

FIG. 1A

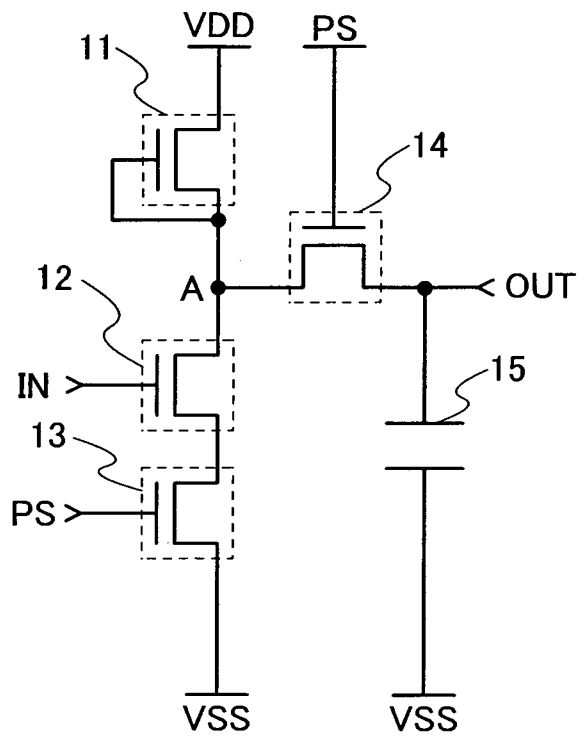


FIG. 1B

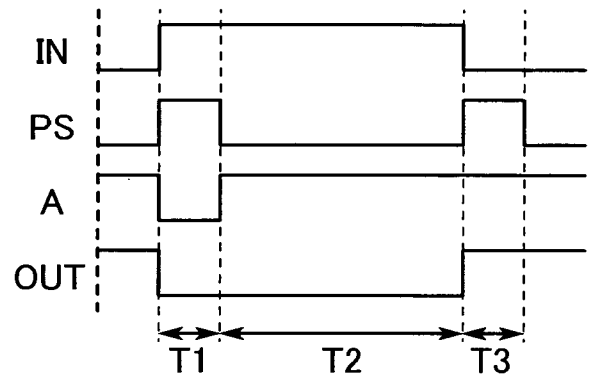


FIG. 1C

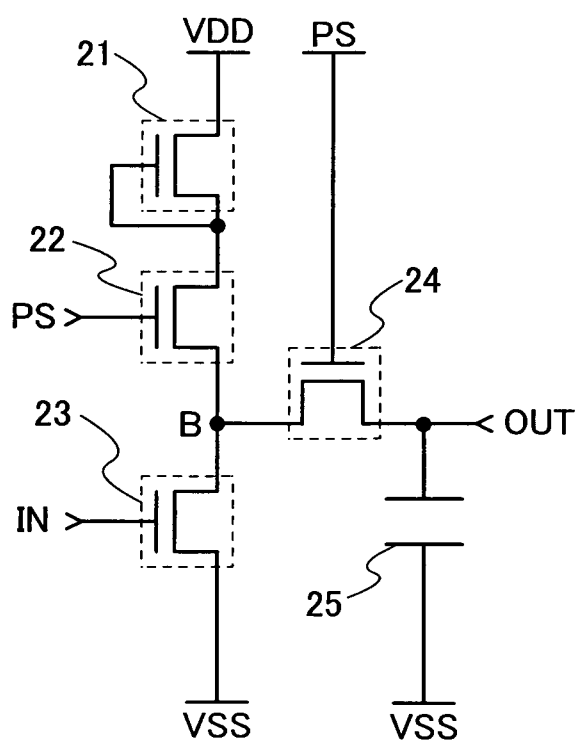
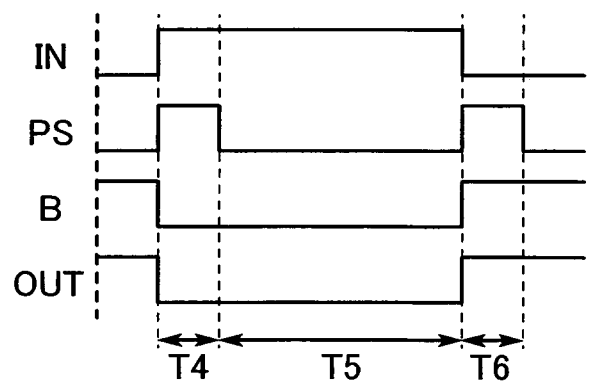


FIG. 1D



2/34

FIG. 2A

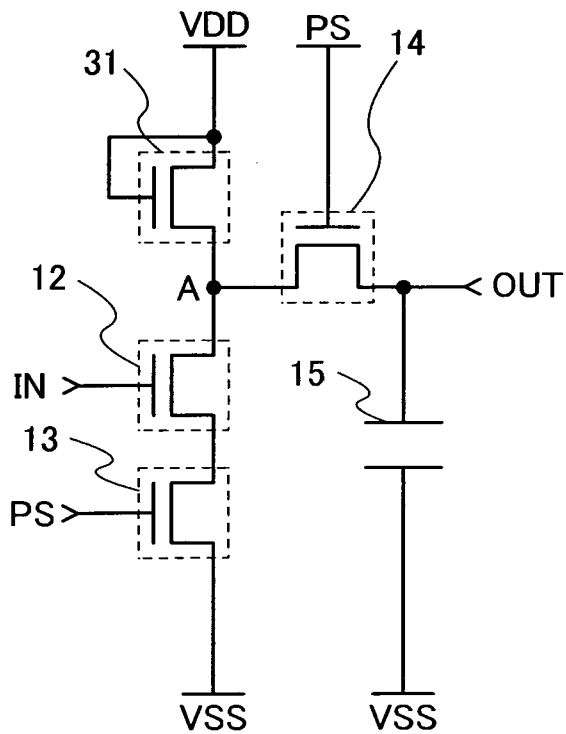


FIG. 2B

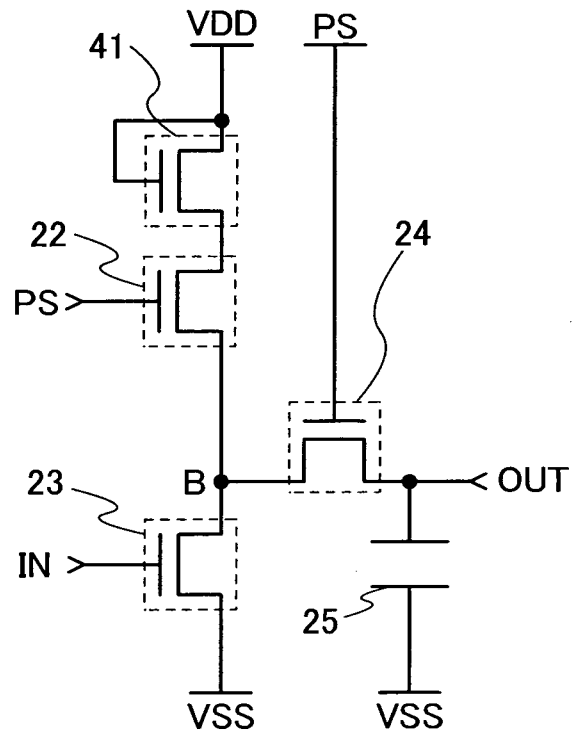


FIG. 2C

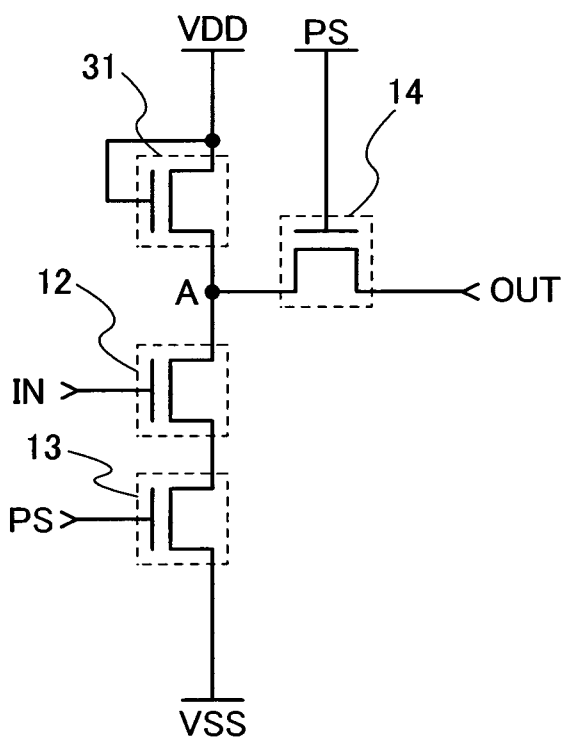
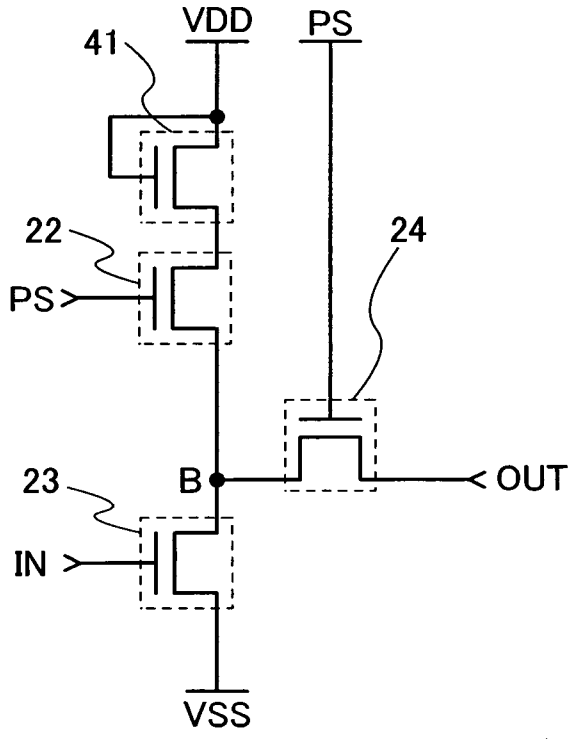


FIG. 2D



3/34

FIG. 3A

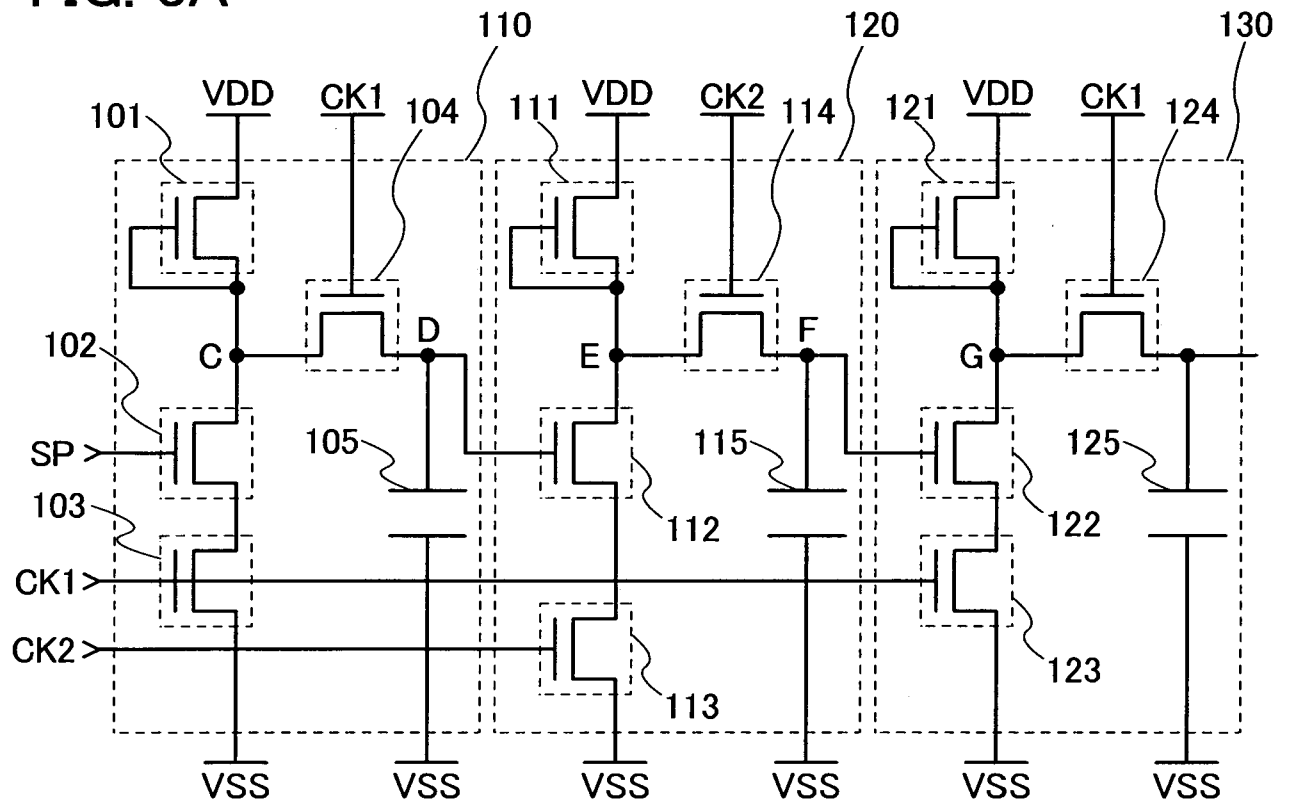


FIG. 3B

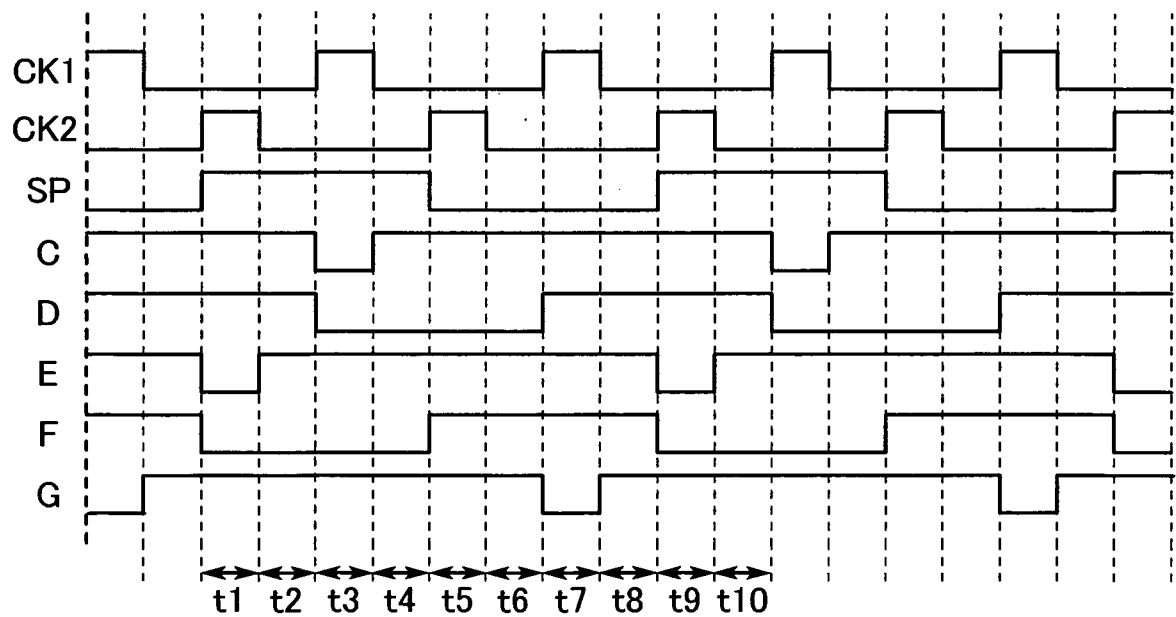


FIG. 4A

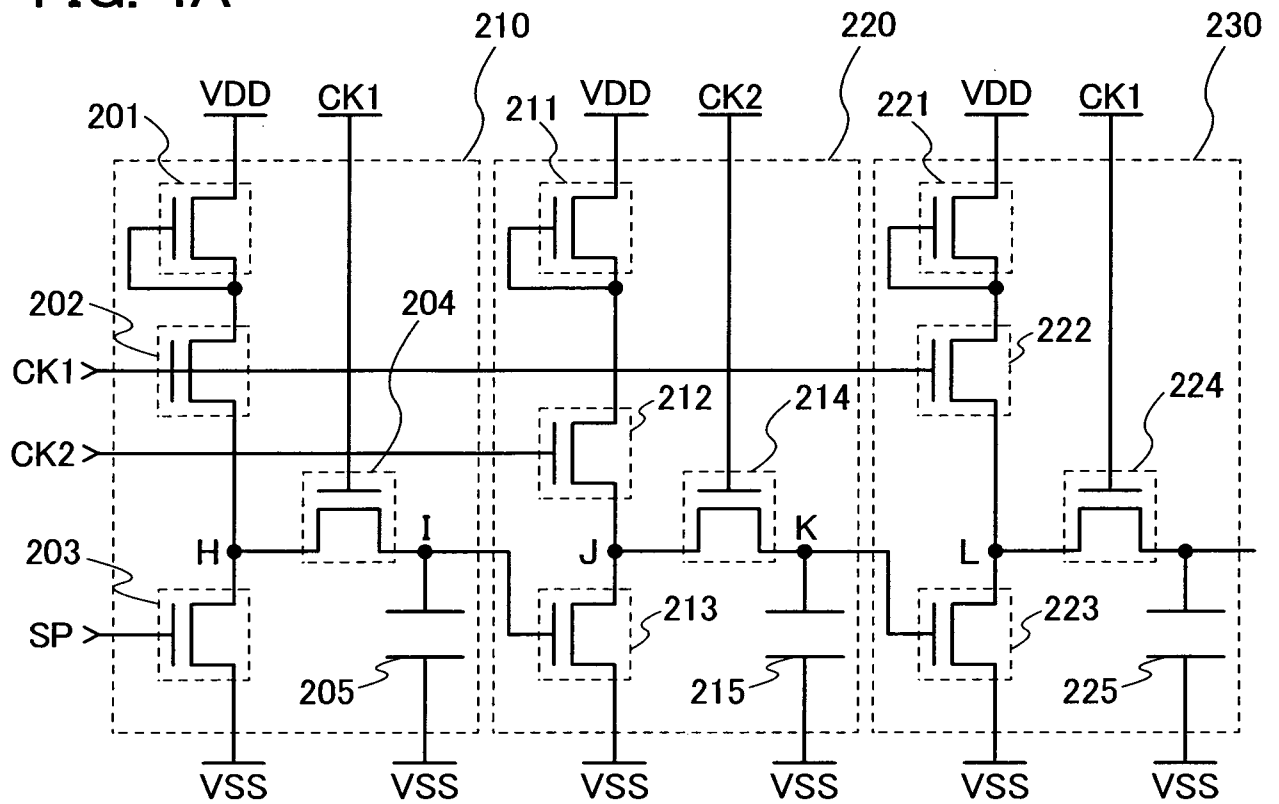
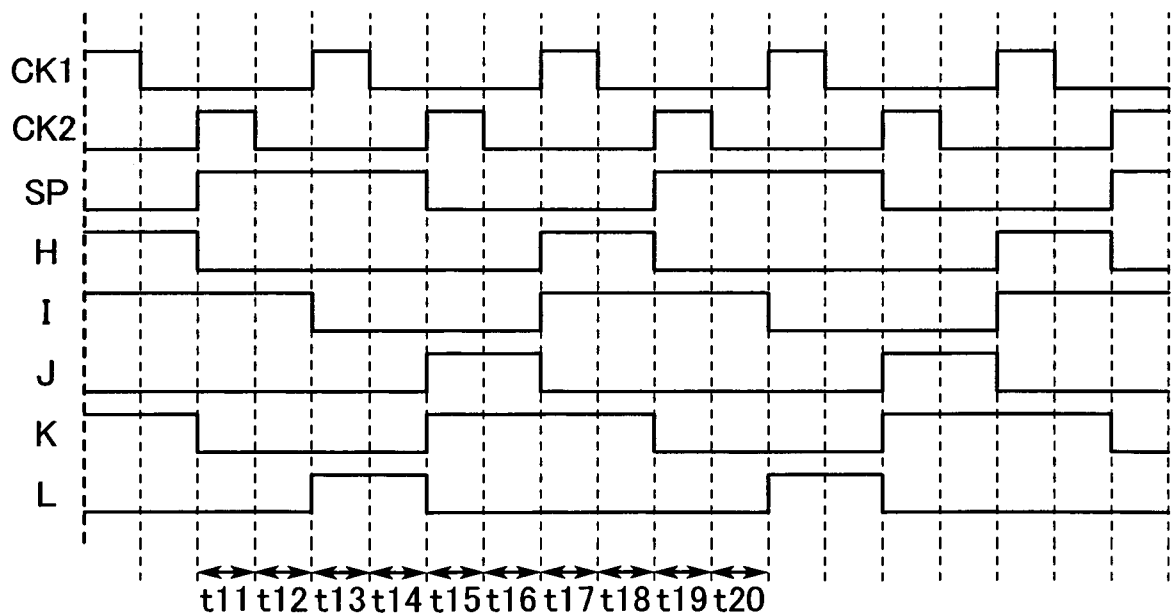


FIG. 4B



5/34

FIG. 5A

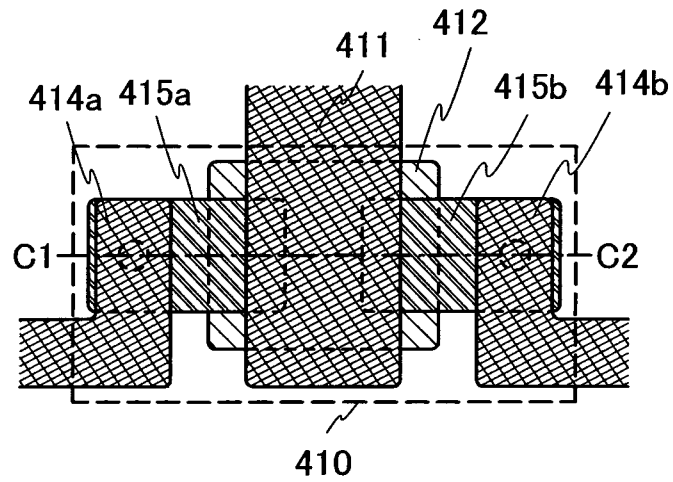
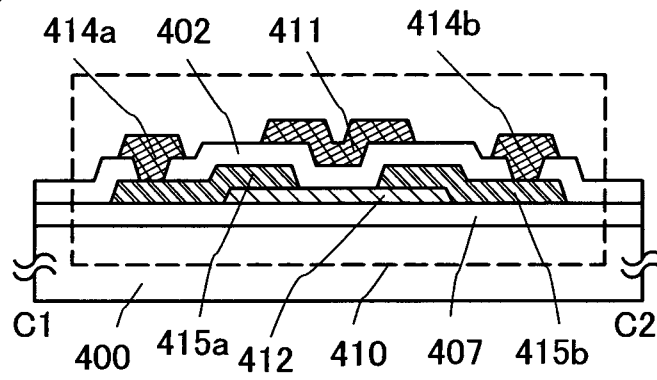


FIG. 5B



6/34

FIG. 6A

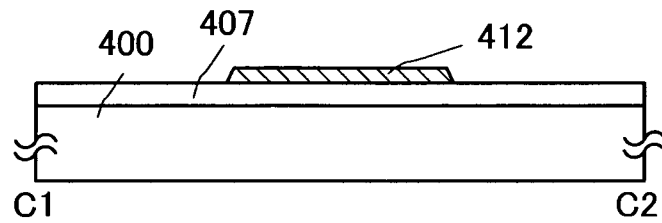


FIG. 6B

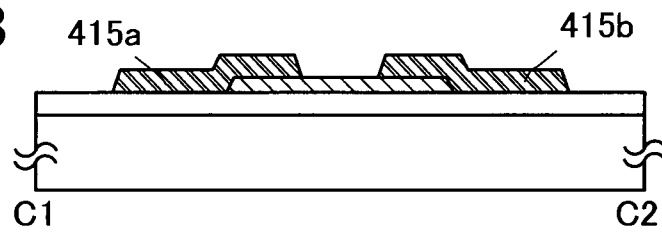


FIG. 6C

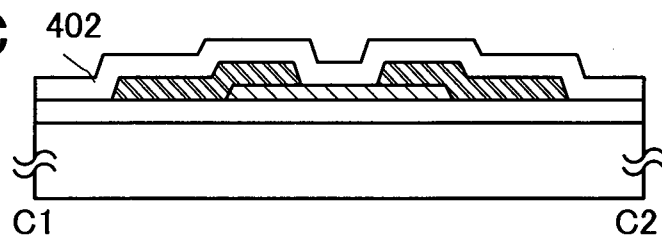


FIG. 6D

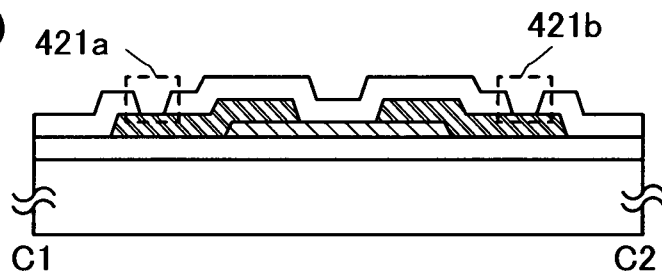
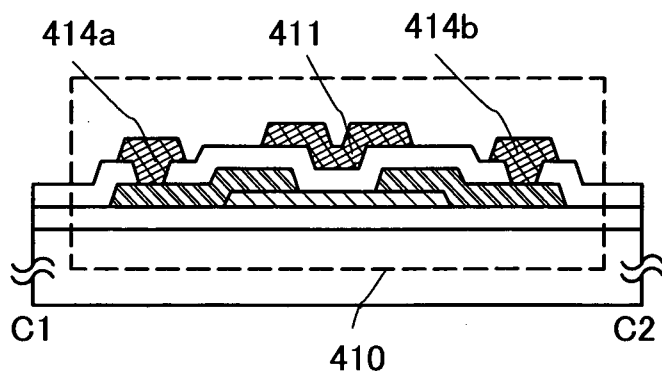


FIG. 6E



7/34

FIG. 7A

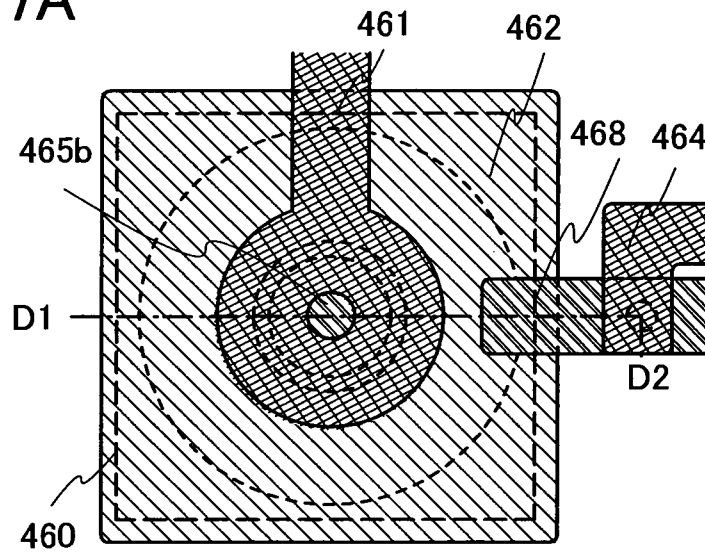
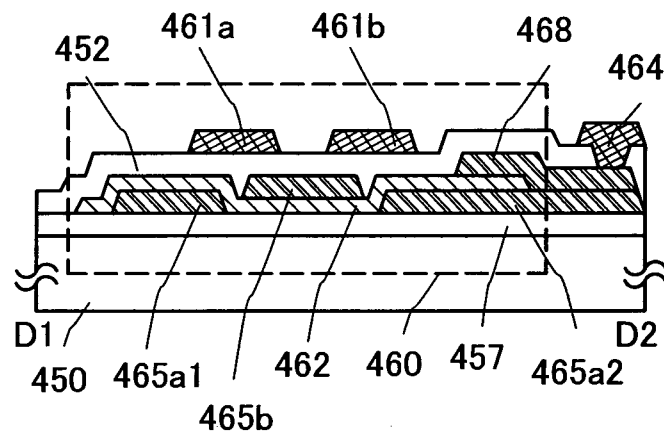


FIG. 7B



8/34

FIG. 8A

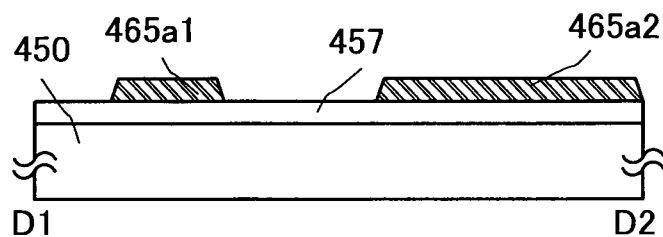


FIG. 8B

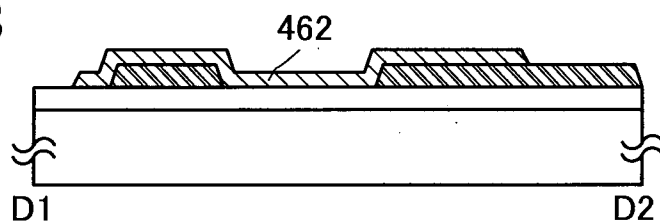


FIG. 8C

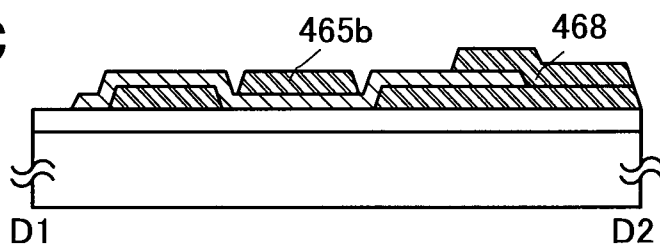


FIG. 8D

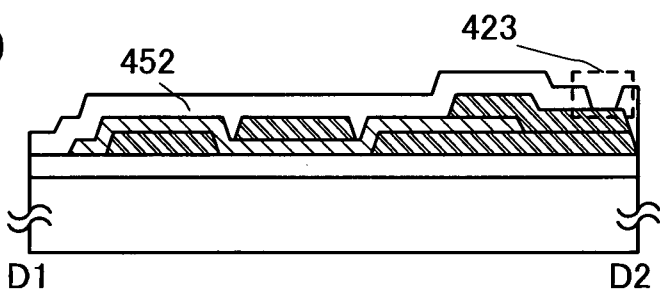


FIG. 8E

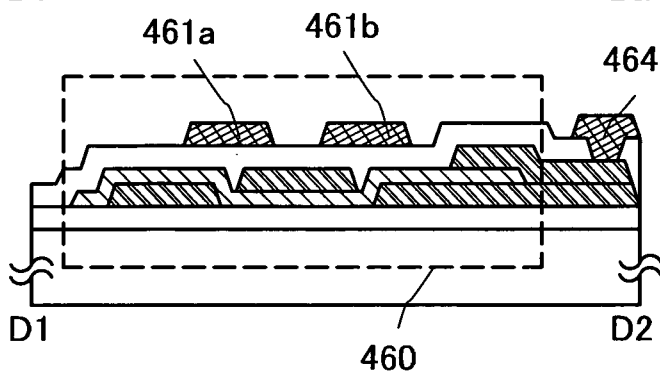


FIG. 9A

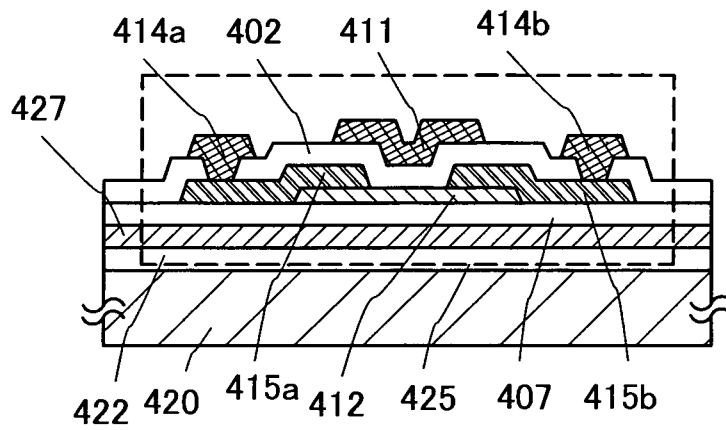
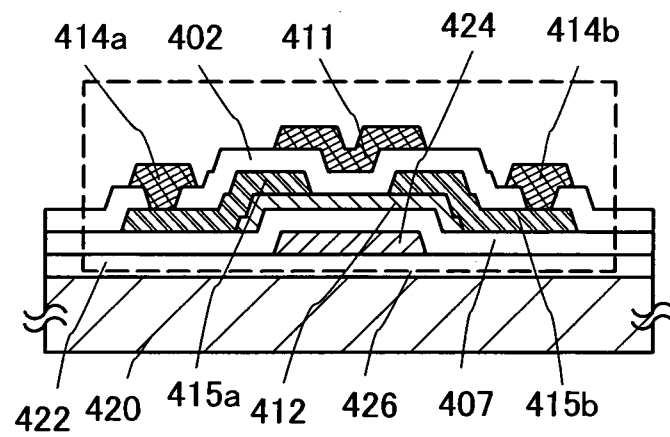


FIG. 9B



10/34

FIG. 10A

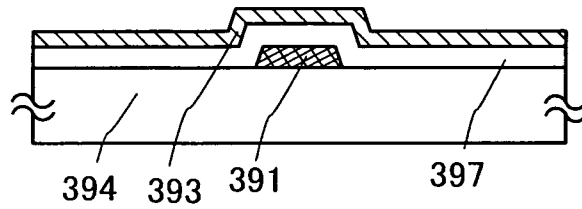


FIG. 10B

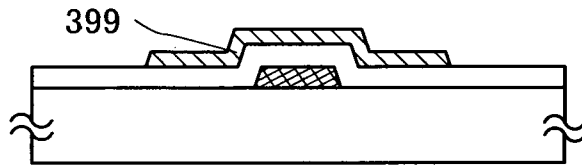


FIG. 10C

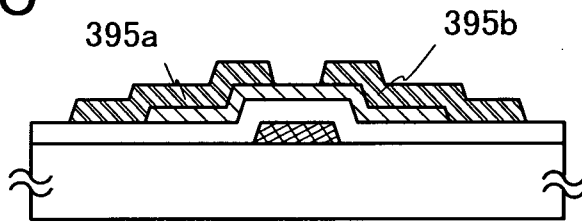


FIG. 10D

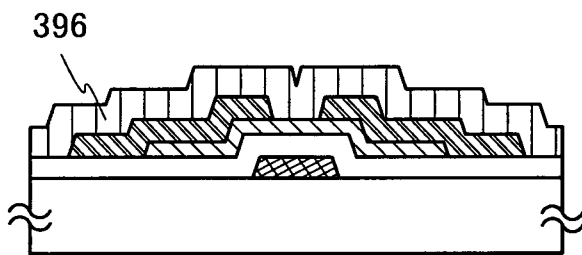
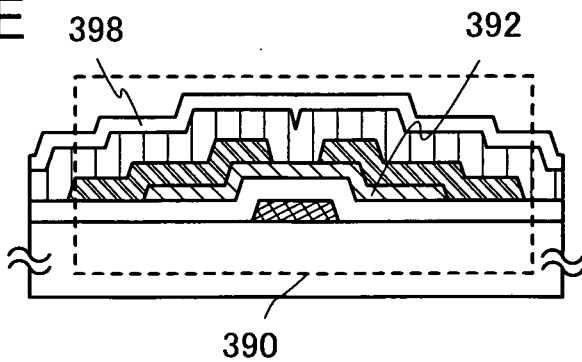


FIG. 10E



11/34

FIG. 11A

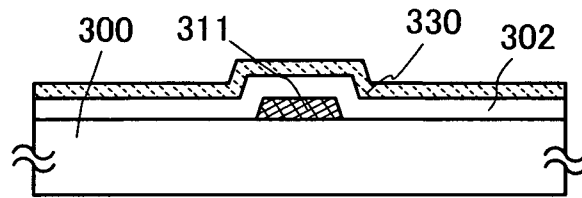


FIG. 11B

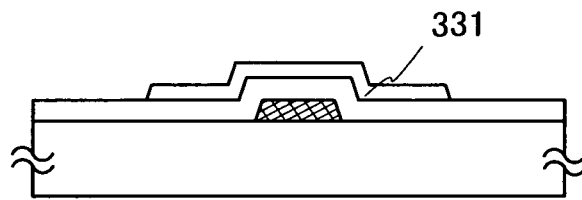


FIG. 11C

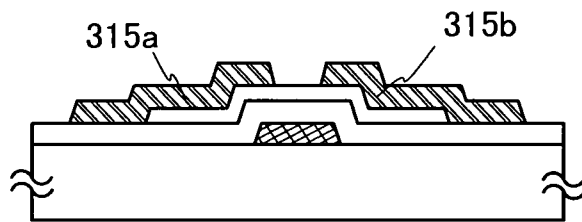


FIG. 11D

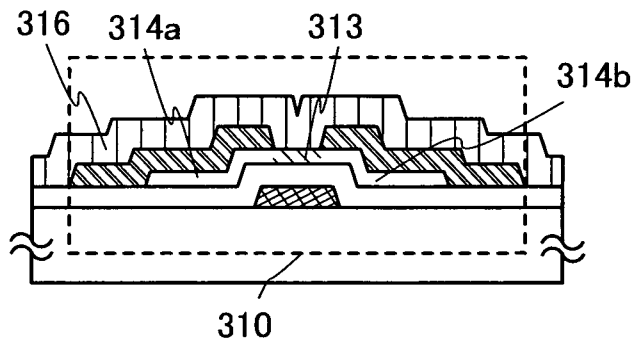
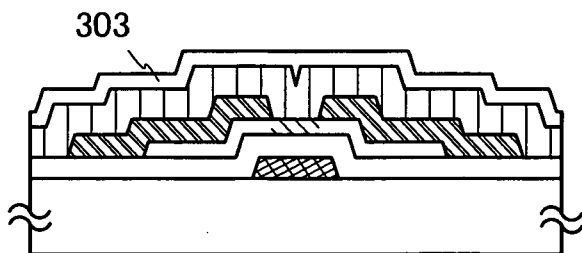


FIG. 11E



12/34

FIG. 12A

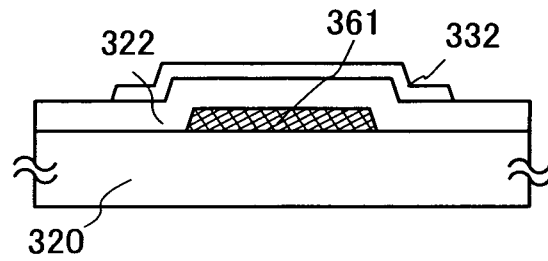


FIG. 12B

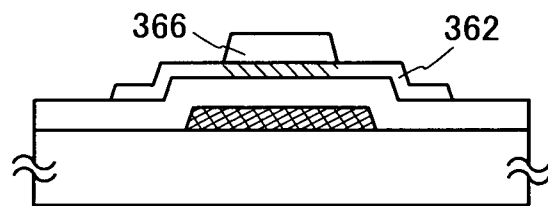


FIG. 12C

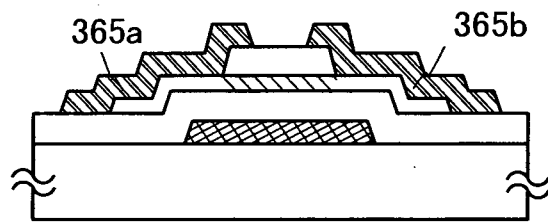
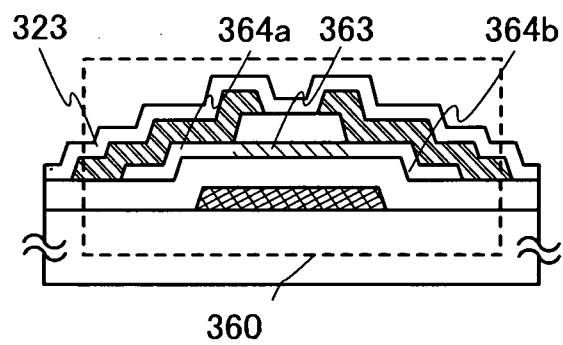


FIG. 12D



13/34

FIG. 13A

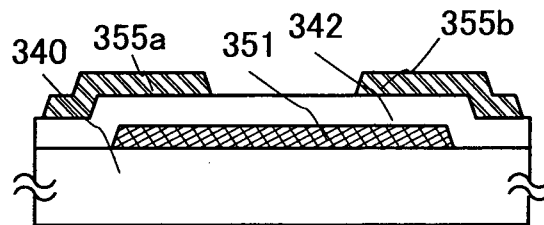


FIG. 13B

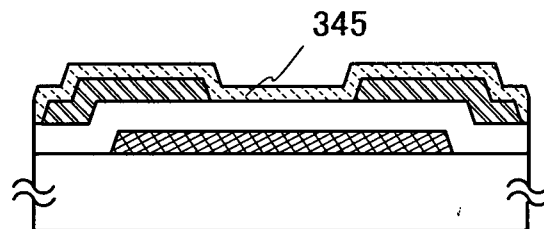


FIG. 13C

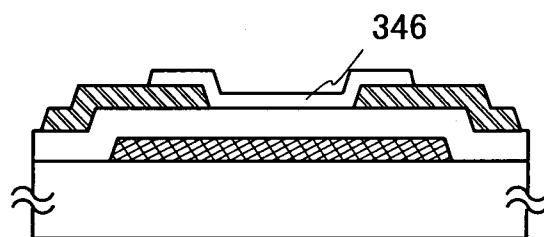


FIG. 13D

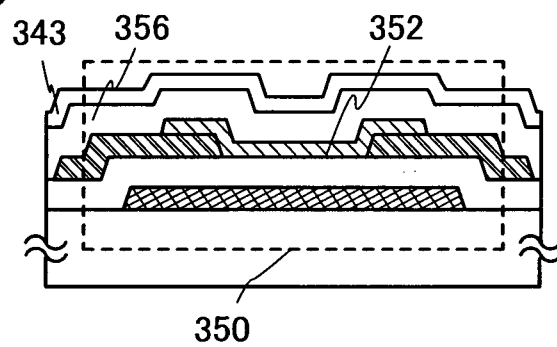


FIG. 14

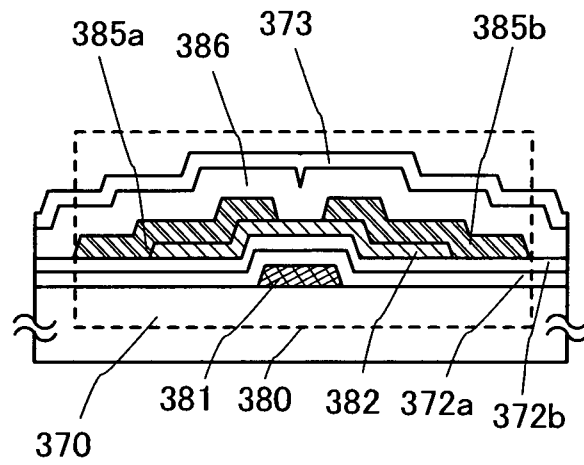


FIG. 15A

FIG. 15C

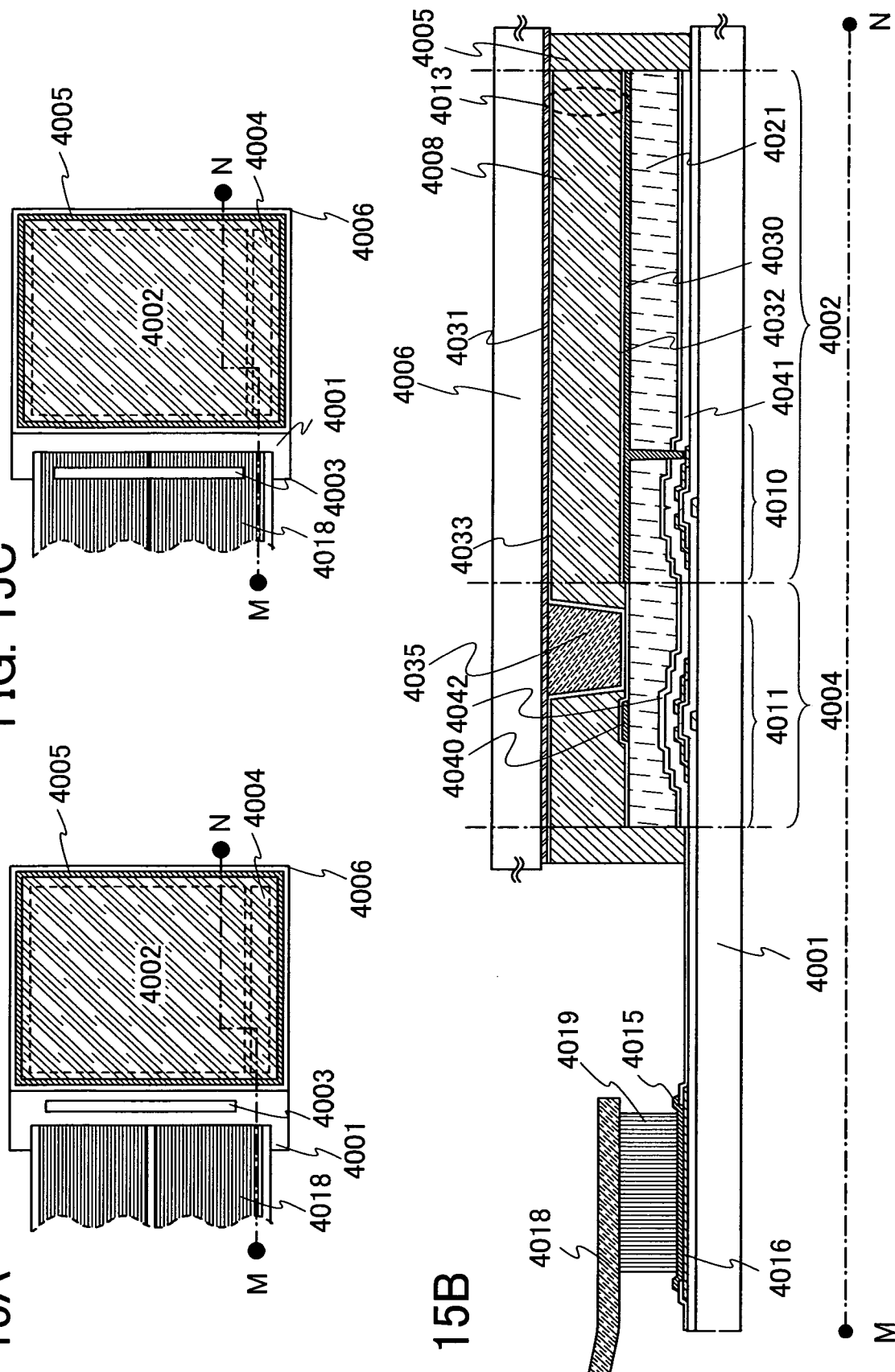
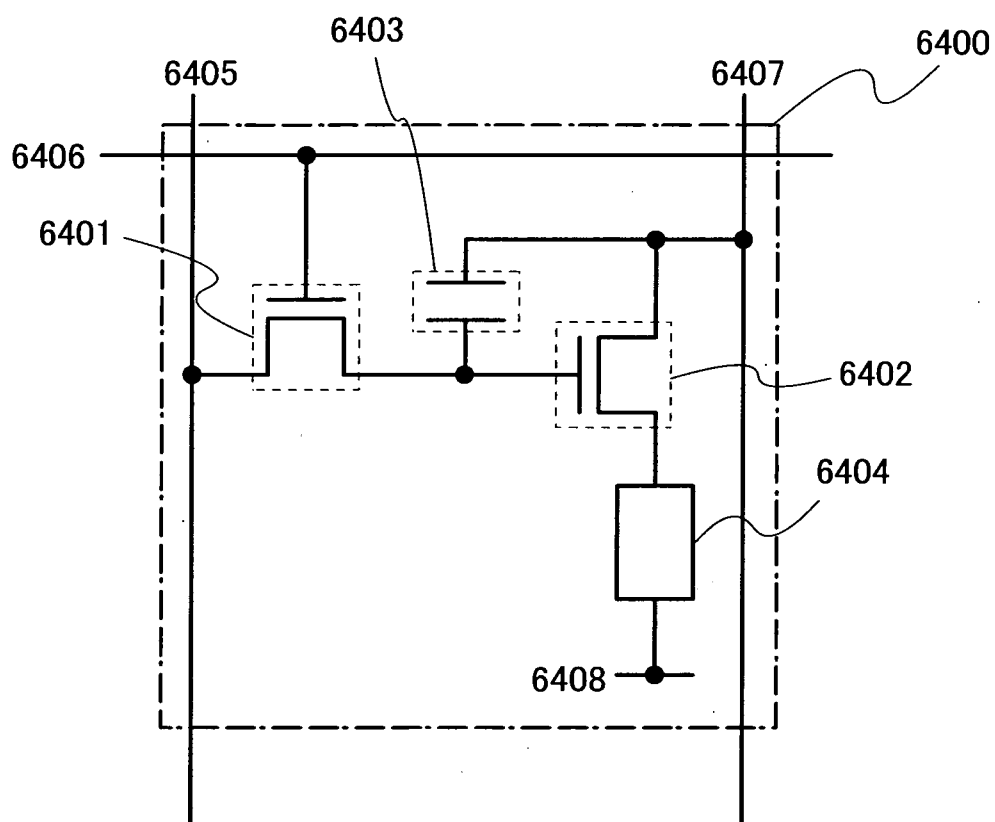


FIG. 16



17/34

FIG. 17A

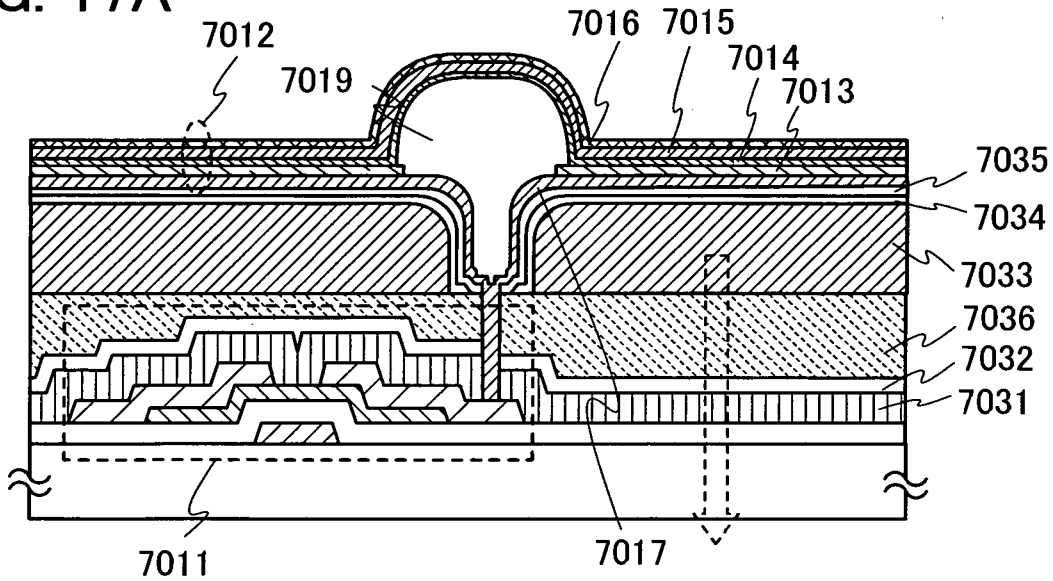


FIG. 17B

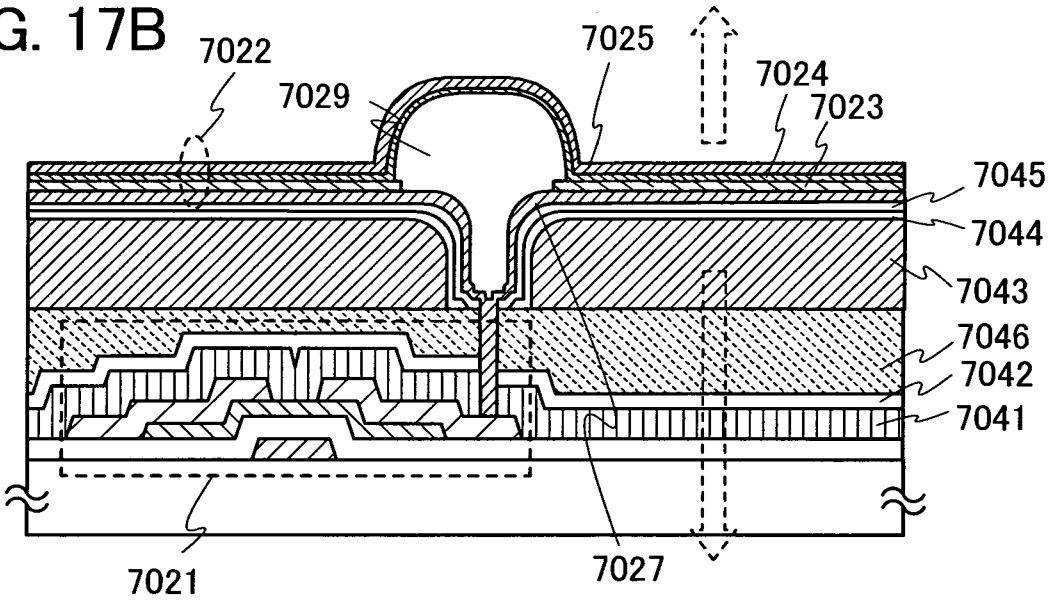


FIG. 17C

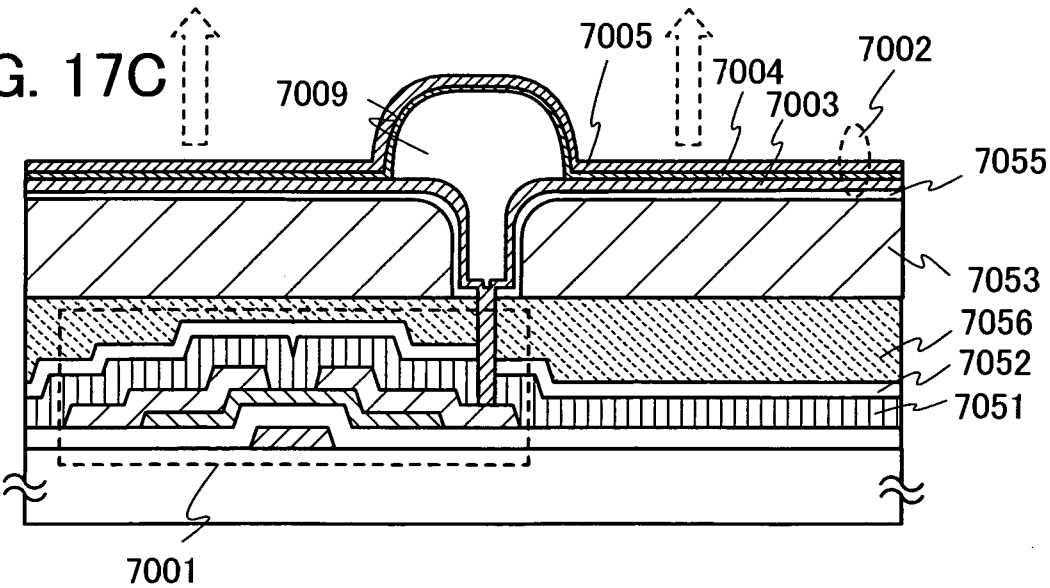


FIG. 18A

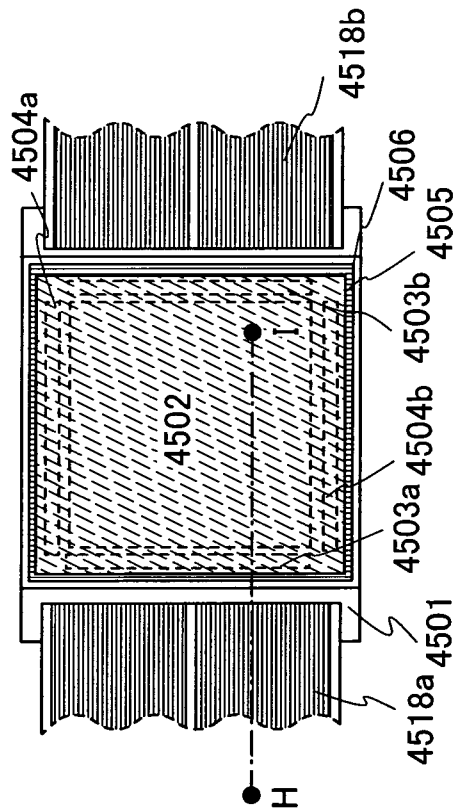
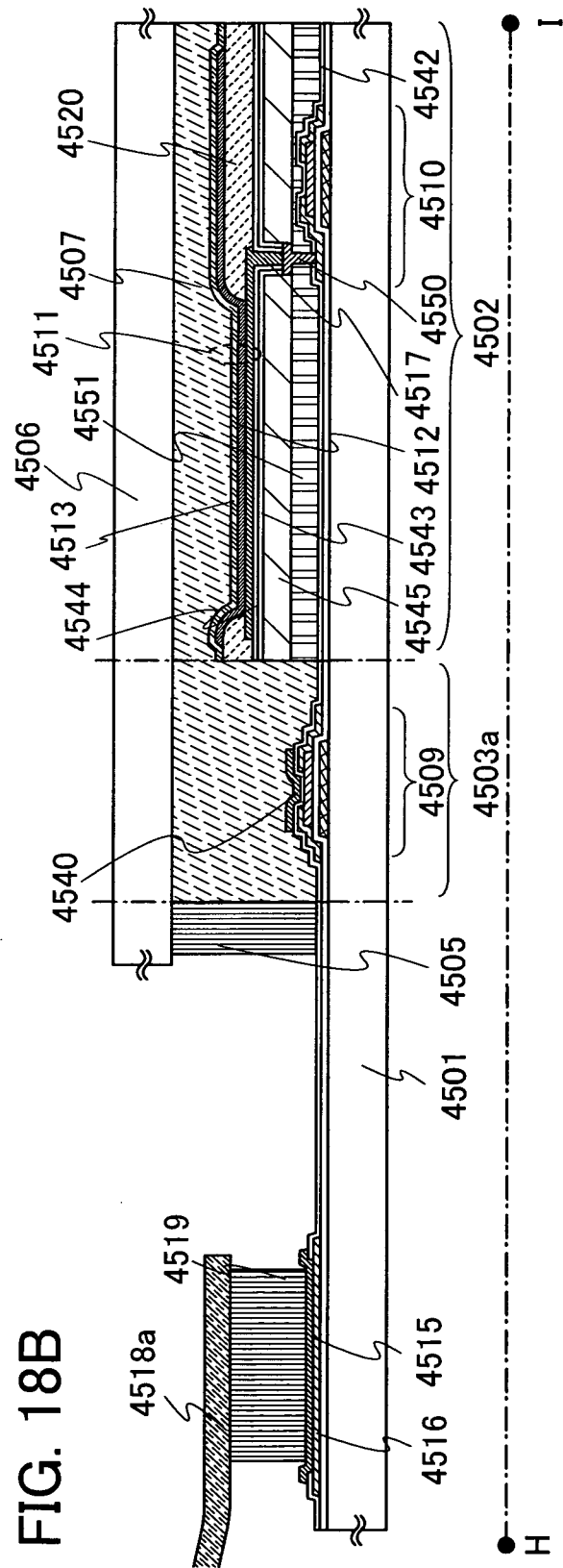
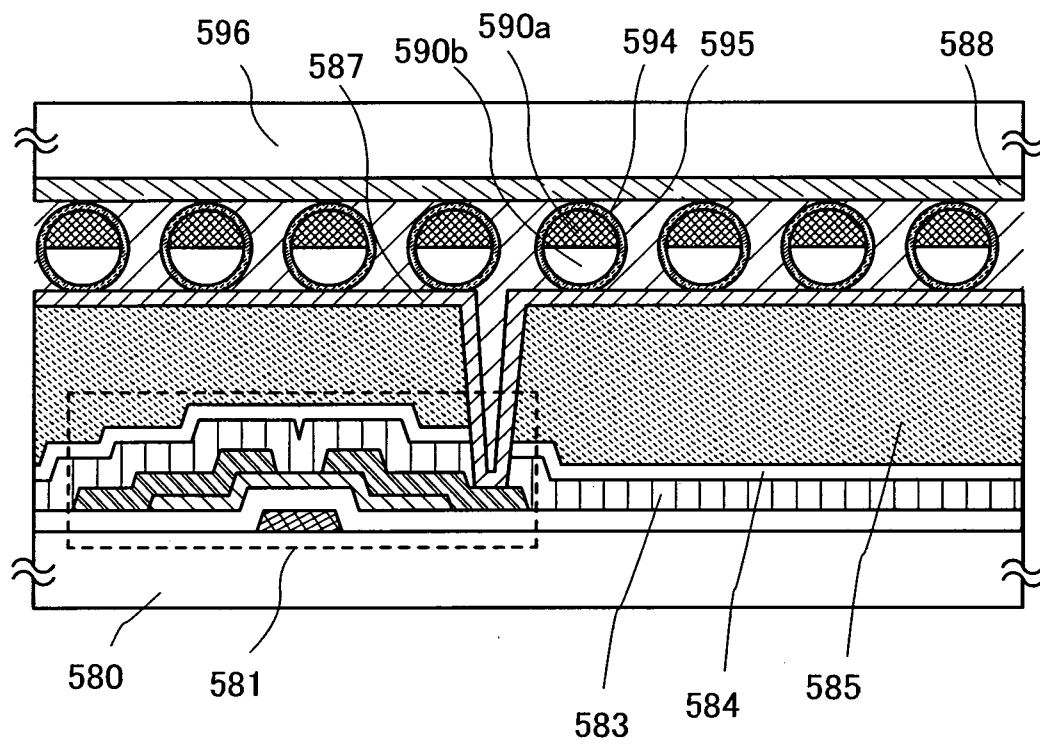


FIG. 18B



19/34

FIG. 19



20/34

FIG. 20A

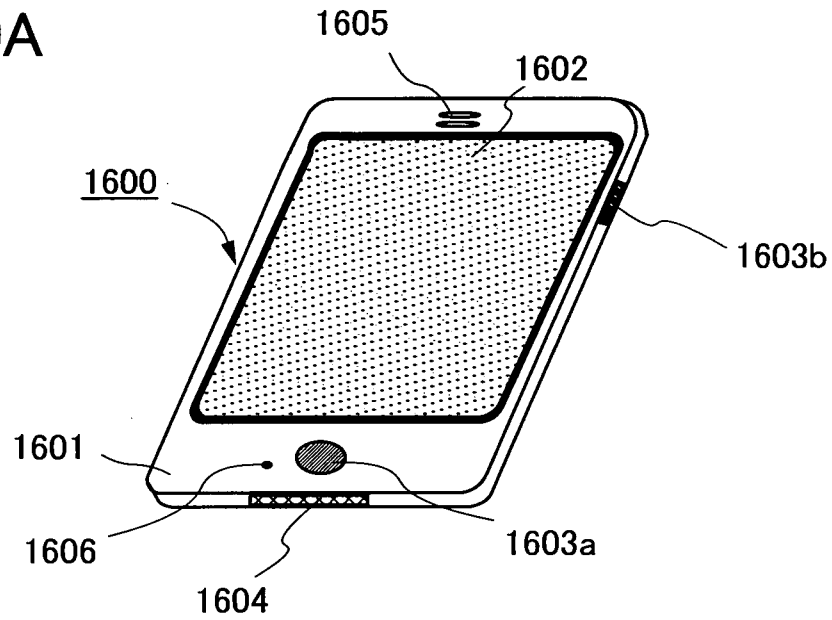
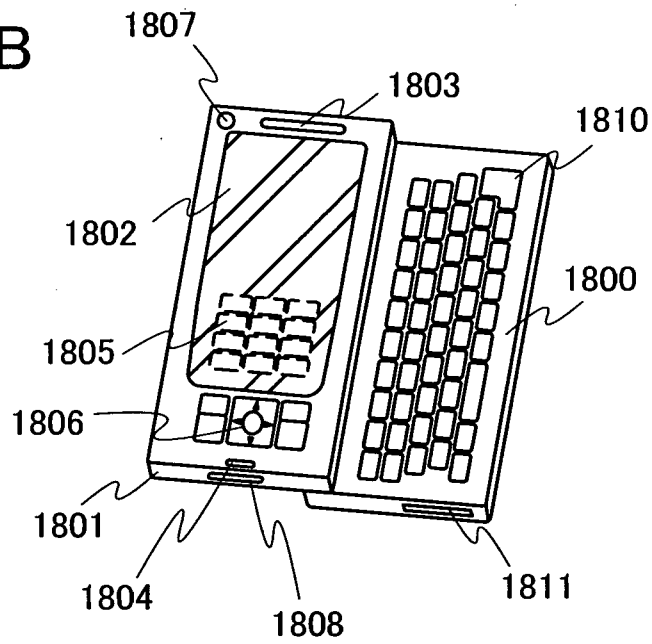


FIG. 20B



21/34

FIG. 21A

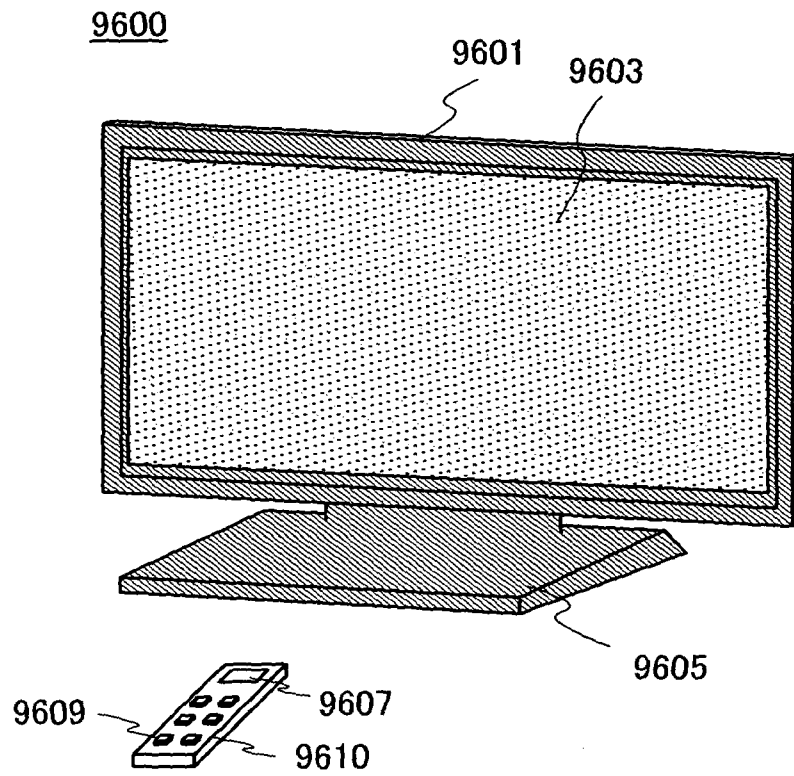
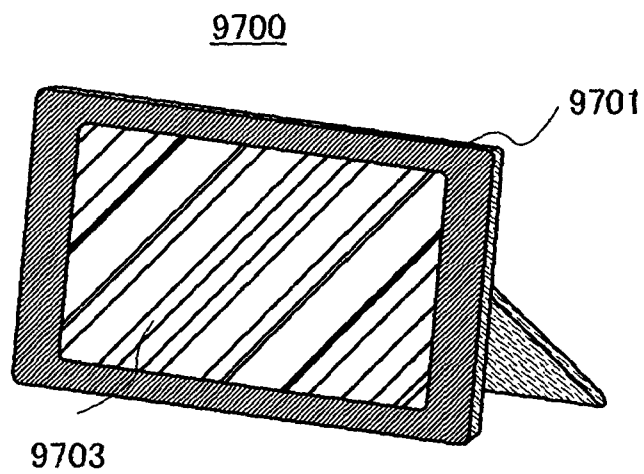


FIG. 21B



22/34

FIG. 22

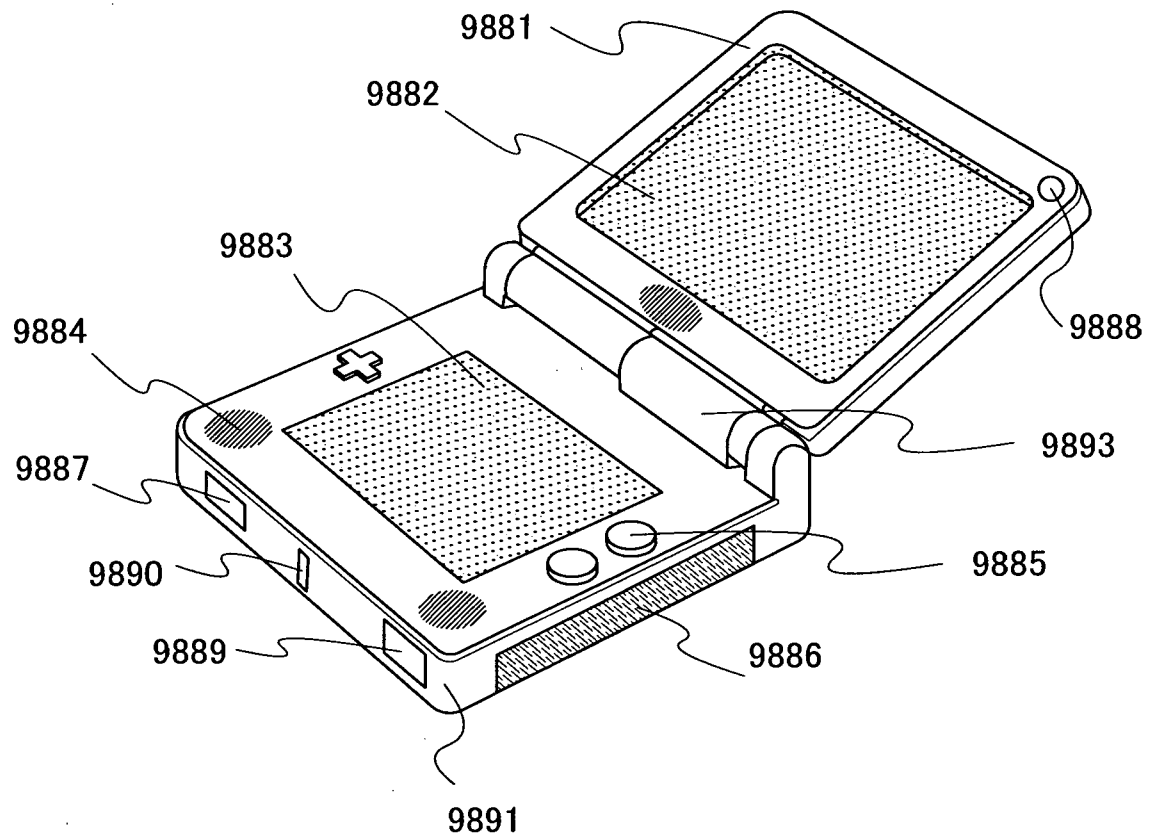
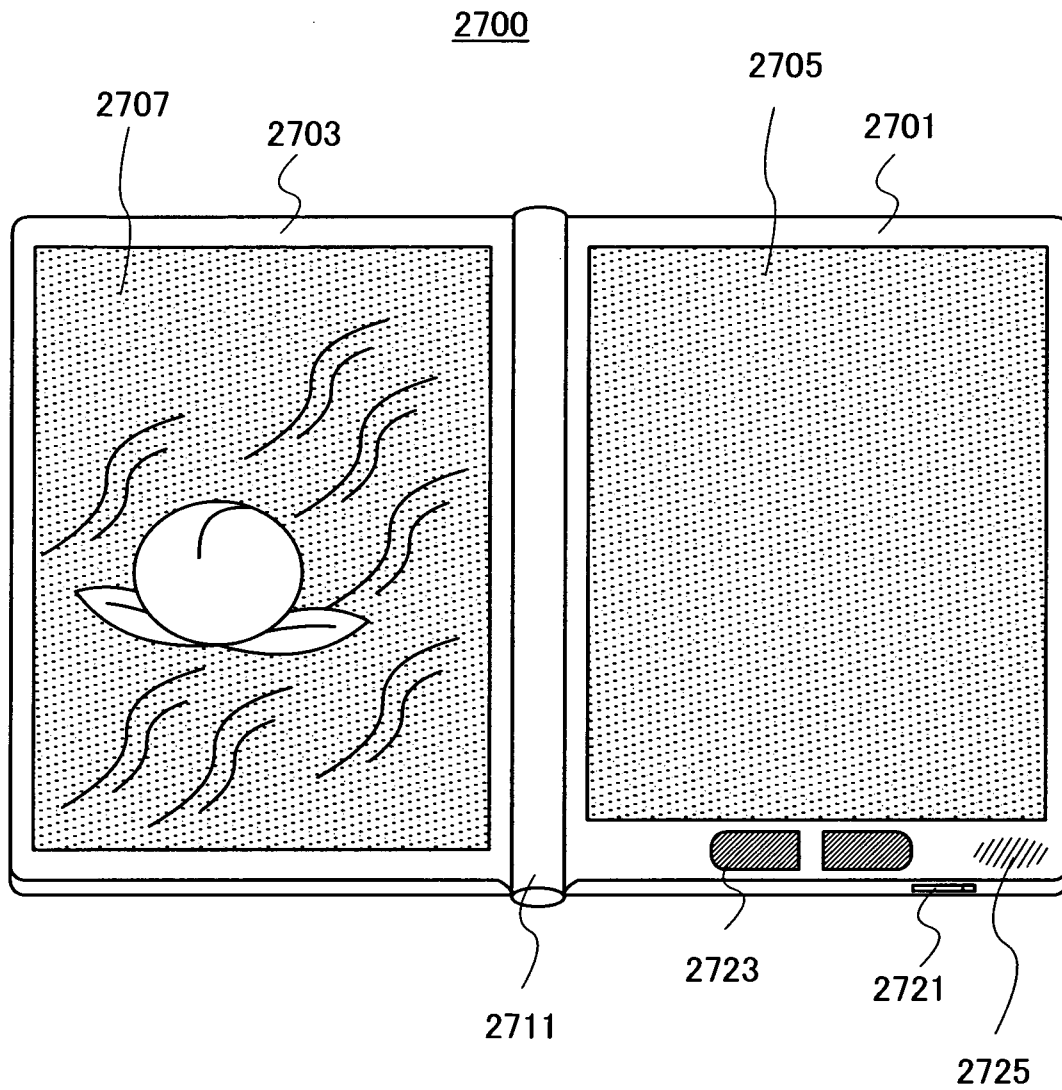
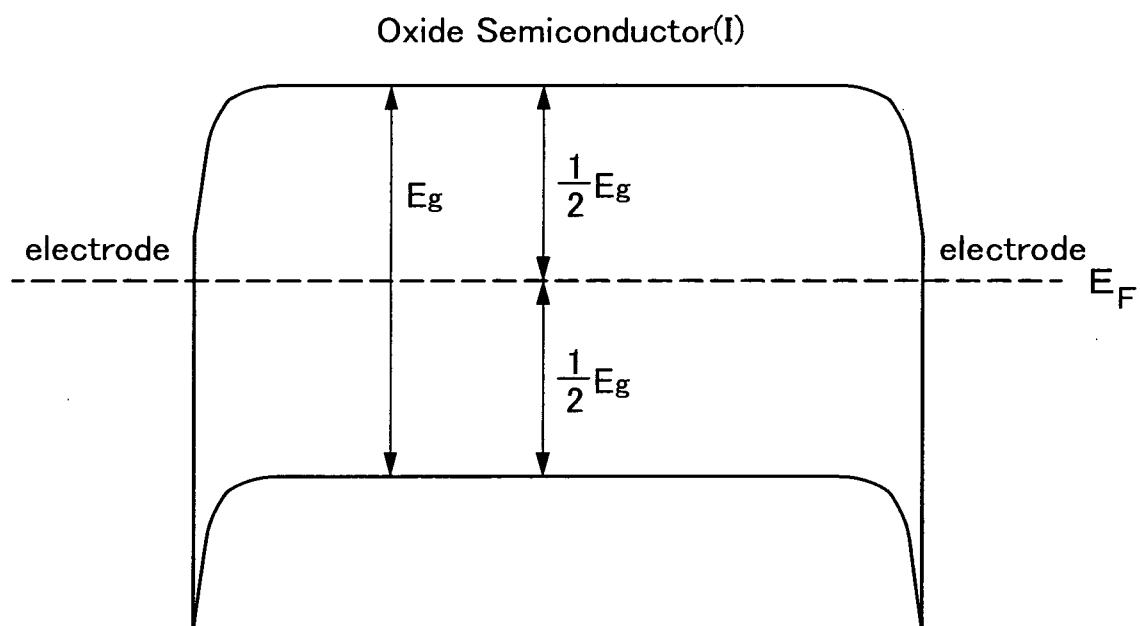


FIG. 23



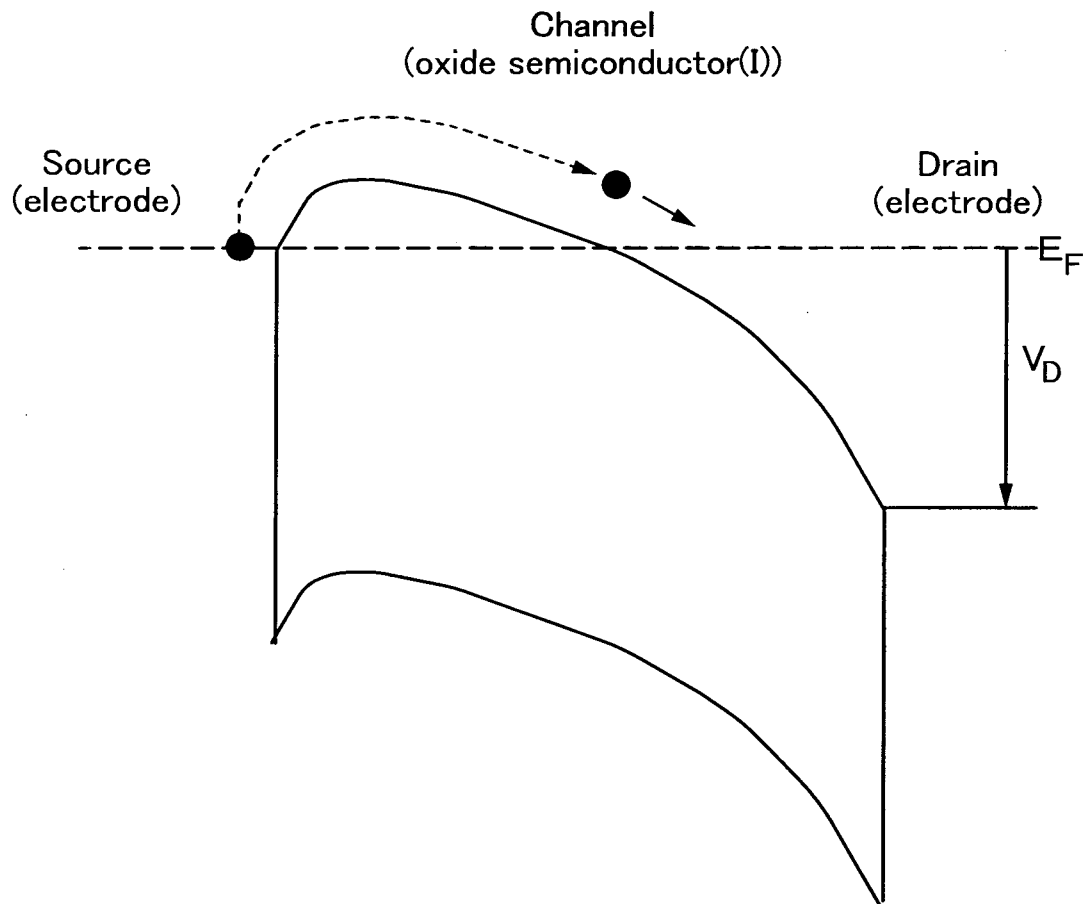
24/34

FIG. 24



25/34

FIG. 25



26/34

FIG. 26A

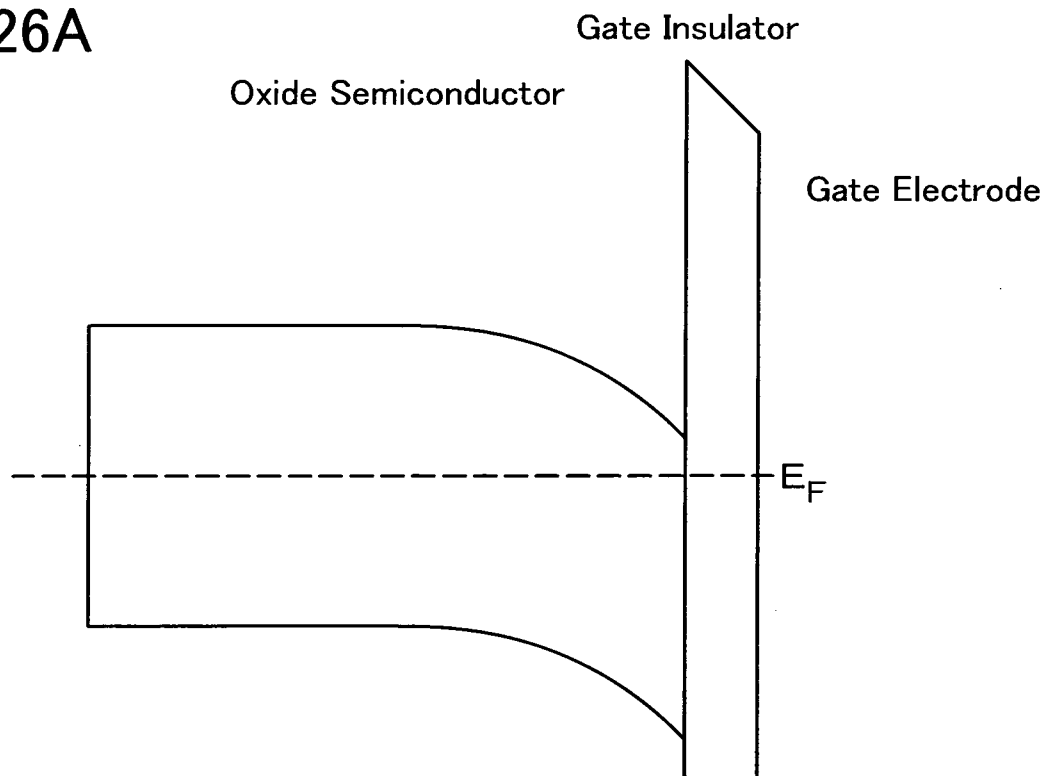


FIG. 26B

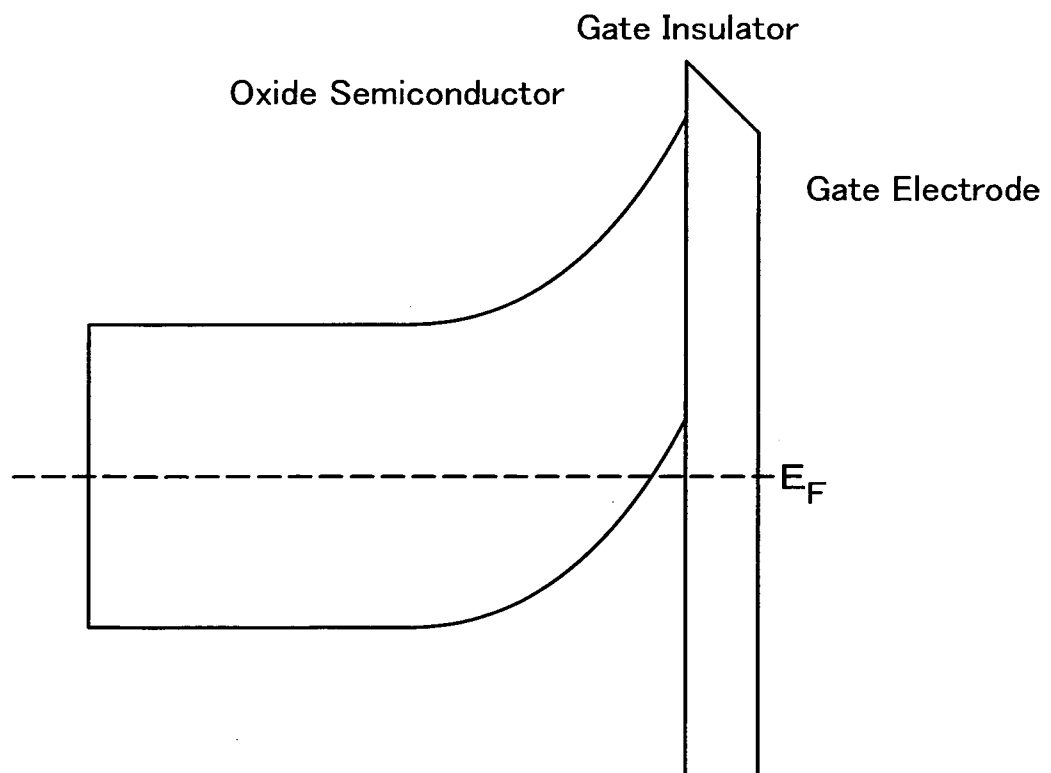
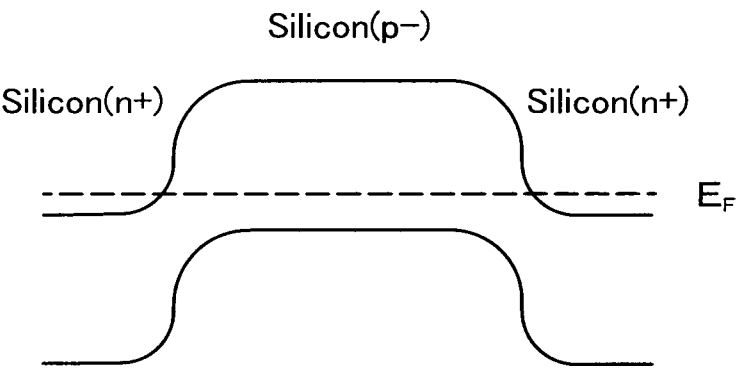
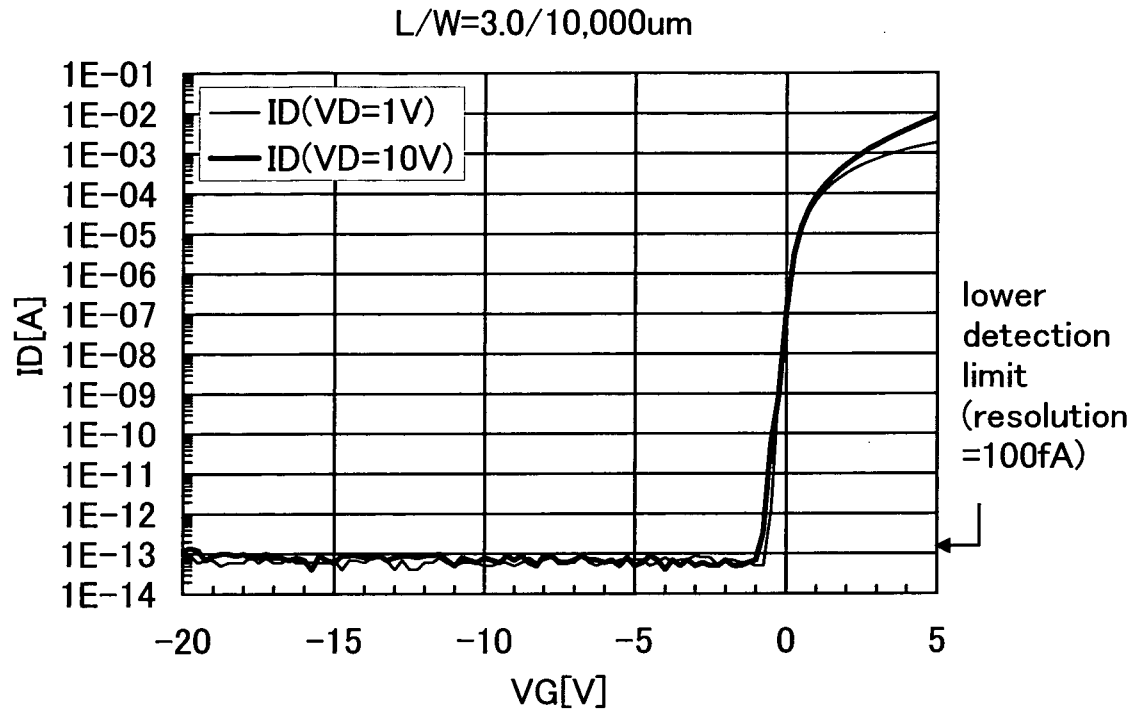


FIG. 27



28/34

FIG. 28



29/34

FIG. 29A

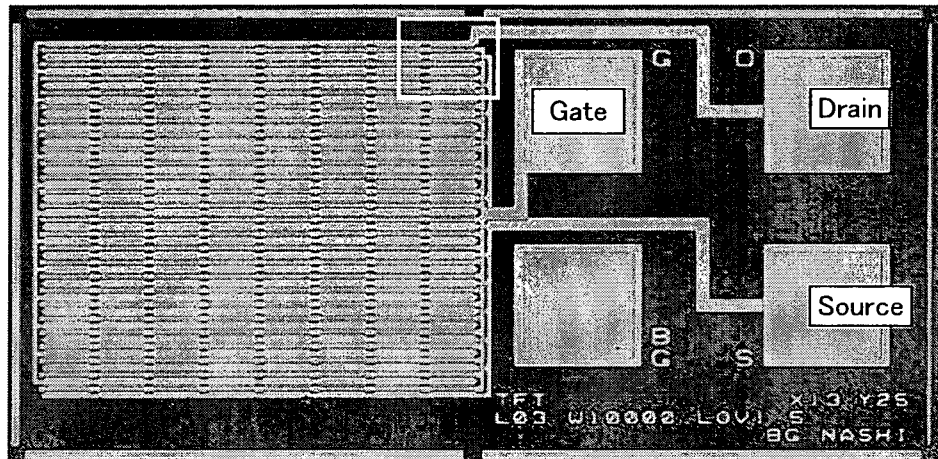
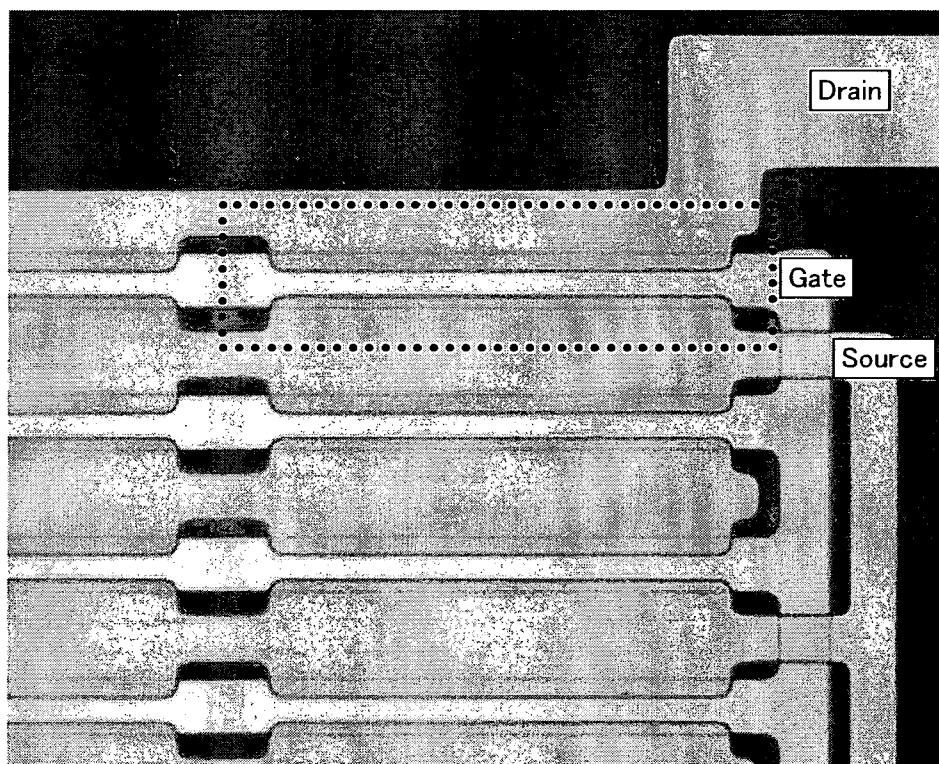


FIG. 29B



30/34

FIG. 30A

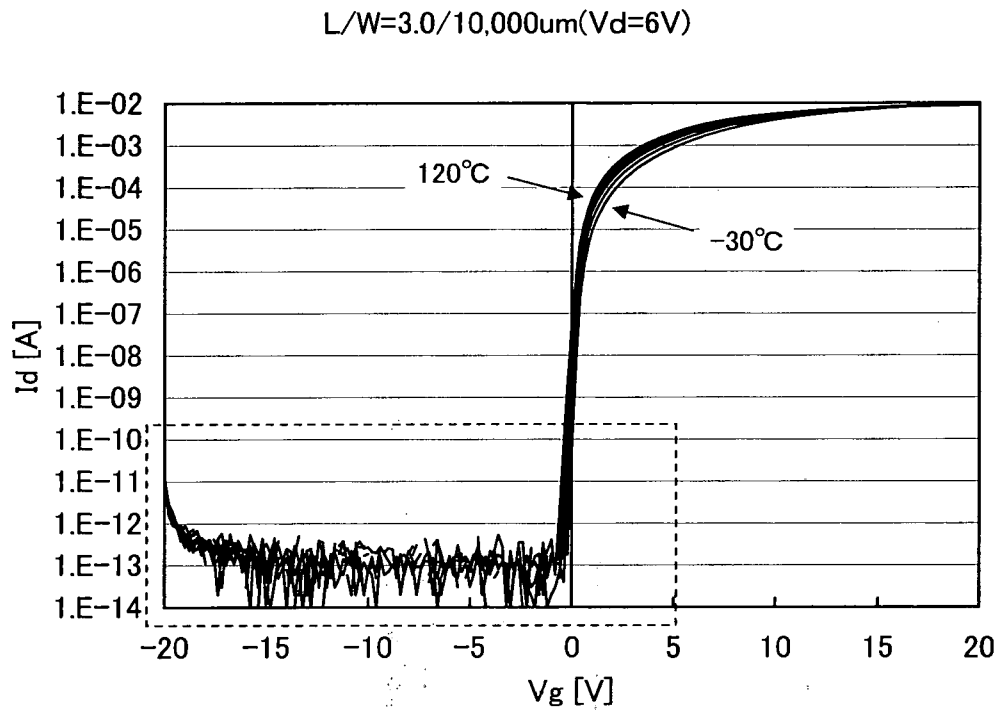
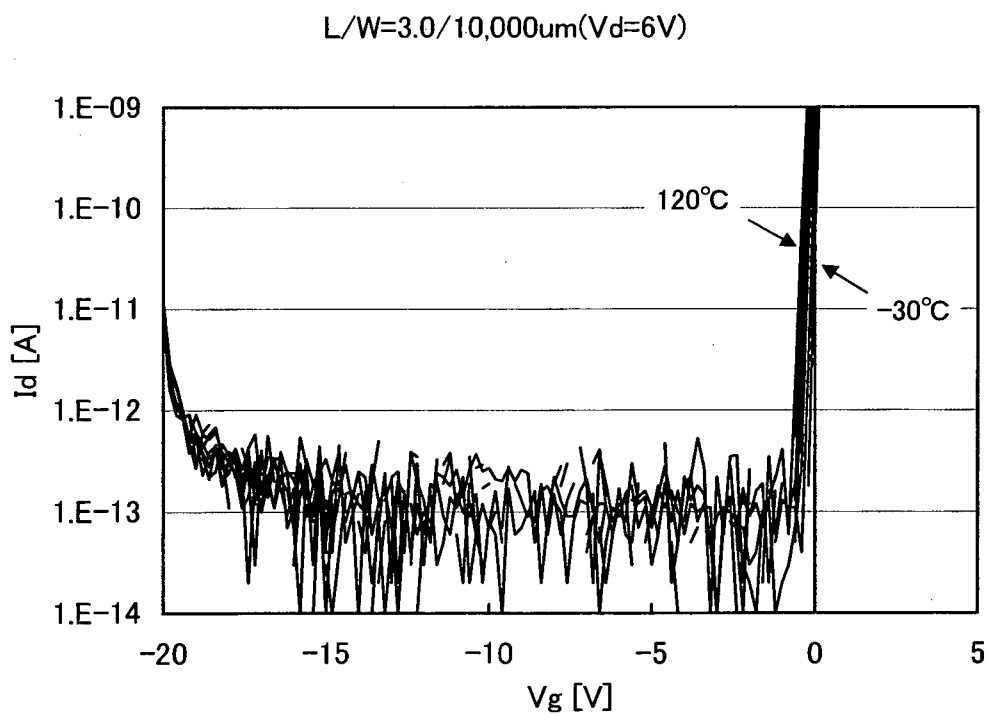


FIG. 30B



REFERENCE NUMERALS

11: thin film transistor, 12: thin film transistor, 13: thin film transistor, 14: thin film transistor, 15: capacitor, 21: thin film transistor, 22: thin film transistor, 23: thin film transistor, 24: thin film transistor, 25: capacitor, 31: thin film transistor, 41: thin film transistor, 101: thin film transistor, 102: thin film transistor, 103: thin film transistor, 104: thin film transistor, 105: capacitor, 110: pulse output circuit, 111: thin film transistor, 112: thin film transistor, 113: thin film transistor, 114: thin film transistor, 115: capacitor, 120: pulse output circuit, 121: thin film transistor, 122: thin film transistor, 123: thin film transistor, 124: thin film transistor, 125: capacitor, 130: pulse output circuit, 201: thin film transistor, 202: thin film transistor, 203: thin film transistor, 204: thin film transistor, 205: capacitor, 210: pulse output circuit, 211: thin film transistor, 212: thin film transistor, 213: thin film transistor, 214: thin film transistor, 215: capacitor, 220: pulse output circuit, 221: thin film transistor, 222: thin film transistor, 223: thin film transistor, 224: thin film transistor, 225: capacitor, 230: pulse output circuit, 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 insulating layer, 320: substrate, 322: gate insulating layer, 323: protective insulating layer, 330: oxide semiconductor layer, 331: oxide semiconductor layer, 332: oxide semiconductor layer, 340: substrate, 342: gate insulating layer, 343: protective insulating layer, 345: oxide semiconductor layer, 346: oxide semiconductor layer, 350: thin

32/34

film transistor, 351: gate electrode layer, 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 electrode layer, 366: oxide insulating layer, 370: substrate, 372a: first gate insulating layer, 372b: second 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 layer, 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: source or drain electrode layer, 415b: source or drain electrode layer, 420: silicon substrate, 421a: opening, 421b: opening, 422: insulating layer, 423: opening, 424: conductive layer, 425: thin film transistor, 426: thin film transistor, 427: conductive layer, 450: substrate, 452: gate insulating layer, 457: insulating layer, 460: thin film transistor, 461: gate electrode layer, 461a: gate electrode layer, 461b: gate electrode layer, 462: oxide semiconductor layer, 464: wiring layer, 465a: source or drain electrode layer, 465a1: source or drain electrode layer, 465a2: source or drain electrode layer, 465b: source or drain electrode layer, 468: wiring

33/34

layer, 580: substrate, 581: thin film transistor, 583: silicon oxide layer, 584: protective insulating layer, 585: insulating layer, 587: electrode layer, 588: electrode layer, 590a: black region, 590b: white region, 594: cavity, 595: filler, 596: counter substrate, 1600: mobile phone, 1601: housing, 1602: display portion, 1603a: operation button, 1603b: operation button, 1604: external connection port, 1605: speaker, 1606: microphone, 1800: housing, 1801: housing, 1802: display panel, 1803: speaker, 1804: microphone, 1805: operation key, 1806: pointing device, 1807: camera lens, 1808: external connection terminal, 1810: keyboard, 1811: external memory slot, 2700: e-book reader, 2701: housing, 2703: housing, 2705: display portion, 2707: display portion, 2711: hinge, 2721: power switch, 2723: operation key, 2725: speaker, 4001: substrate, 4002: pixel portion, 4003: signal line driver circuit, 4004: scan line driver circuit, 4005: sealant, 4006: substrate, 4008: liquid crystal layer, 4010: thin film transistor, 4011: thin film transistor, 4013: liquid crystal element, 4015: connection terminal electrode, 4016: terminal electrode, 4018: FPC, 4019: anisotropic conductive film, 4021: insulating layer, 4030: pixel electrode layer, 4031: counter electrode layer, 4032: insulating layer, 4033: insulating layer, 4040: conductive layer, 4041: insulating layer, 4042: insulating layer, 4501: substrate, 4502: pixel portion, 4503a: signal line driver circuit, 4503b: signal line driver circuit, 4504a: scan line driver circuit, 4504b: 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, 4515: connection terminal electrode, 4516: terminal electrode, 4517: electrode, 4518a: FPC, 4518b: FPC, 4519: anisotropic conductive layer, 4520: partition wall, 4540: conductive layer, 4542: silicon oxide layer,

34/34

4543: overcoat layer, 4544: insulating layer, 4545: color filter layer, 4550: wiring layer, 4551: insulating layer, 6400: pixel, 6401: switching transistor, 6402: driving transistor, 6403: capacitor, 6404: light-emitting element, 6405: signal line, 6406: scan line, 6407: power supply line, 6408: common potential line, 7001: driving TFT, 7002: light-emitting element, 7003: electrode, 7004: EL layer, 7005: electrode, 7009: partition wall, 7011: driving TFT, 7012: light-emitting element, 7013: electrode, 7014: EL layer, 7015: electrode, 7016: shielding film, 7017: conductive layer, 7019: partition wall, 7021: driving TFT, 7022: light-emitting element, 7023: electrode, 7024: EL layer, 7025: electrode, 7026: electrode, 7027: conductive layer, 7029: partition wall, 7031: insulating layer, 7032: insulating layer, 7033: color filter layer, 7034: overcoat layer, 7035: protective insulating layer, 7036: planarization insulating layer, 7041: insulating layer, 7042: insulating layer, 7043: color filter layer, 7044: overcoat layer, 7045: protective insulating layer, 7046: planarization insulating layer, 7051: silicon oxide layer, 7052: protective insulating layer, 7053: planarization insulating layer, 7055: insulating layer, 7056: planarization insulating layer, 9600: television set, 9601: housing, 9603: display portion, 9605: stand, 9607: display portion, 9609: operation key, 9610: remote controller, 9700: digital photo frame, 9701: housing, 9703: display portion, 9881: housing, 9882: display portion, 9883: display portion, 9884: speaker portion, 9885: operation key, 9886: recording medium insertion portion, 9887: connection terminal, 9888: sensor, 9889: microphone, 9890: LED lamp, 9891: housing, 9893: joint portion