

FIG. 1

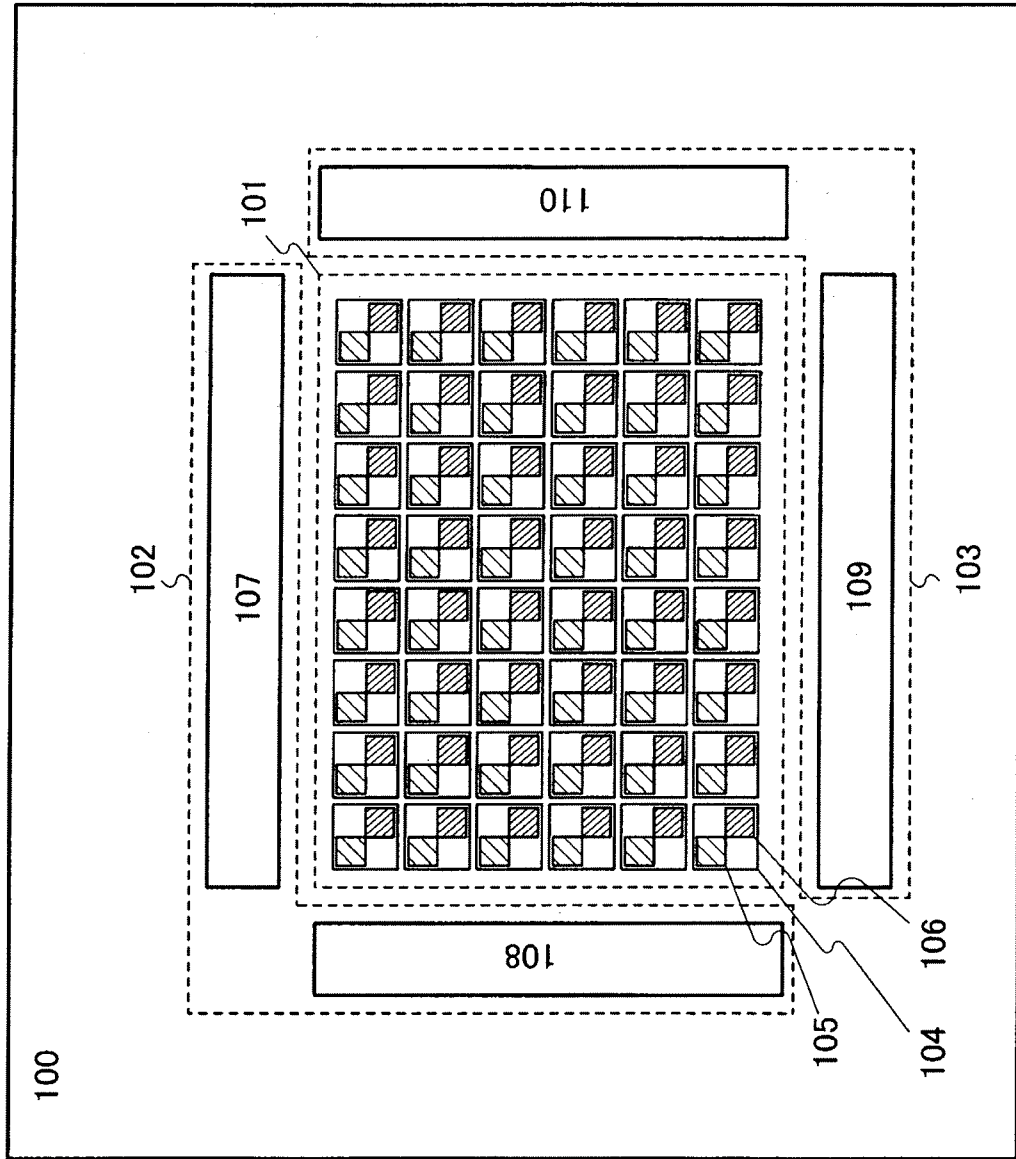


FIG. 2

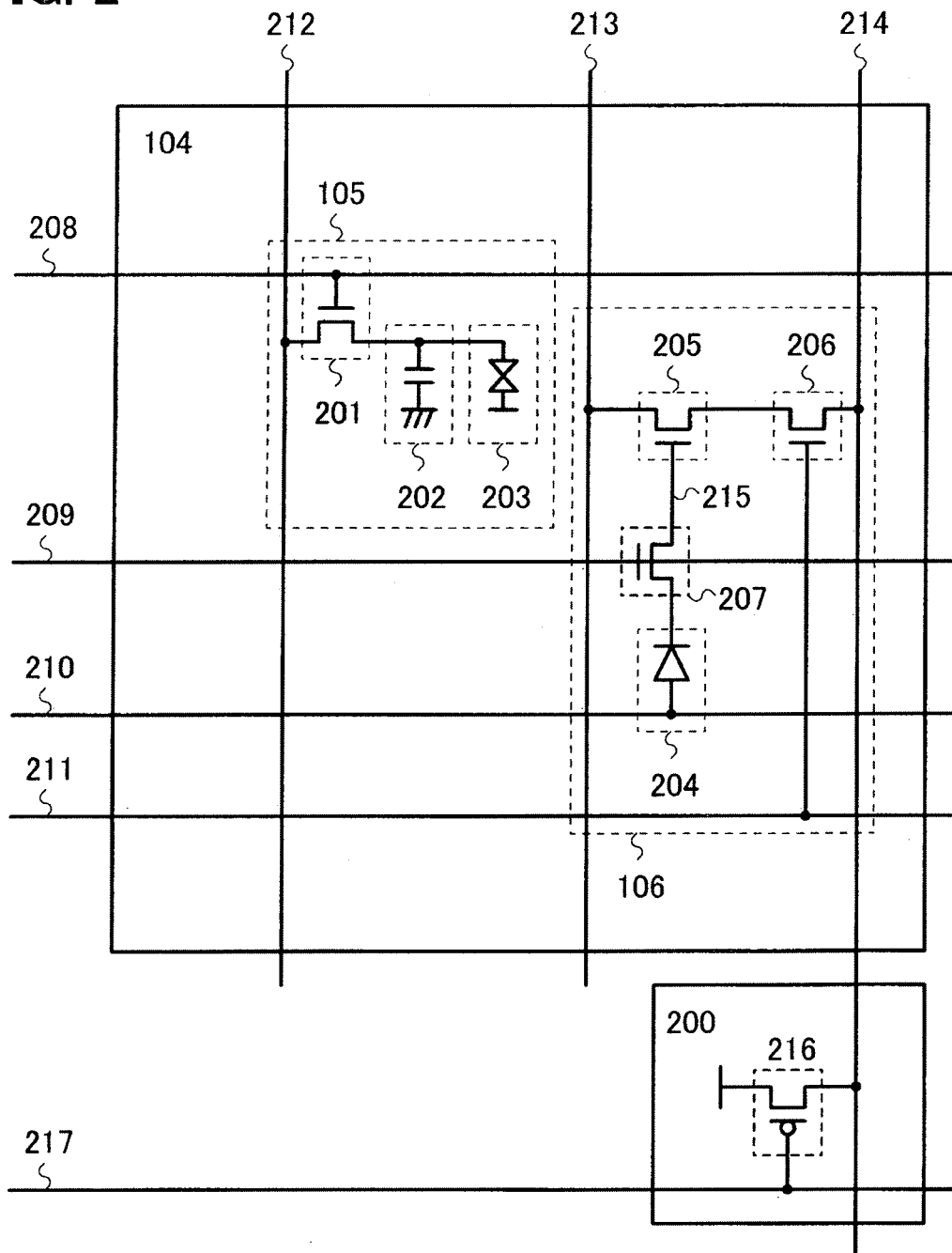
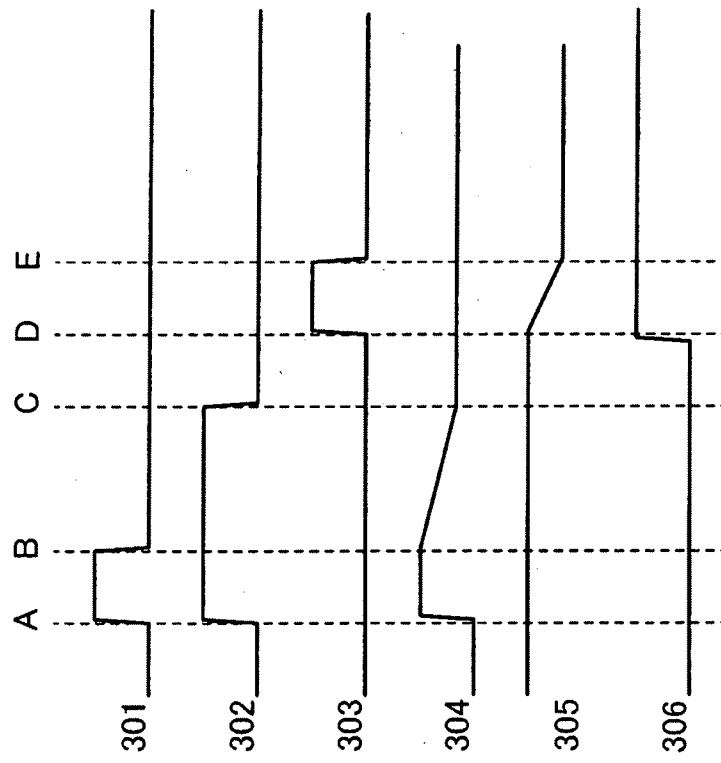


FIG. 3



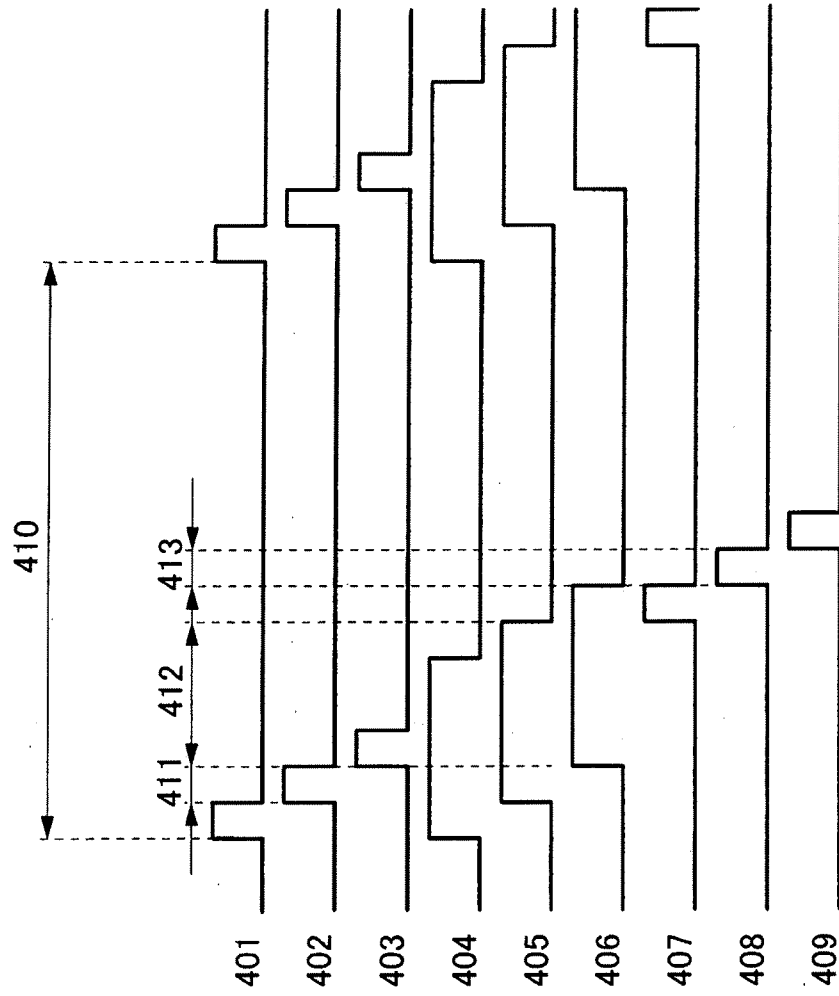


FIG. 4

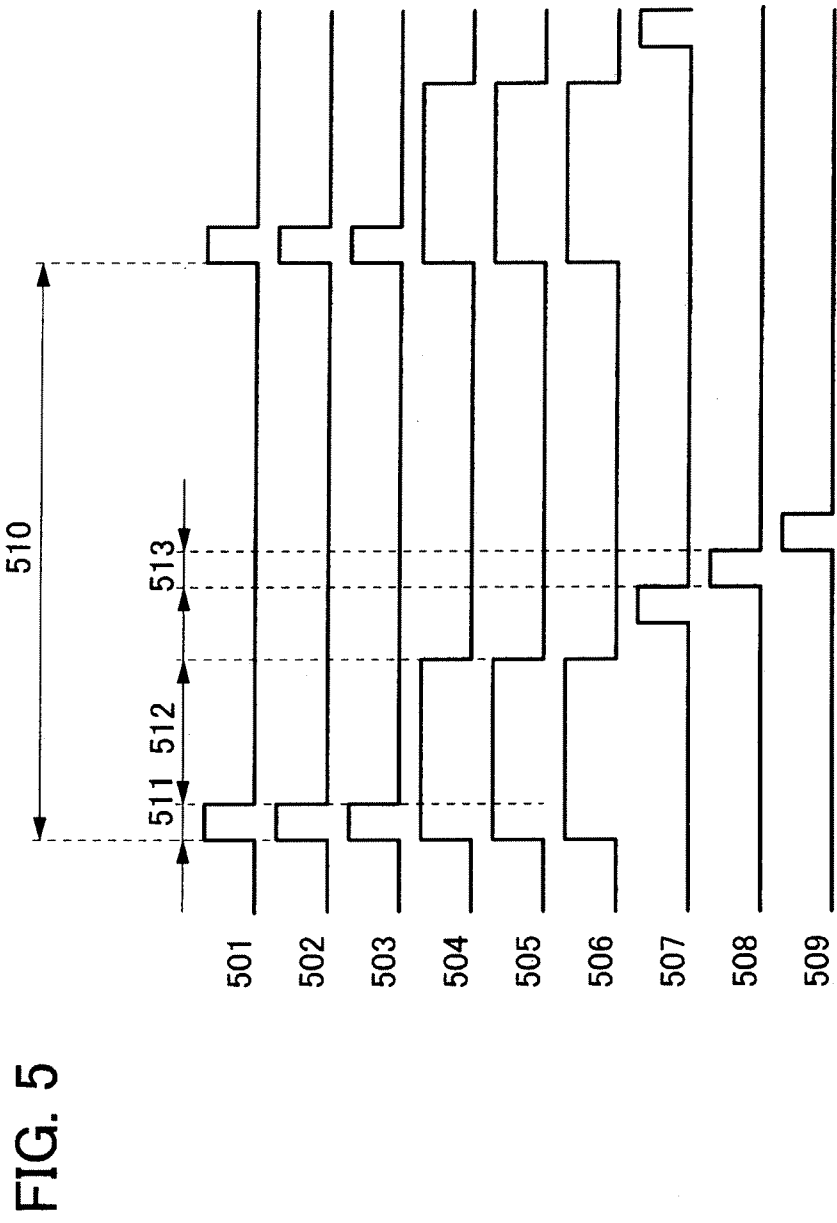


FIG. 6A

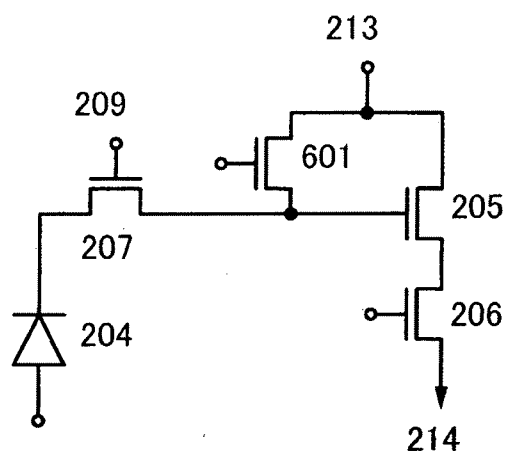


FIG. 6C

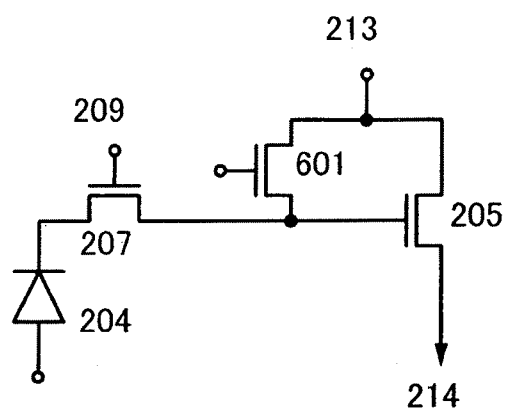


FIG. 6B

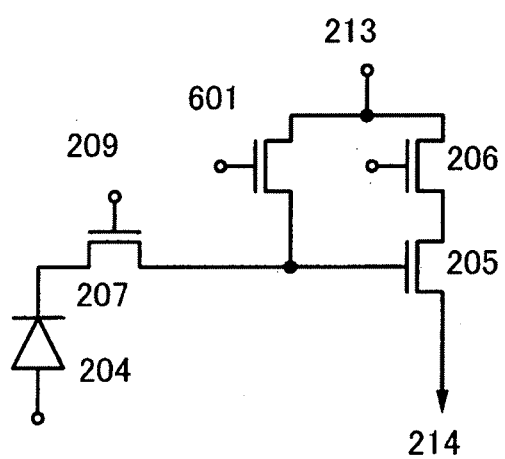


FIG. 6D

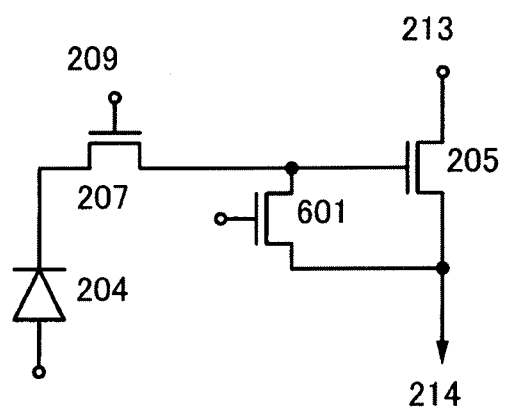


FIG. 7

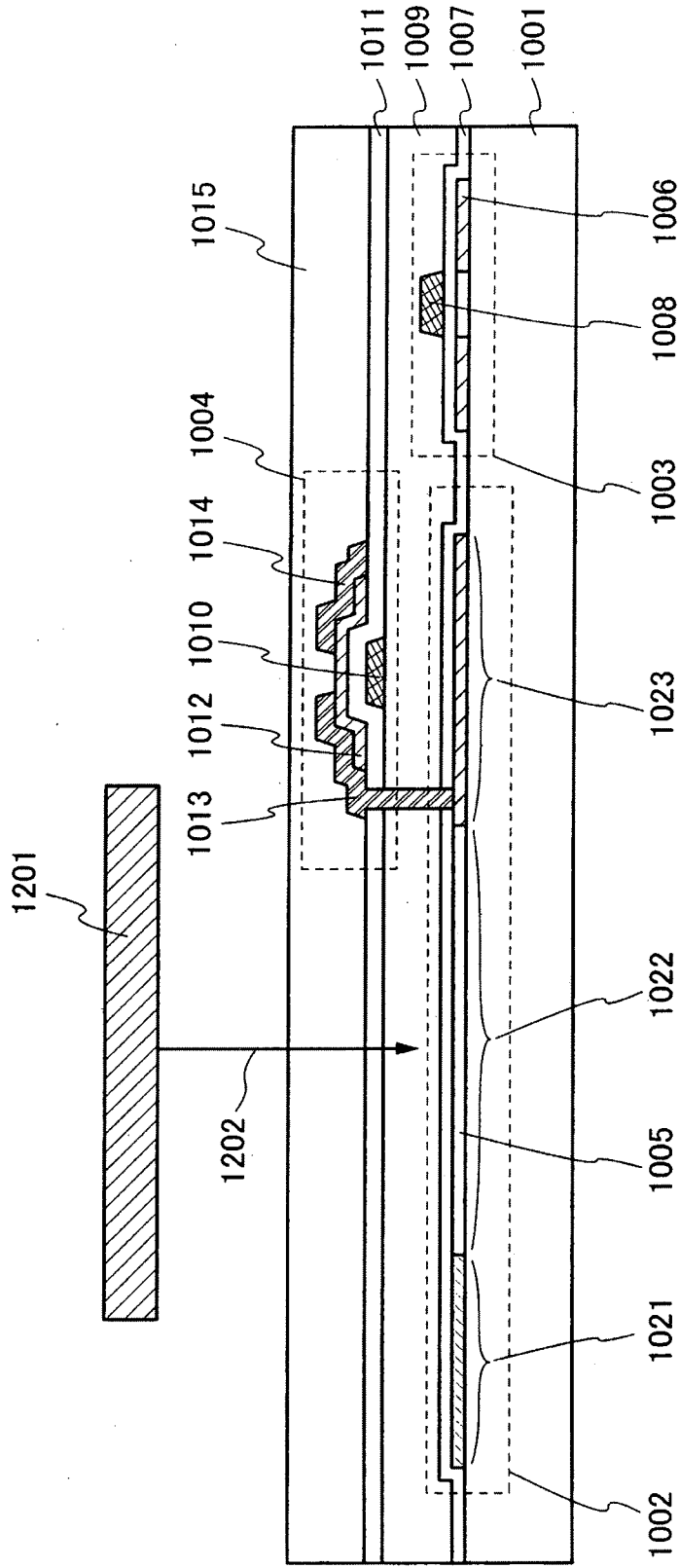


FIG. 8

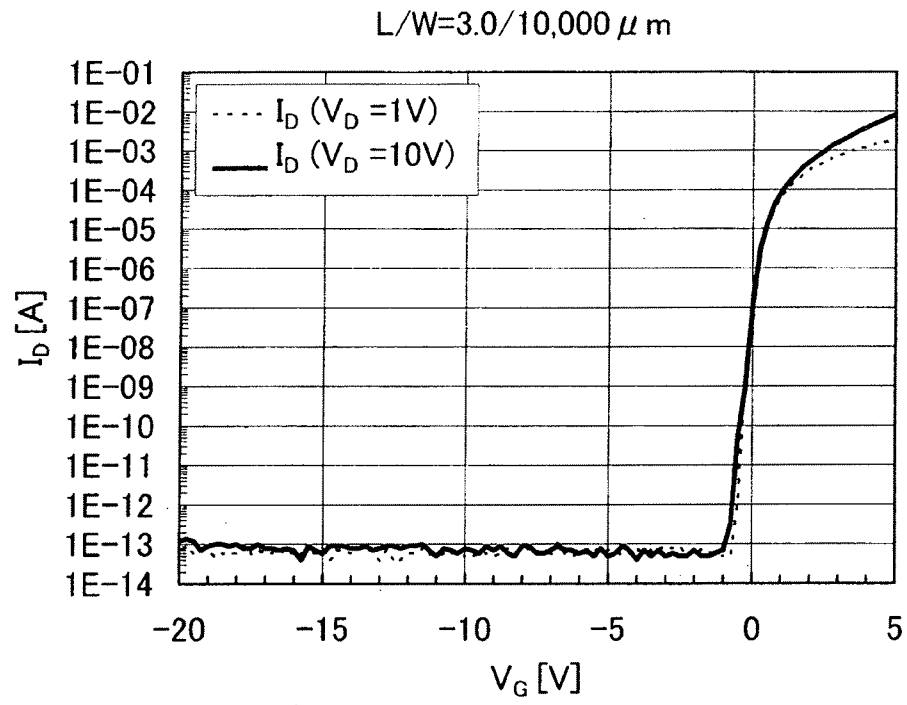


FIG. 9

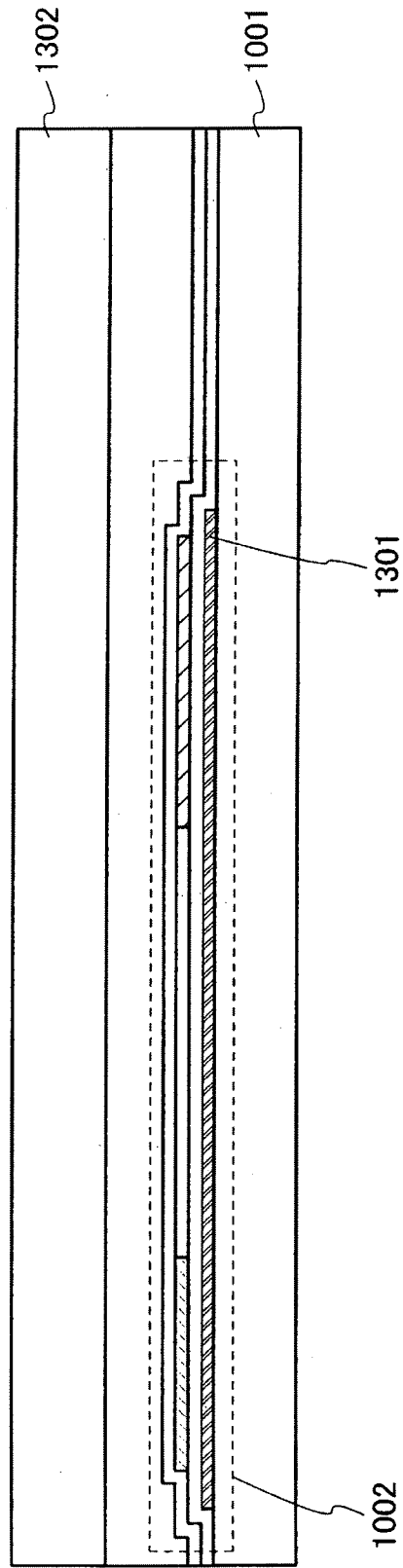


FIG. 10

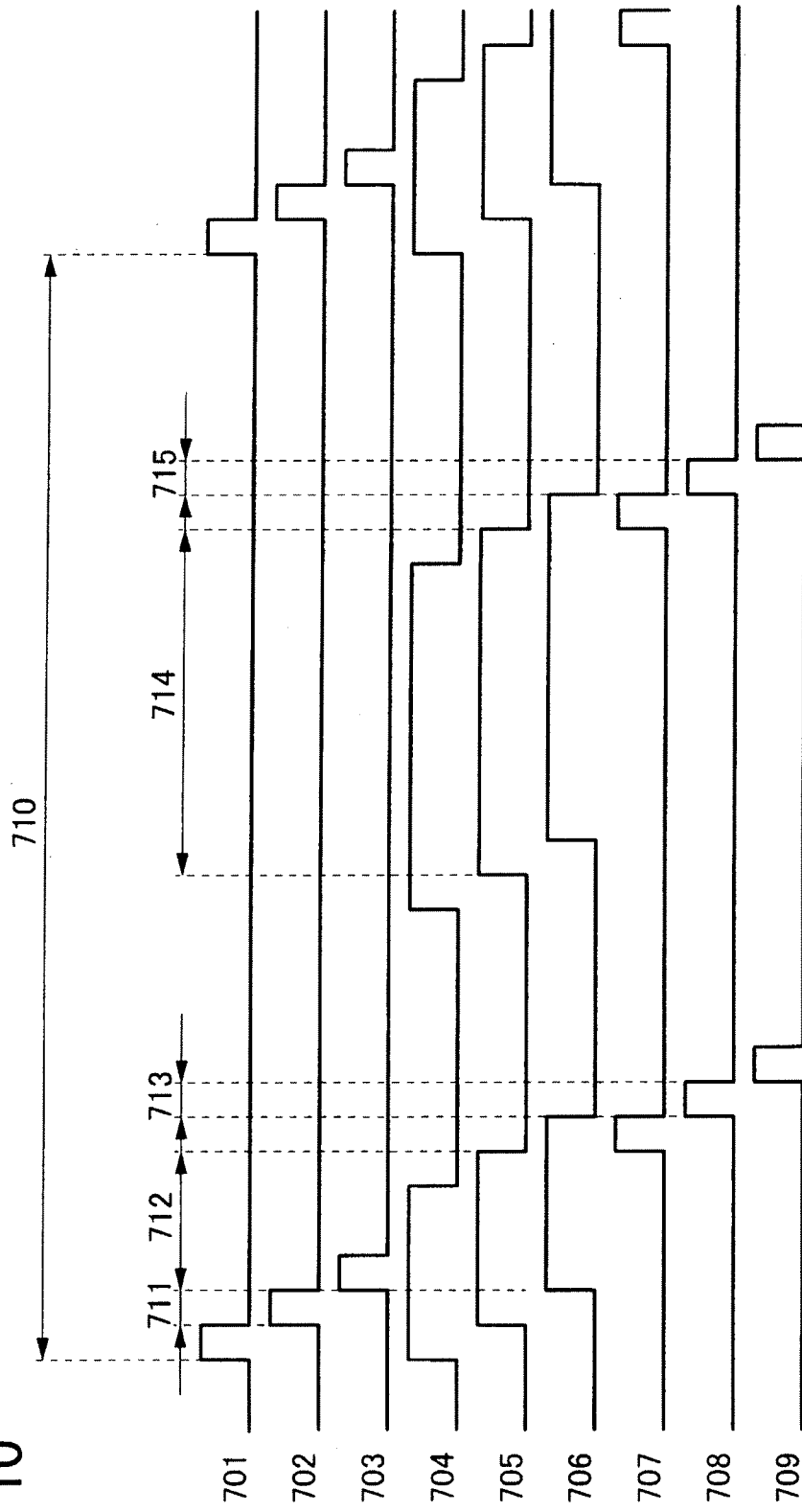


FIG. 11

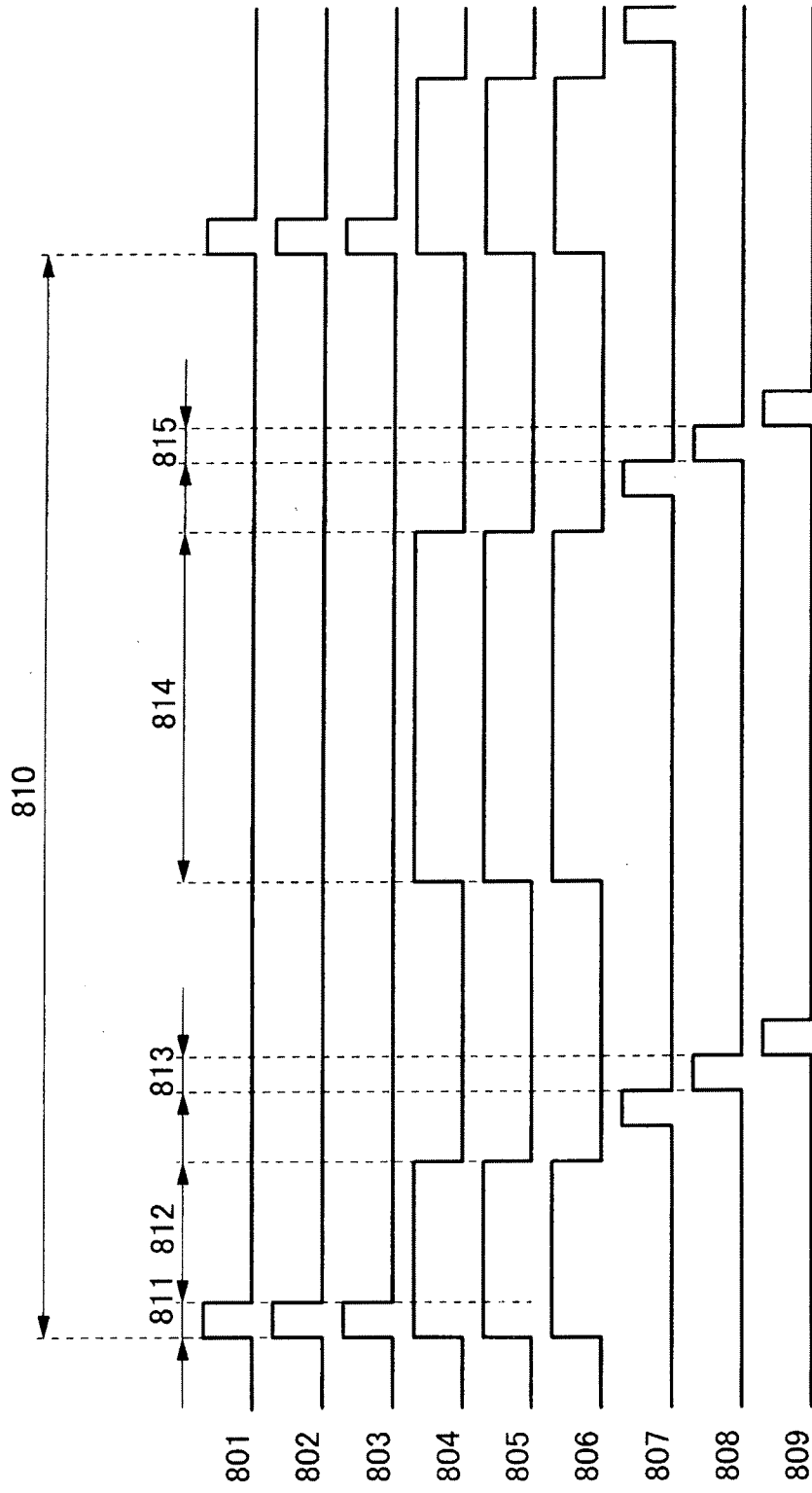
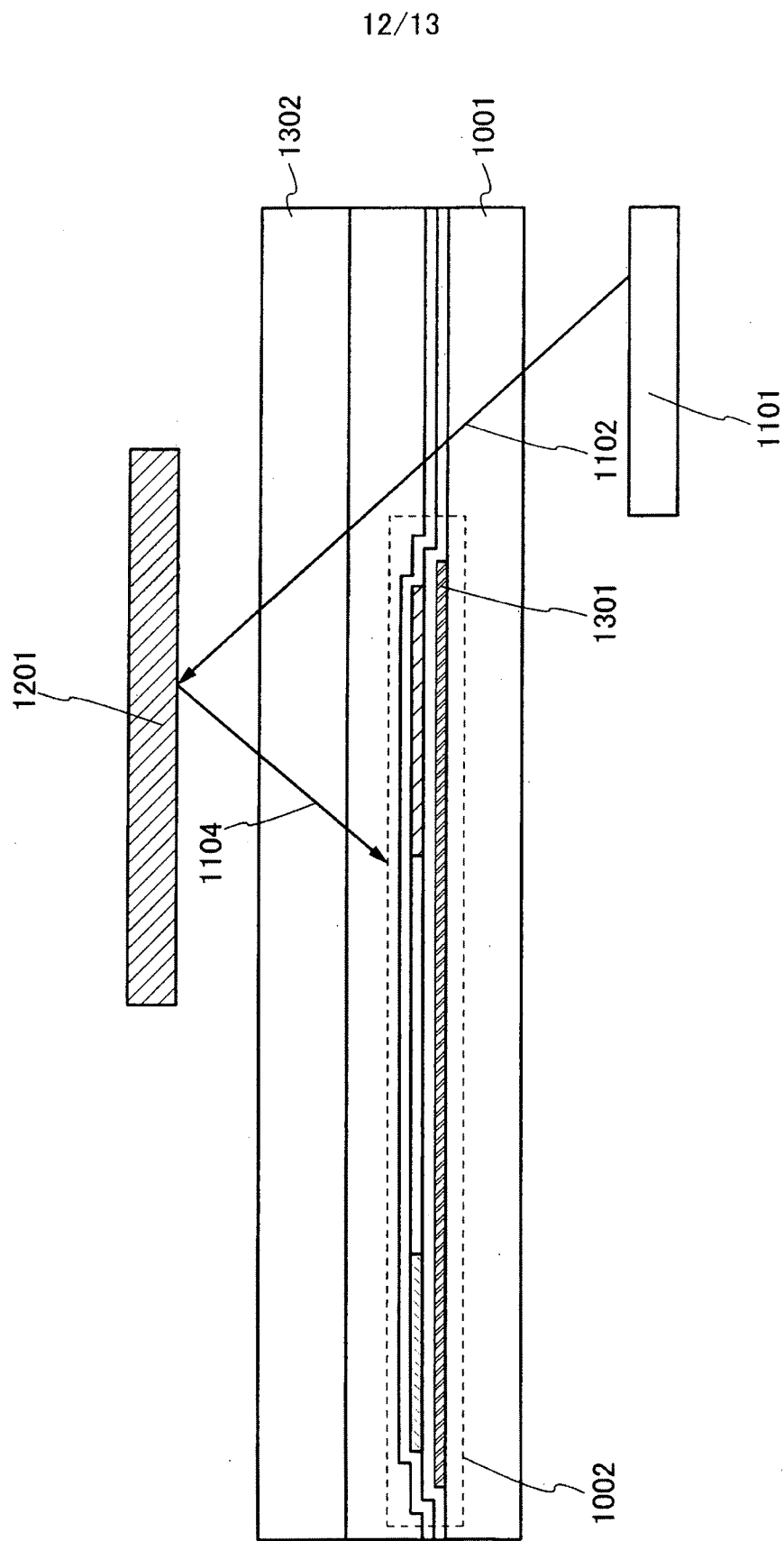


FIG. 12



EXPLANATION OF REFERENCE

100: display panel, 101: pixel circuit, 102: display element control circuit, 103: photosensor control circuit, 104: pixel, 105: display element, 106: photosensor, 107: display element driver circuit, 108: display element driver circuit, 109: photosensor reading circuit, 110: photosensor driver circuit, 200: precharge circuit, 201: transistor, 202: storage capacitor, 203: liquid crystal element, 204: photodiode, 205: transistor, 206: transistor, 207: transistor, 208: gate signal line, 209: gate signal line, 210: reset signal line, 211: gate signal line, 212: video data signal line, 213: photosensor reference signal line, 214: photosensor output signal line, 215: gate signal line, 216: transistor, 217: precharge signal line, 301: signal, 302: signal, 303: signal, 304: signal, 305: signal, 306: signal, 401: signal, 402: signal, 403: signal, 404: signal, 405: signal, 406: signal, 407: signal, 408: signal, 409: signal, 410: period, 411: period, 412: period, 413: period, 501: signal, 502: signal, 503: signal, 504: signal, 505: signal, 506: signal, 507: signal, 508: signal, 509: signal, 510: period, 511: period, 512: period, 513: period, 601: transistor, 701: signal, 702: signal, 703: signal, 704: signal, 705: signal, 706: signal, 707: signal, 708: signal, 709: signal, 710: period, 711: period, 712: period, 713: period, 714: period, 715: period, 801: signal, 802: signal, 803: signal, 804: signal, 805: signal, 806: signal, 807: signal, 808: signal, 809: signal, 810: period, 811: period, 812: period, 813: period, 814: period, 815: period, 1001: substrate, 1002: photodiode, 1003: transistor, 1004: transistor, 1005: semiconductor film, 1006: semiconductor film, 1007: gate insulating film, 1008: gate electrode, 1009: insulating film, 1010: gate electrode, 1011: gate insulating film, 1012: semiconductor film, 1013: electrode, 1014: electrode, 1015: insulating film, 1101: light, 1102: light, 1104: light, 1021: p-layer, 1022: i-layer, 1023: n-layer, 1201: object to be detected, 1202: light, 1301: light-blocking film, 1302: substrate