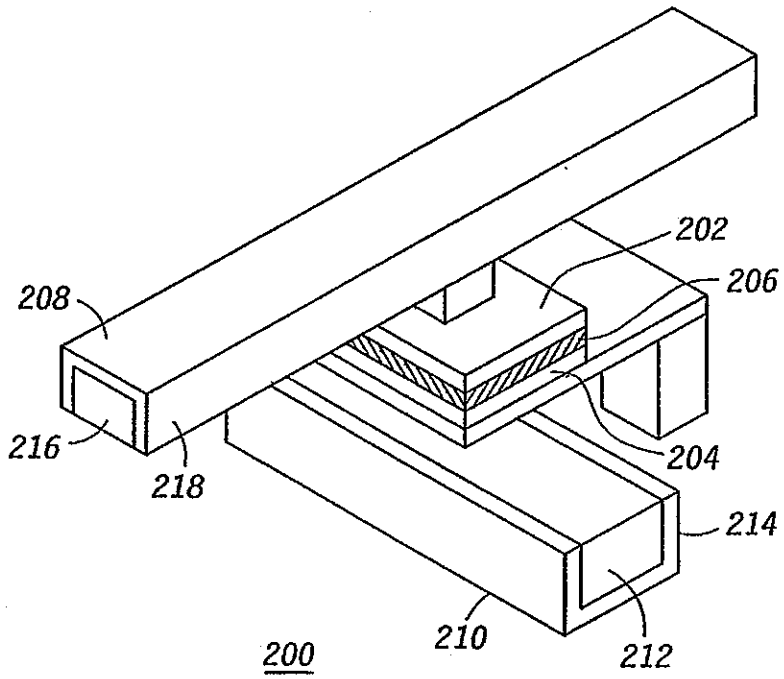


FIG. 1

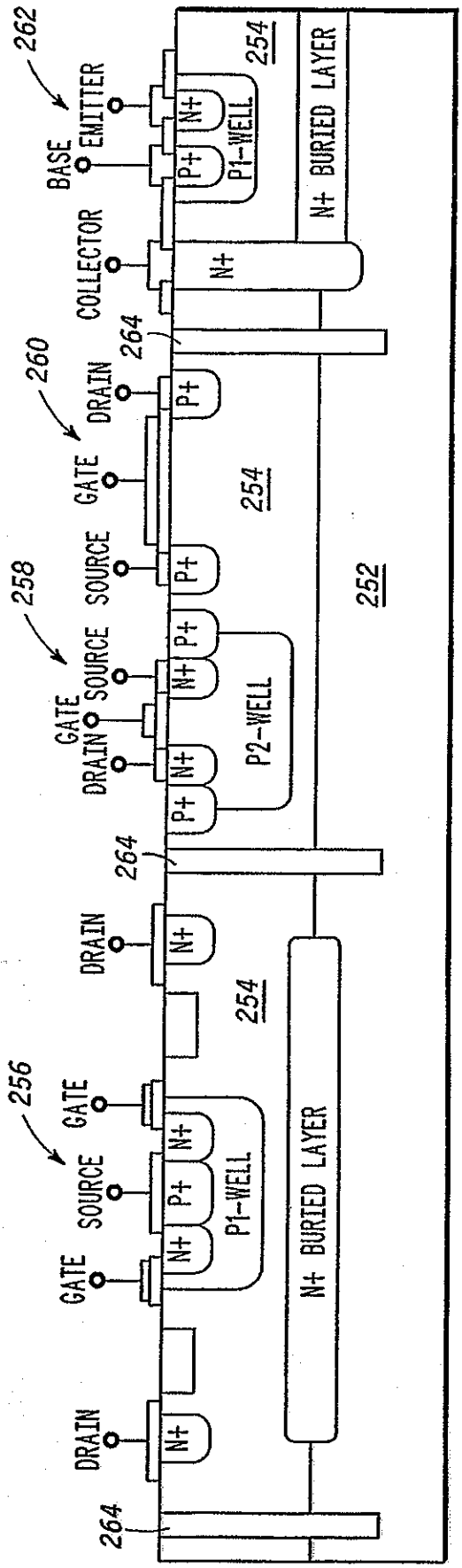


FIG. 2

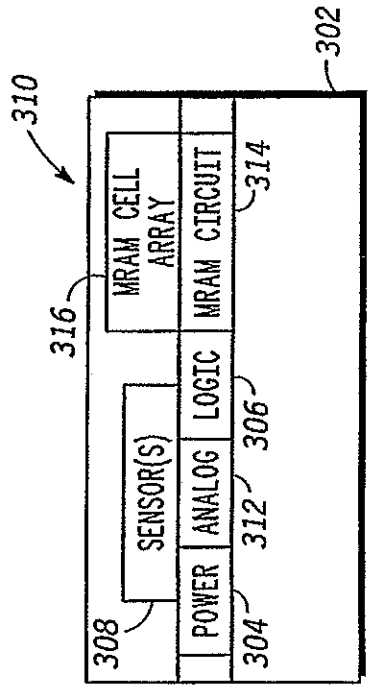


FIG. 4

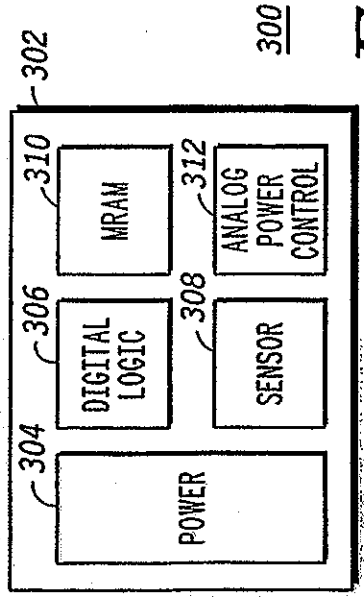


FIG. 3

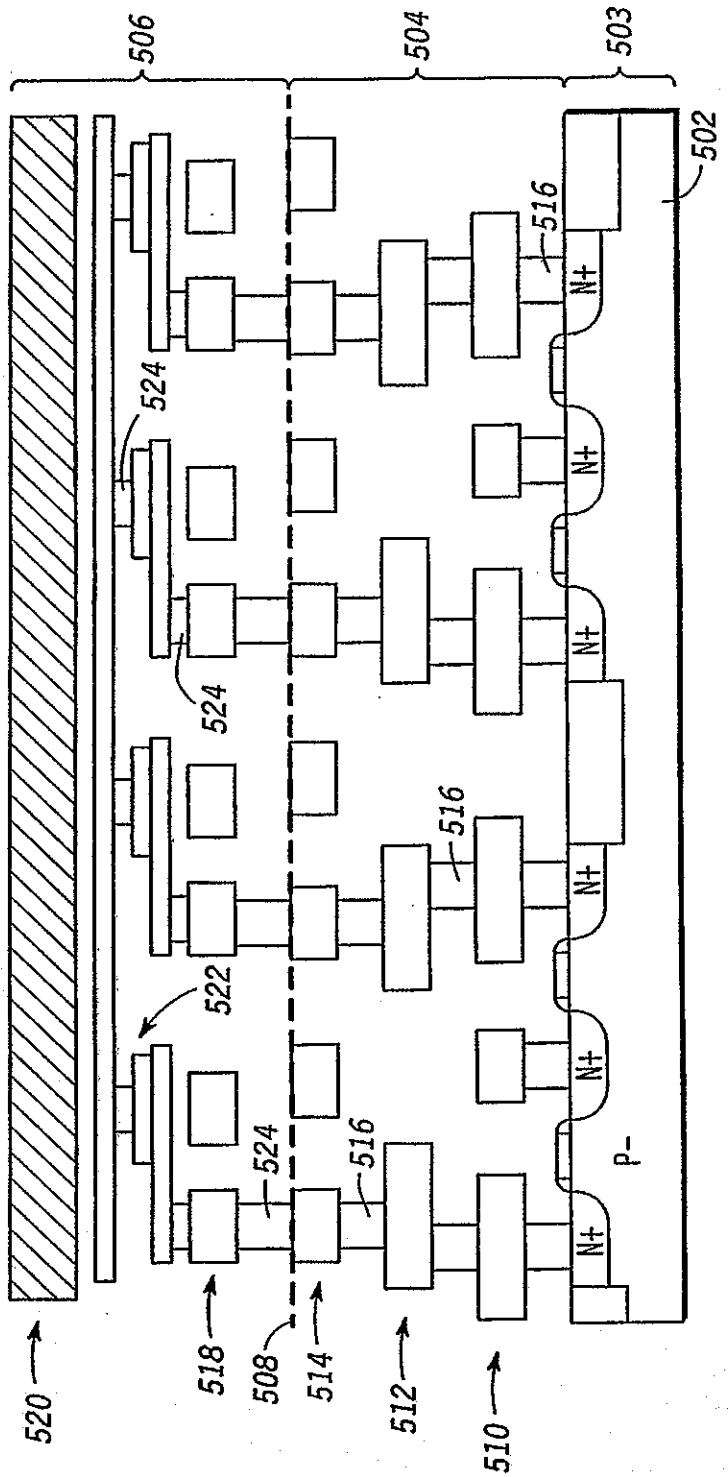


FIG. 5

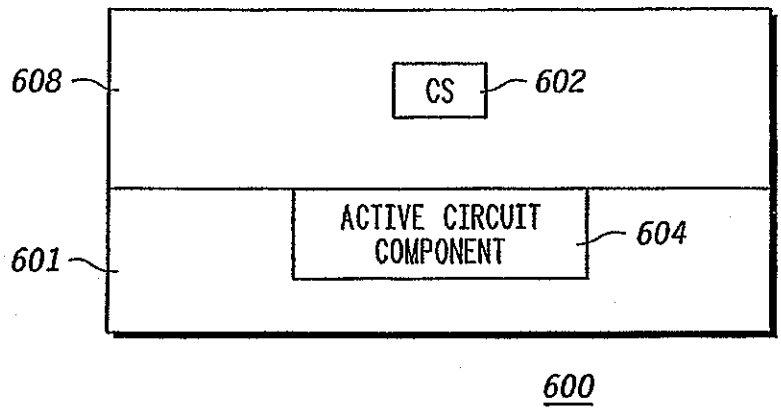


FIG. 6

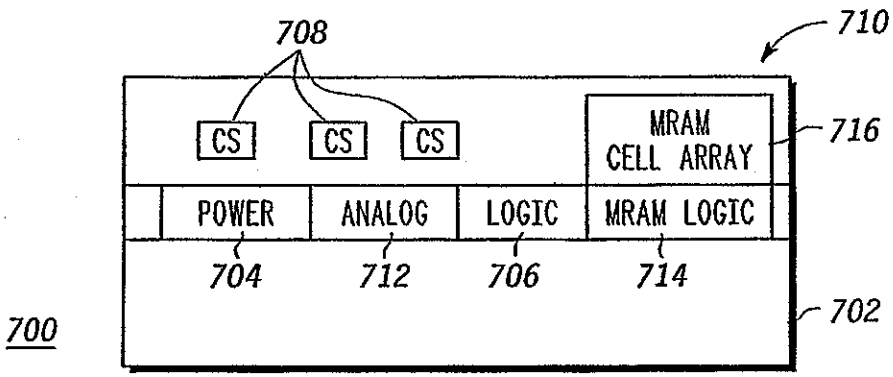


FIG. 7

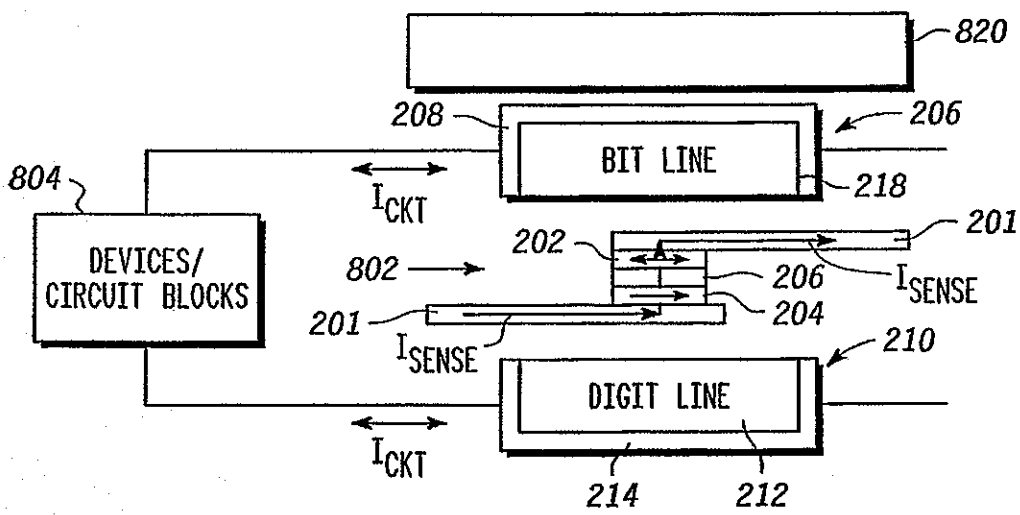


FIG. 8

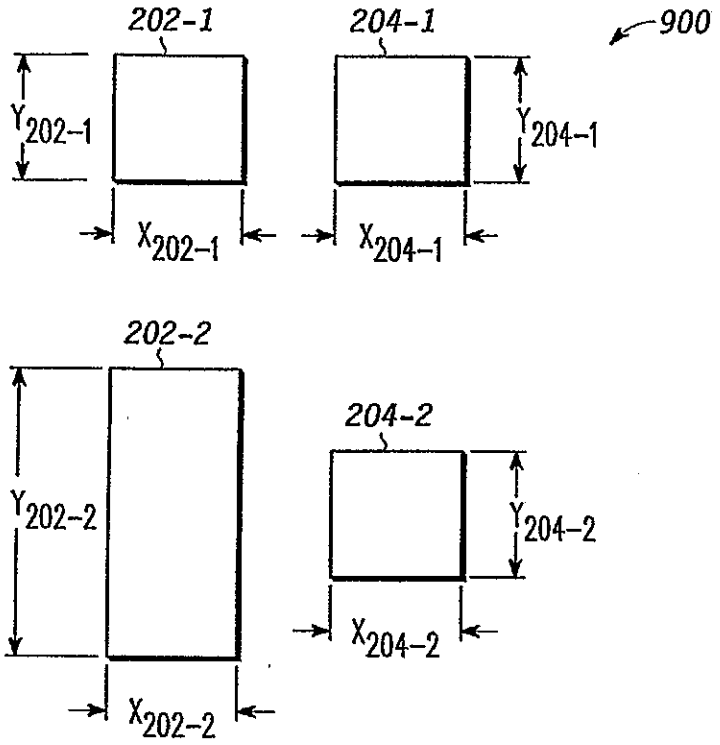


FIG. 9

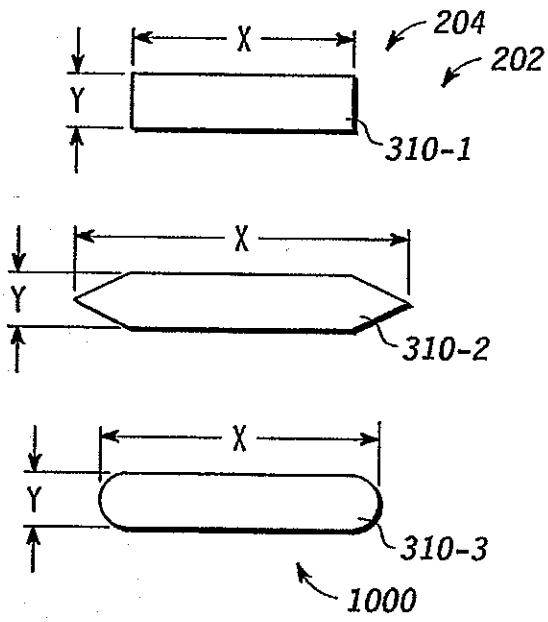


FIG. 10

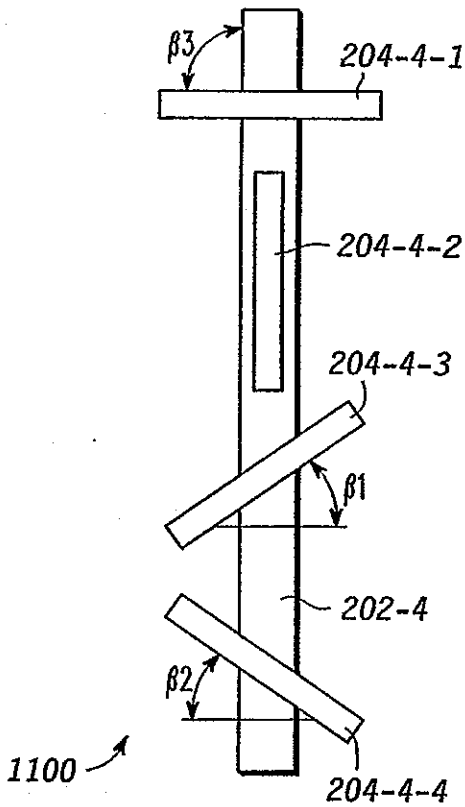


FIG. 11

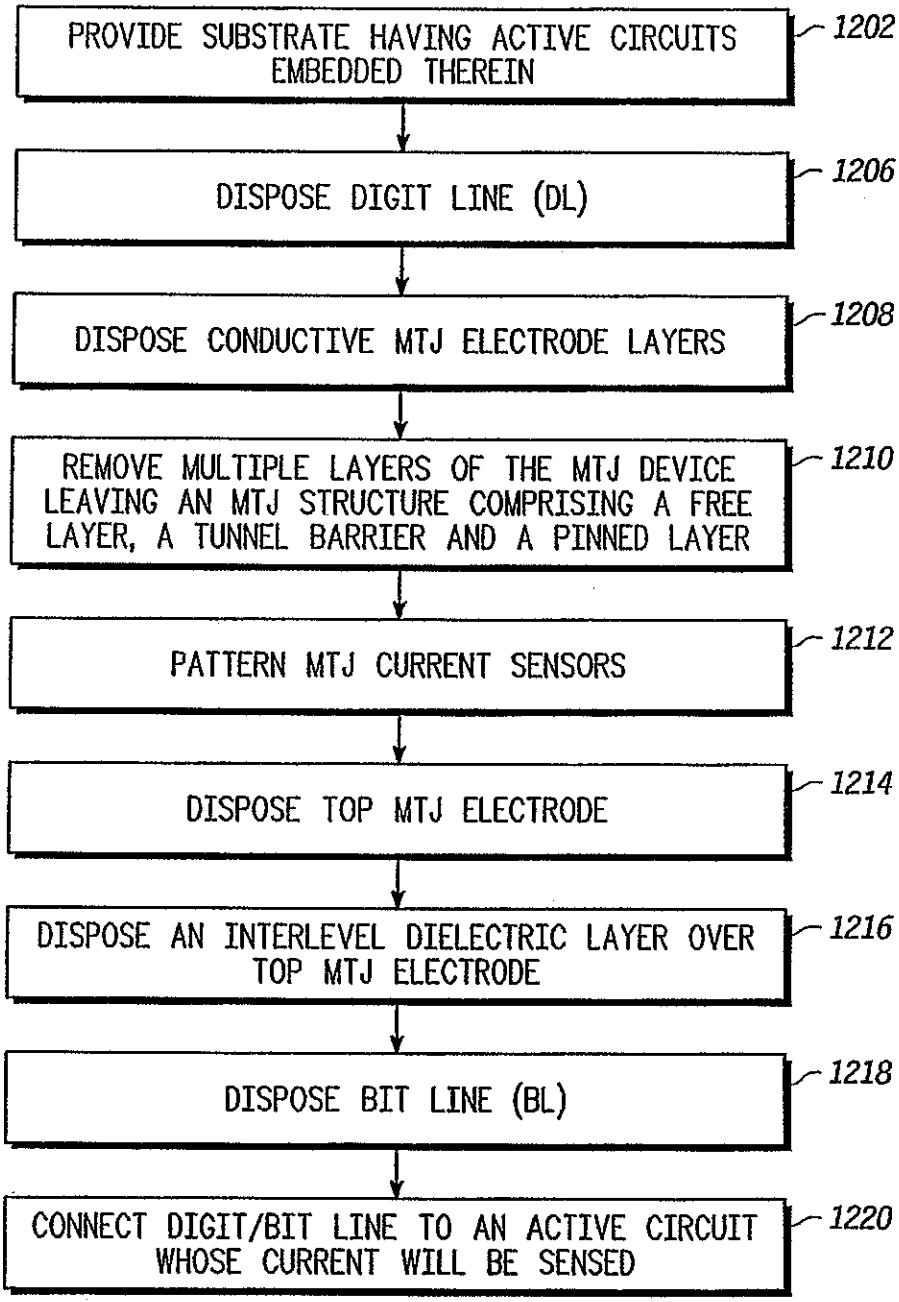

PROVIDE SUBSTRATE HAVING ACTIVE CIRCUITS EMBEDDED THEREIN
1202
DISPOSE DIGIT LINE (DL)
1206
DISPOSE CONDUCTIVE MTJ ELECTRODE LAYERS
1208
REMOVE MULTIPLE LAYERS OF THE MTJ DEVICE LEAVING AN MTJ STRUCTURE COMPRISING A FREE LAYER, A TUNNEL BARRIER AND A PINNED LAYER
1210
PATTERN MTJ CURRENT SENSORS
1212
DISPOSE TOP MTJ ELECTRODE
1214
DISPOSE AN INTERLEVEL DIELECTRIC LAYER OVER TOP MTJ ELECTRODE
1216
DISPOSE BIT LINE (BL)
1218
CONNECT DIGIT/BIT LINE TO AN ACTIVE CIRCUIT WHOSE CURRENT WILL BE SENSED
1220

FIG. 12