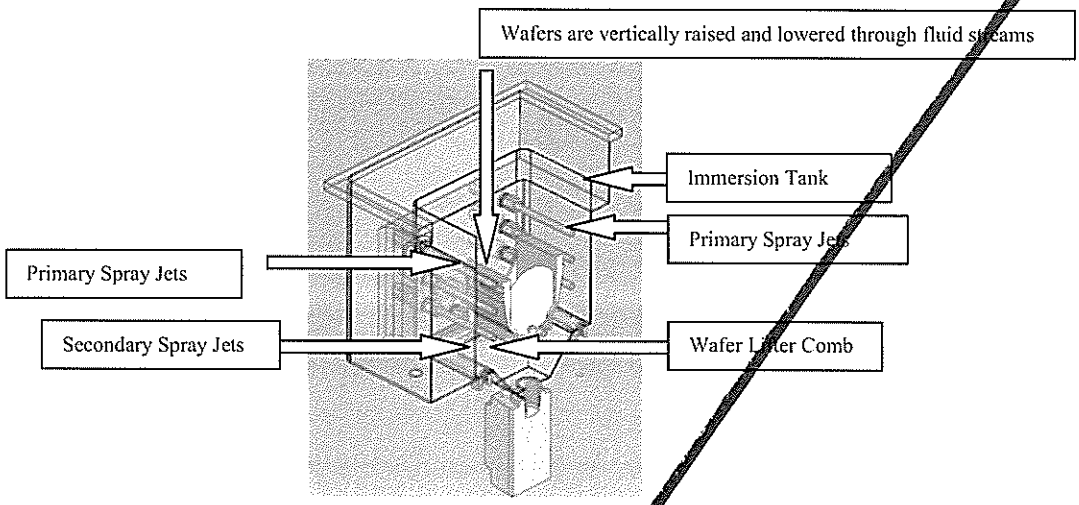

Wafers are vertically raised and lowered through fluid streams
Immersion Tank
Primary Spray Jets
Primary Spray Jets
Secondary Spray Jets
Wafer Lifter Comb

Fig. 1A

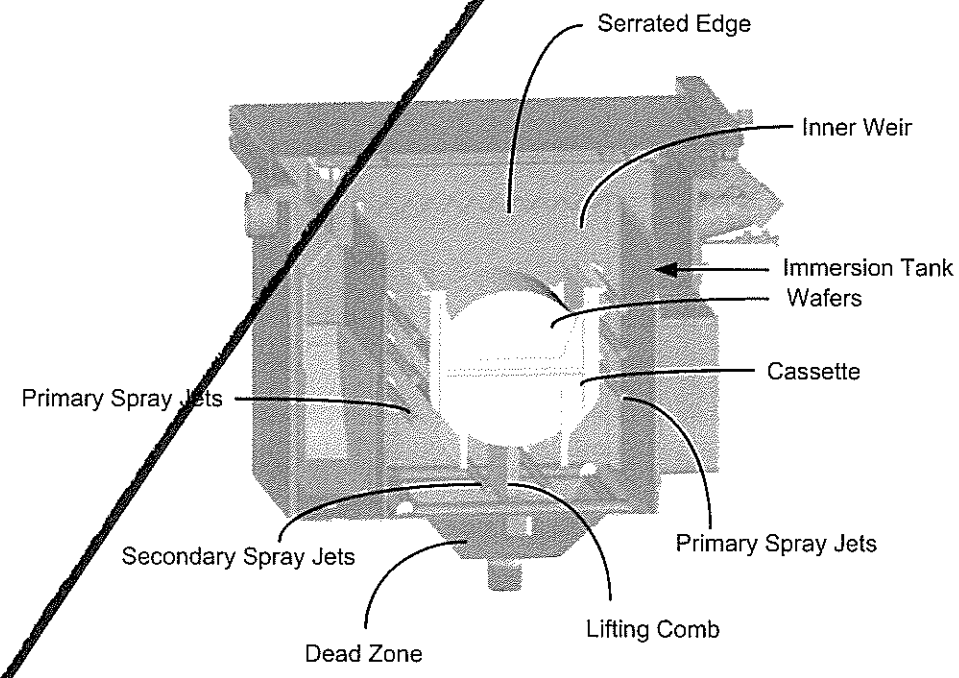

Serrated Edge
Inner Weir
Immersion Tank
Wafers
Cassette
Primary Spray Jets
Secondary Spray Jets
Primary Spray Jets
Dead Zone
Lifting Comb

Fig. 1B


Primary Spray Jets
Primary Spray Jets
Wafer Lifting Comb
Secondary Spray Jets
Dead Zone

Fig. 1C

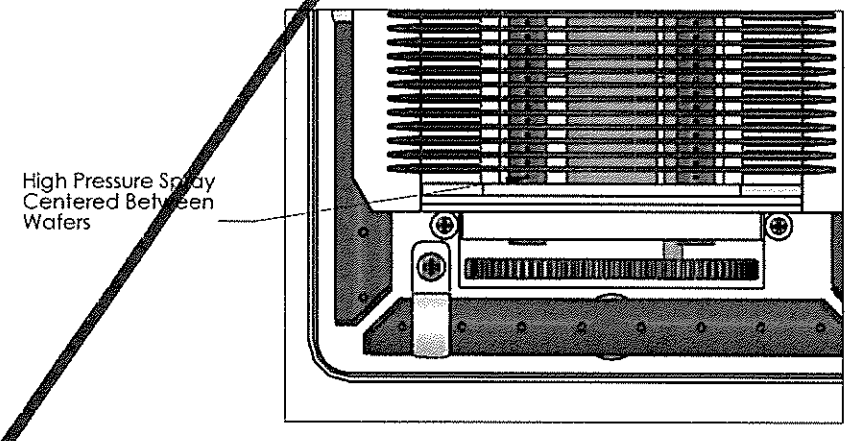

High Pressure Spray Centered Between Wafers

Fig. 1D

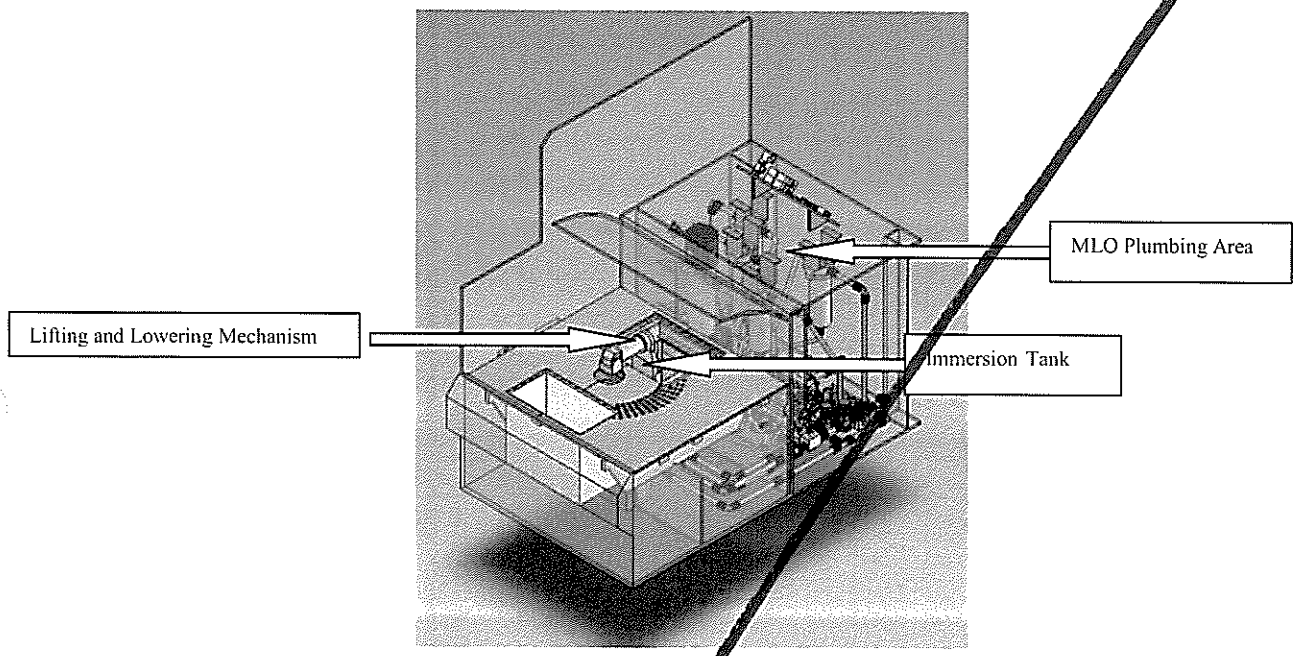

MLO Plumbing Area
Lifting and Lowering Mechanism
Immersion Tank

Fig. 2A

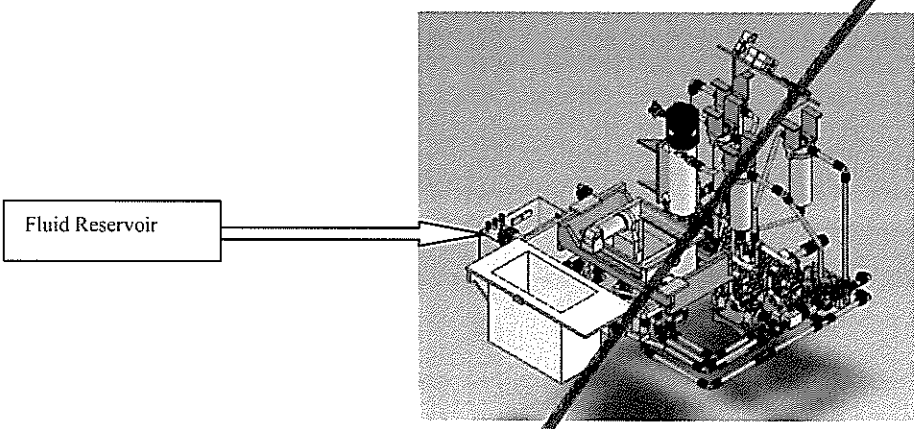


Fig. 2B

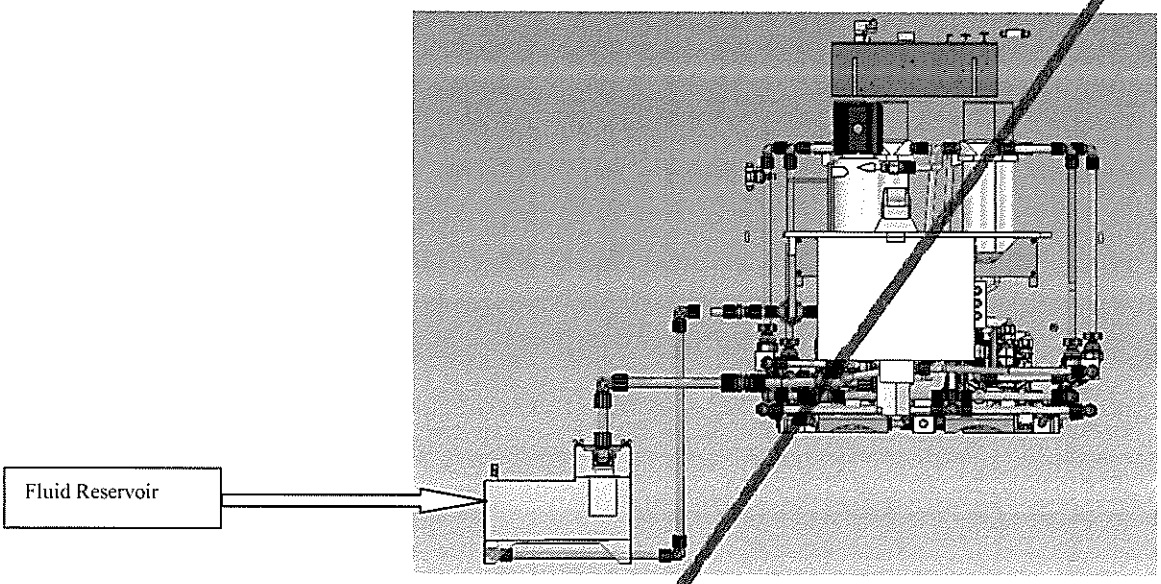


Fig. 3

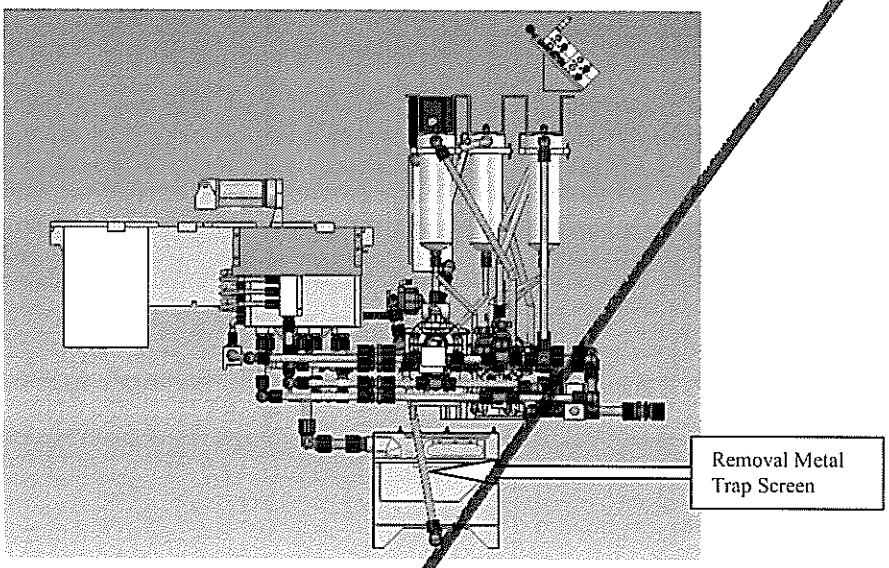


Fig. 4

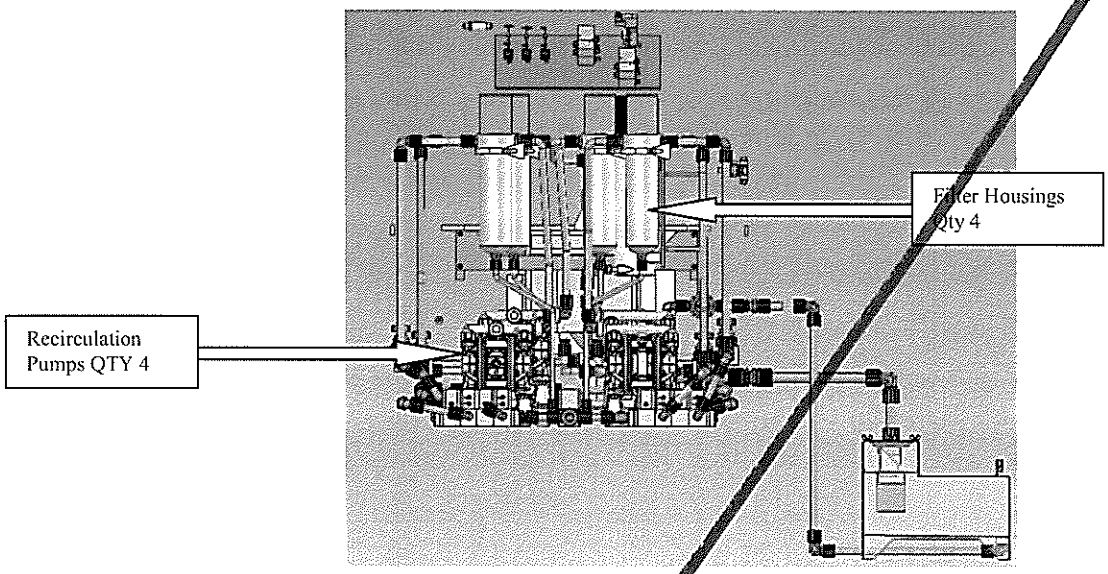


Fig. 5

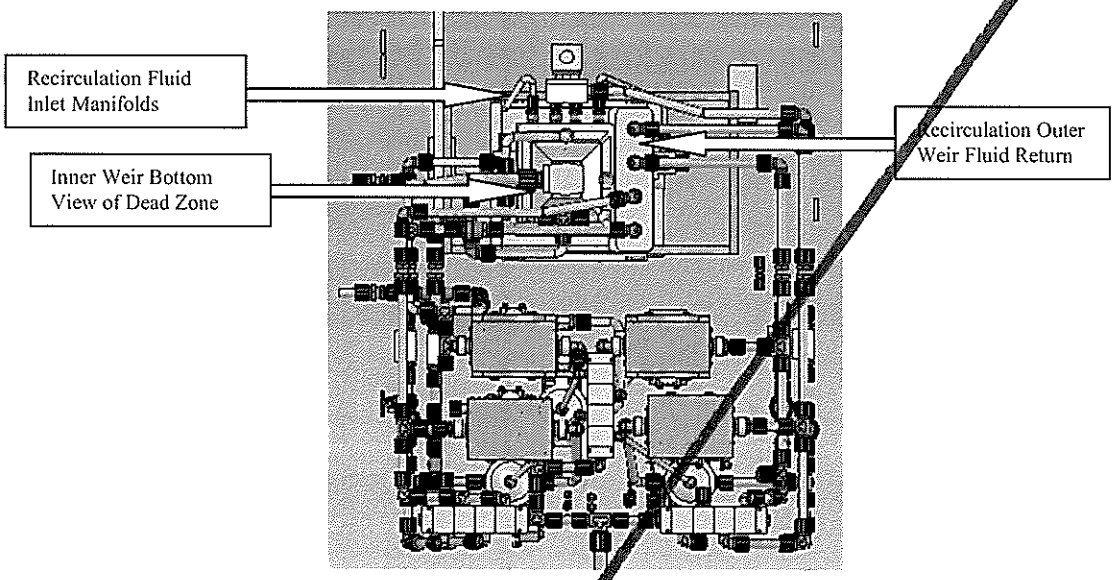

Recirculation Fluid
Inlet Manifolds
Inner Weir Bottom
View of Dead Zone
Recirculation Outer
Weir Fluid Return

Fig. 6

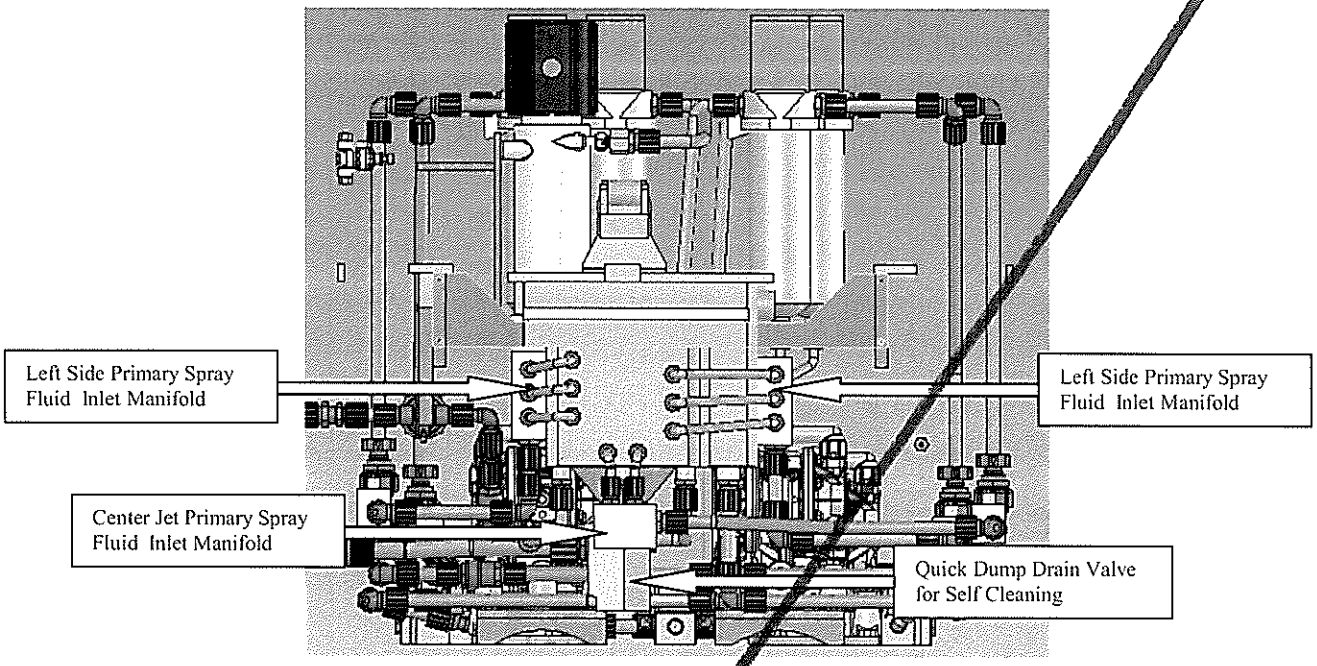

Left Side Primary Spray Fluid Inlet Manifold
Left Side Primary Spray Fluid Inlet Manifold
Center Jet Primary Spray Fluid Inlet Manifold
Quick Dump Drain Valve for Self Cleaning

Fig. 7A

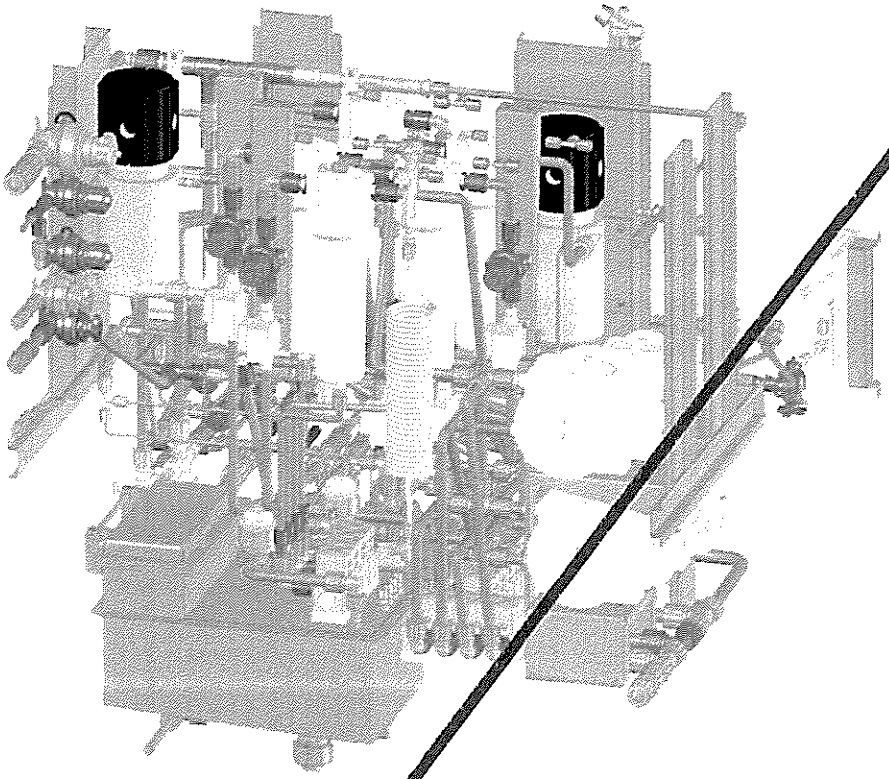


Fig. 7B

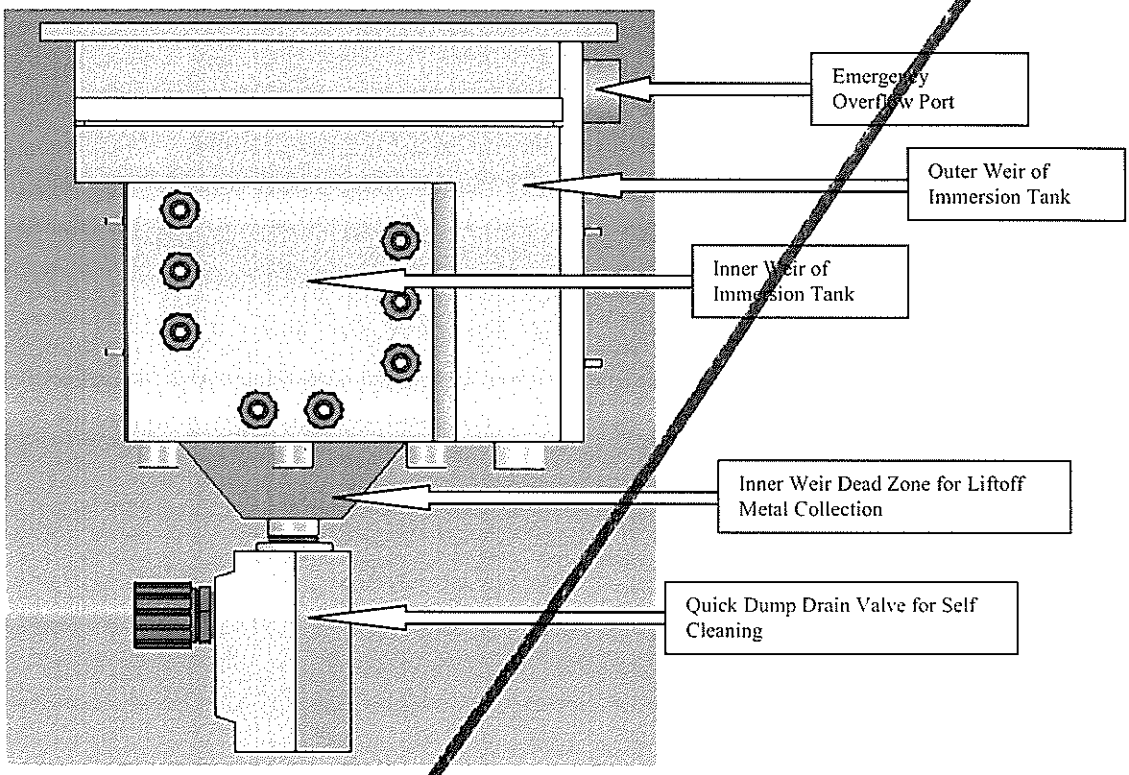

Emergency Overflow Port
Outer Weir of Immersion Tank
Inner Weir of Immersion Tank
Inner Weir Dead Zone for Liftoff Metal Collection
Quick Dump Drain Valve for Self Cleaning

Fig. 8

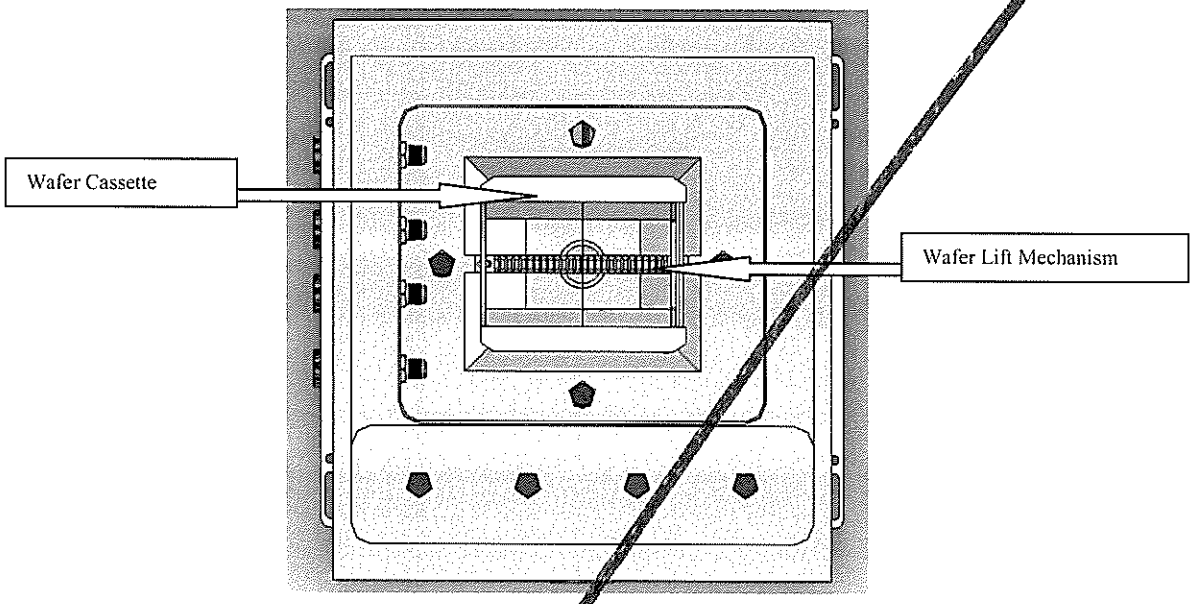


Fig. 9

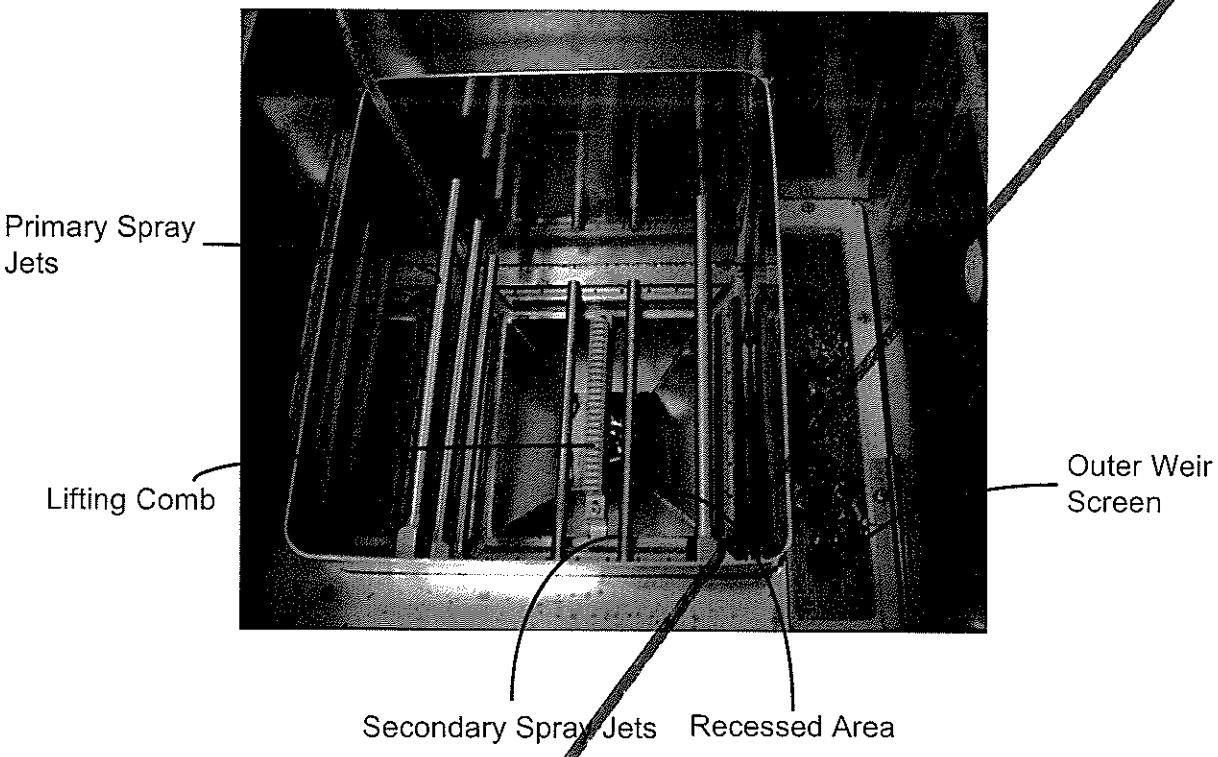

Primary Spray Jets
Lifting Comb
Outer Weir Screen
Secondary Spray Jets
Recessed Area

Fig. 10A

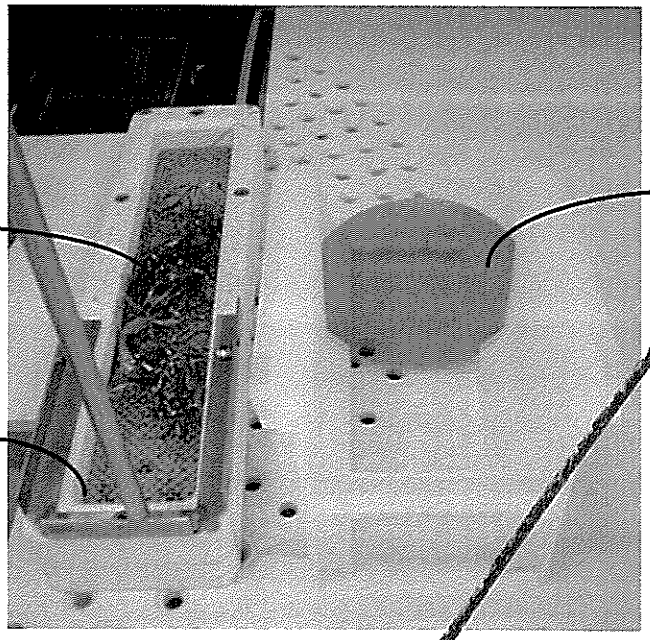


Fig. 10B

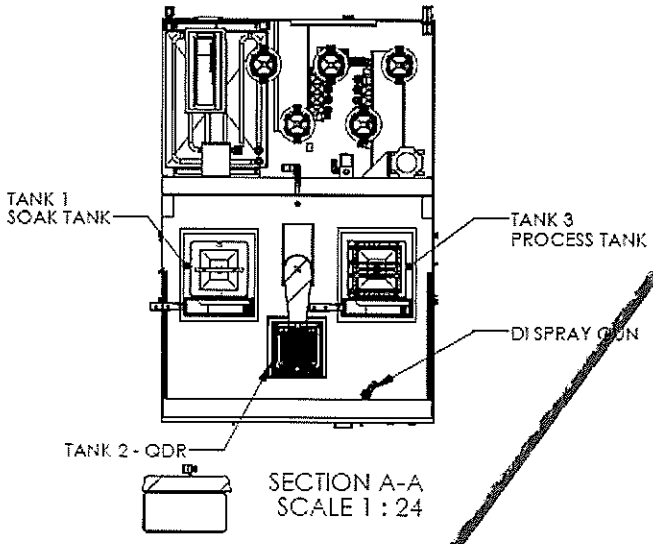

TANK 1
SOAK TANK
TANK 3
PROCESS TANK
DI SPRAY GUN
TANK 2 - QDR
SECTION A-A
SCALE 1 : 24

Fig. 11

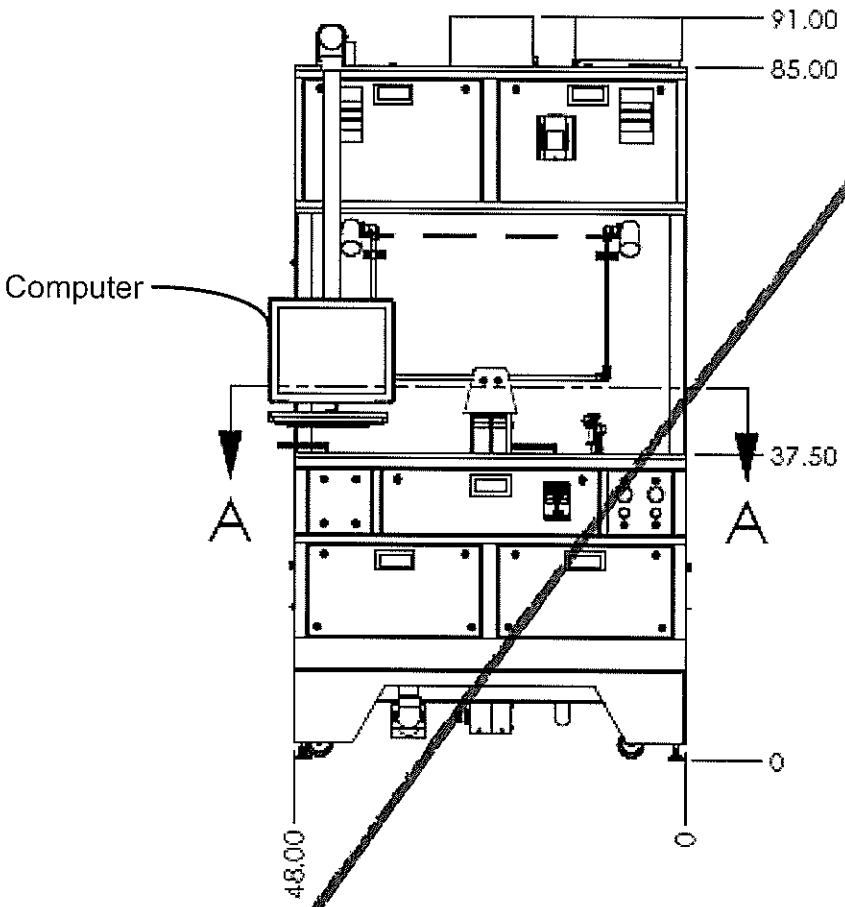


Fig. 12

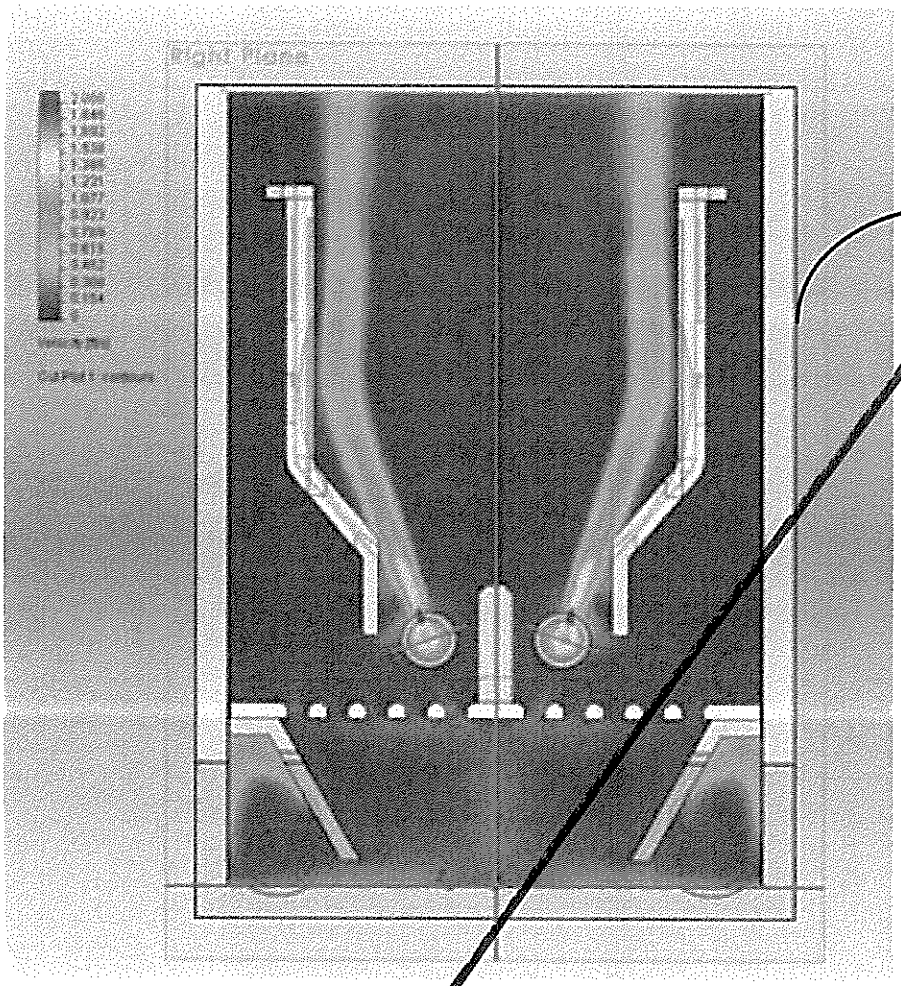


Fig. 13

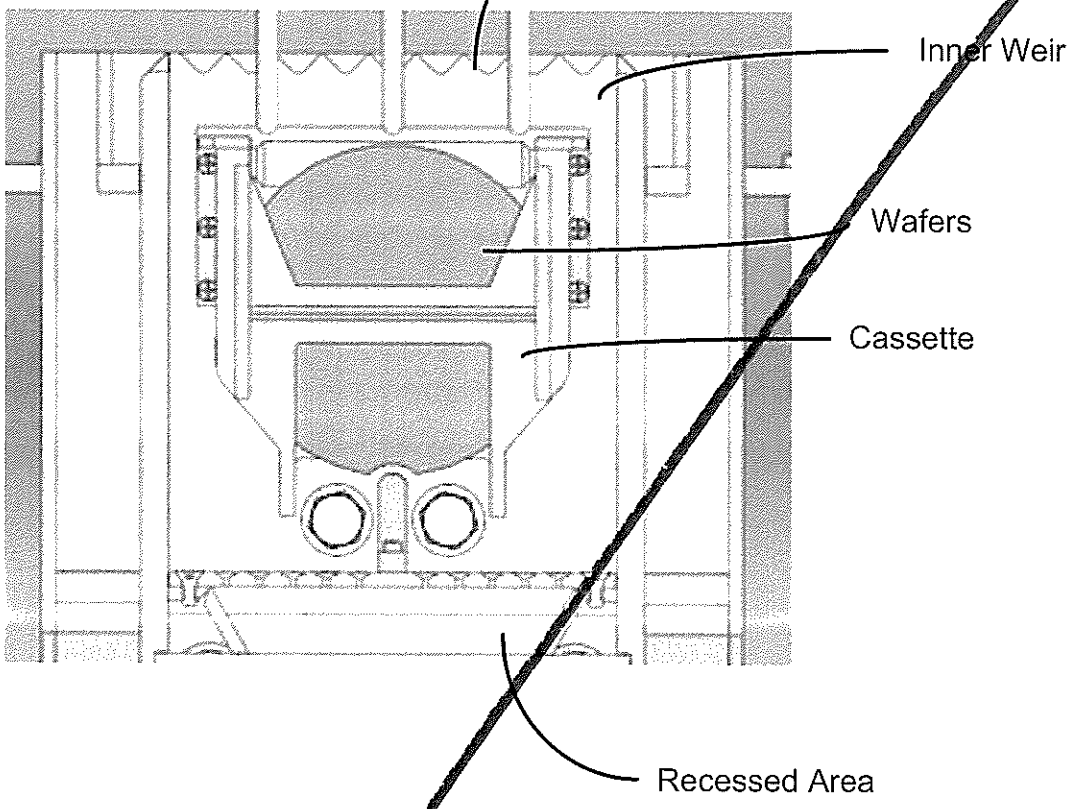


Fig. 14

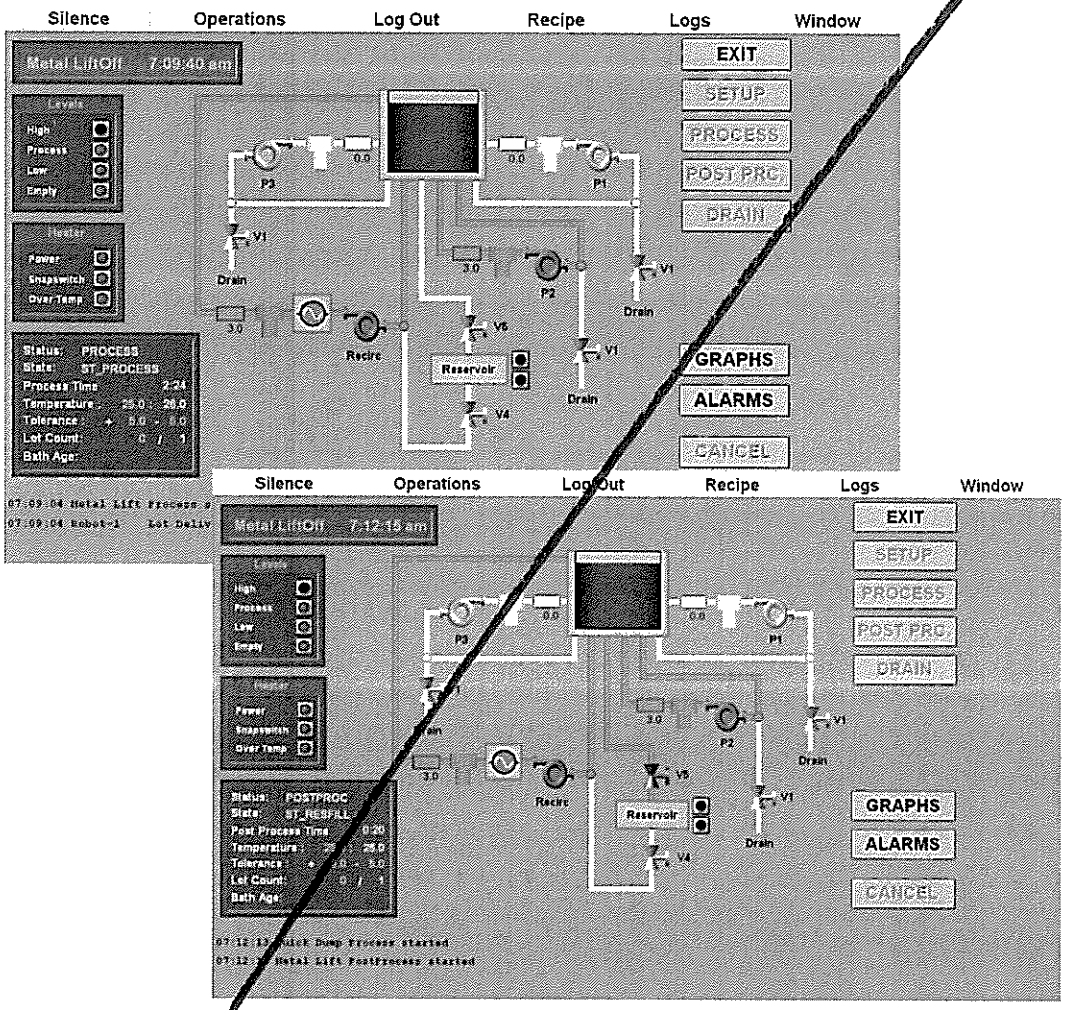

Silence
Operations
Log Out
Recipe
Logs
Window
EXIT
SETUP
PROCESS
POST PRC
DRAIN
GRAPHS
ALARMS
CANCEL
Metal LiftOff
Reservoir
Recirc
Drain
P1
P2
P3
V1
V4
V5
Silence
Operations
Log Out
Recipe
Logs
Window
EXIT
SETUP
PROCESS
POST PRC
DRAIN
GRAPHS
ALARMS
CANCEL
Reservoir
Recirc
Drain

Fig. 15

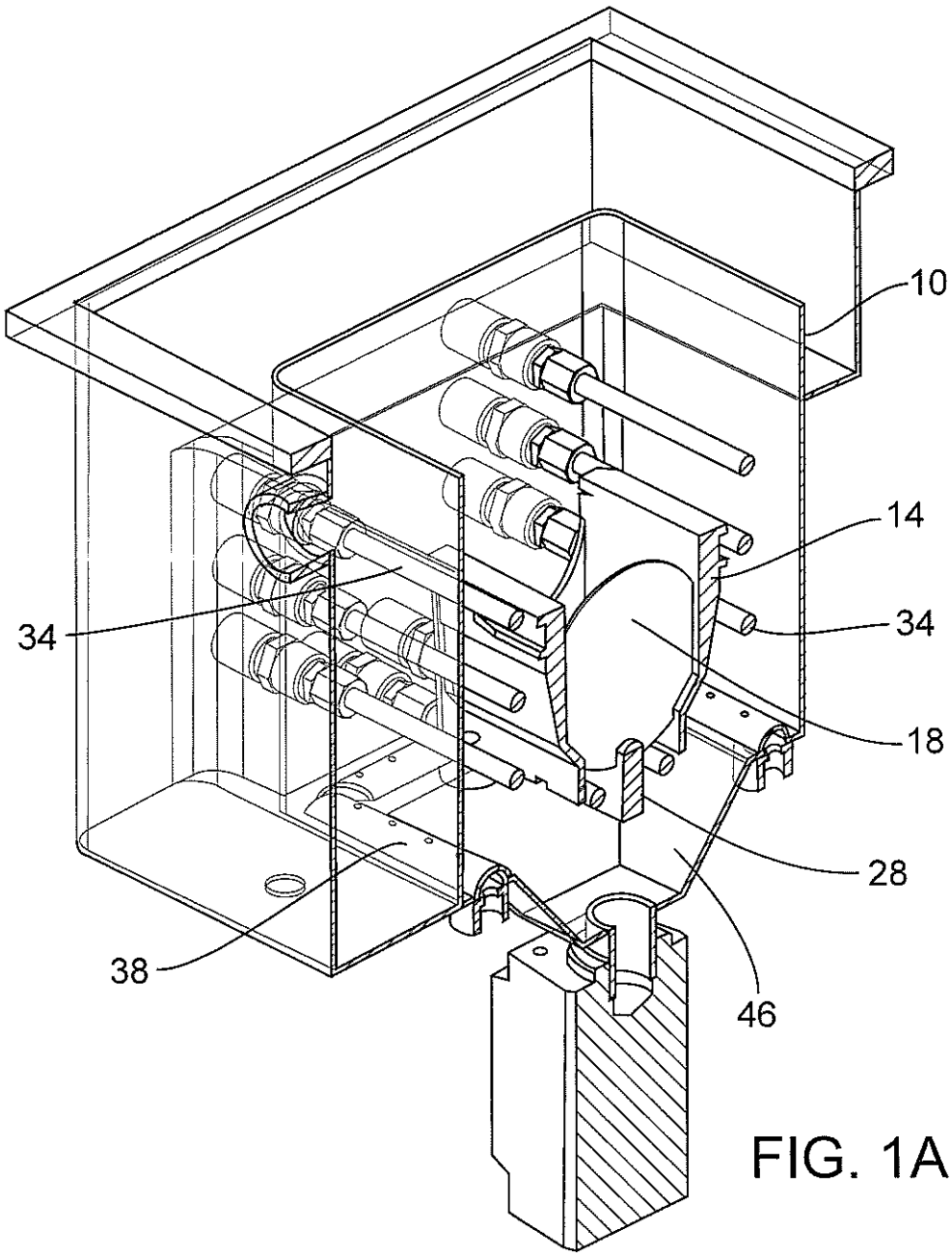


FIG. 1A

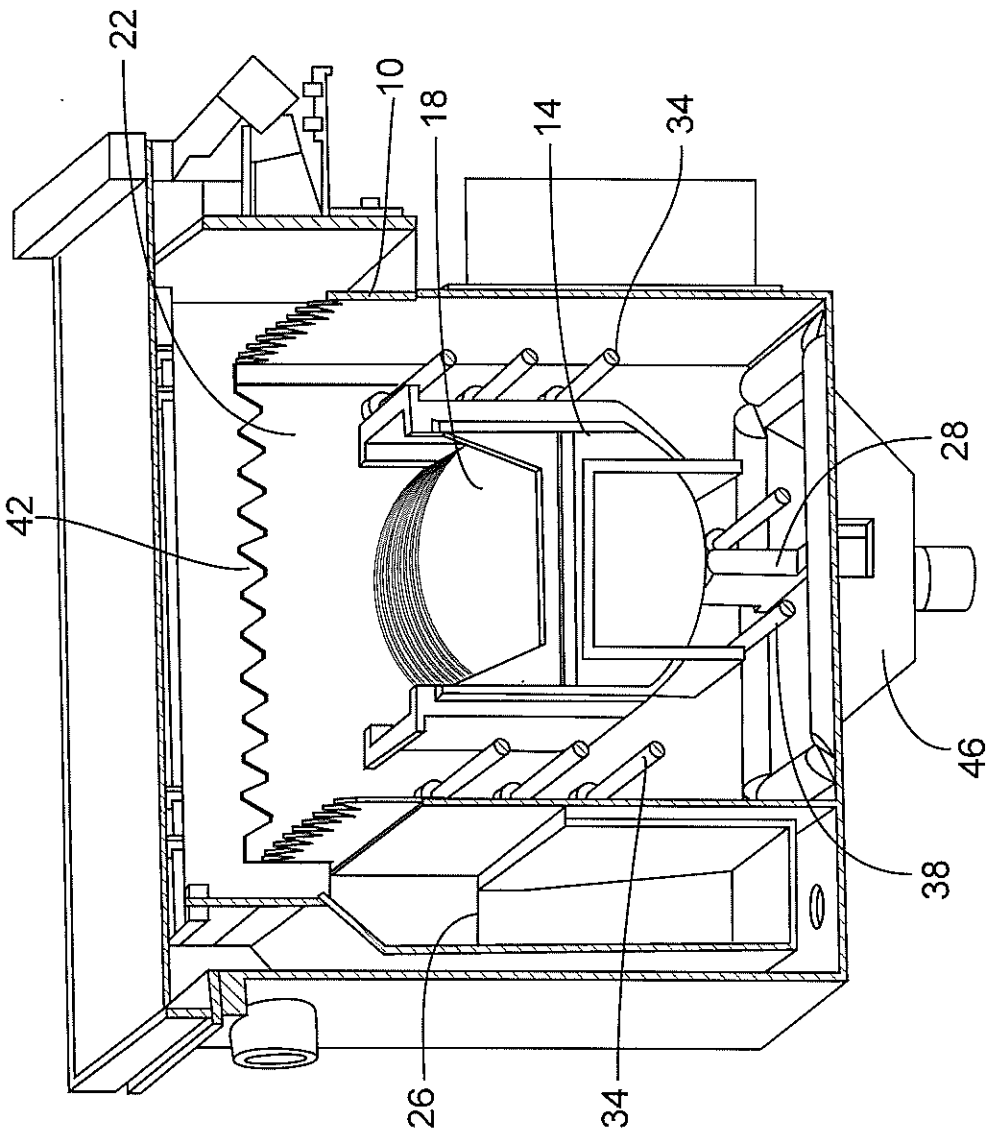


FIG. 1B

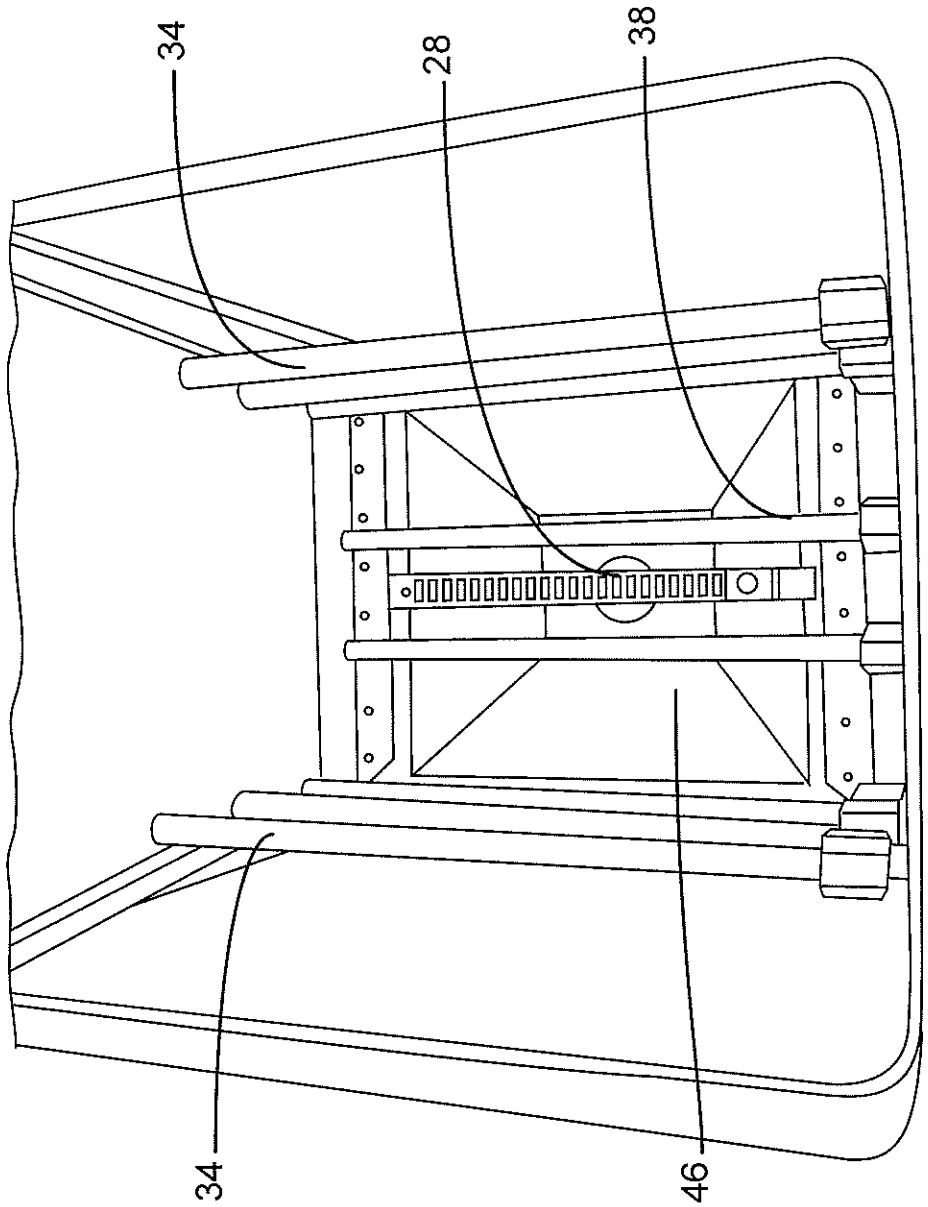


FIG. 1C

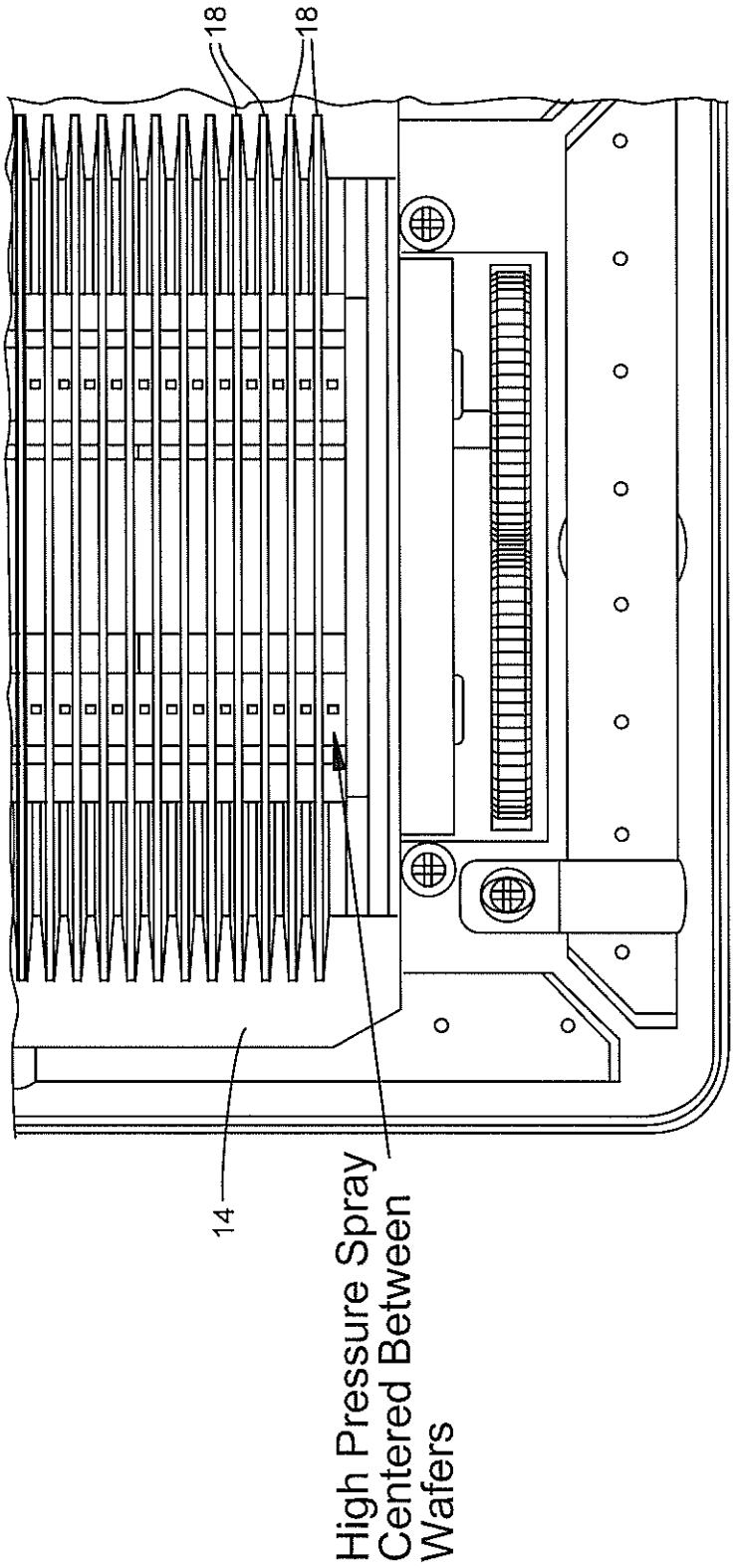


FIG. 1D

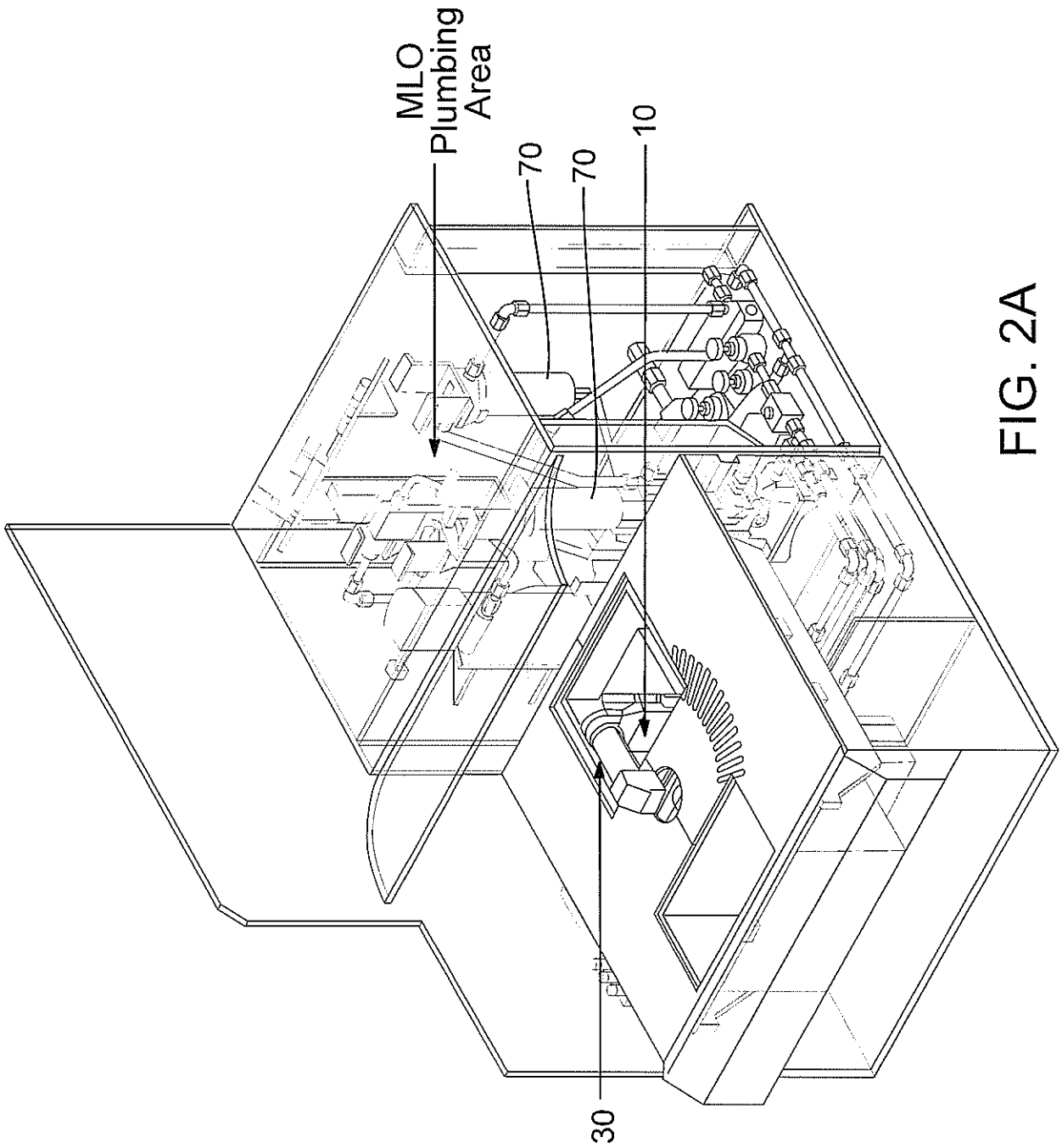


FIG. 2A

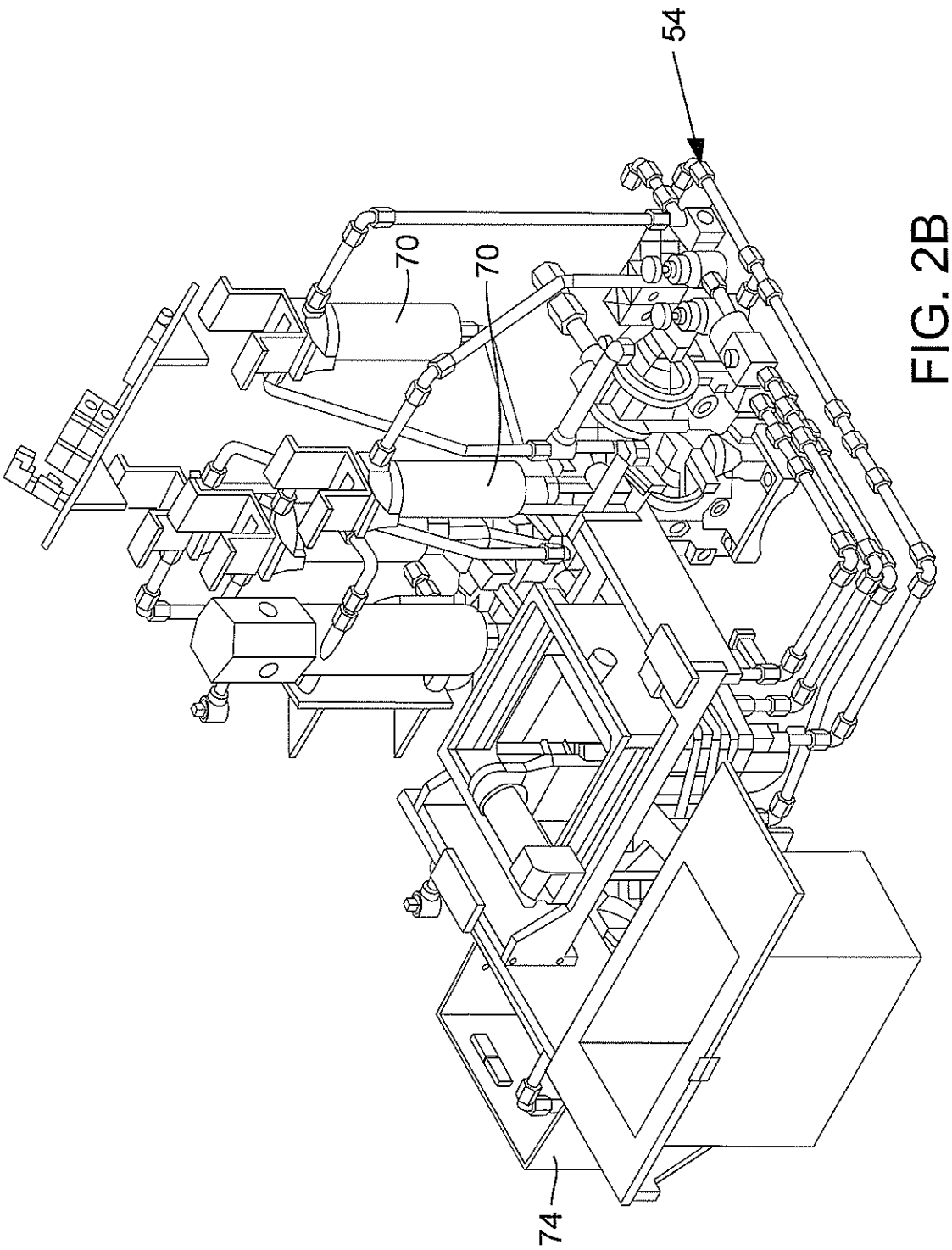


FIG. 2B

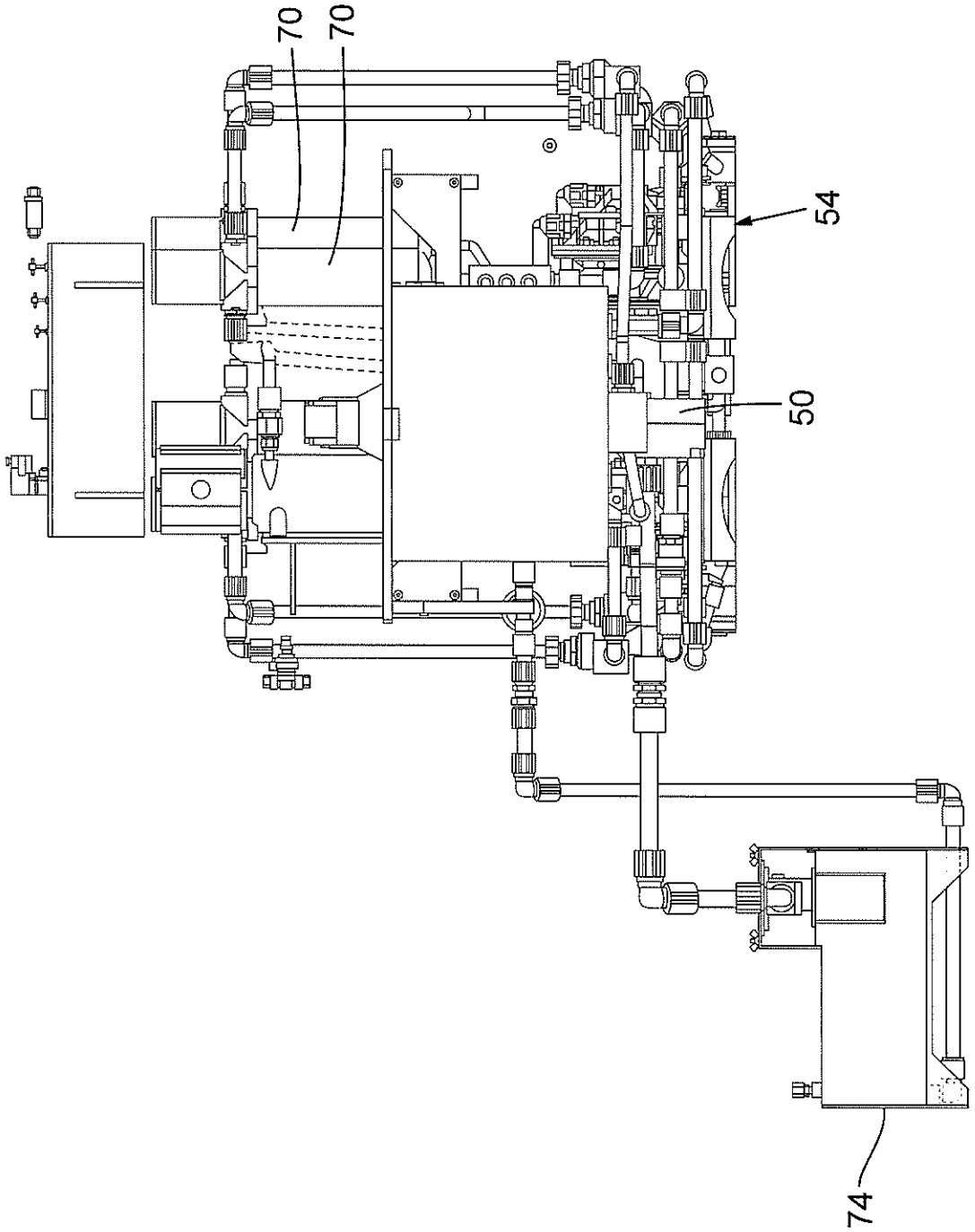


FIG. 3

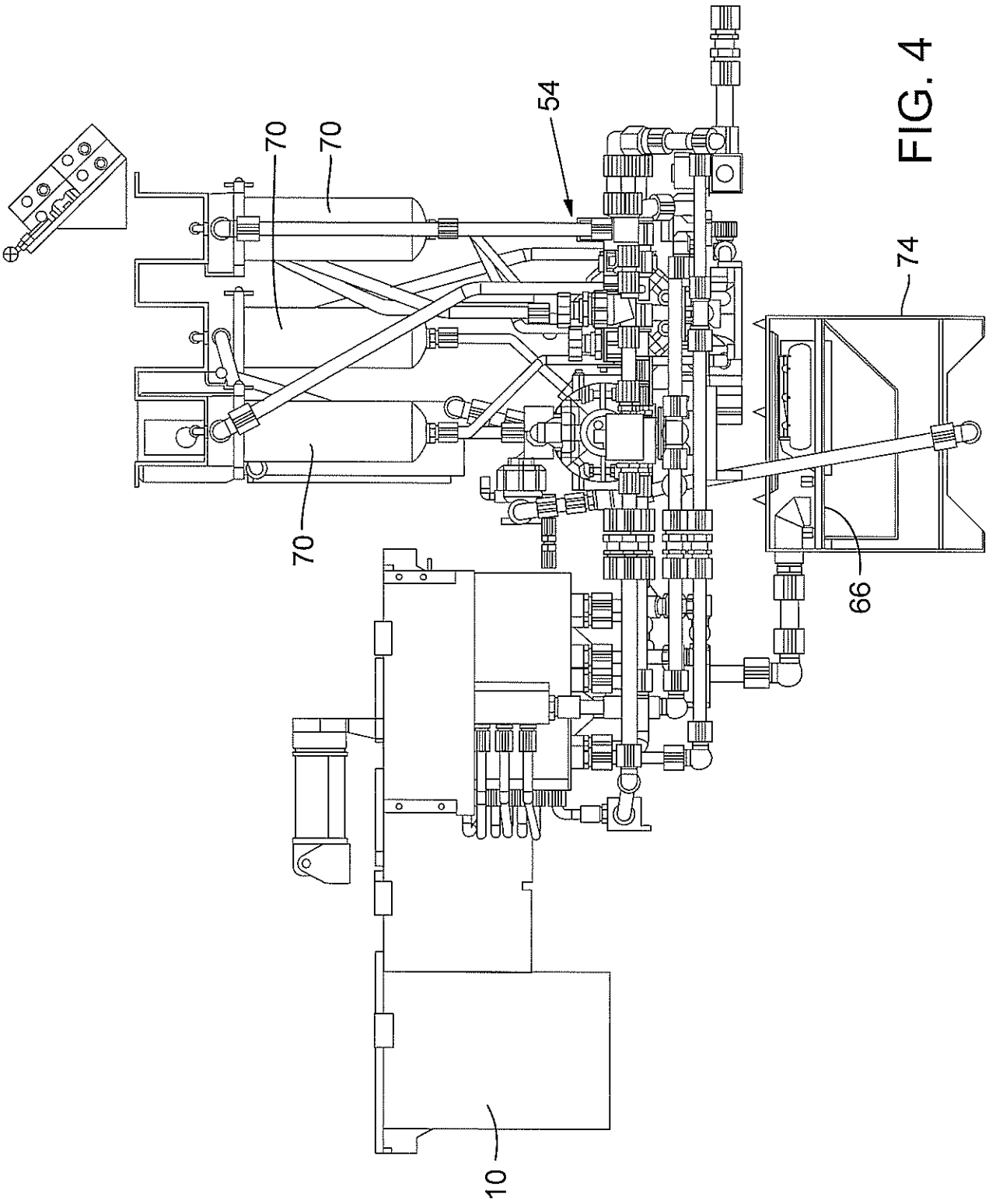


FIG. 4

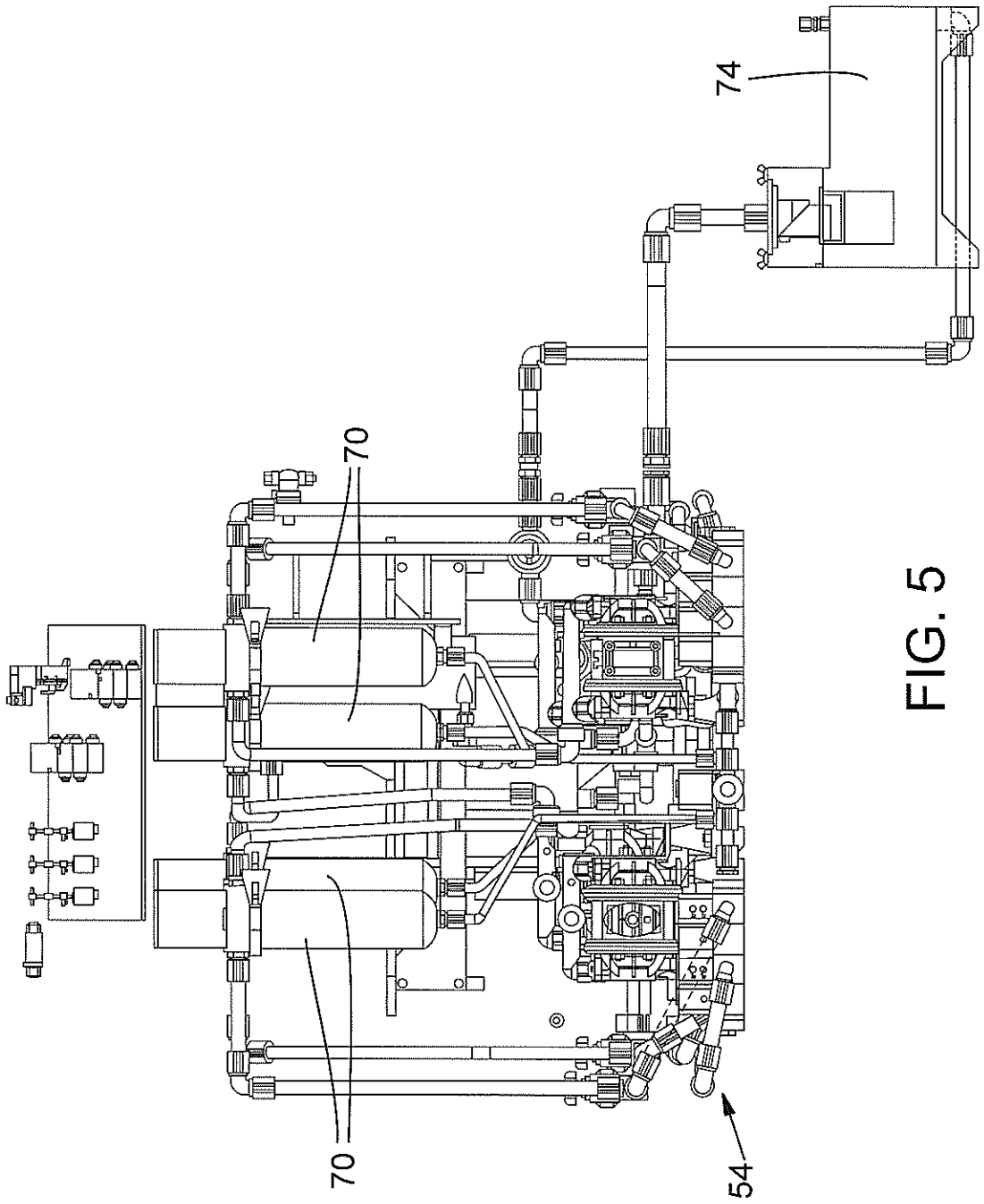


FIG. 5

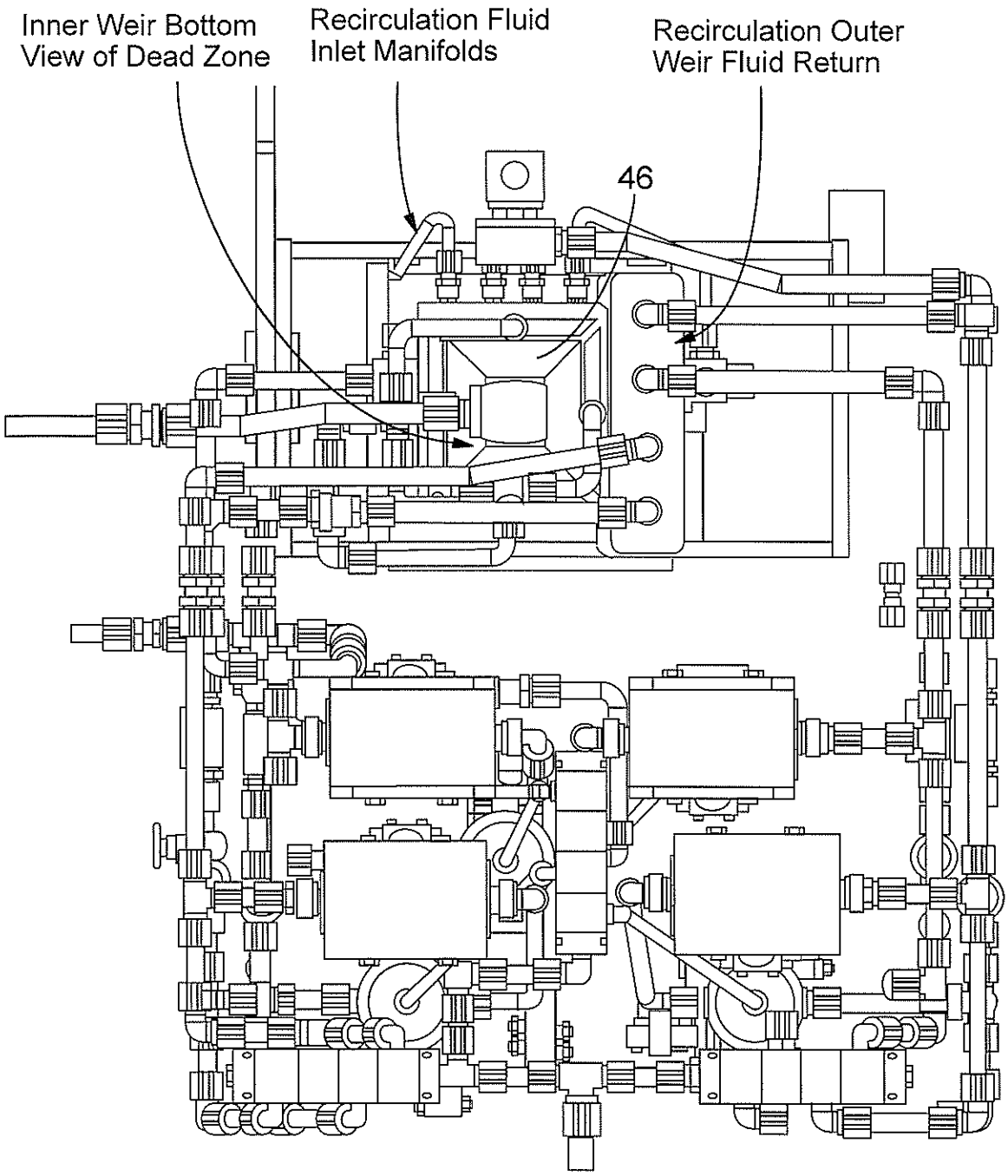

Inner Weir Bottom
View of Dead Zone
Recirculation Fluid
Inlet Manifolds
Recirculation Outer
Weir Fluid Return
46

Fig. 6

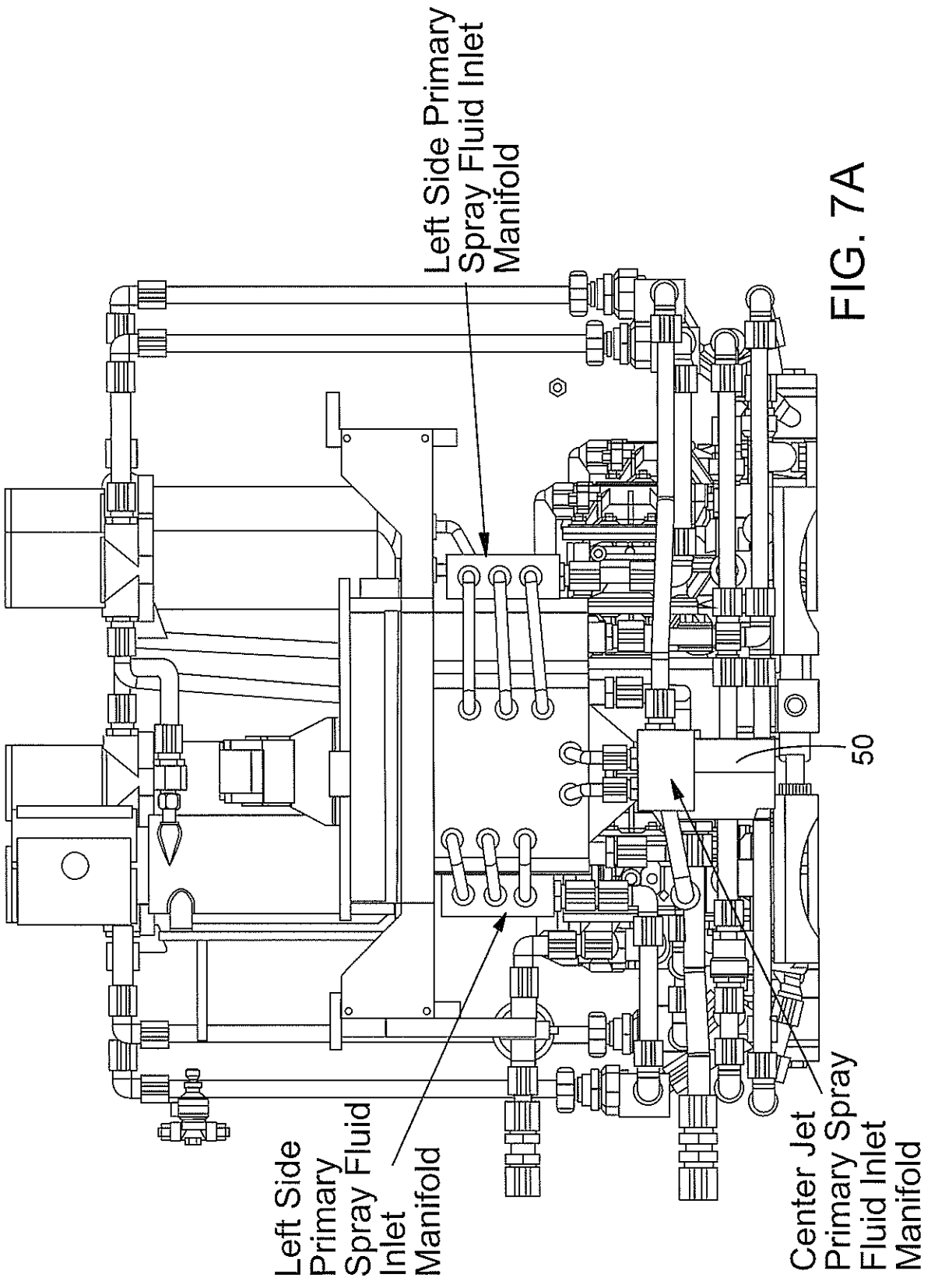

Left Side Primary Spray Fluid Inlet Manifold
Left Side Primary Spray Fluid Inlet Manifold
Center Jet Primary Spray Fluid Inlet Manifold
50

FIG. 7A

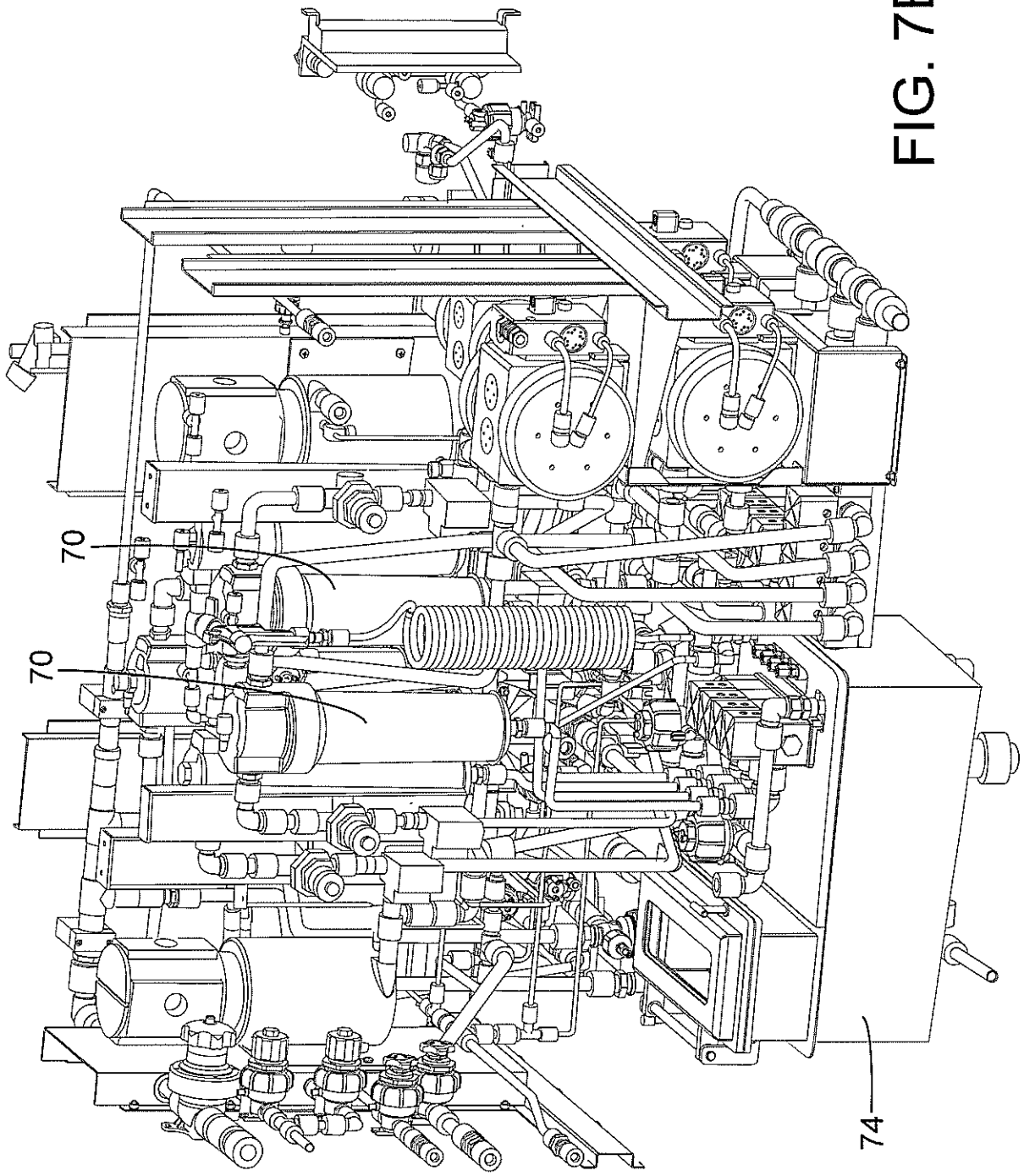


FIG. 7B

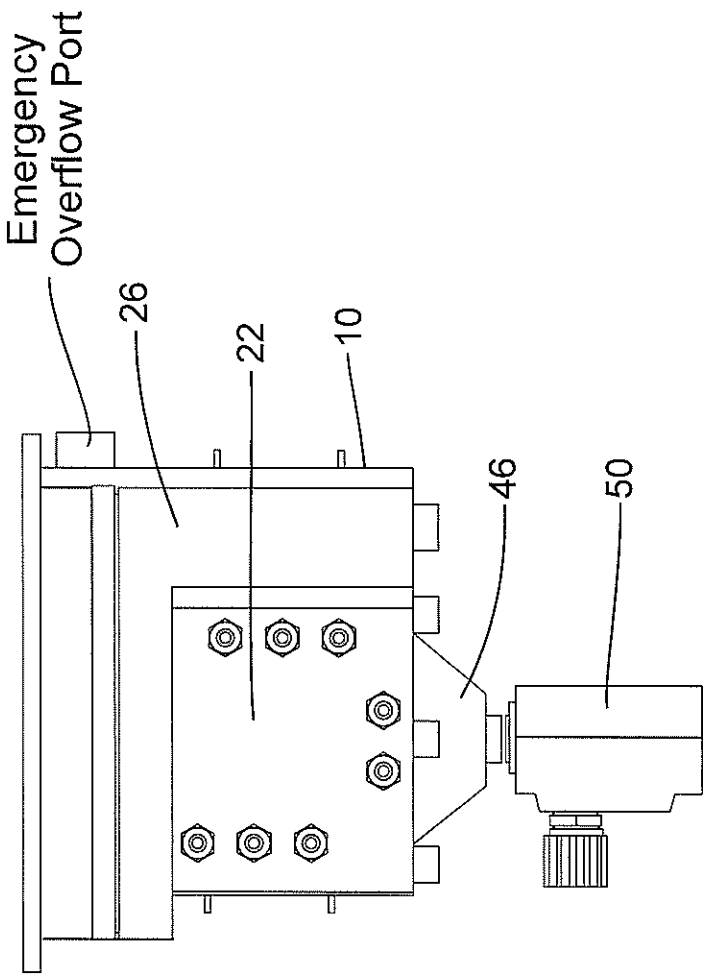


FIG. 8

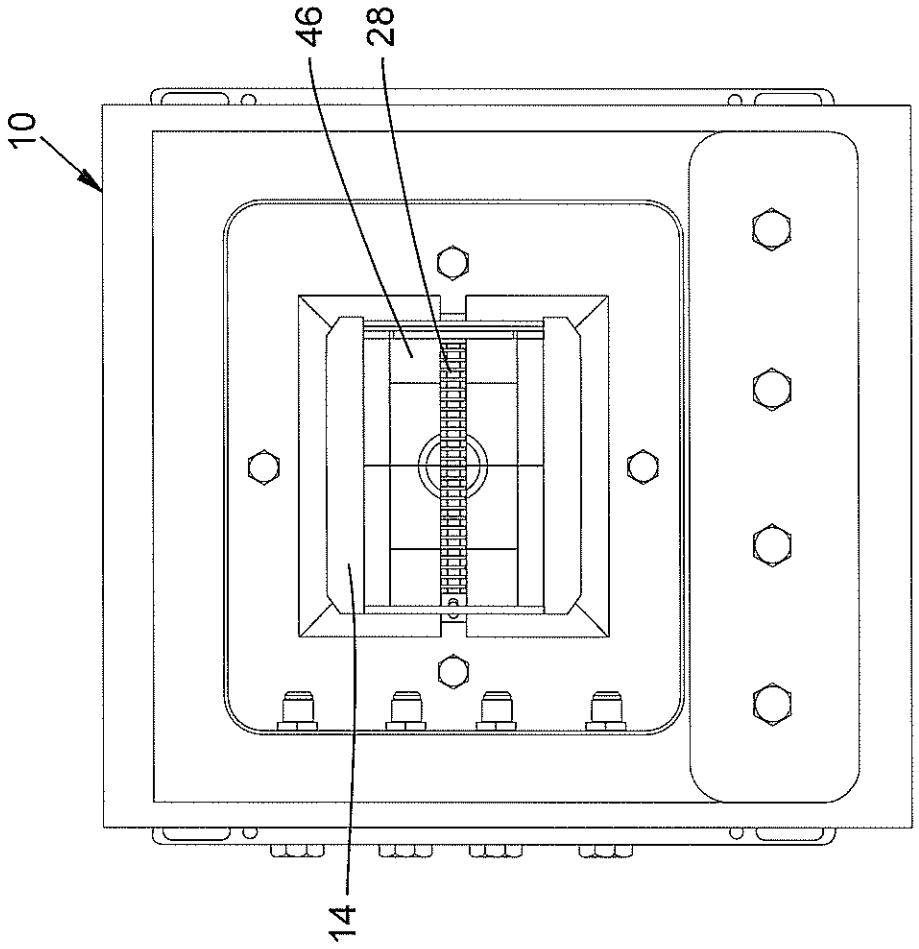


FIG. 9

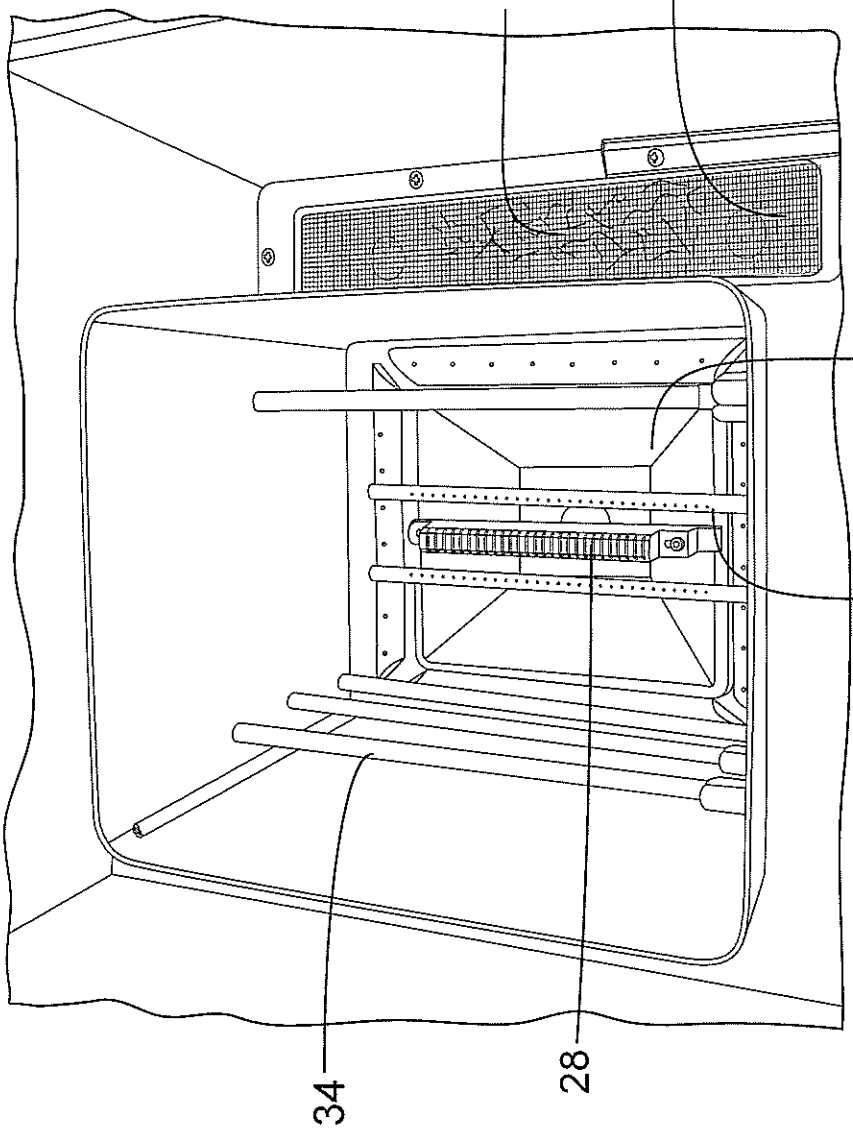


FIG. 10A

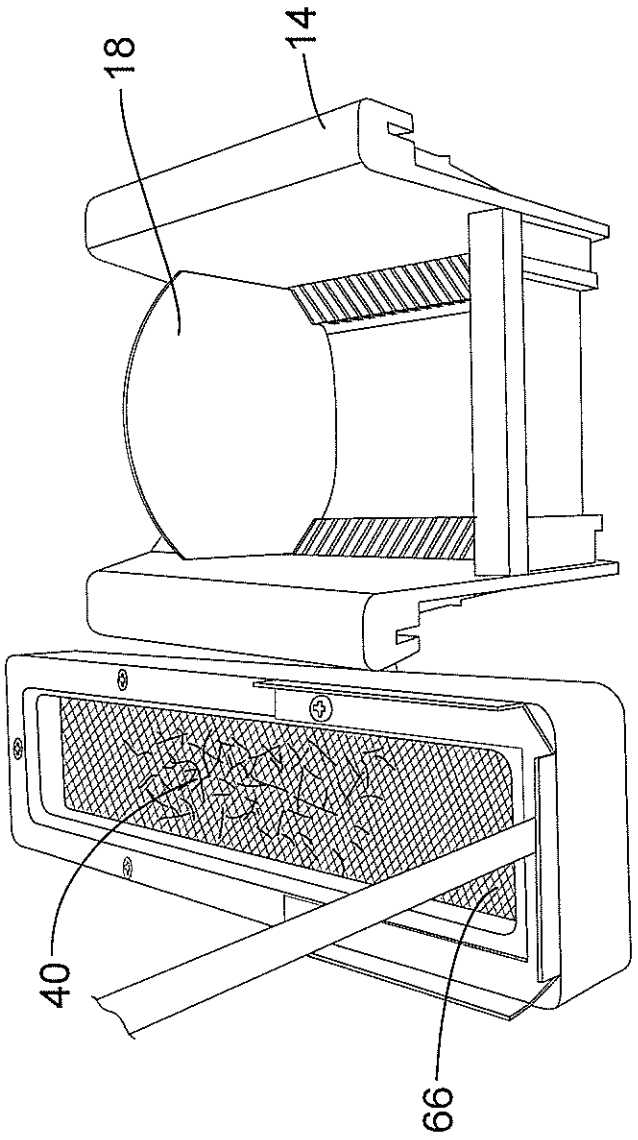


FIG. 10B

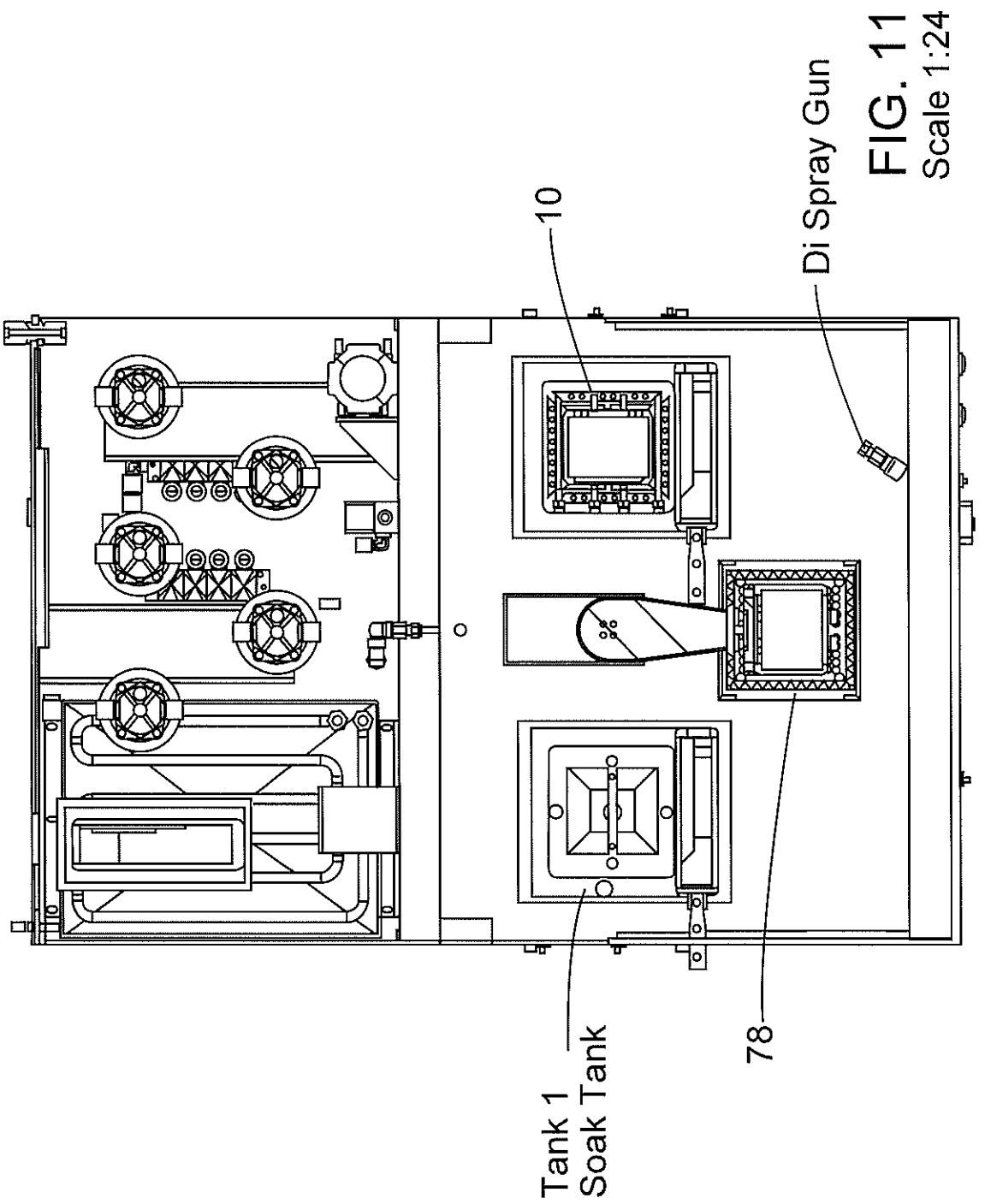


FIG. 11
Scale 1:24

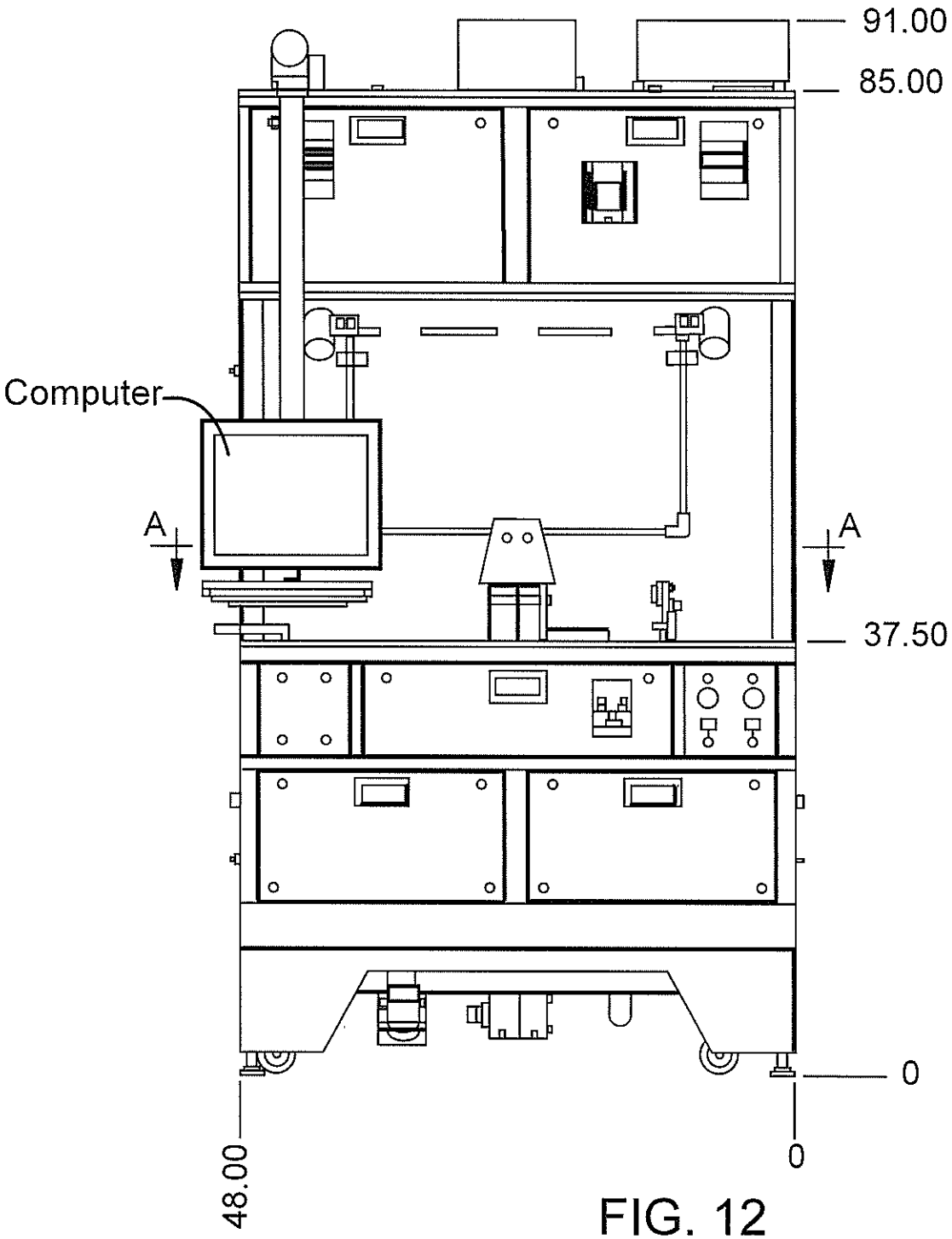


FIG. 12

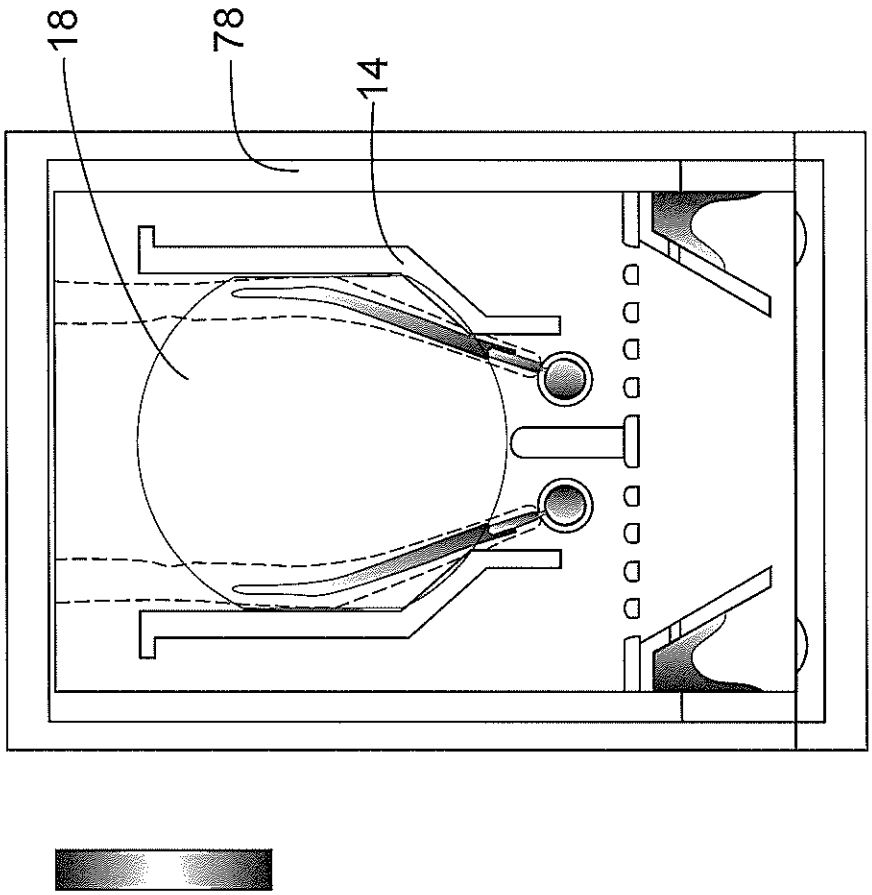


FIG. 13

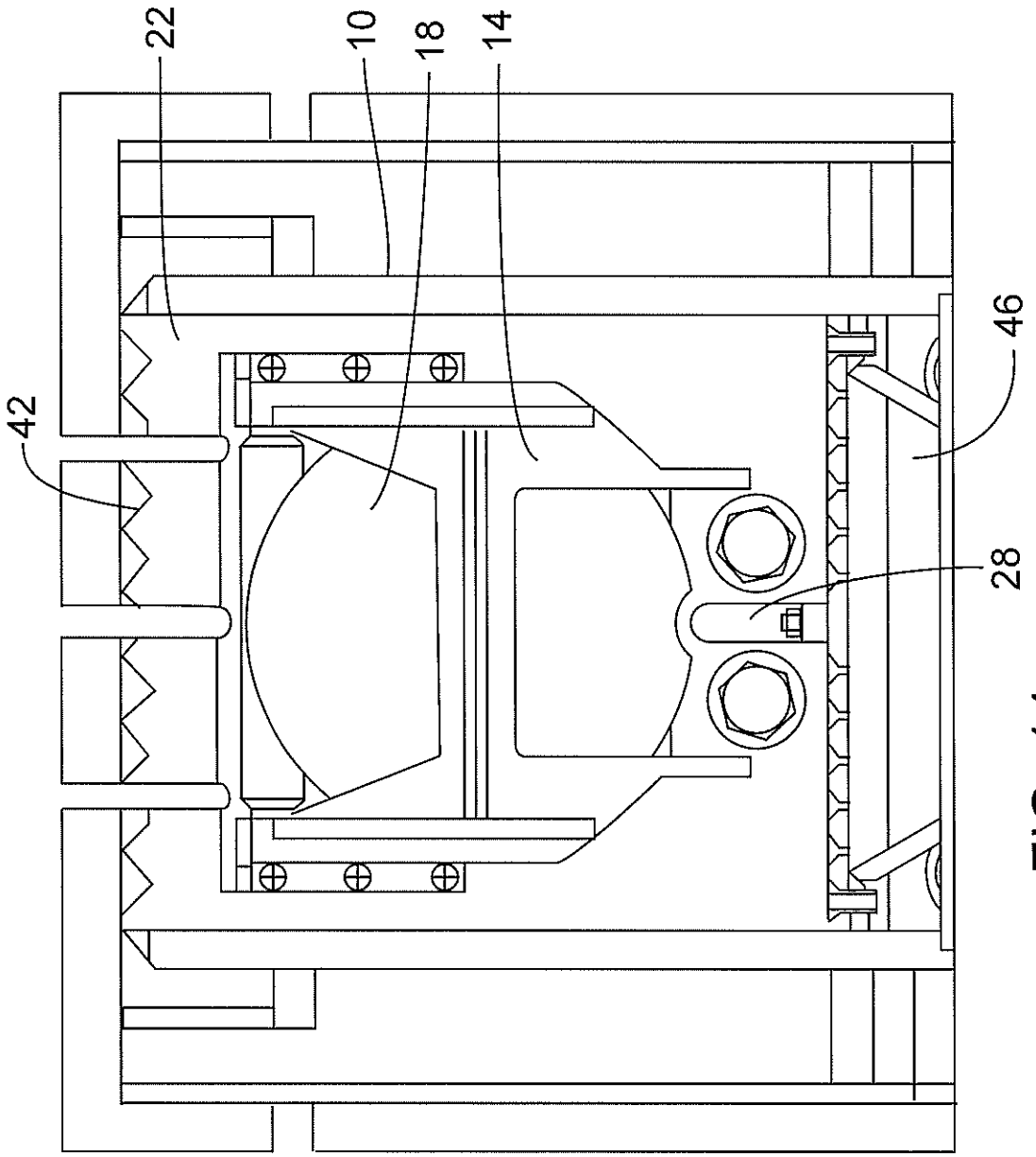


FIG. 14

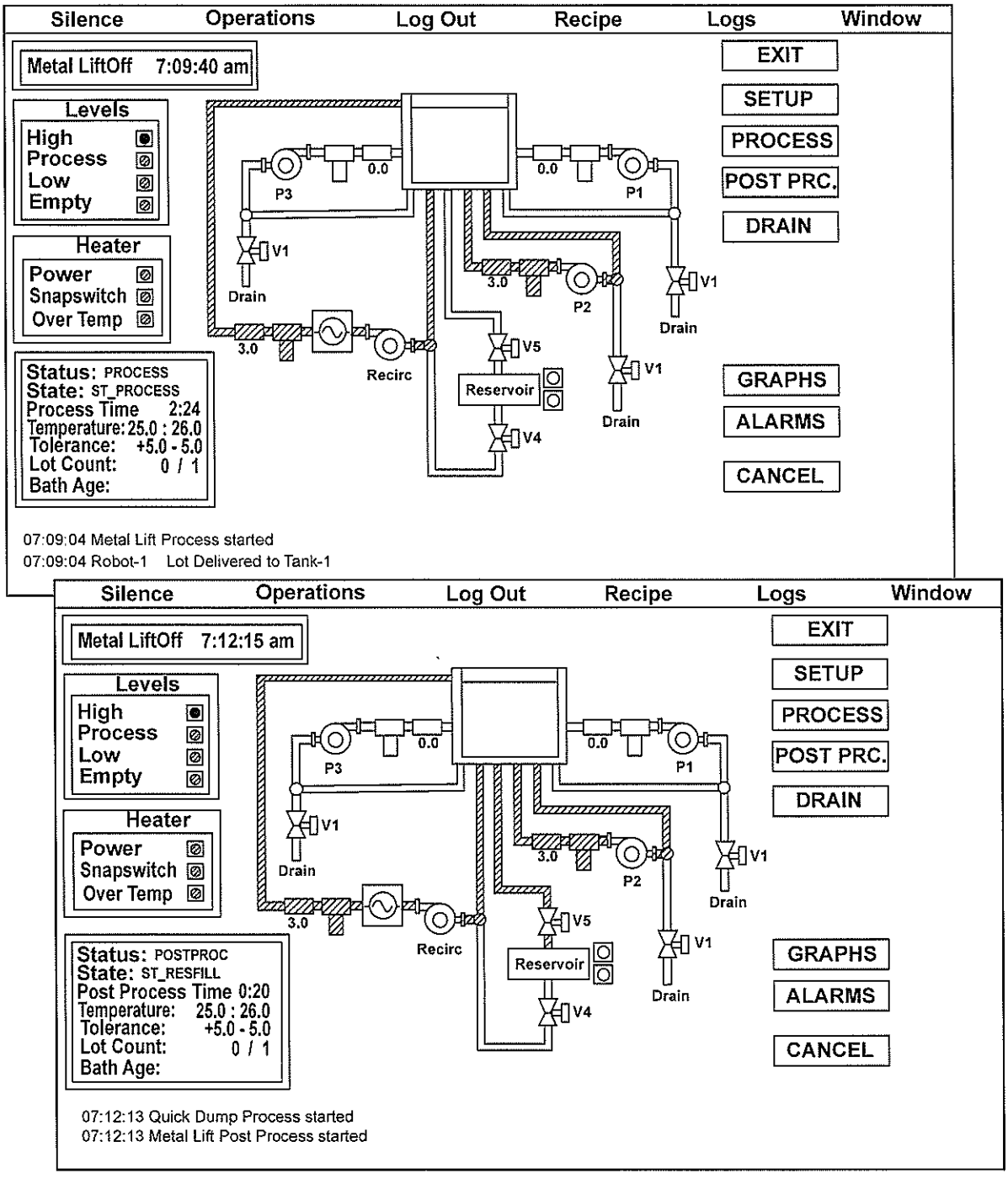

Silence
Operations
Log Out
Recipe
Logs
Window
Metal LiftOff 7:09:40 am
Levels
High
Process
Low
Empty
Heater
Power
Snapswitch
Over Temp
Status: PROCESS
State: ST_PROCESS
Process Time 2:24
Temperature: 25.0 : 26.0
Tolerance: +5.0 - 5.0
Lot Count: 0 / 1
Bath Age:
EXIT
SETUP
PROCESS
POST PRC.
DRAIN
GRAPHS
ALARMS
CANCEL
P3
P1
P2
V1
V4
V5
Drain
Recirc
Reservoir
3.0
0.0
07:09:04 Metal Lift Process started
07:09:04 Robot-1 Lot Delivered to Tank-1
Silence
Operations
Log Out
Recipe
Logs
Window
Metal LiftOff 7:12:15 am
Levels
High
Process
Low
Empty
Heater
Power
Snapswitch
Over Temp
Status: POSTPROC
State: ST_RESFILL
Post Process Time 0:20
Temperature: 25.0 : 26.0
Tolerance: +5.0 - 5.0
Lot Count: 0 / 1
Bath Age:
EXIT
SETUP
PROCESS
POST PRC.
DRAIN
GRAPHS
ALARMS
CANCEL
P3
P1
P2
V1
V4
V5
Drain
Recirc
Reservoir
3.0
0.0
07:12:13 Quick Dump Process started
07:12:13 Metal Lift Post Process started

FIG. 15