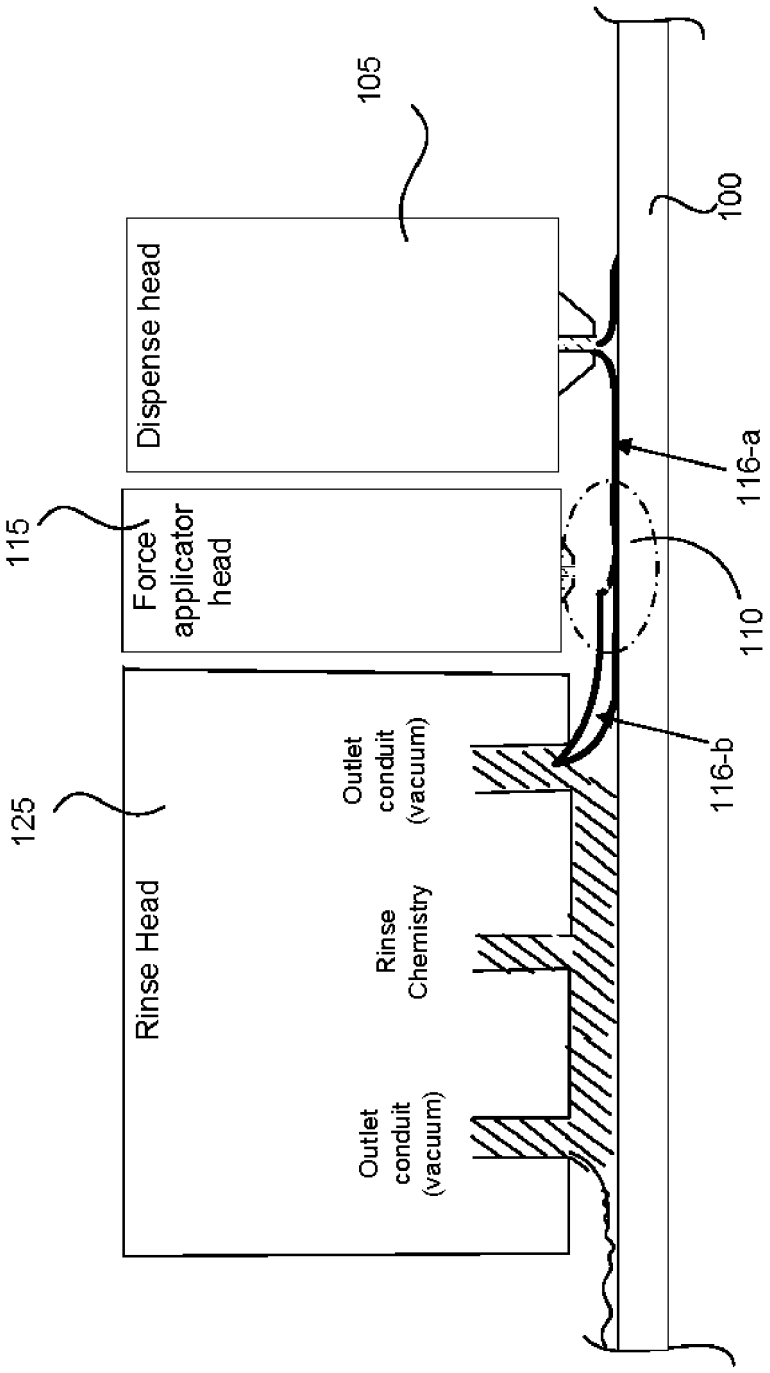

105
100
Dispense head
116-a
115
Force applicator head
110
125
Rinse Head
Outlet conduit (vacuum)
Rinse Chemistry
Outlet conduit (vacuum)
116-b

Figure 1A

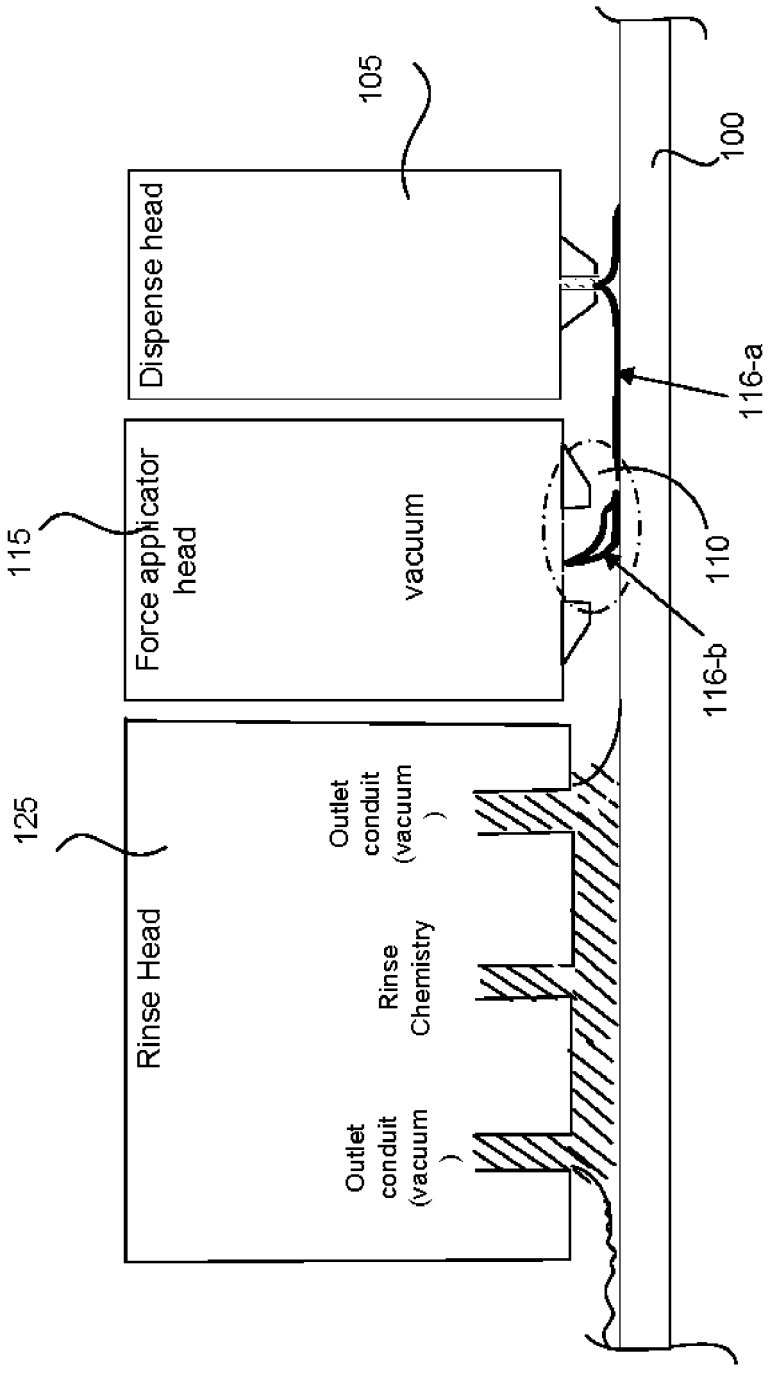

105
100
Dispense head
116-a
115
Force applicator head
vacuum
110
116-b
125
Rinse Head
Outlet conduit (vacuum)
Rinse Chemistry
Outlet conduit (vacuum)

Figure 1B

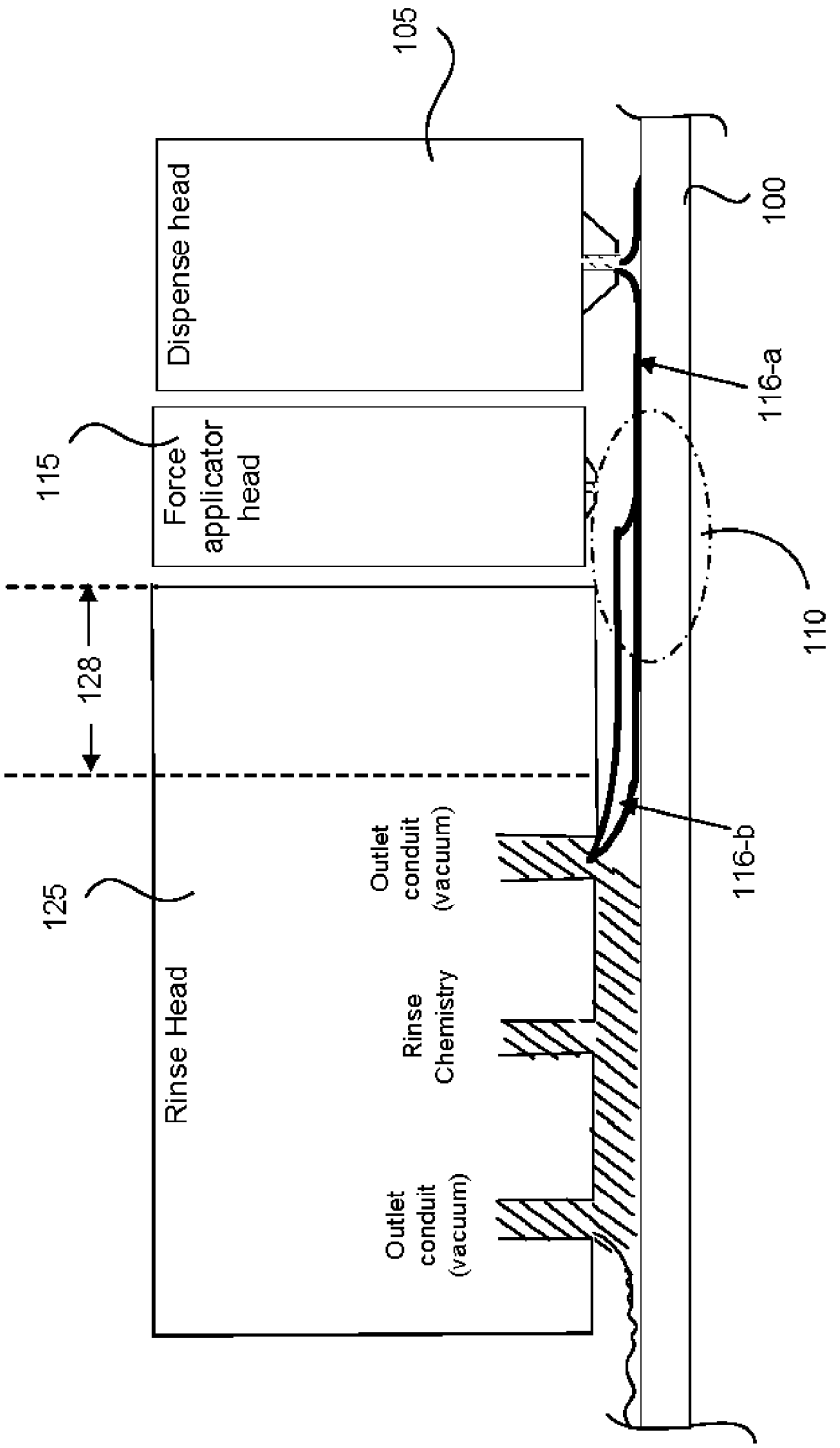

105
Dispense head
100
116-a
115
Force applicator head
110
128
125
Rinse Head
Outlet conduit (vacuum)
Rinse Chemistry
Outlet conduit (vacuum)
116-b

Figure 1C

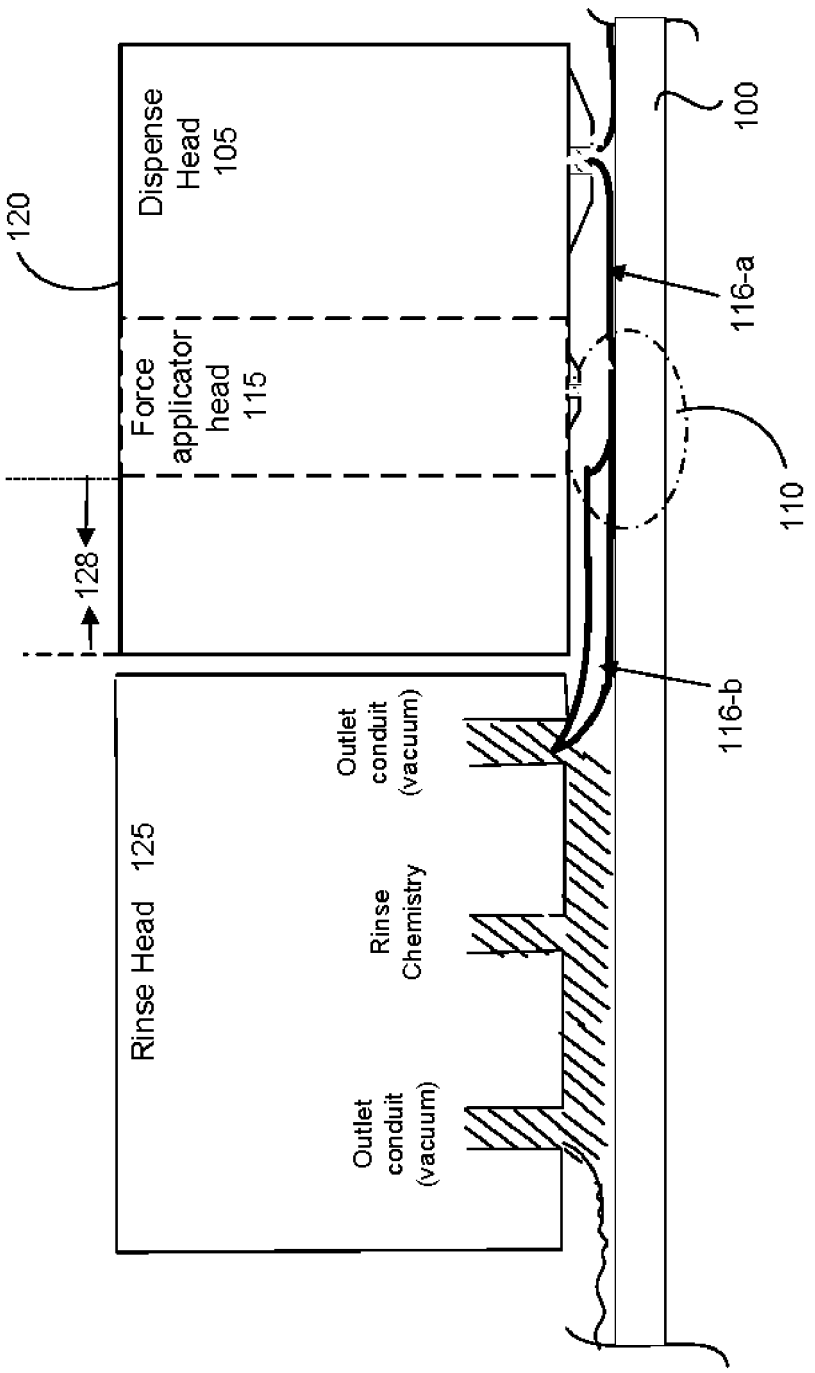

120
Dispense Head 105
Force applicator head 115
128
Rinse Head 125
Outlet conduit (vacuum)
Rinse Chemistry
Outlet conduit (vacuum)
116-a
116-b
110
100

Figure 2A

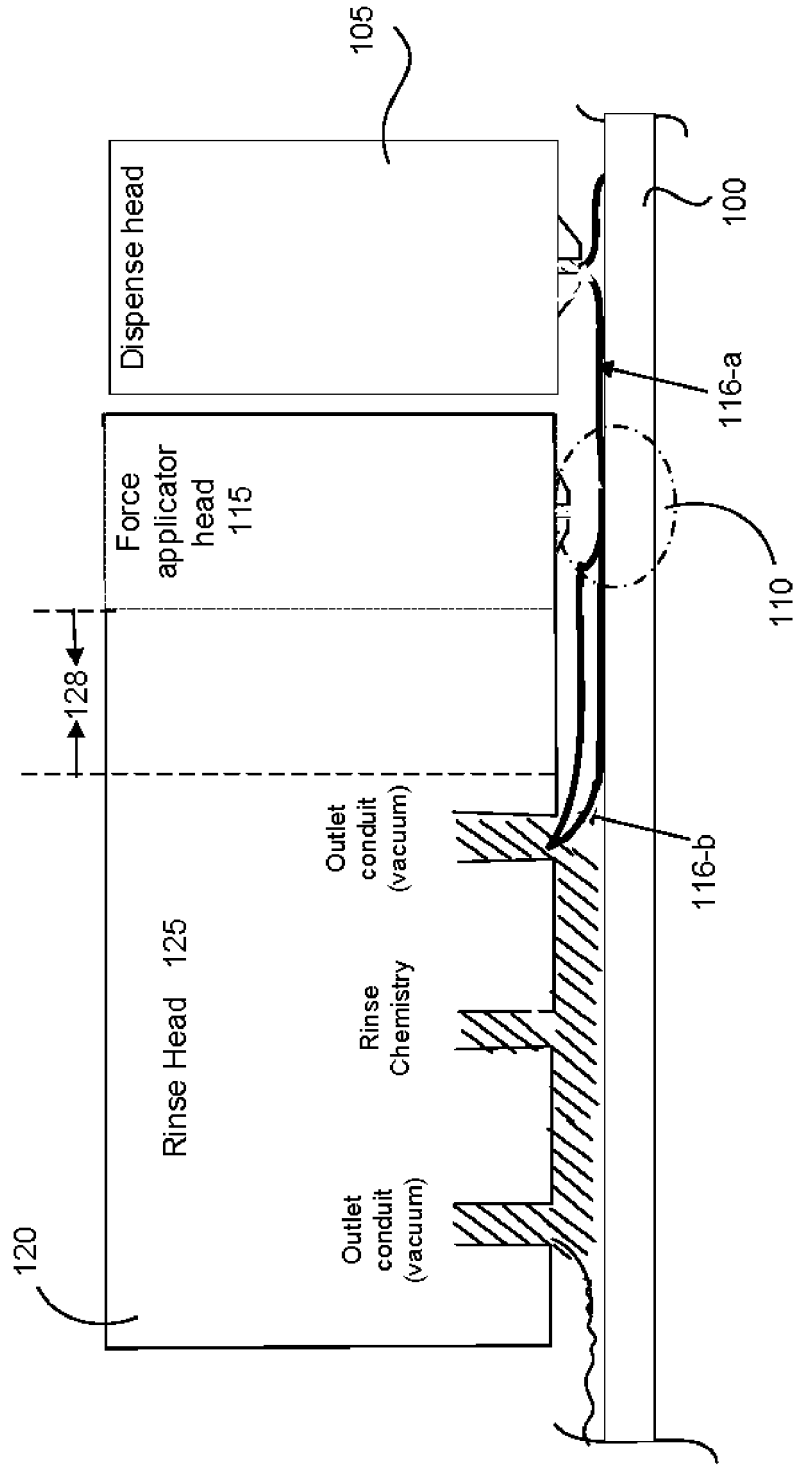

105
Dispense head
100
116-a
Force applicator head 115
110
128
Outlet conduit (vacuum)
116-b
Rinse Head 125
Rinse Chemistry
Outlet conduit (vacuum)
120

Figure 2B

Figure 3A

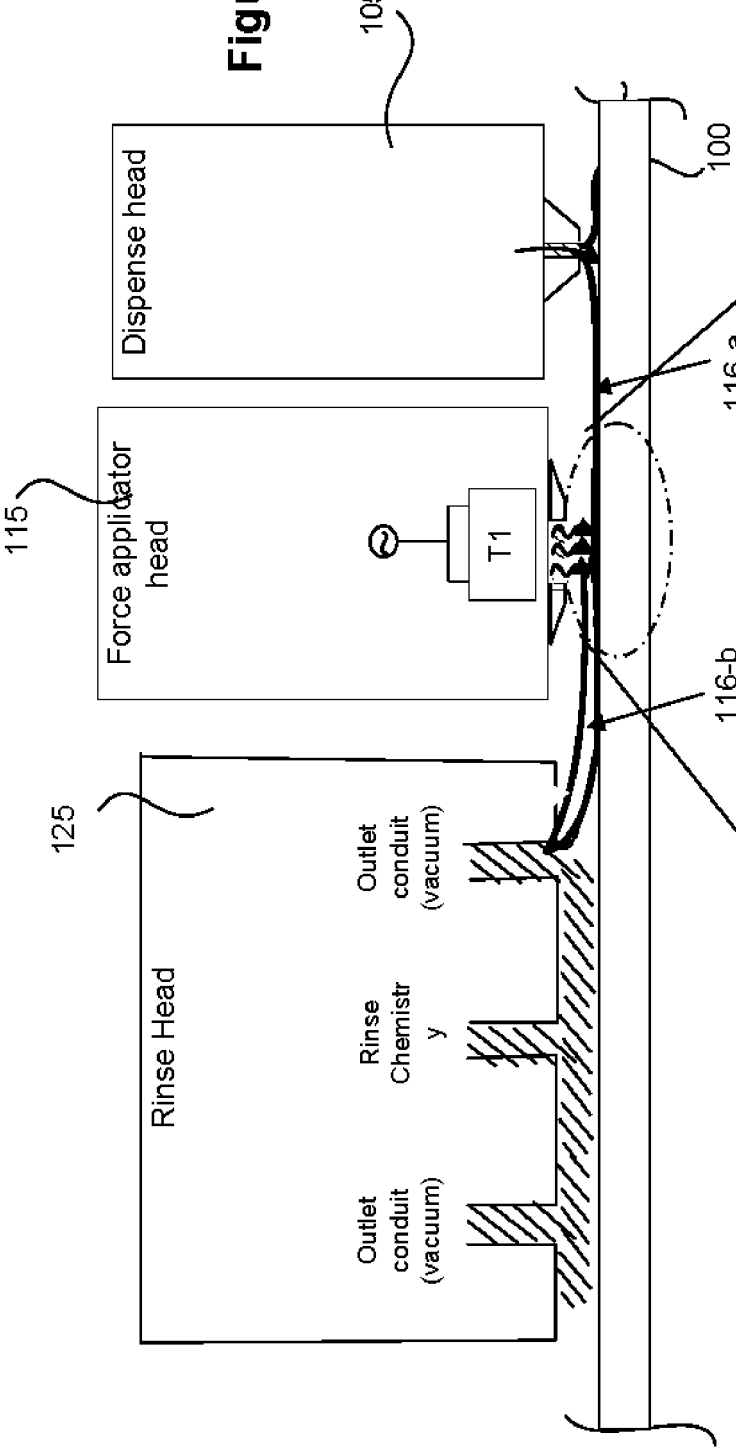
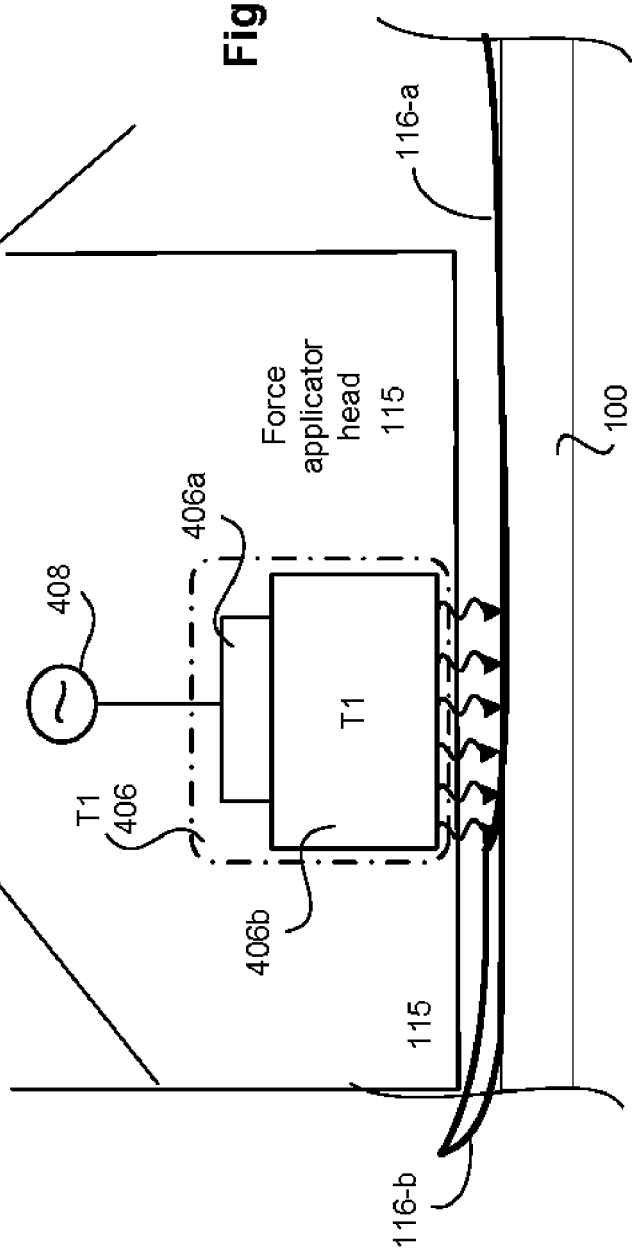


Figure 3B



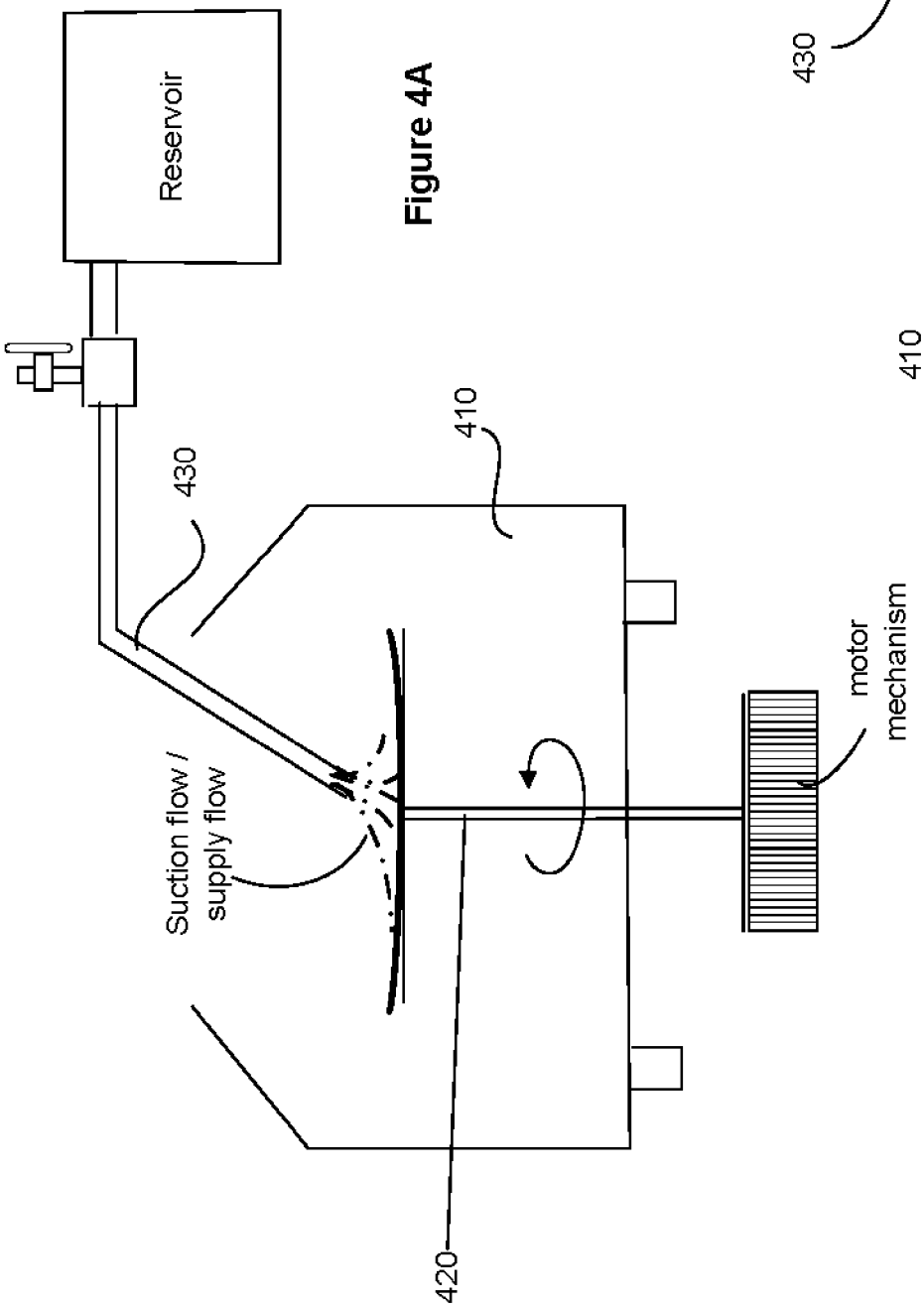


Figure 4A

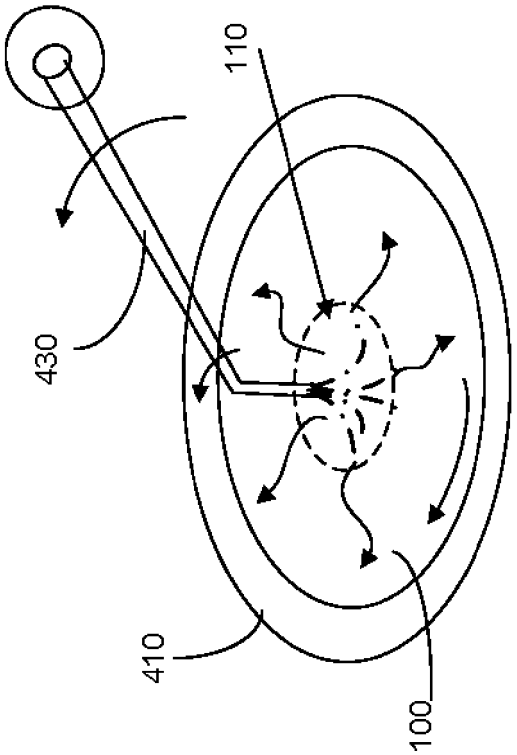


Figure 4B

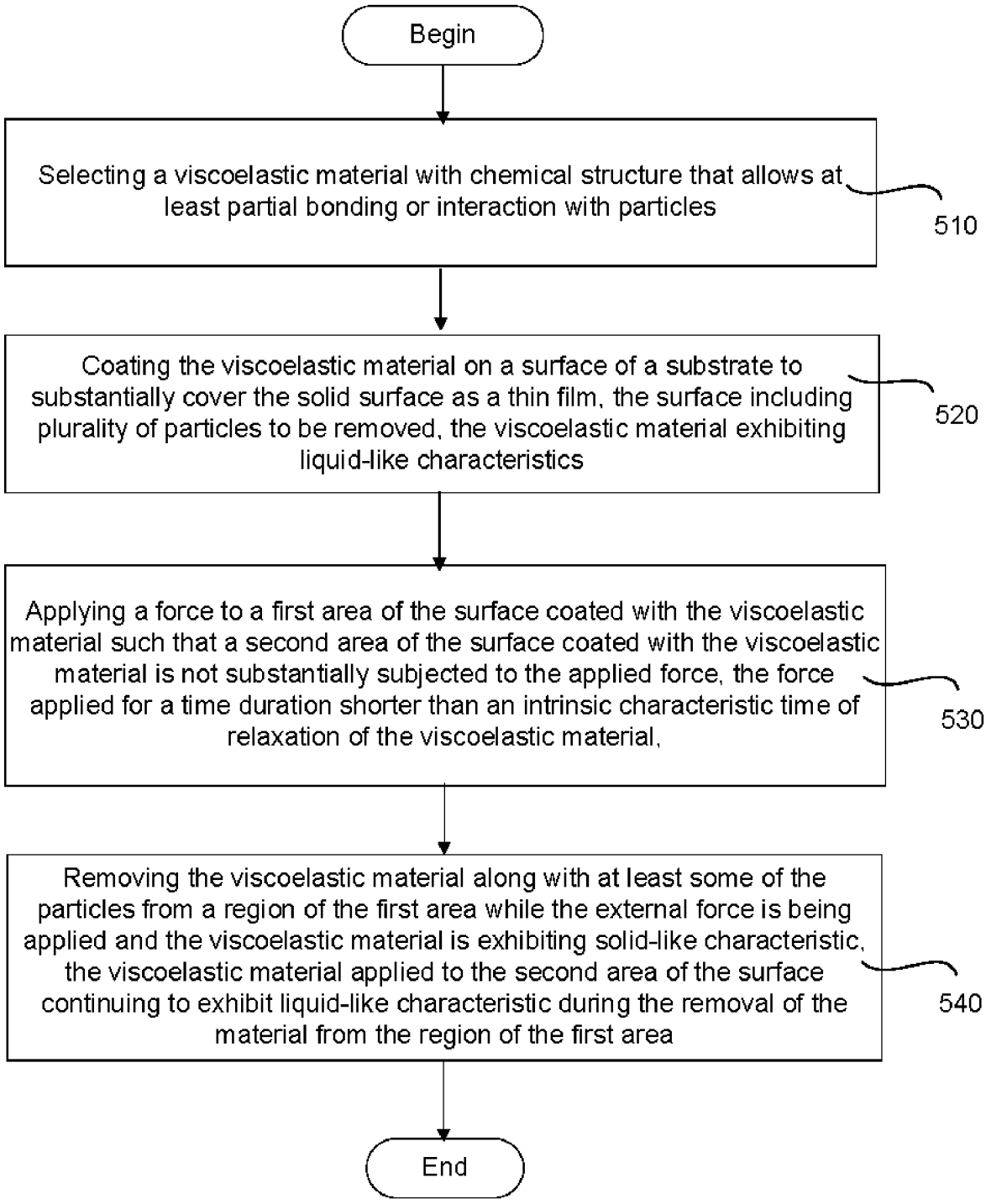

Begin
Selecting a viscoelastic material with chemical structure that allows at least partial bonding or interaction with particles
510
Coating the viscoelastic material on a surface of a substrate to substantially cover the solid surface as a thin film, the surface including plurality of particles to be removed, the viscoelastic material exhibiting liquid-like characteristics
520
Applying a force to a first area of the surface coated with the viscoelastic material such that a second area of the surface coated with the viscoelastic material is not substantially subjected to the applied force, the force applied for a time duration shorter than an intrinsic characteristic time of relaxation of the viscoelastic material,
530
Removing the viscoelastic material along with at least some of the particles from a region of the first area while the external force is being applied and the viscoelastic material is exhibiting solid-like characteristic, the viscoelastic material applied to the second area of the surface continuing to exhibit liquid-like characteristic during the removal of the material from the region of the first area
540
End

Figure 5