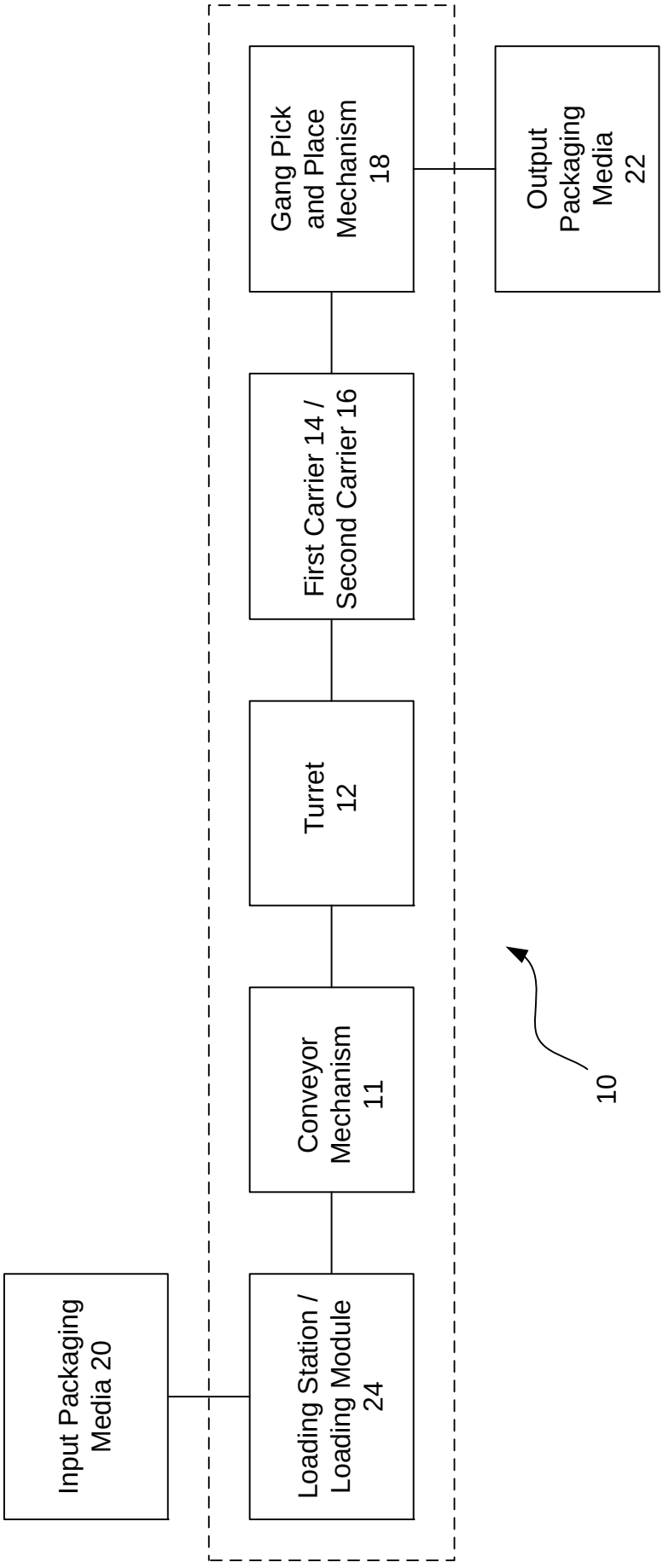

Input Packaging Media 20
Loading Station / Loading Module 24
Conveyor Mechanism 11
Turret 12
First Carrier 14 / Second Carrier 16
Gang Pick and Place Mechanism 18
Output Packaging Media 22
10

FIG. 1

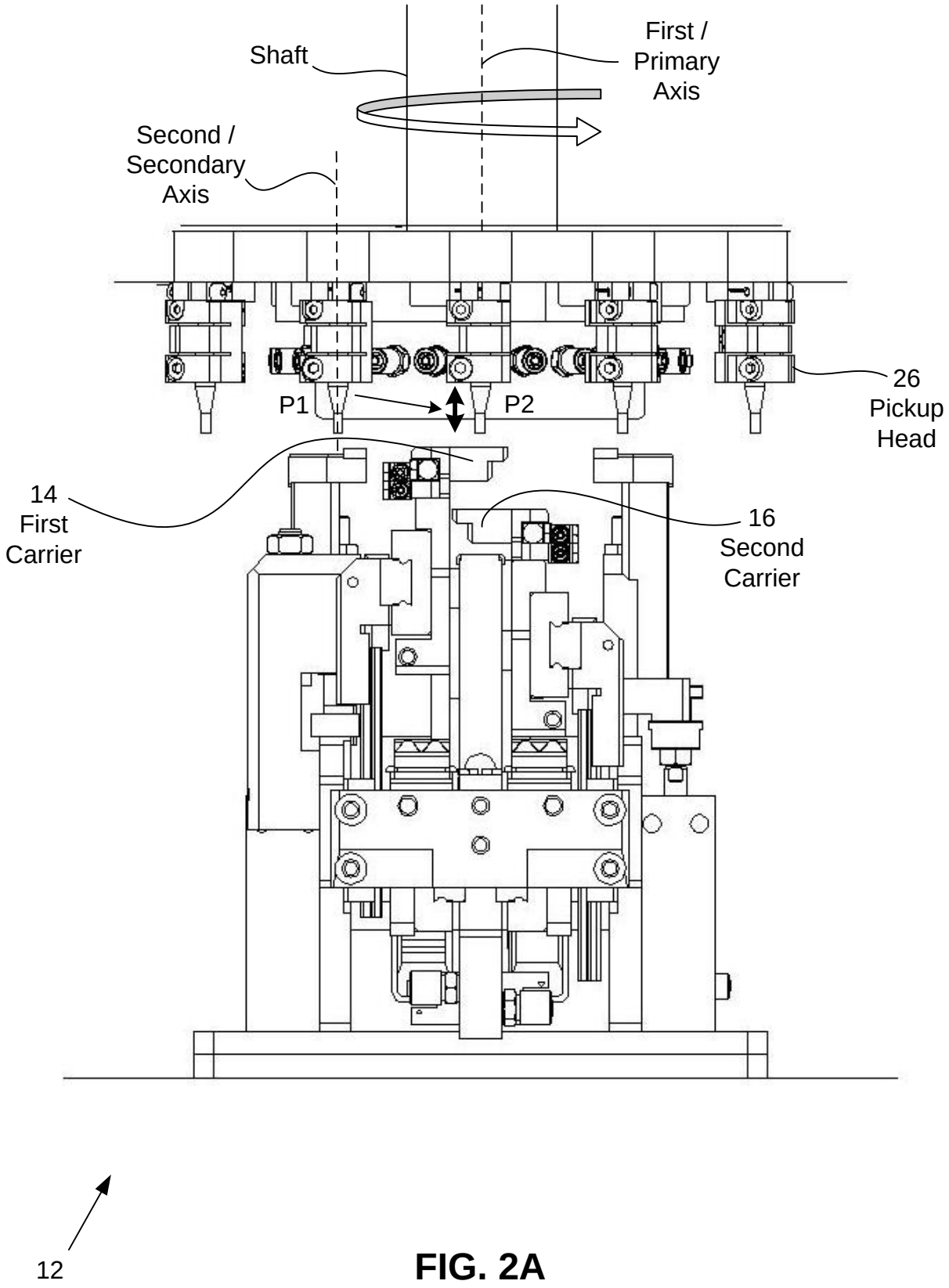

Shaft
First / Primary Axis
Second / Secondary Axis
26 Pickup Head
P1
P2
14 First Carrier
16 Second Carrier
12

FIG. 2A

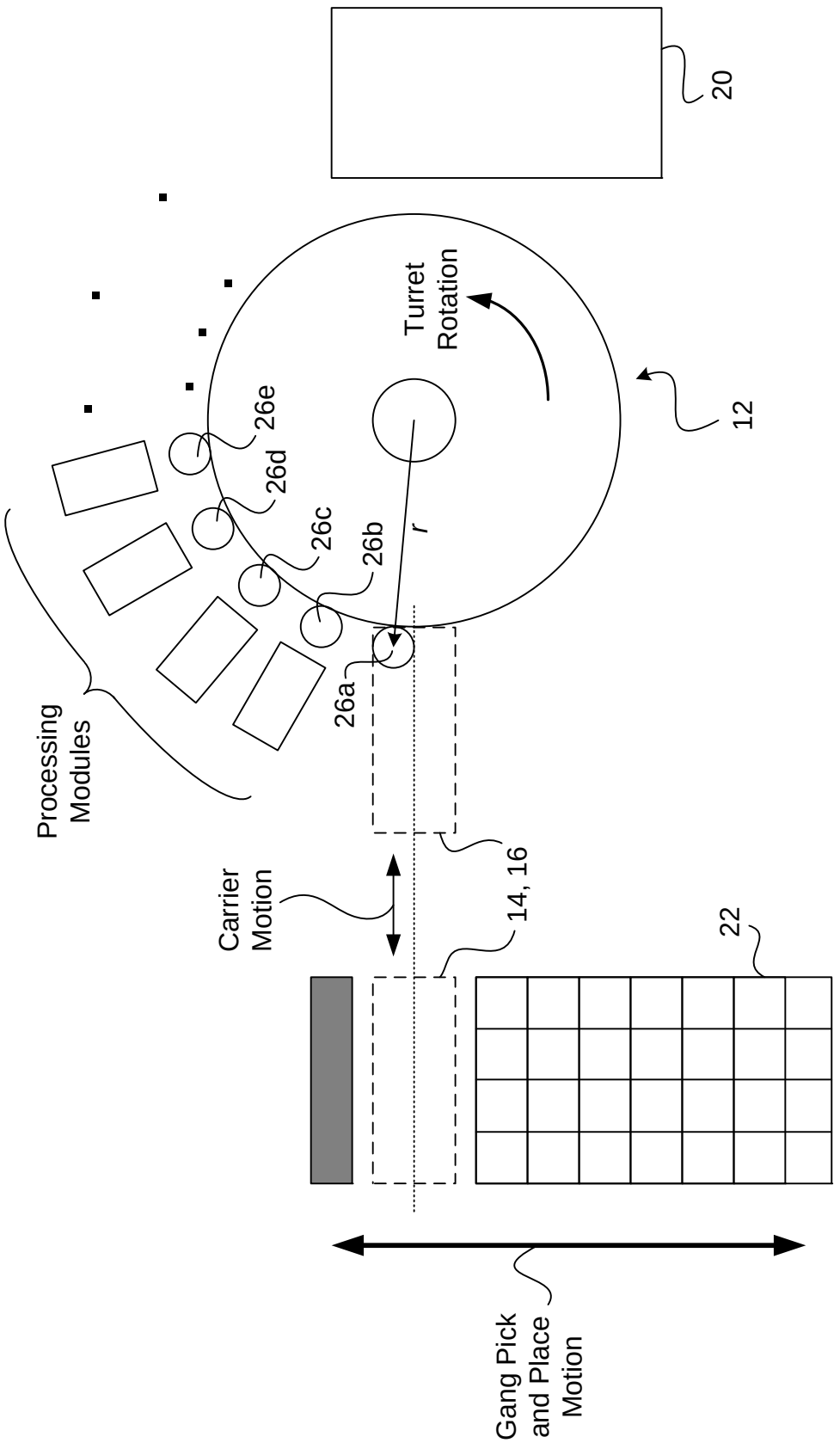

10
20
Turret Rotation
12
26e
26d
26c
26b
r
26a
Processing Modules
Carrier Motion
14, 16
22
Gang Pick and Place Motion

FIG. 2B

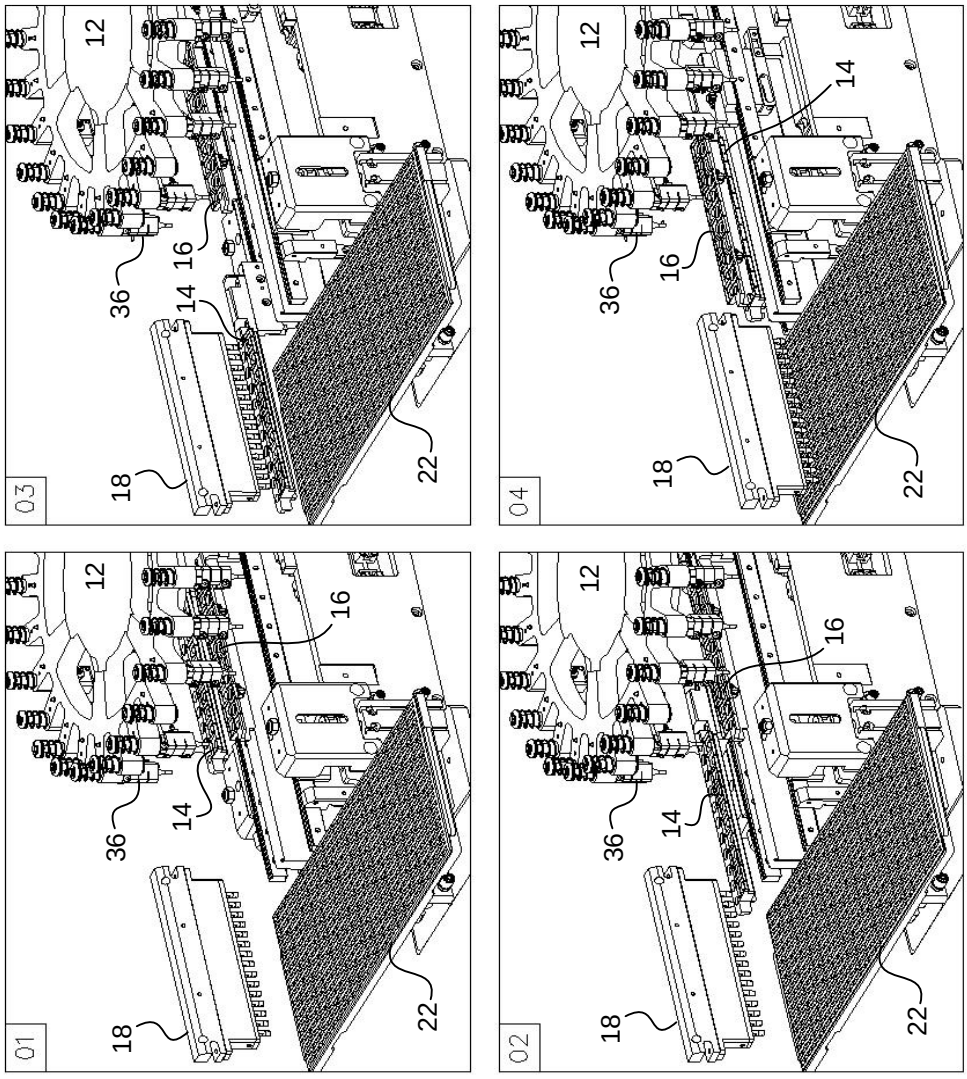


FIG. 3

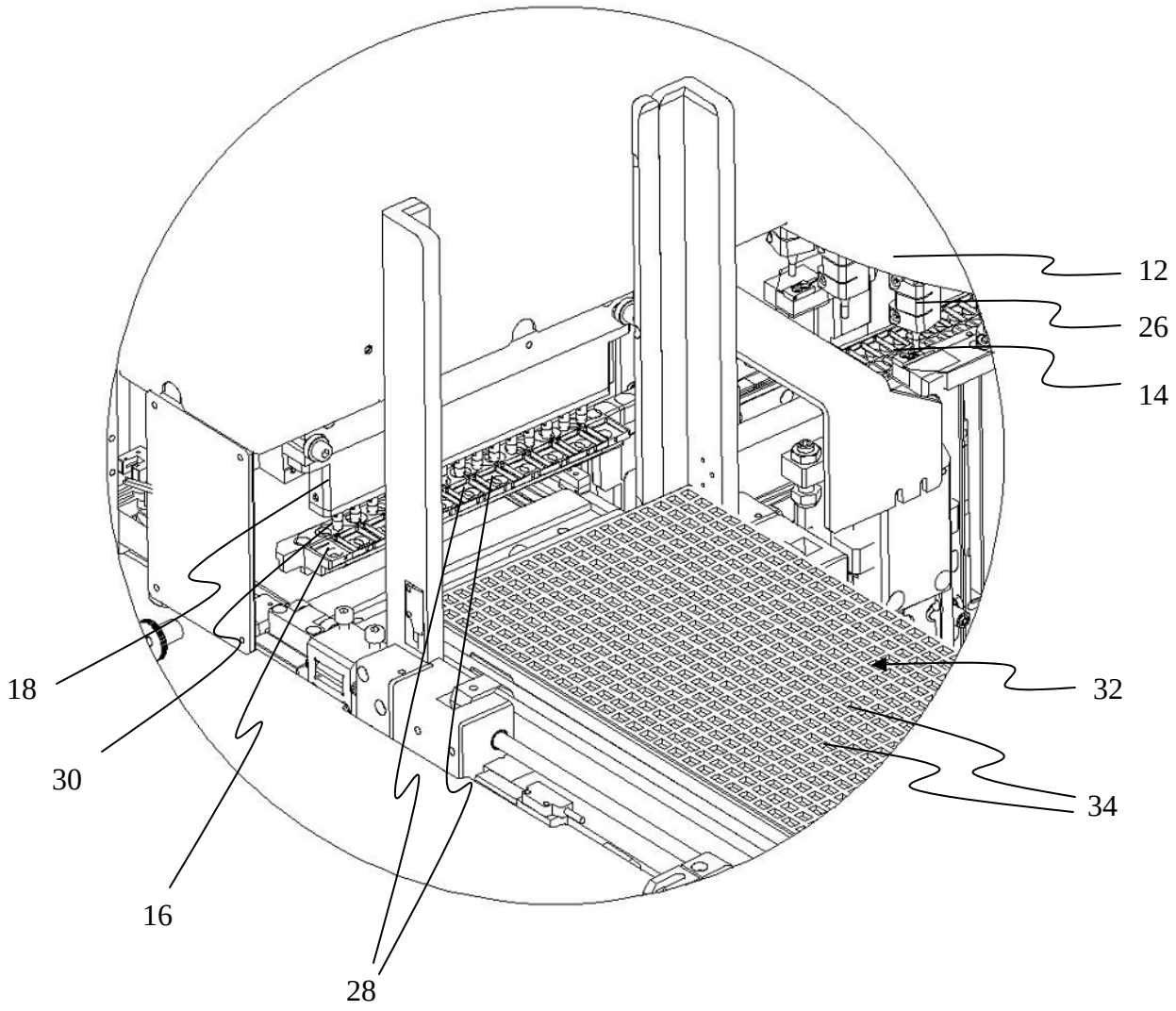


FIG. 4

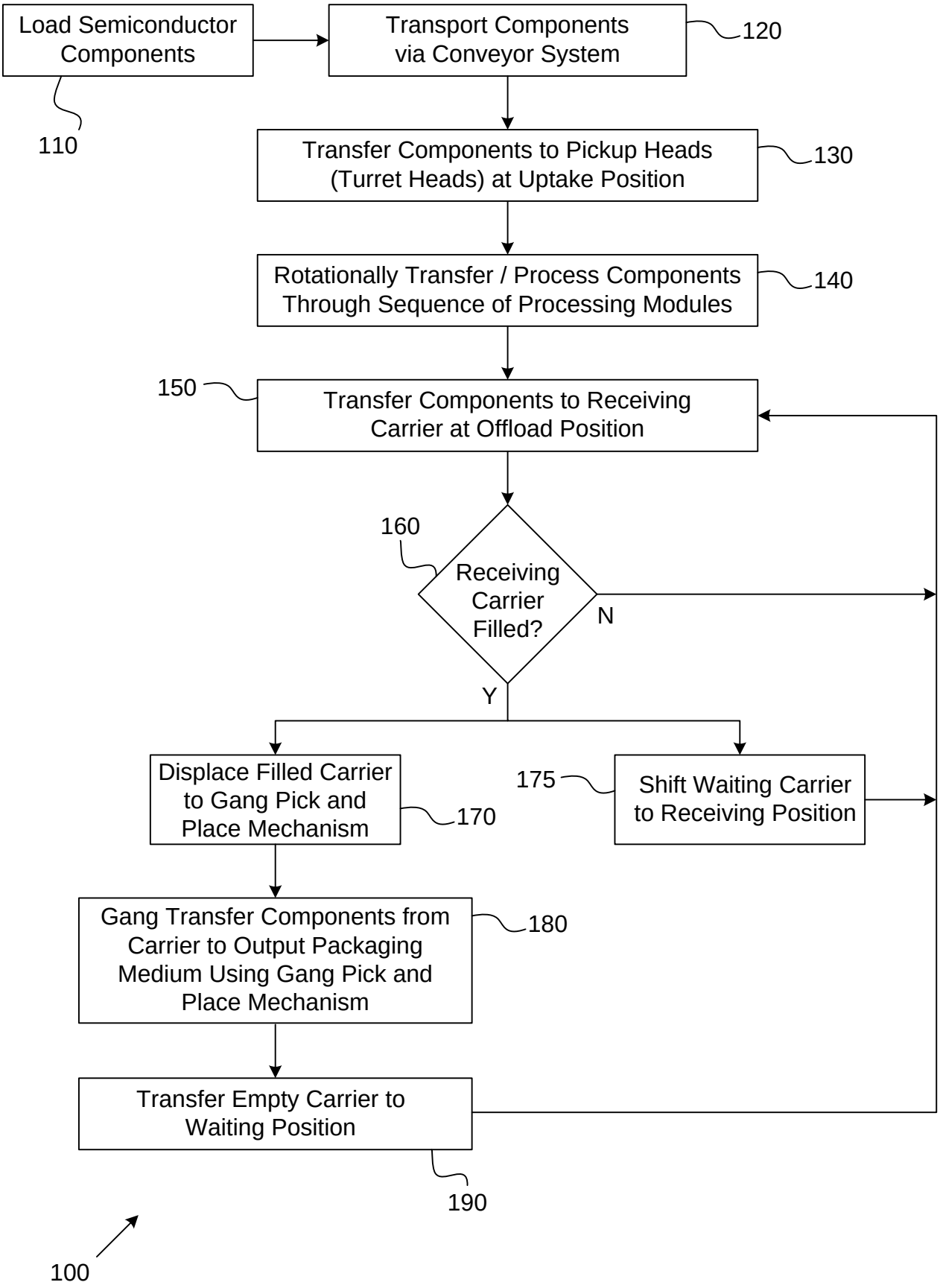

Load Semiconductor Components
110
Transport Components via Conveyor System
120
Transfer Components to Pickup Heads (Turret Heads) at Uptake Position
130
Rotationally Transfer / Process Components Through Sequence of Processing Modules
140
150
Transfer Components to Receiving Carrier at Offload Position
160
Receiving Carrier Filled?
N
Y
Displace Filled Carrier to Gang Pick and Place Mechanism
170
175
Shift Waiting Carrier to Receiving Position
Gang Transfer Components from Carrier to Output Packaging Medium Using Gang Pick and Place Mechanism
180
Transfer Empty Carrier to Waiting Position
190
100

FIG. 5