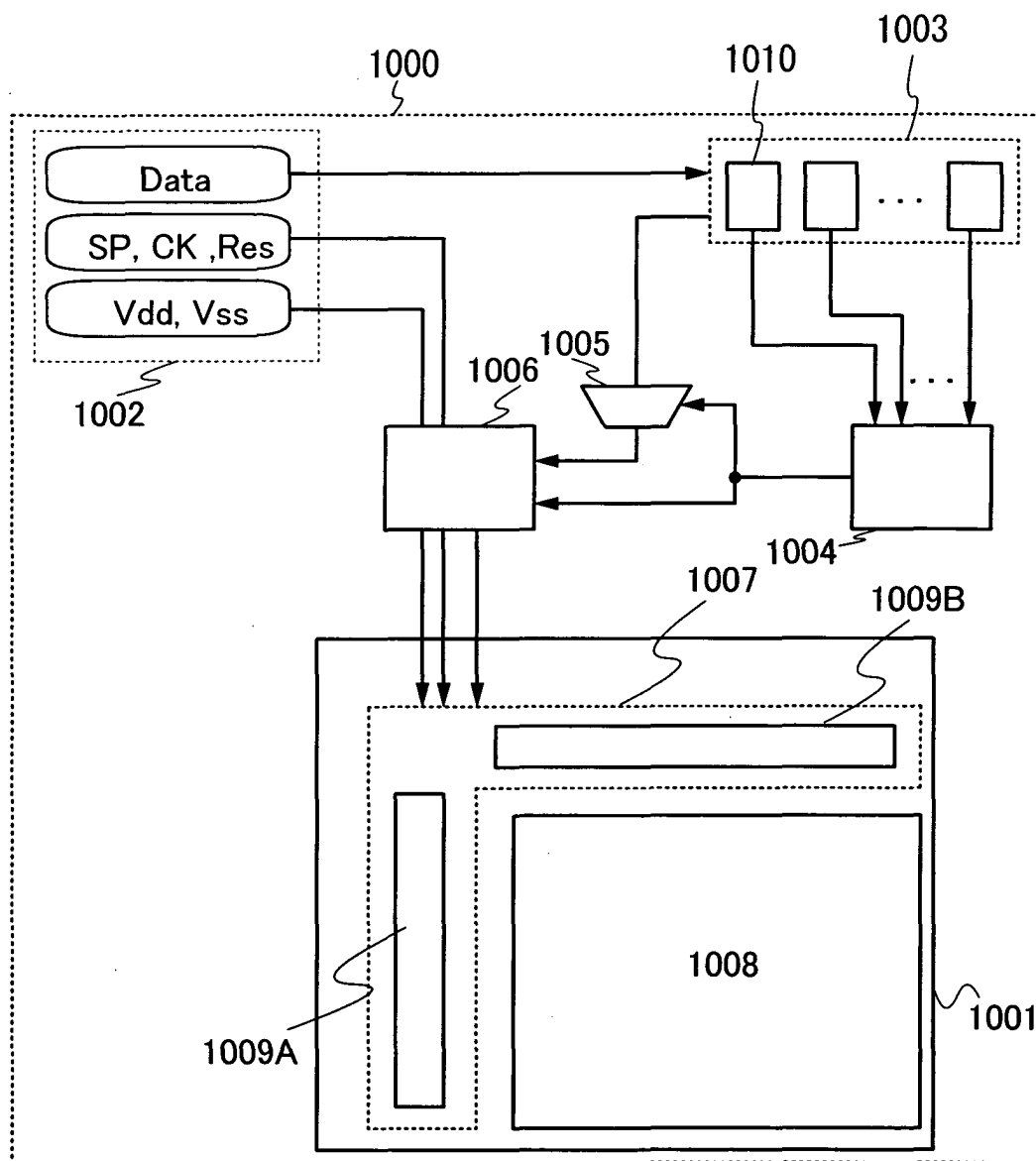


FIG. 26A

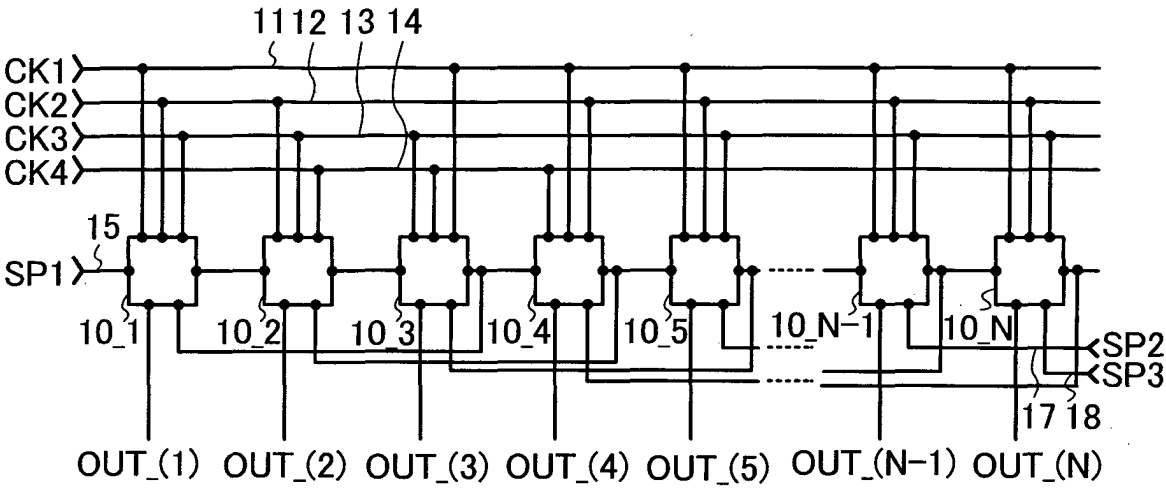


FIG. 26B

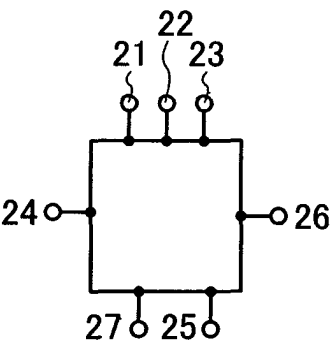


FIG. 26C

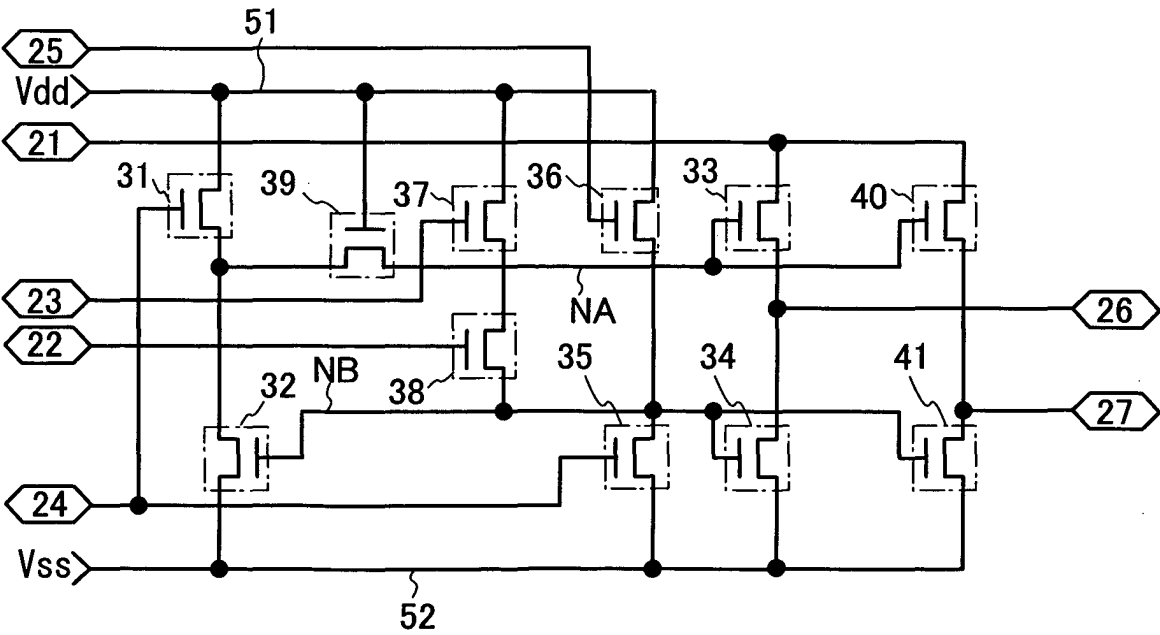


FIG. 27

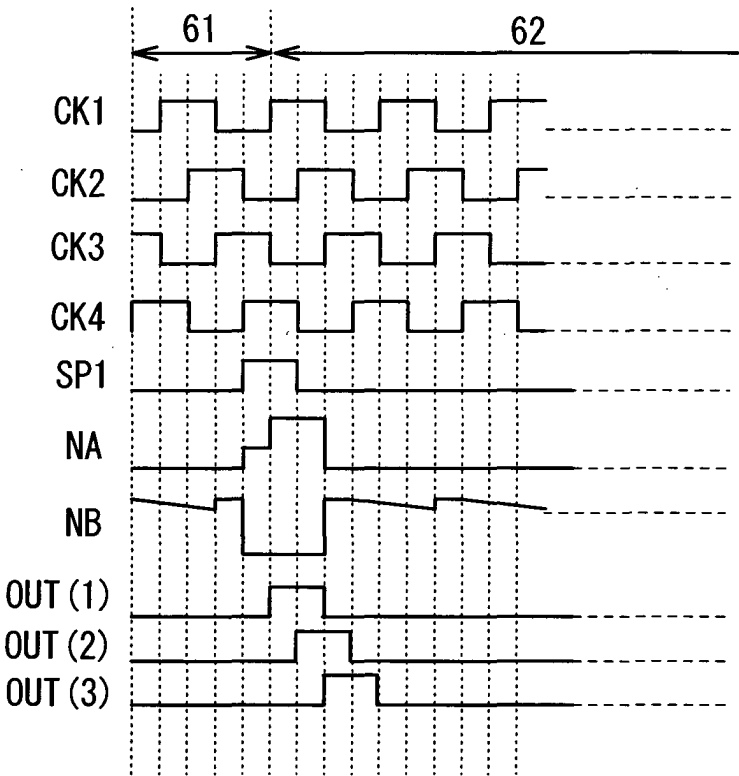
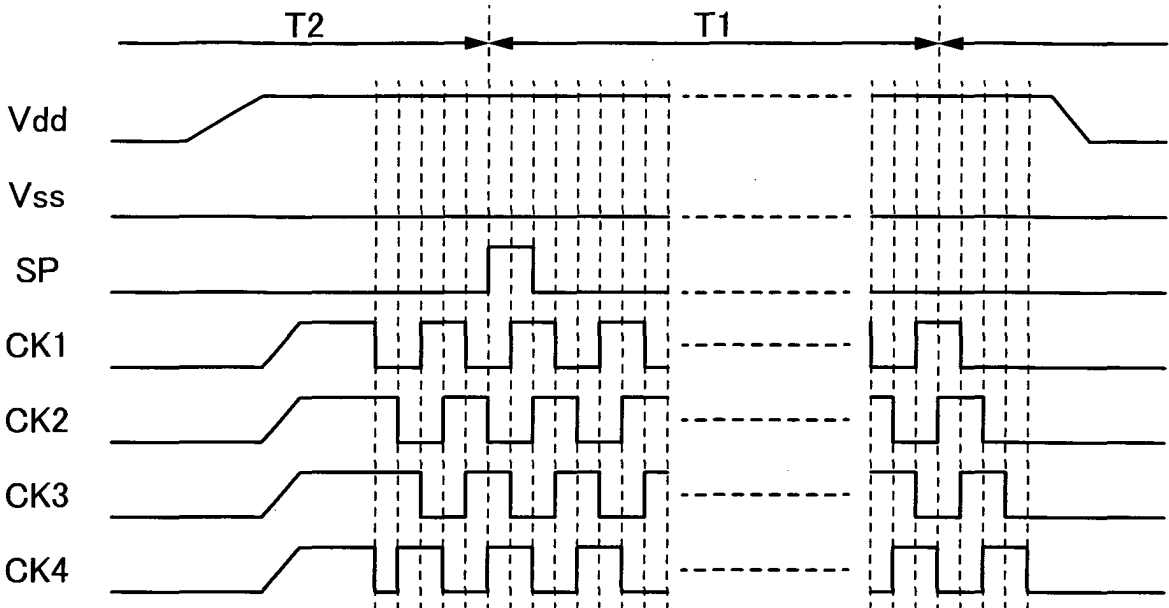


FIG. 28



EXPLANATION OF REFERENCE

11: wiring, 12: wiring, 13: wiring, 14: wiring, 15: wiring, 17: wiring, 18:
wiring, 51: power supply line, 52: power supply line, 61: period, 62: period,
5 100: pixel, 101: wiring, 102: wiring, 102A: wiring, 102B: wiring, 103:
oxide semiconductor layer, 104: capacitor line, 105: pixel electrode, 106:
thin film transistor, 108: substrate temperature, 111: substrate, 112: base
film, 113: gate insulating film, 114: oxide insulating layer, 121: insulating
layer, 200: substrate, 201: pixel, 202: pixel portion, 203: scan line driver
10 circuit, 204: signal line driver circuit, 251: period, 252: period, 261: period,
300: substrate, 302: gate insulating layer, 303: protective insulating layer,
310: thin film transistor, 311: gate electrode layer, 313: channel formation
region, 314a: high-resistance source region, 314b: high-resistance drain
region, 315a: source electrode layer, 315b: drain electrode layer, 316: oxide
15 insulating layer, 320: substrate, 322: gate insulating layer, 323: protective
insulating layer, 330: oxide insulating film, 331: oxide semiconductor layer,
332: oxide semiconductor layer, 340: substrate, 342: gate insulating layer,
343: protective insulating layer, 345: oxide semiconductor film, 346: oxide
semiconductor layer, 350: thin film transistor, 351: gate electrode layer,
20 352: oxide semiconductor layer, 355a: source electrode layer, 355b: drain
electrode layer, 356: oxide insulating layer, 360: thin film transistor, 361:
gate electrode layer, 362: oxide semiconductor layer, 363: channel
formation region, 364a: high-resistance source region, 364b:
high-resistance drain region, 365a: source electrode layer, 365b: drain
25 electrode layer, 366: oxide insulating layer, 370: substrate, 372a: gate
insulating layer, 372b: gate insulating layer, 373: protective insulating layer,
380: thin film transistor, 381: gate electrode layer, 382: oxide

semiconductor layer, 385a: source electrode layer, 385b: drain electrode layer, 386: oxide insulating layer, 390: thin film transistor, 391: gate electrode layer, 392: oxide semiconductor layer, 393: oxide semiconductor film, 394: substrate, 395a: source electrode layer, 395b: drain electrode layer, 396: oxide insulating layer, 397: gate insulating layer, 398: protective insulating layer, 399: oxide semiconductor layer, 400: substrate, 402: gate insulating layer, 407: insulating layer, 410: thin film transistor, 411: gate electrode layer, 412: oxide semiconductor layer, 414a: wiring layer, 414b: wiring layer, 415a: drain electrode layer, 415b: drain electrode layer, 420: silicon substrate, 422: insulating layer, 423: opening, 424: conductive layer, 425: thin film transistor, 427: conductive layer, 438: wiring layer, 450: substrate, 452: gate insulating layer, 457: insulating layer, 460: thin film transistor, 461: gate electrode layer, 462: oxide semiconductor layer, 464: wiring layer, 465a: drain electrode layer, 465a1: drain electrode layer, 465a2: drain electrode layer, 465b: drain electrode layer, 468: wiring layer, 472a: gate insulating layer, 1008: pixel portion, 1009B: signal line driver circuit, 4501: substrate, 4502: pixel portion, 4503a: signal line driver circuit, 4504a: scan line driver circuit, 4505: sealant, 4506: substrate, 4507: filler, 4509: thin film transistor, 4510: thin film transistor, 4511: light-emitting element, 4512: electroluminescent layer, 4513: electrode layer, 4515: connection terminal electrode, 4516: terminal electrode, 4517: electrode layer, 4518a: FPC, 4519: anisotropic conductive film, 4520: partition, 4540: conductive layer, 4542: insulating layer, 6400: pixel, 6401: switching transistor, 6402: driving transistor, 6404: light-emitting element, 6405: signal line, 6406: scan line, 6407: power supply line, 6408: common electrode, 7001: driving TFT, 7002: light-emitting element, 7003: electrode, 7004: EL layer, 7005: electrode, 7011: driving TFT, 7012: light-emitting

element, 7013: electrode, 7014: EL layer, 7015: electrode, 7016:
light-blocking film, 7017: conductive film, 7019: partition, 7021: driving
TFT, 7022: light-emitting element, 7023: electrode, 7024: EL layer, 7025:
electrode, 7026: electrode, 7027: conductive film, 7029: partition, 7030:
5 drain electrode layer, 7031: insulating layer, 7033: color filter, 7034:
overcoat layer, 7035: insulating layer, 7040: drain electrode layer, 7041:
insulating layer, 7043: color filter, 7044: overcoat layer, 7045: insulating
layer, 7051: insulating layer, 7053: insulating layer, 7055: insulating layer,
7211: driving TFT, 7212: light-emitting element, 7217: conductive film,
10 7230: drain electrode, 7231: insulating layer, 7233: light-storing layer,
7234: overcoat layer, 7235: insulating layer, 9630: chassis, 9631: display
portion, 9633: speaker, 9635: operation key, 9636: connection terminal,
9638: microphone, 9672: memory medium reading portion, 9676: shutter
button, 9677: image receiving portion, 9680: external connection port, and
15 9681: pointing device.