FIG. 1

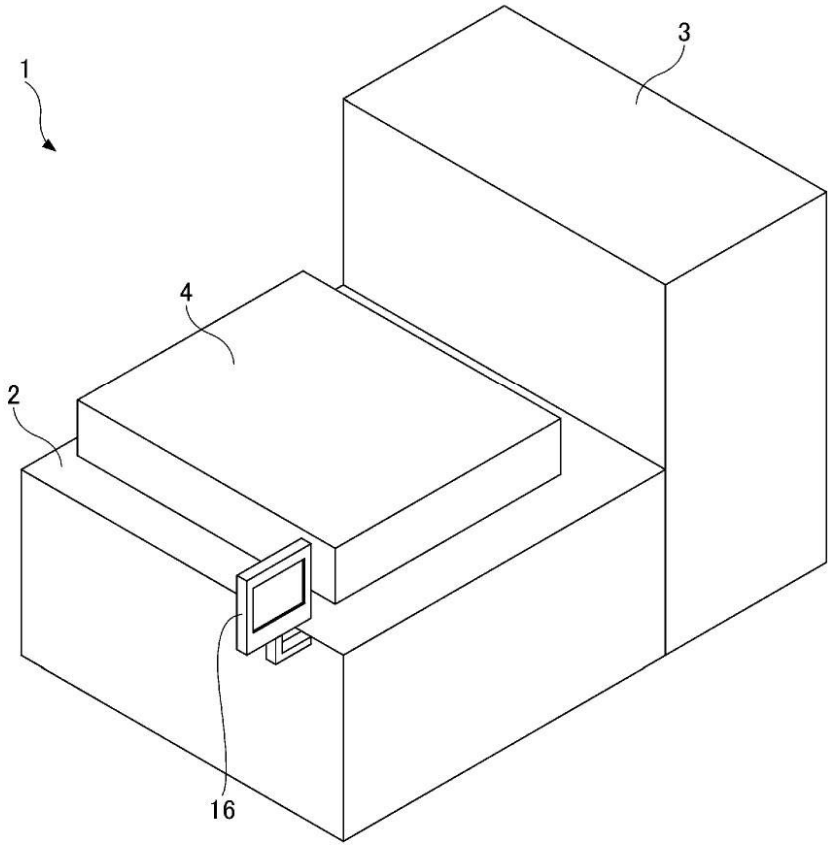


FIG. 2

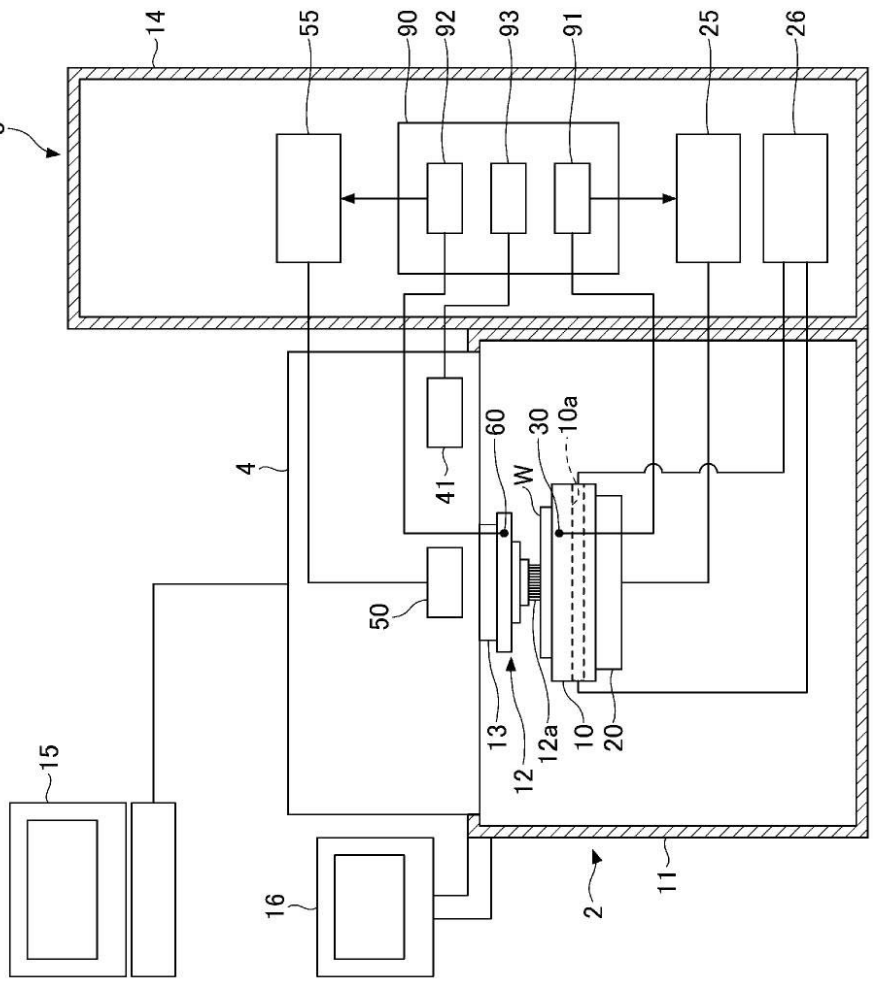


FIG. 3

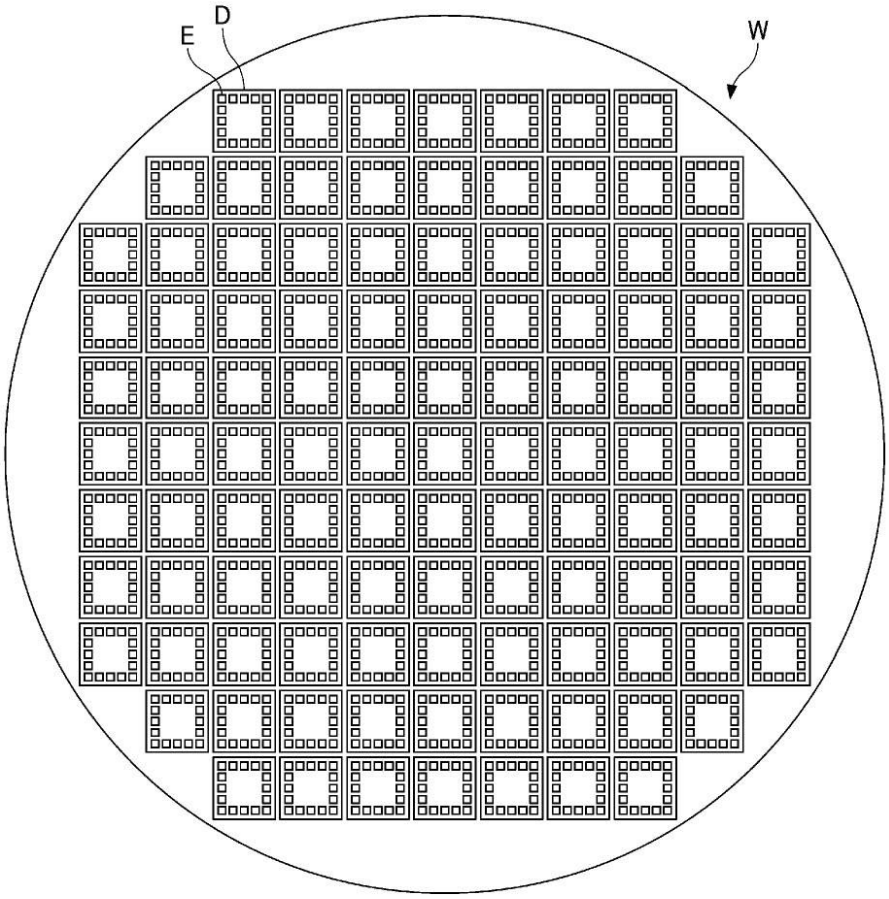


FIG. 4

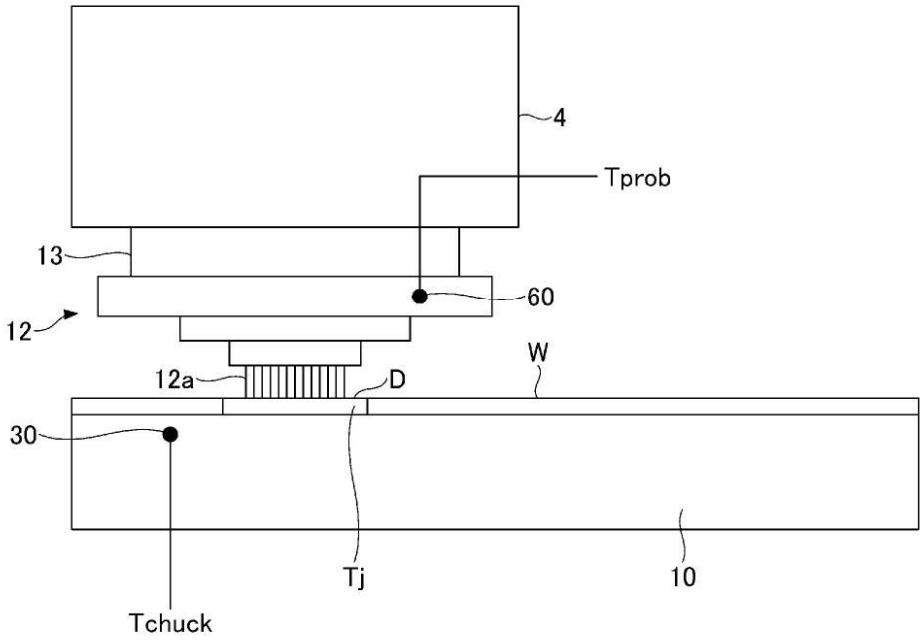


FIG. 5

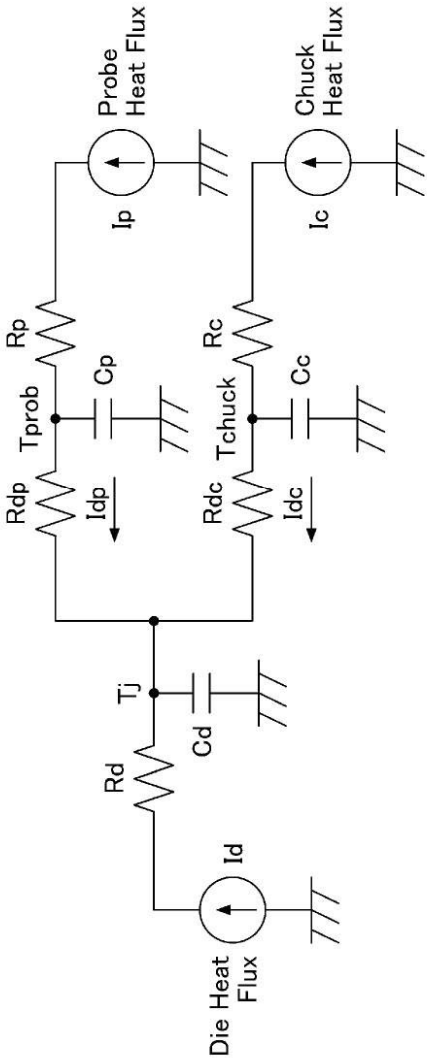

Probe
Heat Flux
Ip
Chuck
Heat Flux
Ic
Rp
Rc
Cp
Cc
Tprob
Tchuck
Rdp
Idp
Rdc
Idc
Tj
Cd
Rd
Id
Die Heat
Flux

FIG. 6

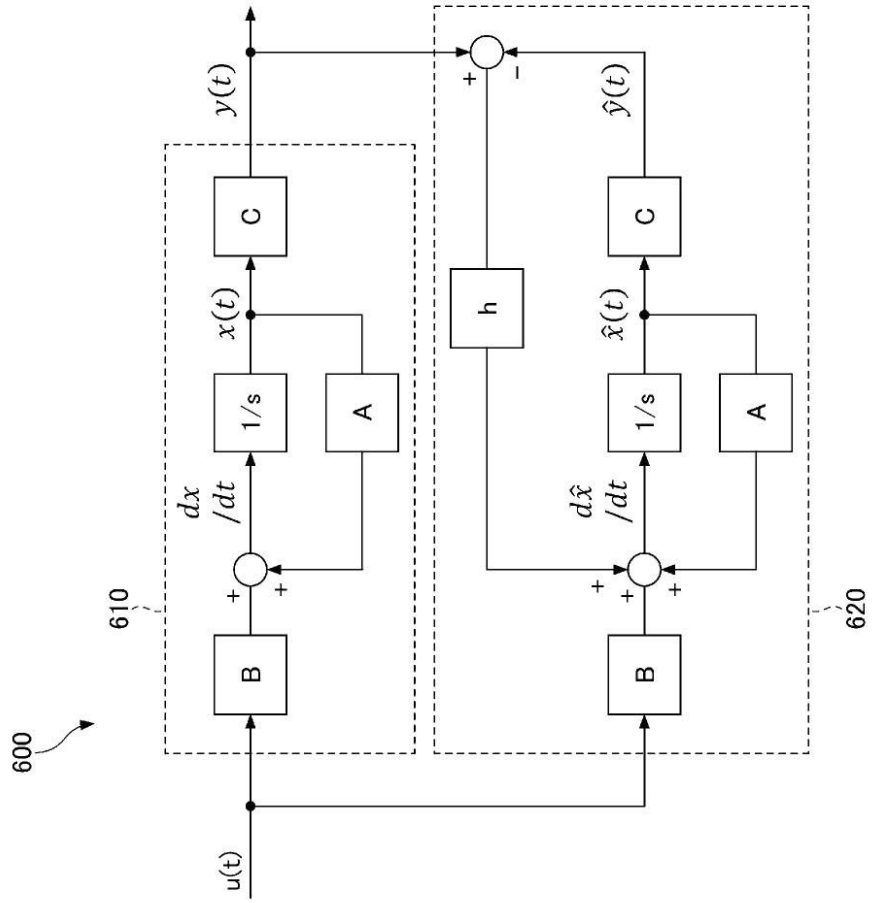


FIG. 7

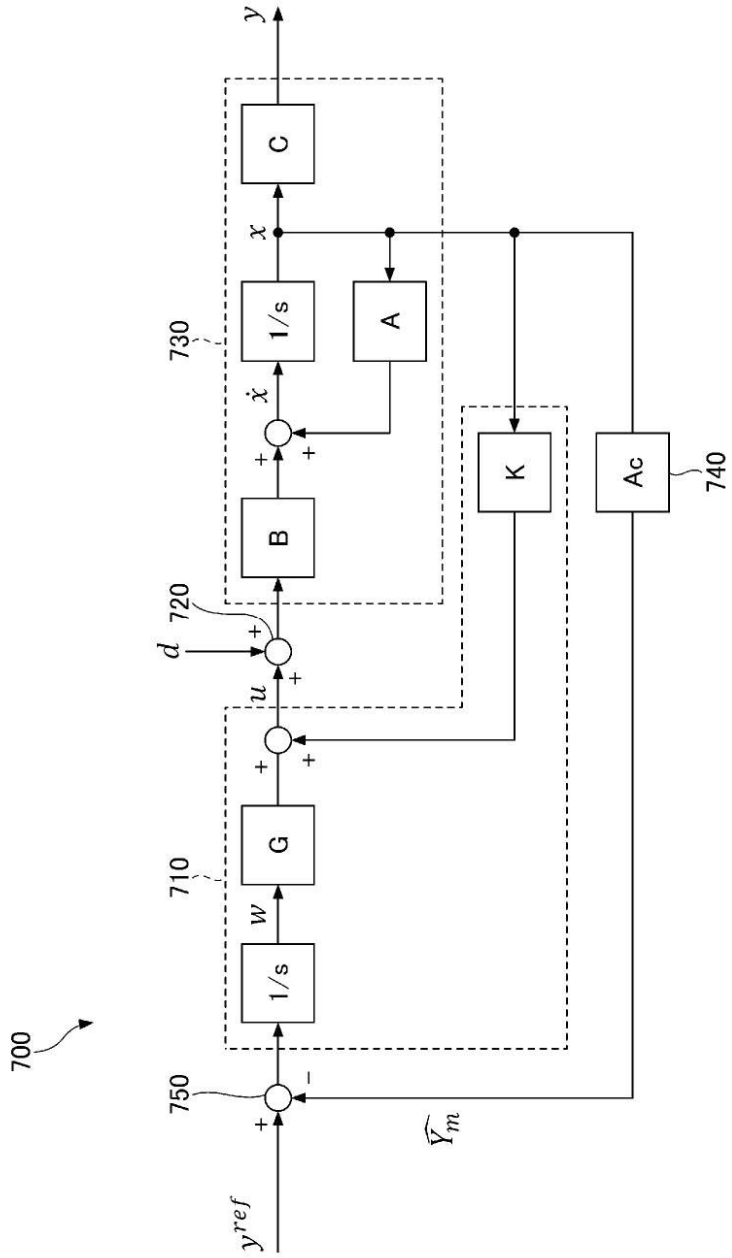


FIG. 8

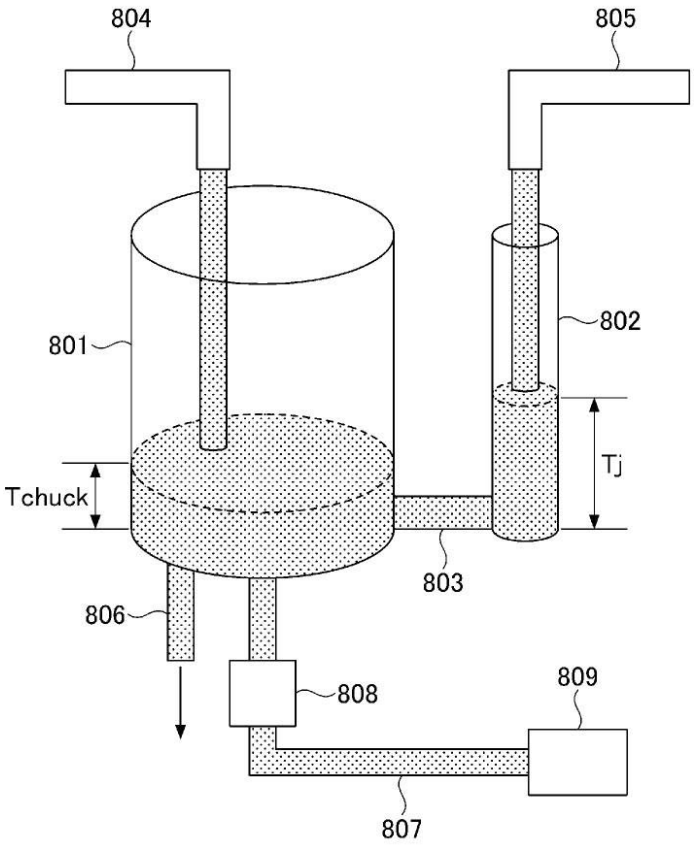


FIG. 9

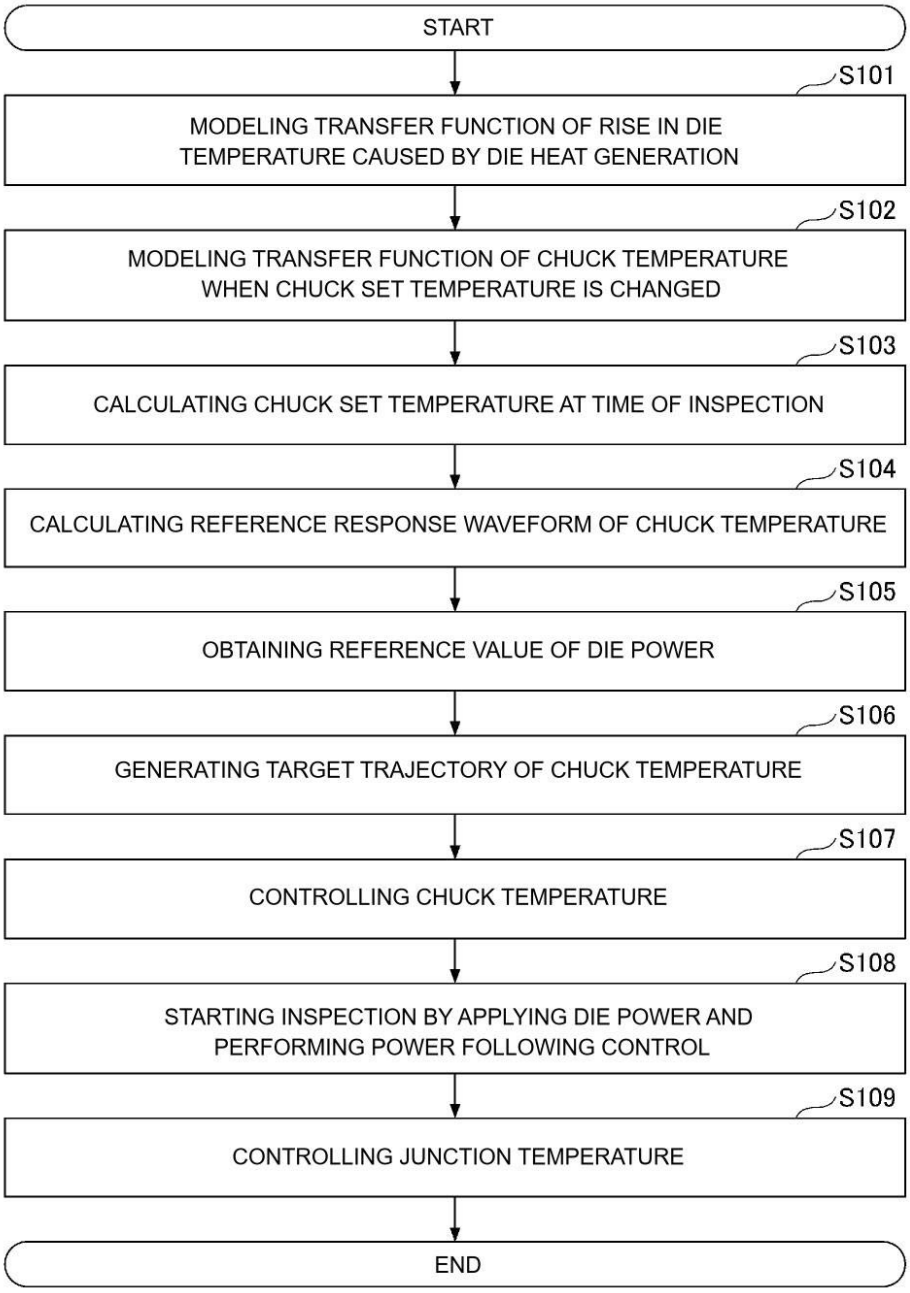
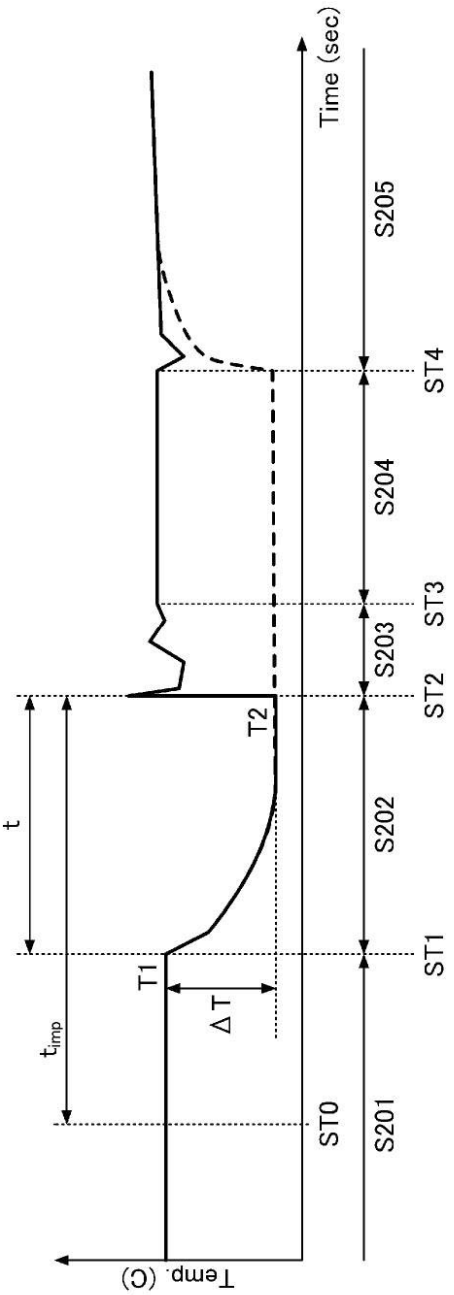

START
S101
MODELING TRANSFER FUNCTION OF RISE IN DIE TEMPERATURE CAUSED BY DIE HEAT GENERATION
S102
MODELING TRANSFER FUNCTION OF CHUCK TEMPERATURE WHEN CHUCK SET TEMPERATURE IS CHANGED
S103
CALCULATING CHUCK SET TEMPERATURE AT TIME OF INSPECTION
S104
CALCULATING REFERENCE RESPONSE WAVEFORM OF CHUCK TEMPERATURE
S105
OBTAINING REFERENCE VALUE OF DIE POWER
S106
GENERATING TARGET TRAJECTORY OF CHUCK TEMPERATURE
S107
CONTROLLING CHUCK TEMPERATURE
S108
STARTING INSPECTION BY APPLYING DIE POWER AND PERFORMING POWER FOLLOWING CONTROL
S109
CONTROLLING JUNCTION TEMPERATURE
END

FIG. 10


Temp. (C)
Time (sec)
ST0
ST1
ST2
ST3
ST4
S201
S202
S203
S204
S205
T1
T2
ΔT
t
t_{imp}