

FIG. 1

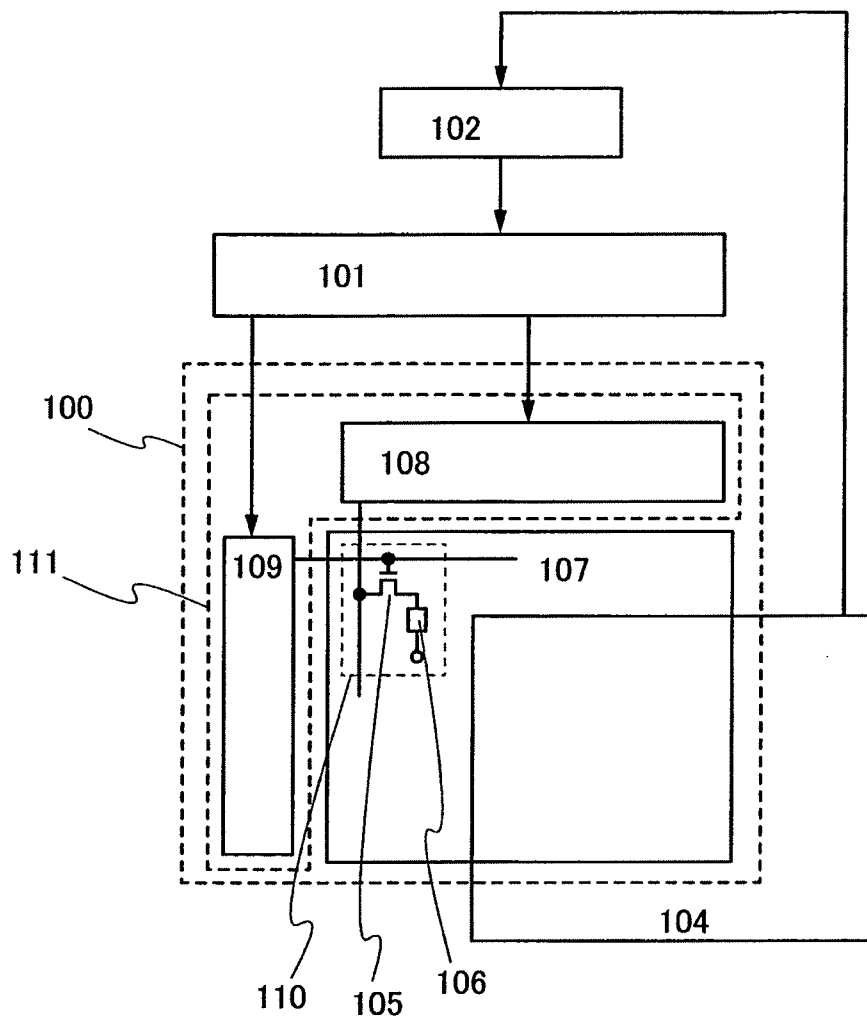


FIG. 2

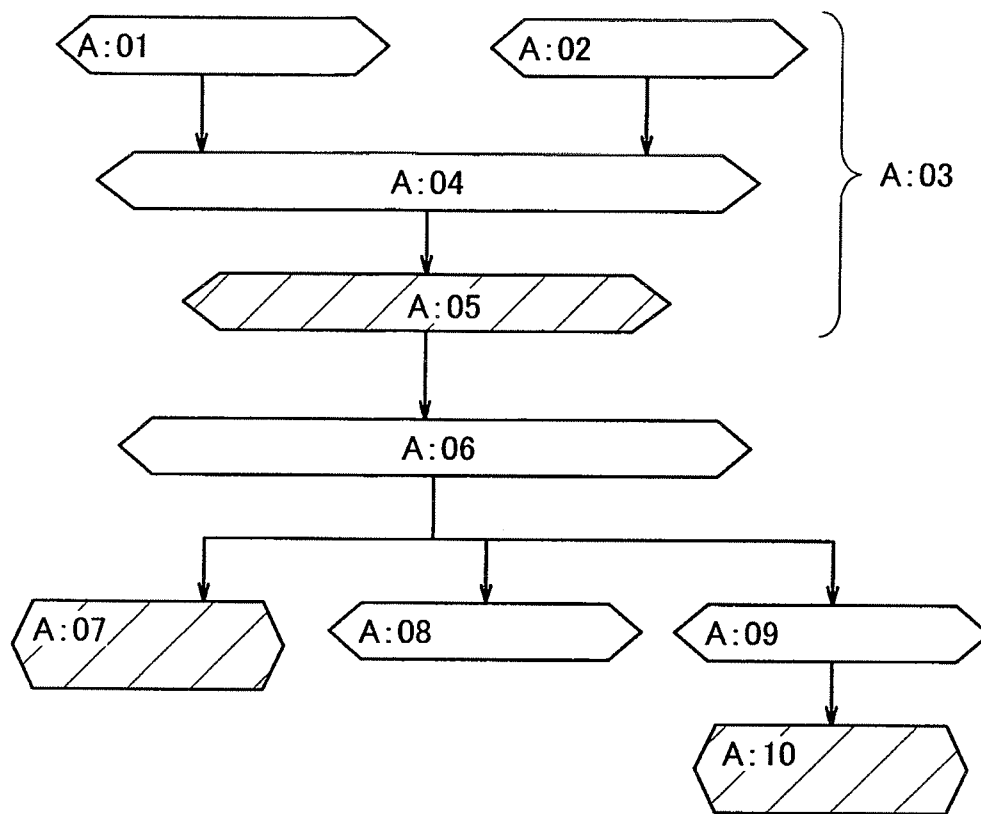


FIG. 3

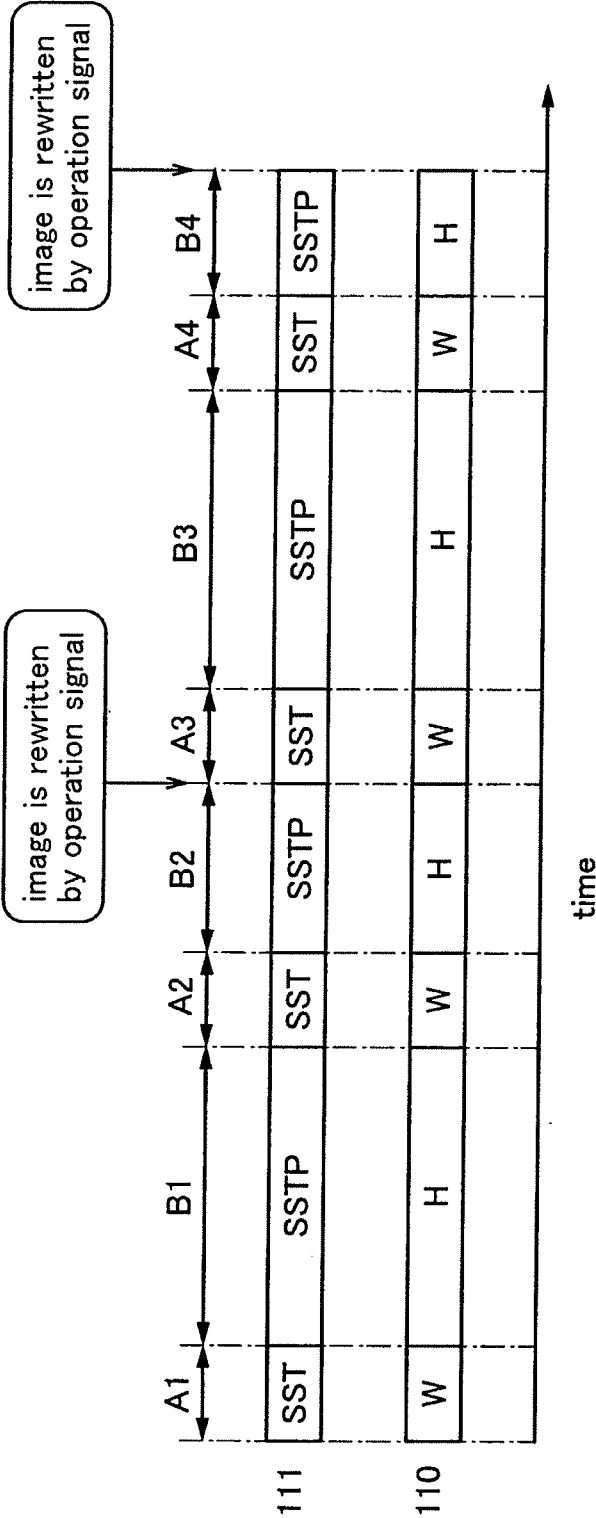


FIG. 4

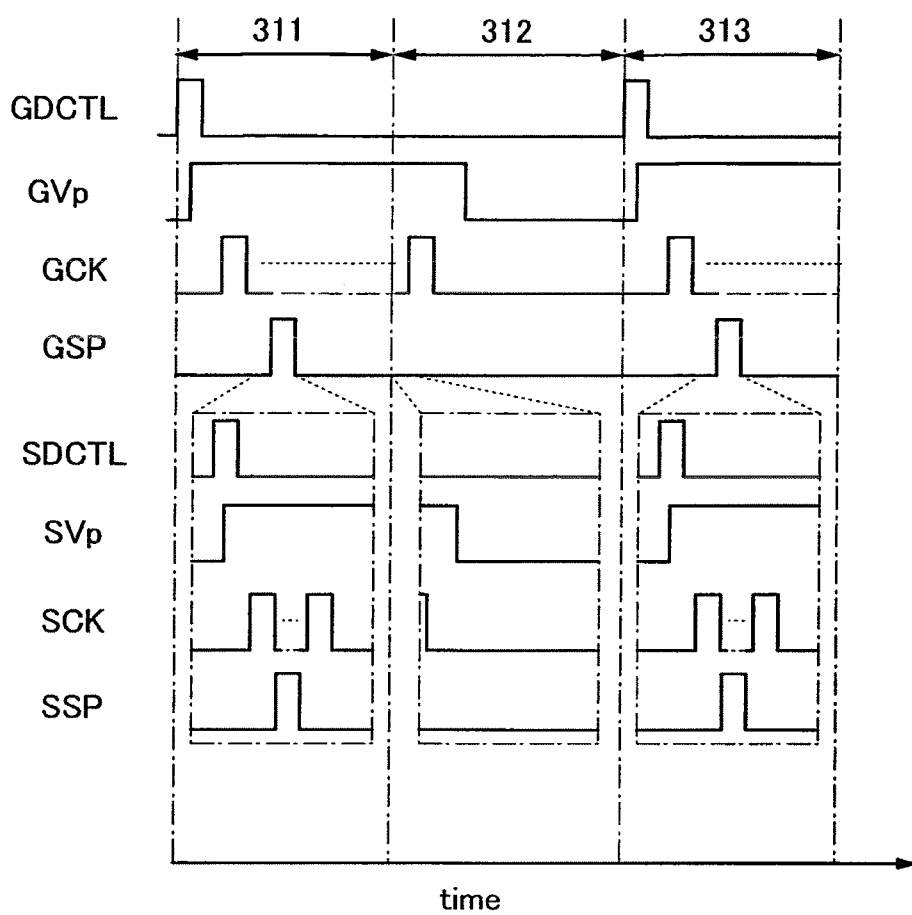


FIG. 5A

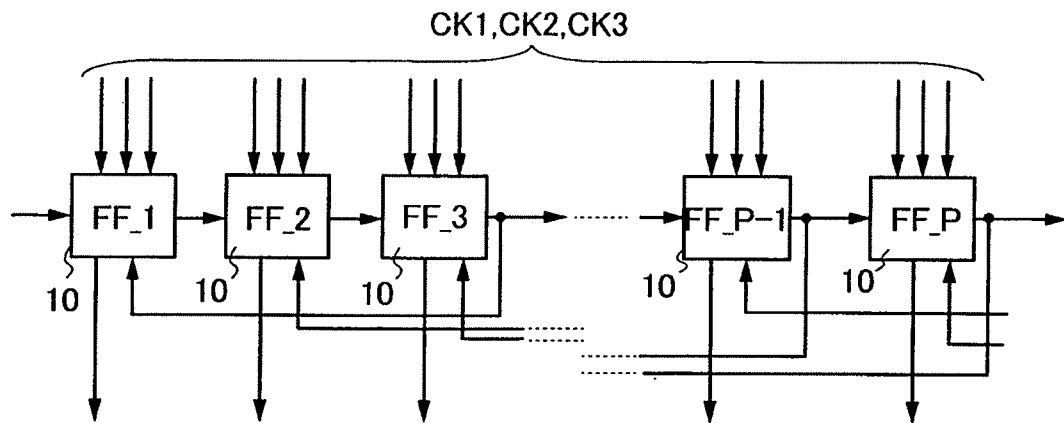


FIG. 5B

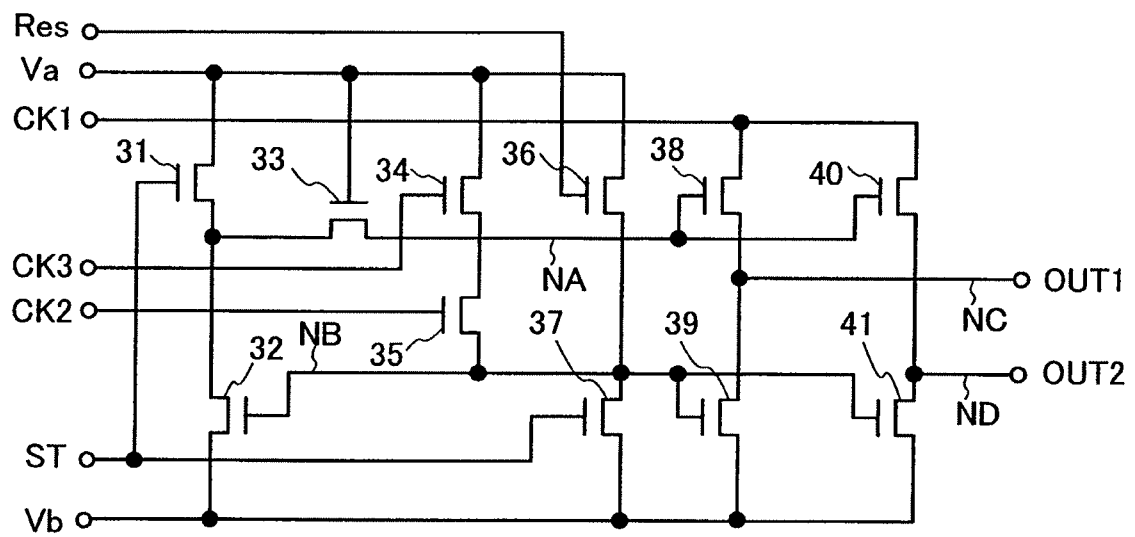


FIG. 6A

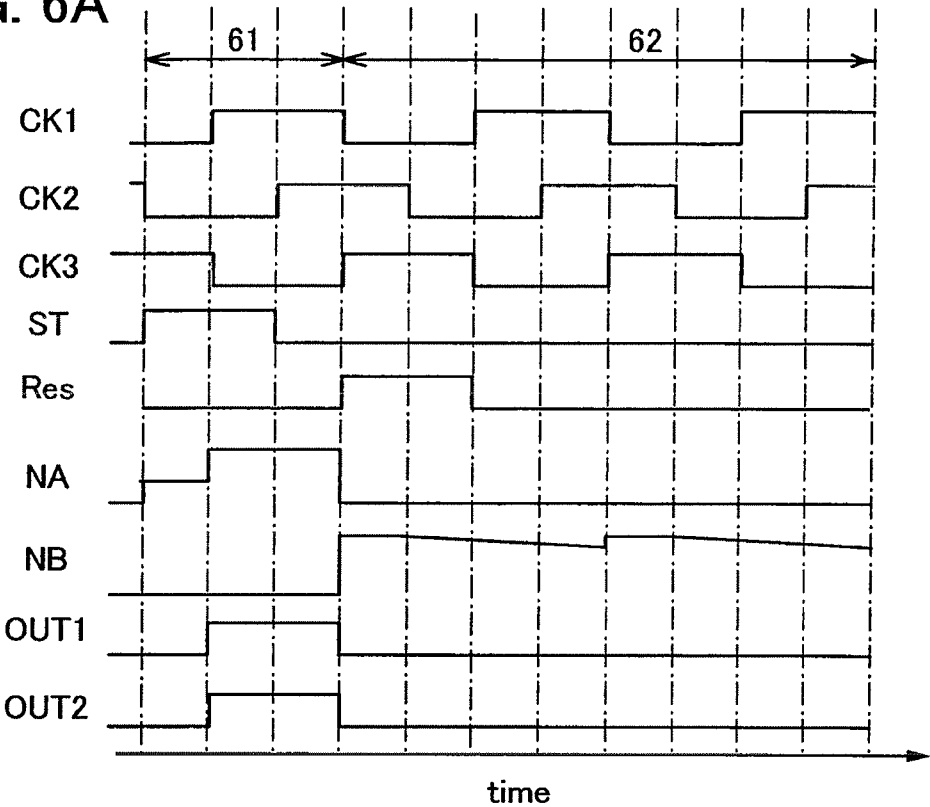


FIG. 6B

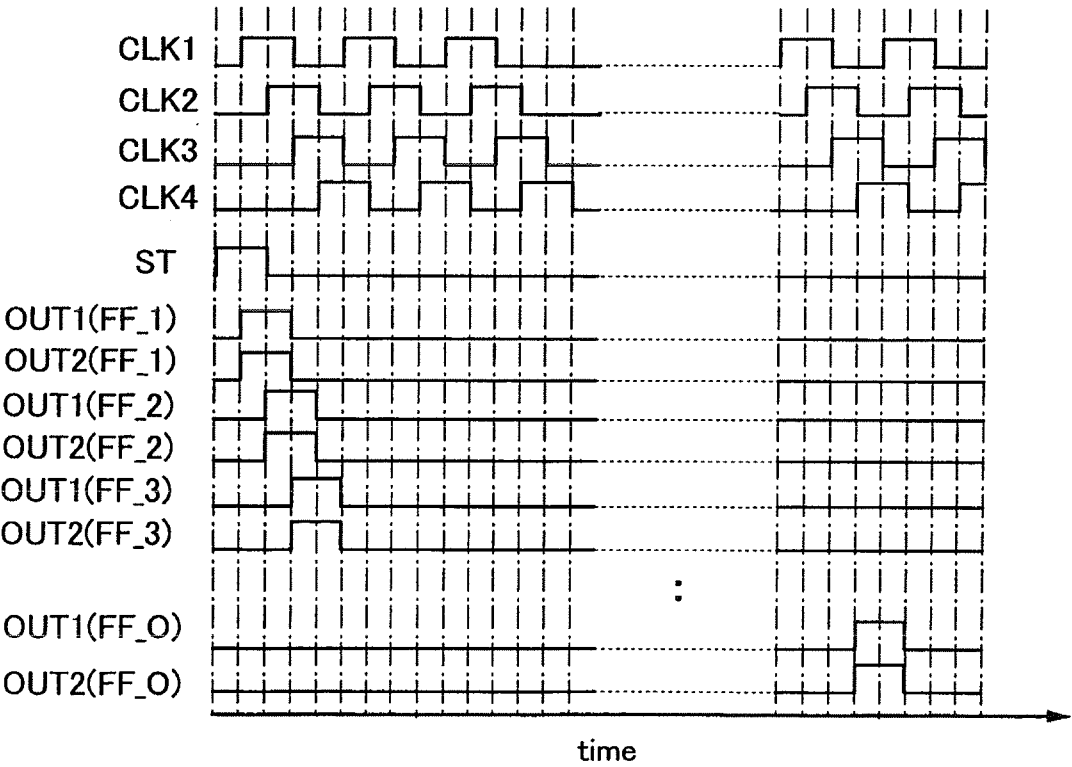


FIG. 7

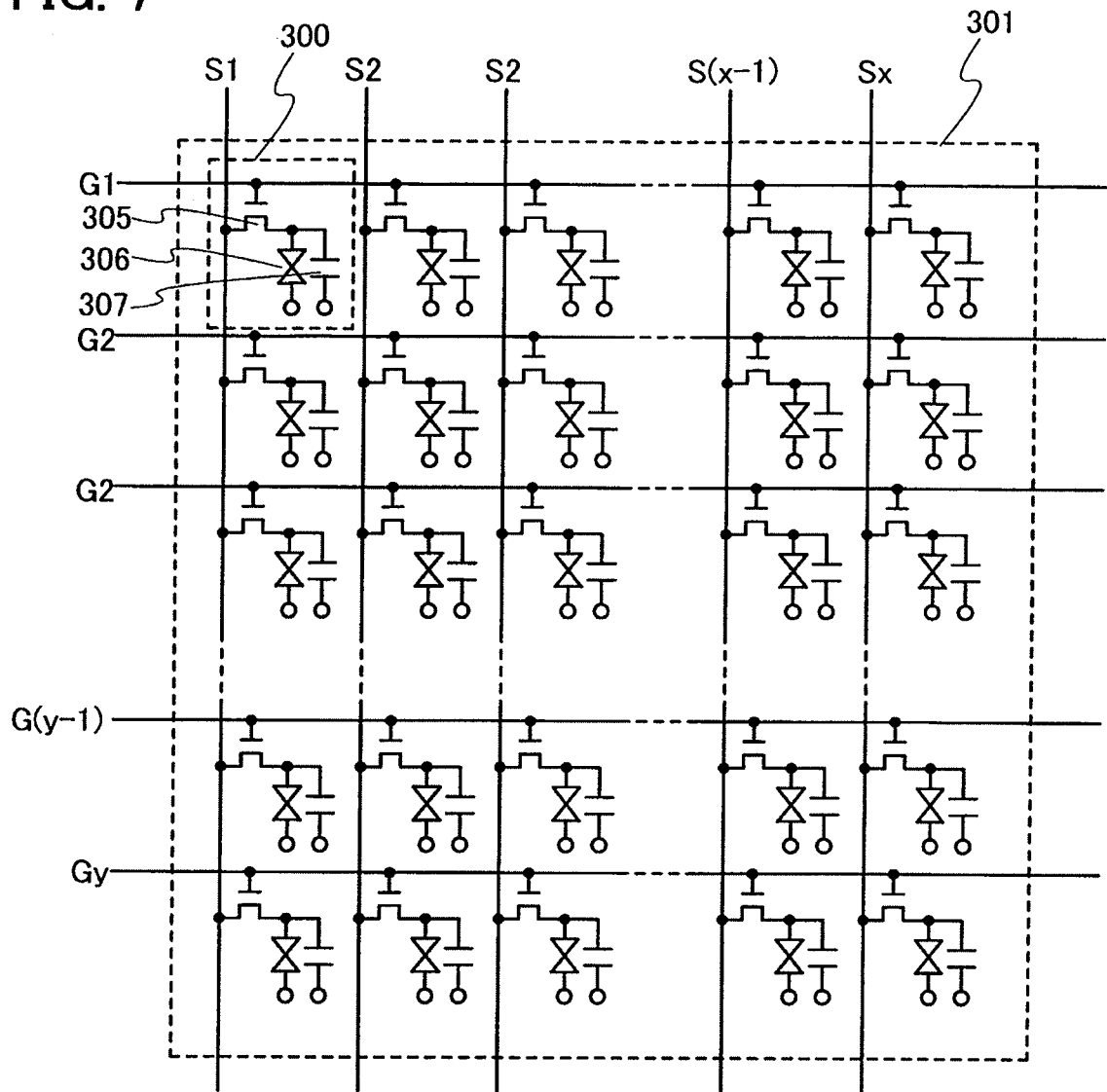
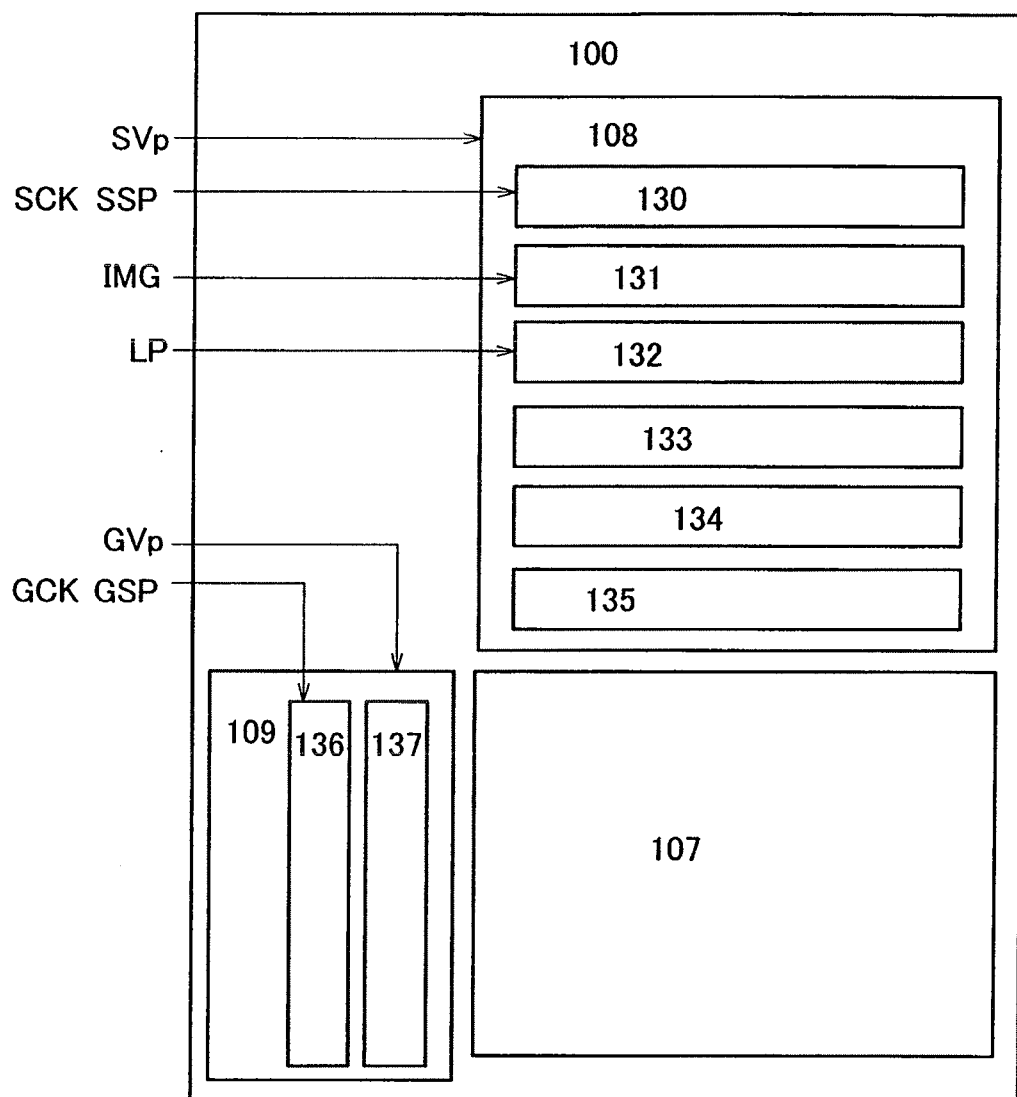


FIG. 8



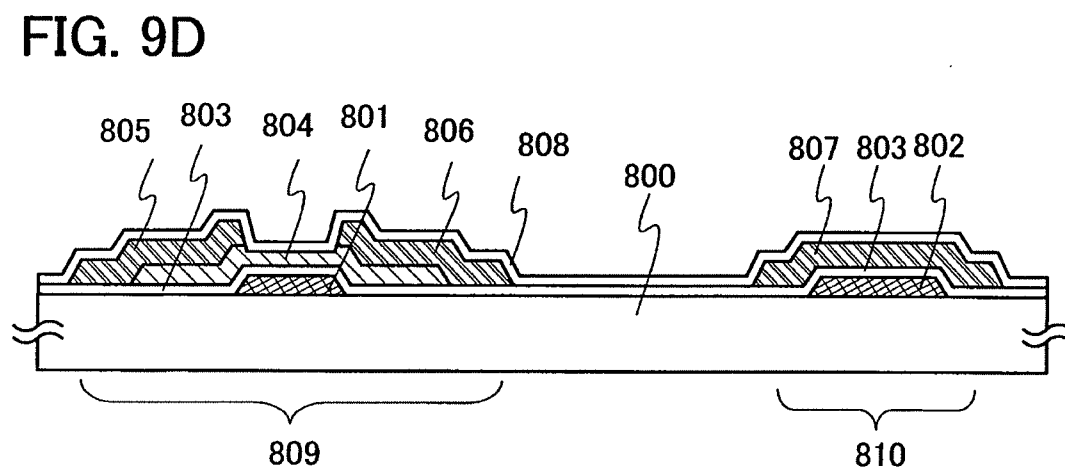
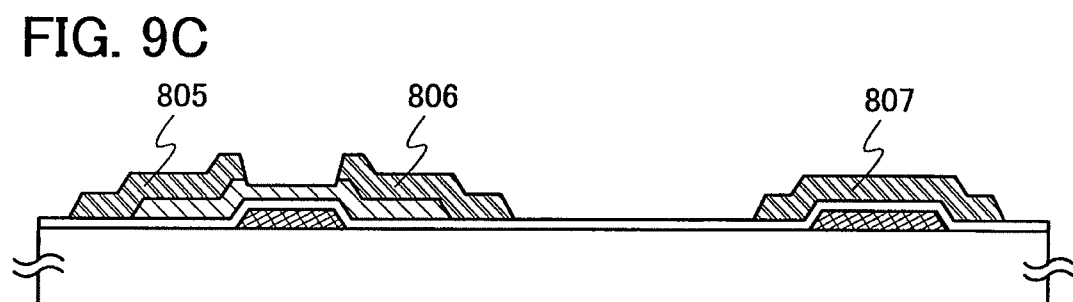
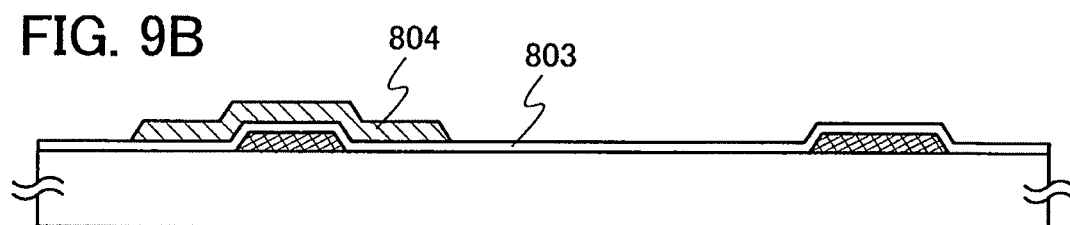
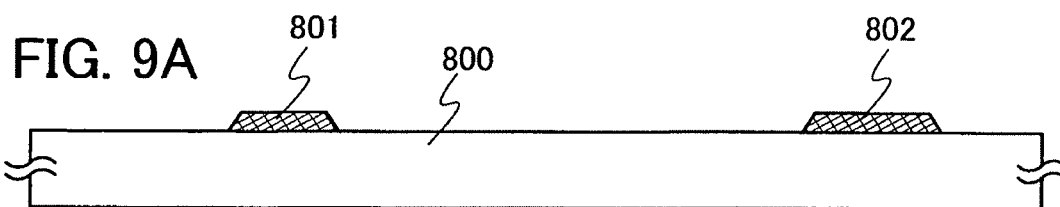


FIG. 10A

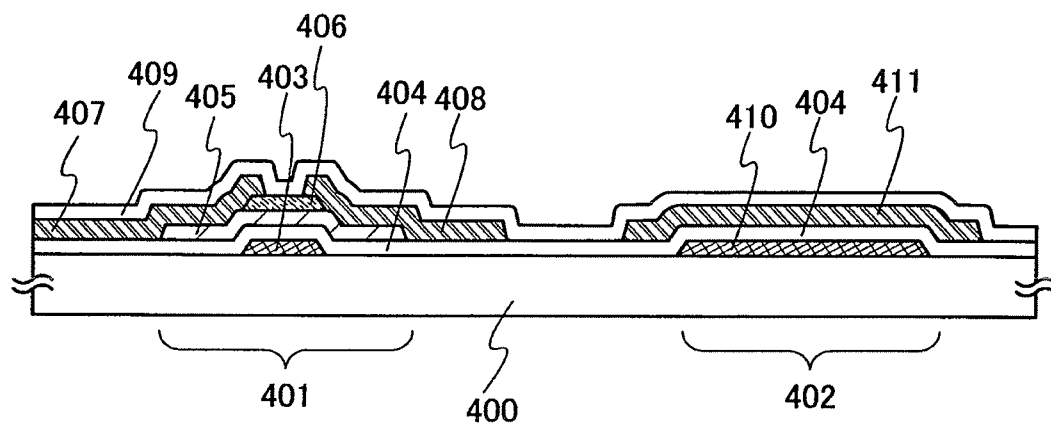


FIG. 10B

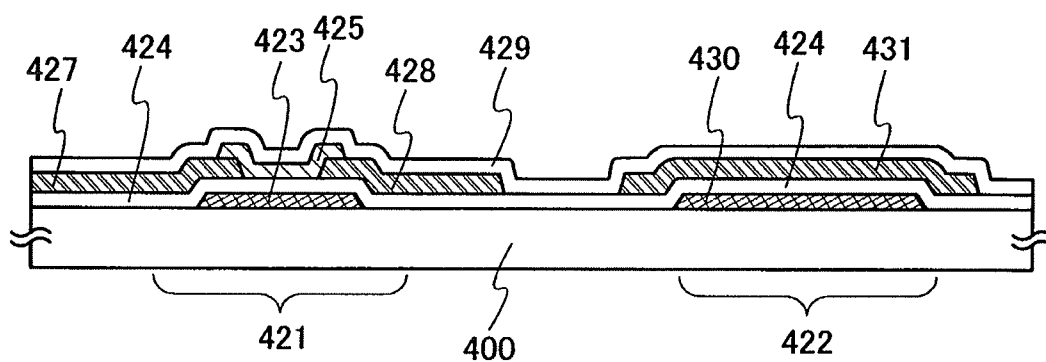


FIG. 10C

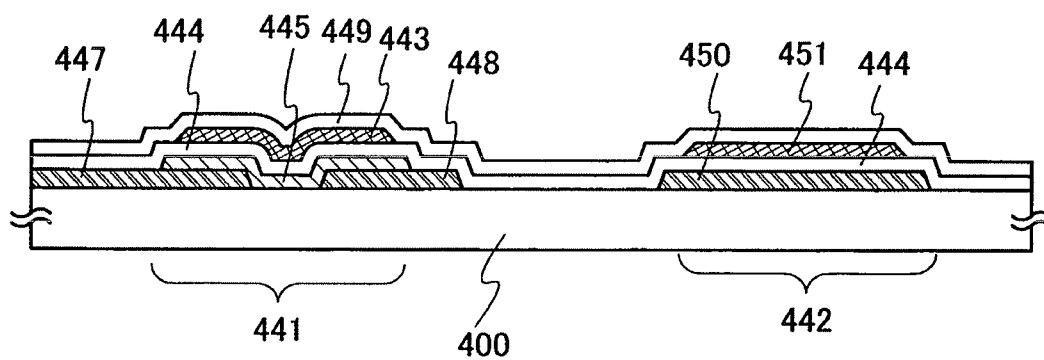


FIG. 11

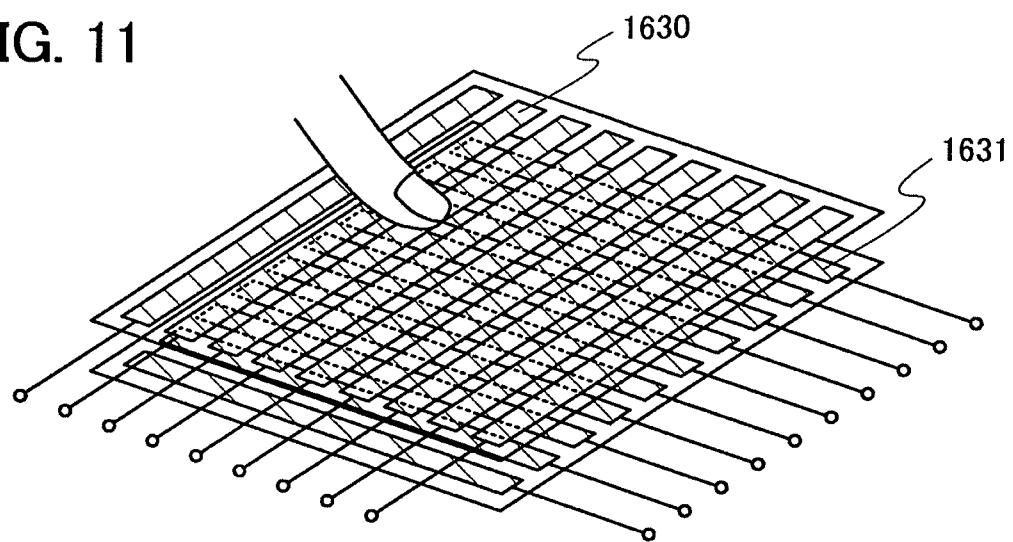


FIG. 12A

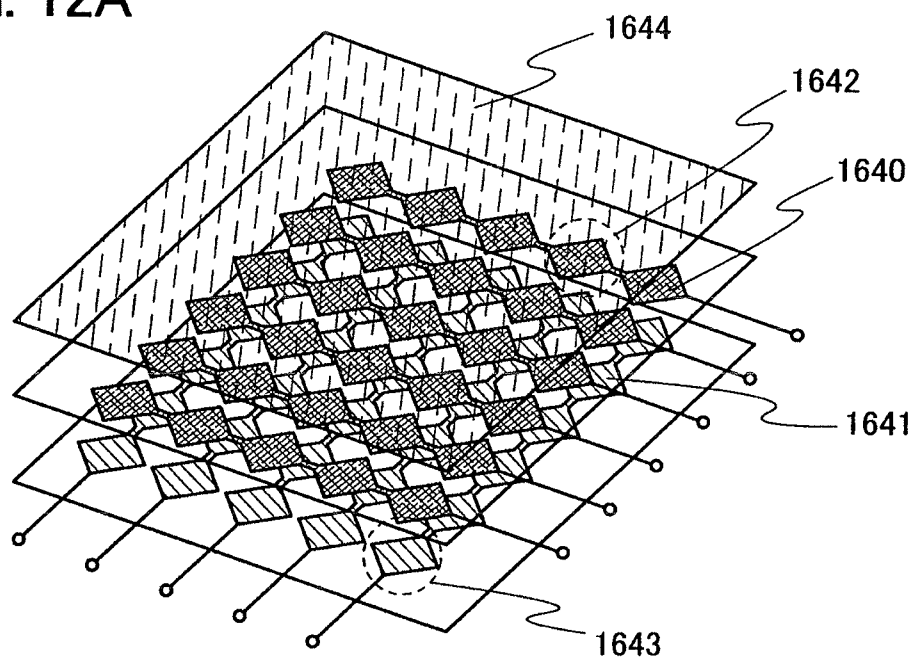


FIG. 12B

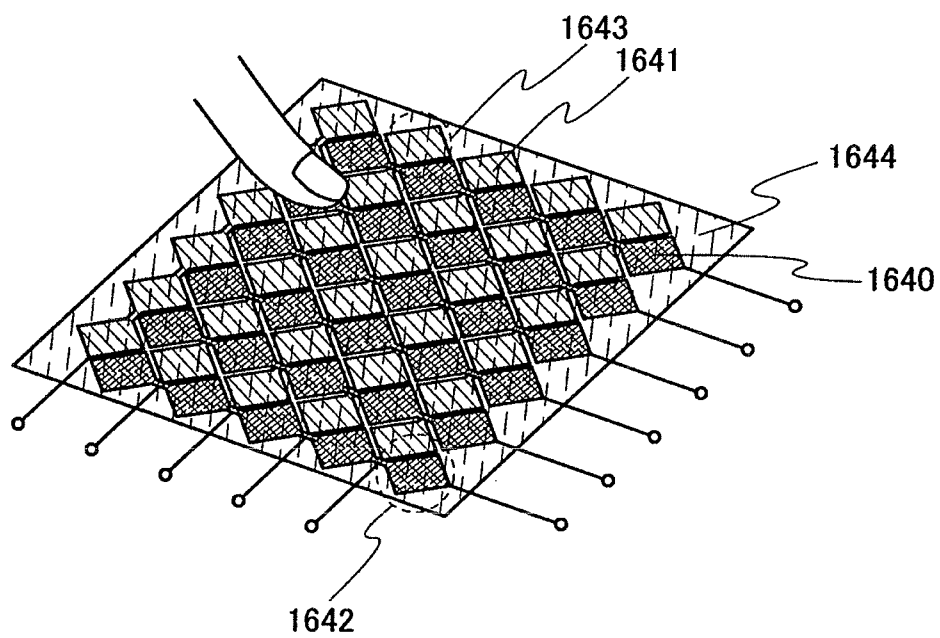


FIG. 13

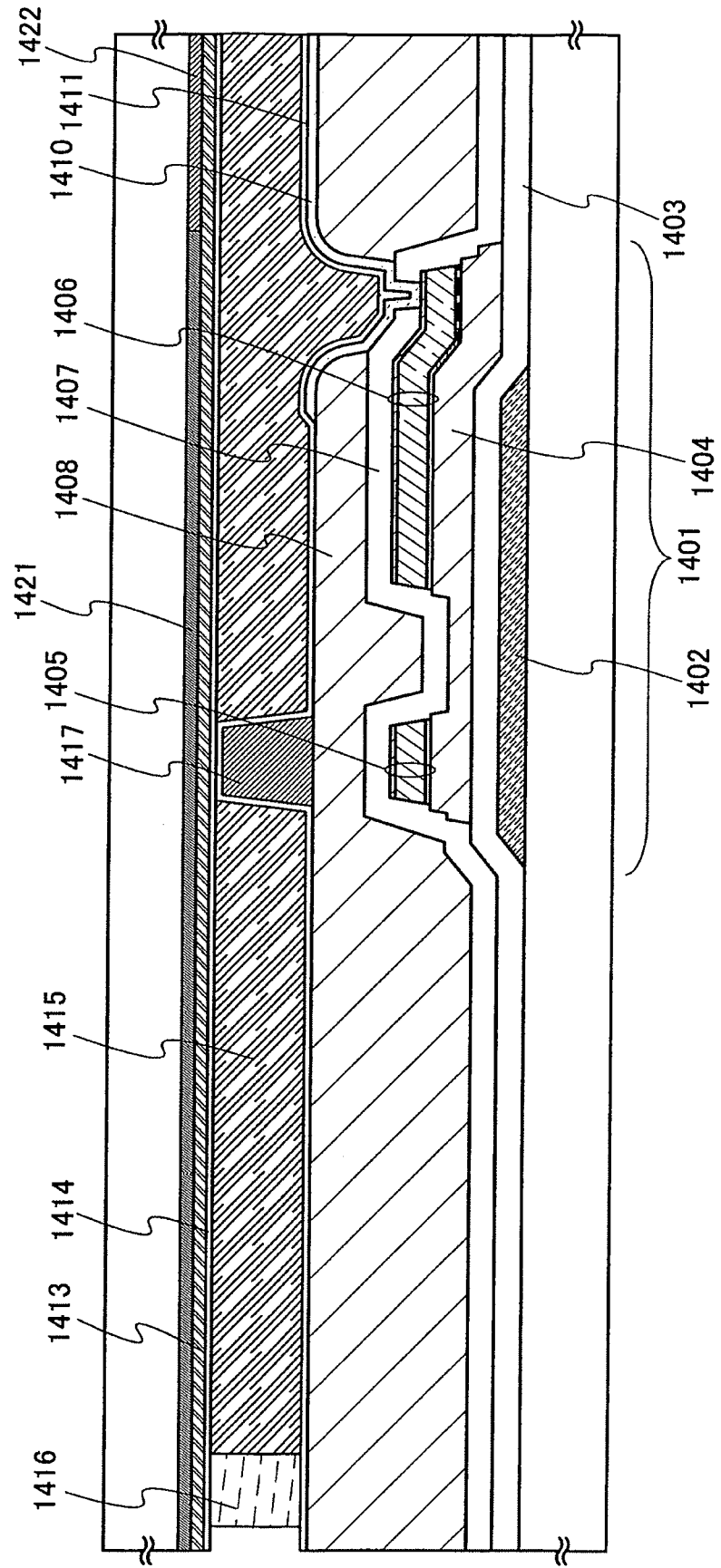


FIG. 14A

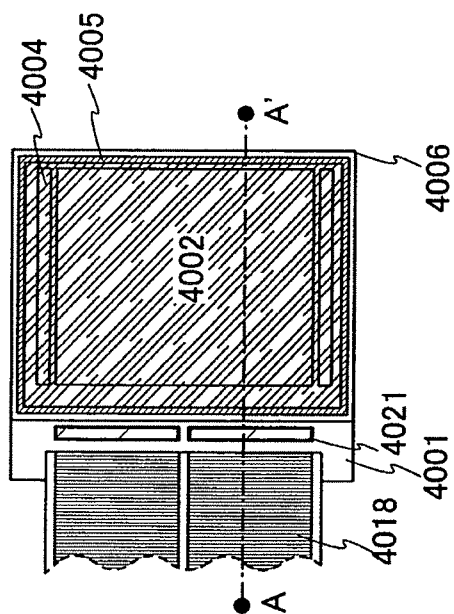


FIG. 14B

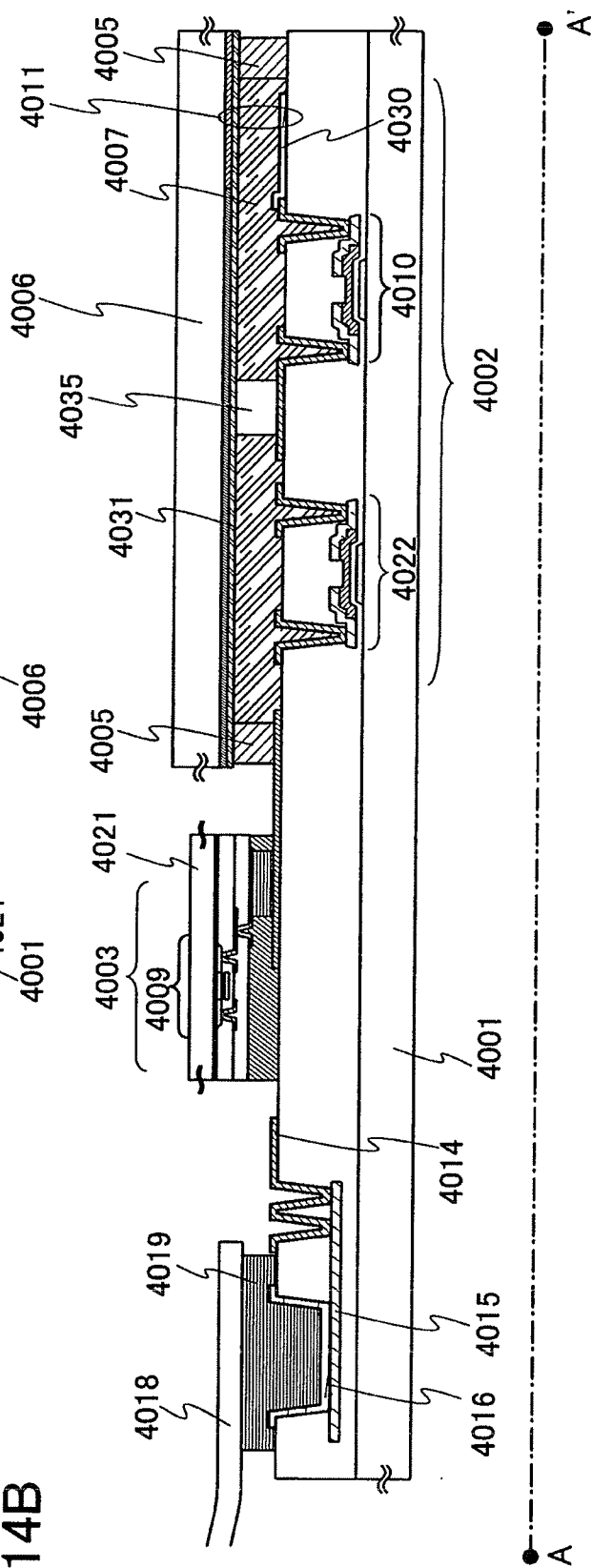


FIG. 15

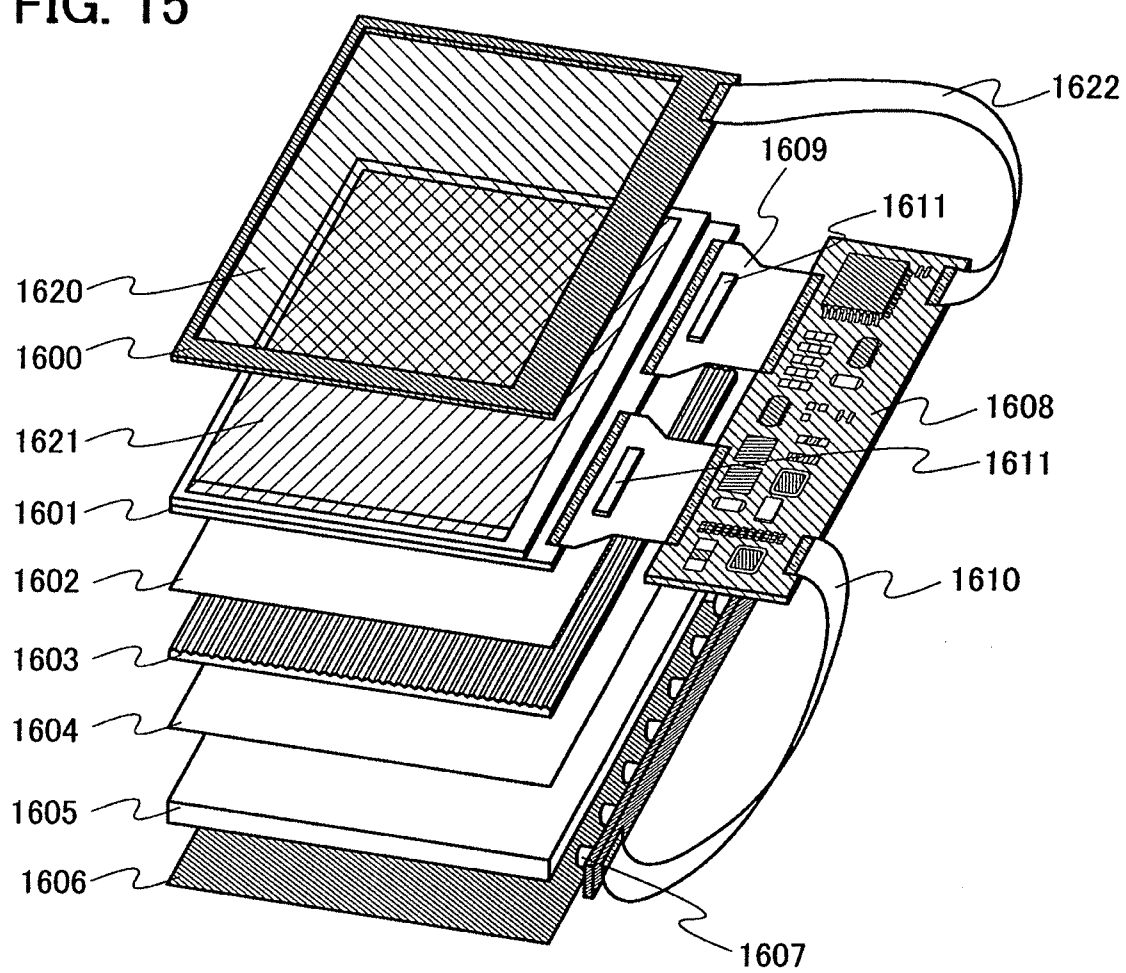


FIG. 16A

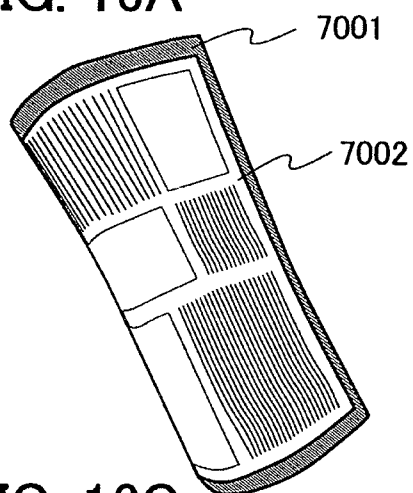


FIG. 16B

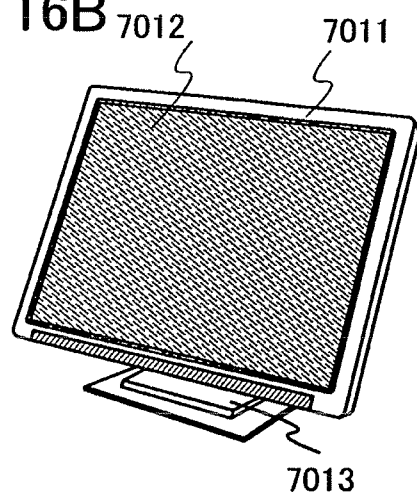


FIG. 16C

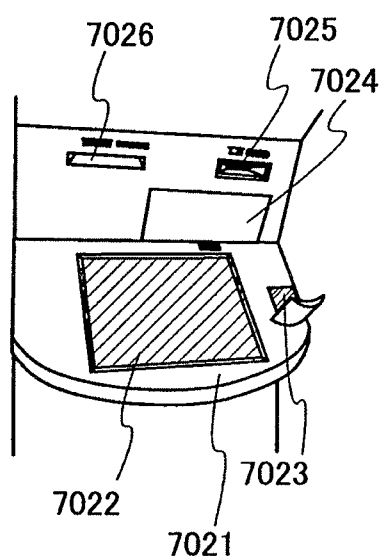


FIG. 16D

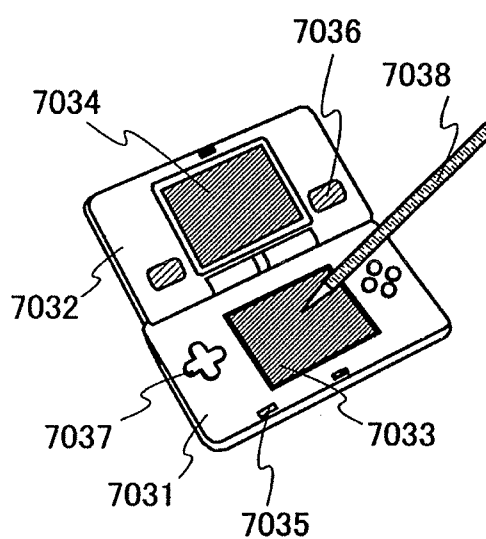


FIG. 16E

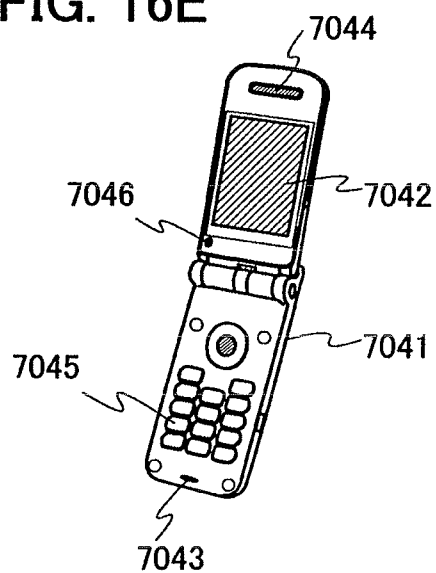


FIG. 16F

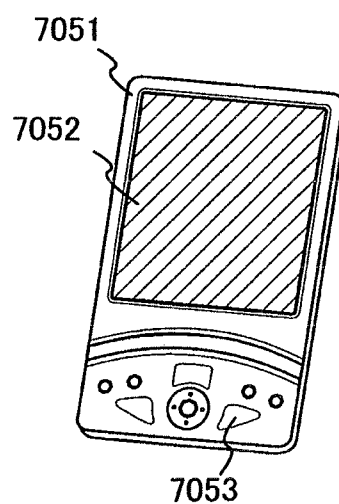


FIG. 17A

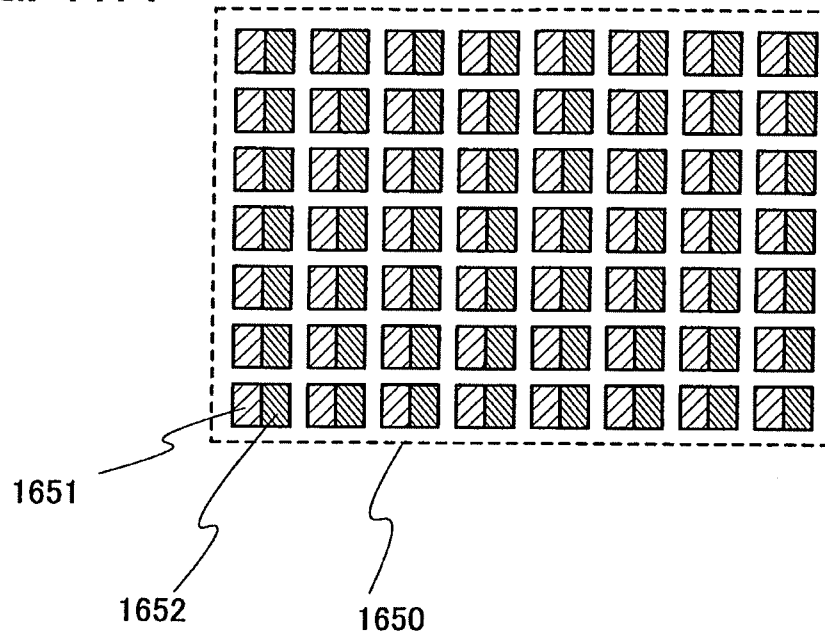
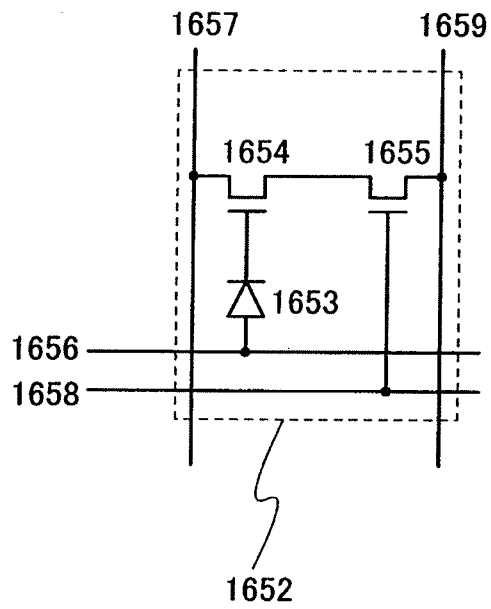


FIG. 17B



EXPLANATION OF REFERENCE

10: unit sequential circuit, 31: transistor, 32: transistor, 33: transistor, 34: transistor, 35: transistor, 36: transistor, 37: transistor, 38: transistor, 39: transistor, 40: transistor, 41: transistor, 61: selection period, 62: non-selection period, 100: panel, 101: display control circuit, 102: CPU, 104: touch panel, 105: transistor, 106: display element, 107: pixel portion, 108: signal line driver circuit, 109: scan line driver circuit, 110: pixel, 111: driver circuit, 130: shift register, 131: memory circuit, 132: memory circuit, 133: level shifter, 134: DAC, 135: analog buffer, 136: shift register, 137: digital buffer, 300: pixel, 301: pixel portion, 305: transistor, 306: liquid crystal element, 307: capacitor, 311: frame period, 312: frame period, 313: frame period, 400: substrate, 401: transistor, 402: capacitor, 403: gate electrode, 404: insulating film, 405: oxide semiconductor film, 406: channel protective film, 407: source electrode, 408: drain electrode, 409: insulating film, 410: electrode, 411: electrode, 421: transistor, 422: capacitor, 423: gate electrode, 424: insulating film, 425: oxide semiconductor film, 427: source electrode, 428: drain electrode, 429: insulating film, 430: electrode, 431: electrode, 441: transistor, 442: capacitor, 443: gate electrode, 444: insulating film, 445: oxide semiconductor film, 447: source electrode, 448: drain electrode, 449: insulating film, 450: electrode, 451: electrode, 800: substrate, 801: gate electrode, 802: electrode, 803: gate insulating film, 804: oxide semiconductor film, 805: source electrode, 806: drain electrode, 807: electrode, 808: insulating film, 809: transistor, 810: capacitor, 1401: transistor, 1402: gate electrode, 1403: gate insulating film, 1404: oxide semiconductor film, 1405: conductive film, 1406: conductive film, 1407: insulating film, 1408: insulating film, 1409: pixel electrode, 1410: pixel electrode, 1411: alignment film, 1413: counter electrode, 1414: alignment film, 1415: liquid crystal, 1416: sealant, 1417: spacer, 1421: light-blocking film, 1422: coloring layer, 1600: touch panel, 1601: panel, 1602: diffuser plate, 1603: prism sheet, 1604: diffuser plate, 1605: light guide plate, 1606: reflective plate, 1607: backlight, 1608: circuit board, 1609: COF tape, 1610: FPC, 1611: substrate, 1620: position detection portion, 1621: pixel portion, 1622: FPC, 1630: electrode, 1631: electrode, 1640: electrode,

1641: electrode, 1642: conductive film, 1643: conductive film, 1644: insulating layer, 1650: pixel portion, 1651: pixel, 1652: photosensor, 1653: photodiode, 1654: transistor, 1655: transistor, 1656: reset signal line, 1657: reference signal line, 1658: gate signal line, 1659: output signal line, 4001: substrate, 4002: pixel portion, 4003: signal line driver circuit, 4004: scan line driver circuit, 4005: sealant, 4006: counter substrate, 4007: liquid crystal, 4009: transistor, 4010: transistor, 4011: liquid crystal element, 4014: wiring, 4016: connection terminal, 4018: FPC, 4019: anisotropic conductive film, 4021: substrate, 4022: transistor, 4030: pixel electrode, 4031: counter electrode, 4035: spacer, 7001: housing, 7002: display portion, 7011: housing, 7012: display portion, 7013: supporting base, 7021: housing, 7022: display portion, 7023: coin slot, 7024: bill slot, 7025: card slot, 7026: bankbook slot, 7031: housing, 7032: housing, 7033: display portion, 7034: display portion, 7035: microphone, 7036: speaker, 7037: operation key, 7038: stylus, 7041: housing, 7042: display portion, 7043: audio-input portion, 7044: audio-output portion, 7045: operation key, 7046: light-receiving portion, 7051: housing, 7052: display portion, and 7053: operation key