

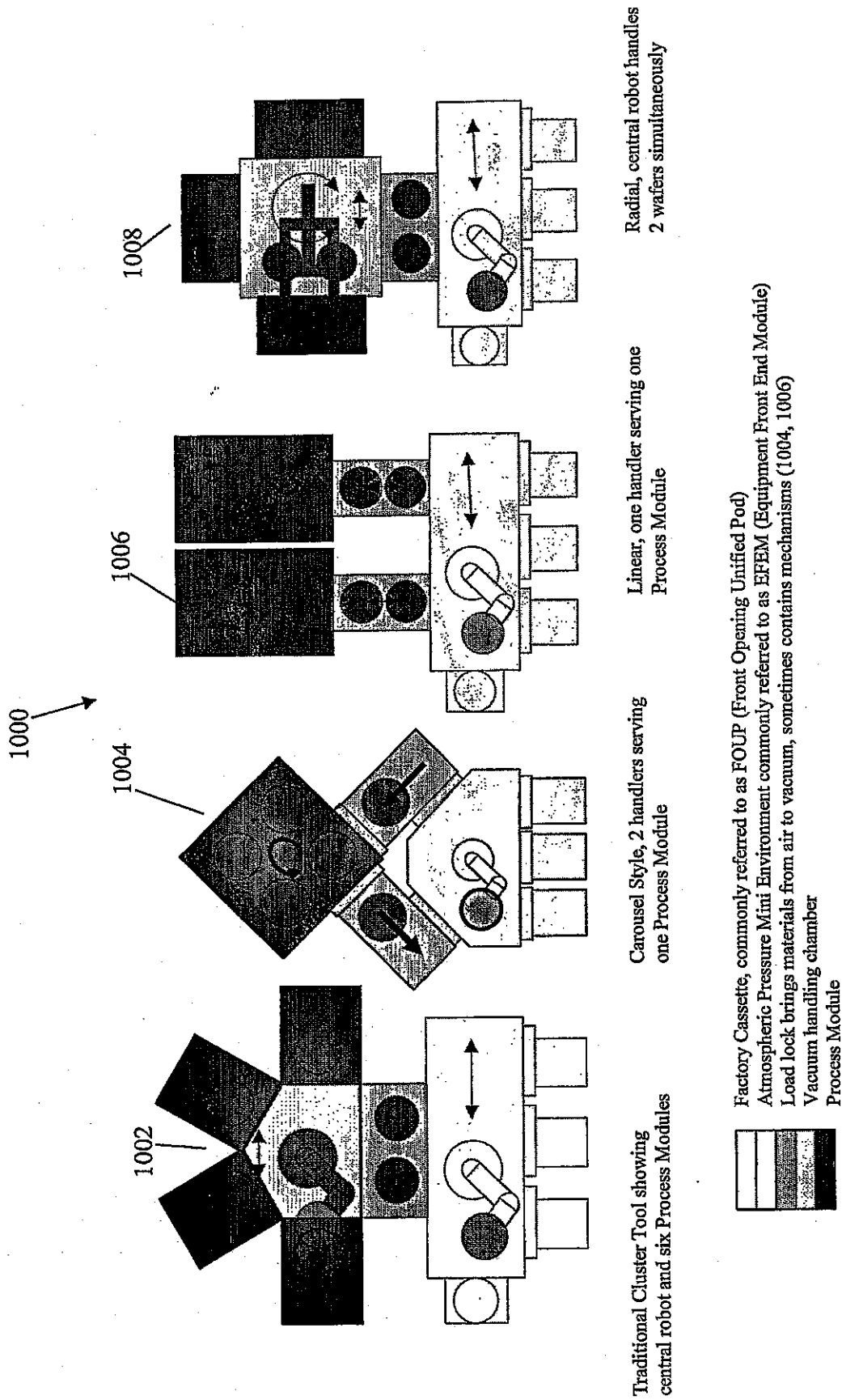


FIG. 1

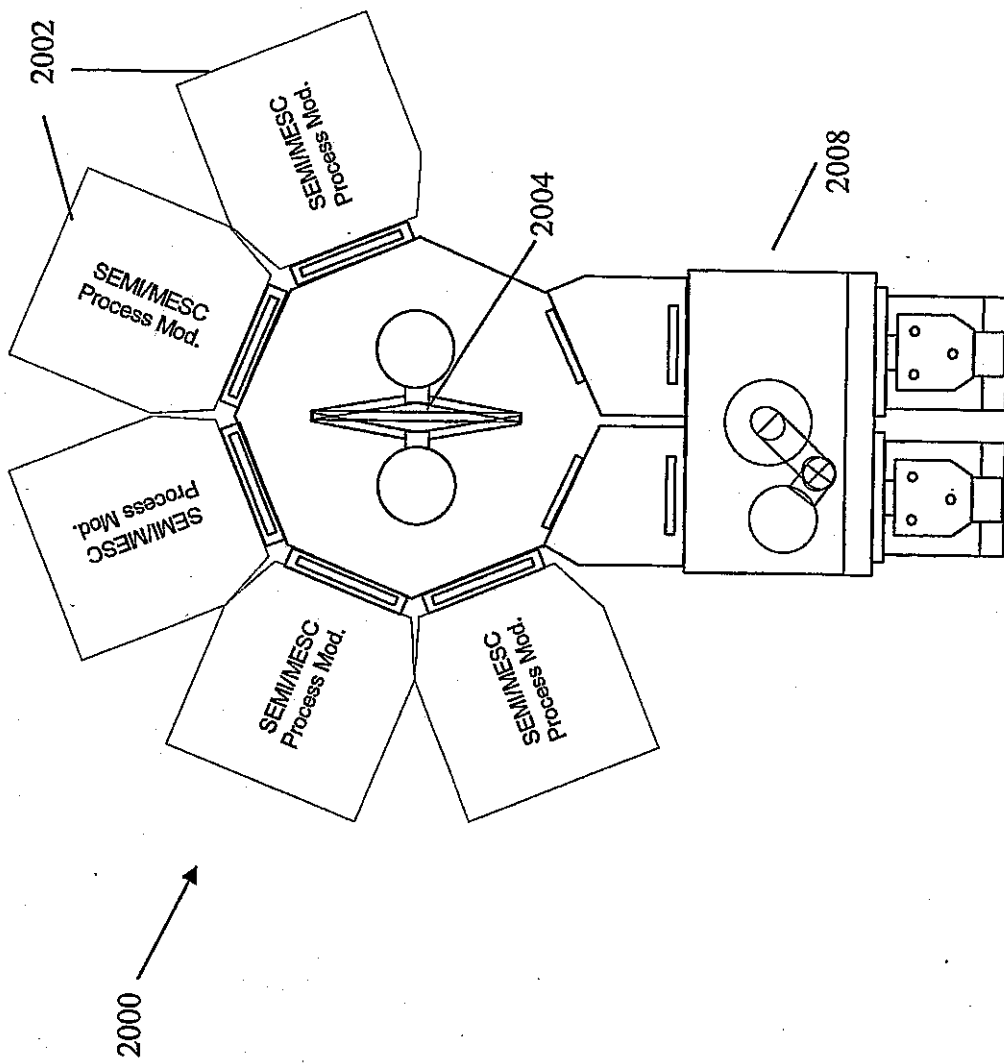


FIG. 2

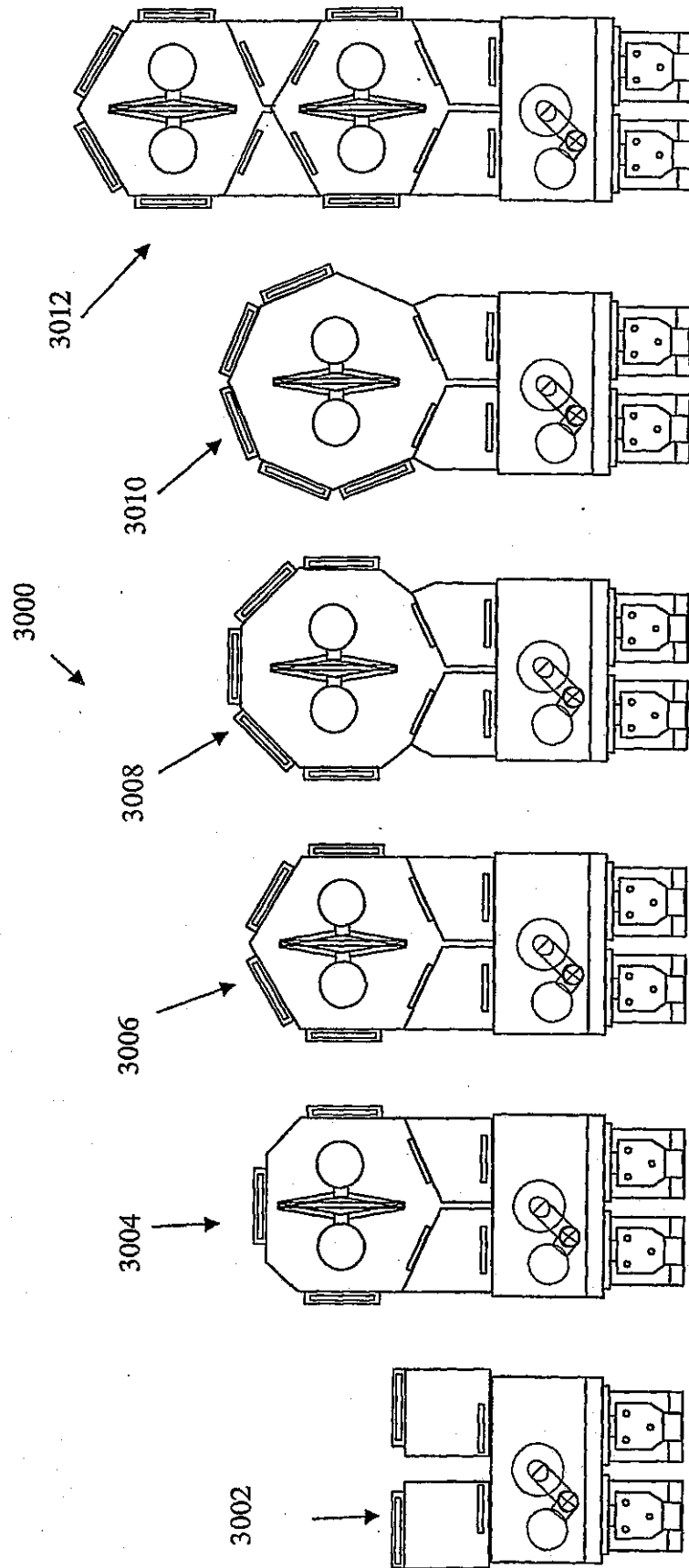


FIG.3A

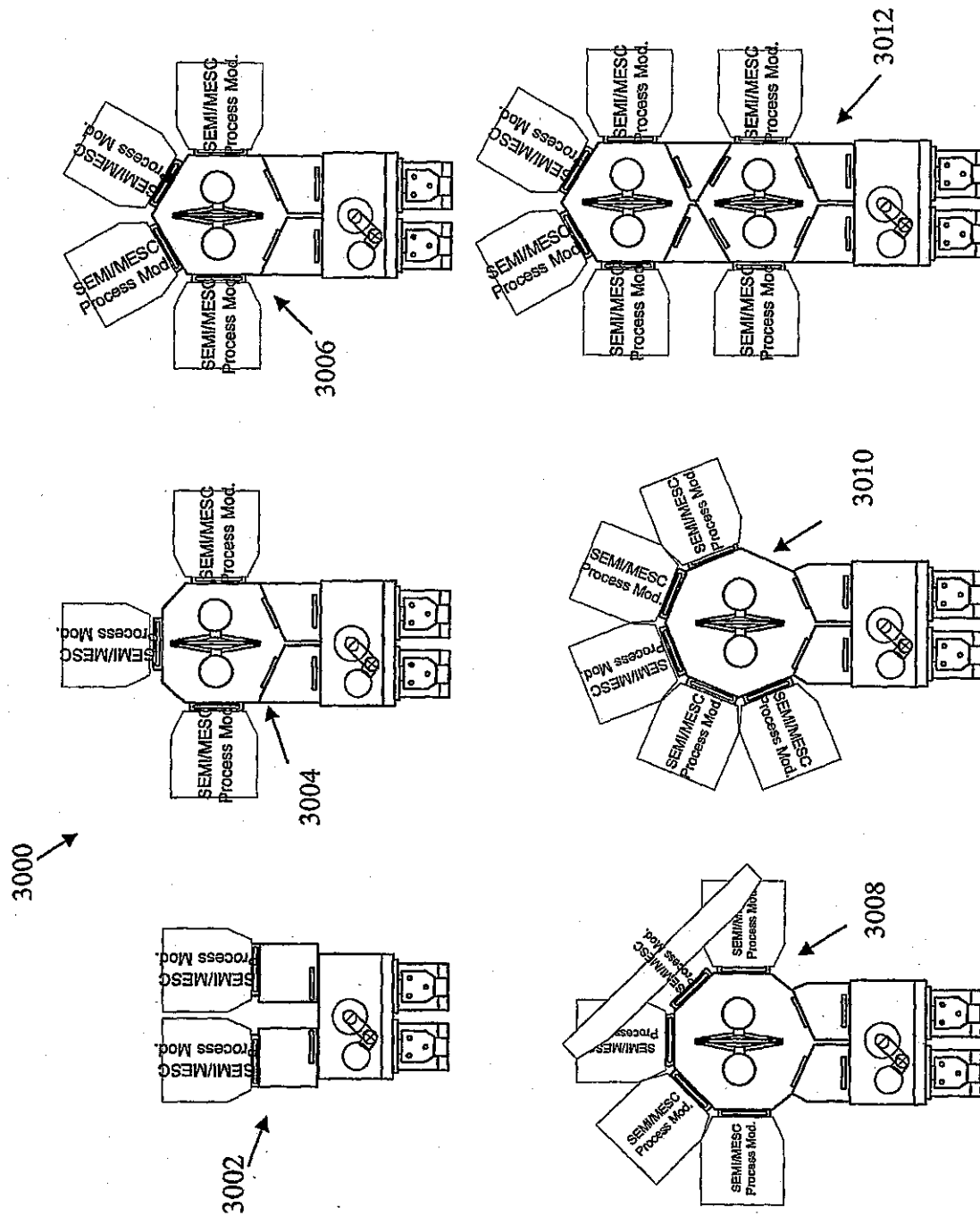
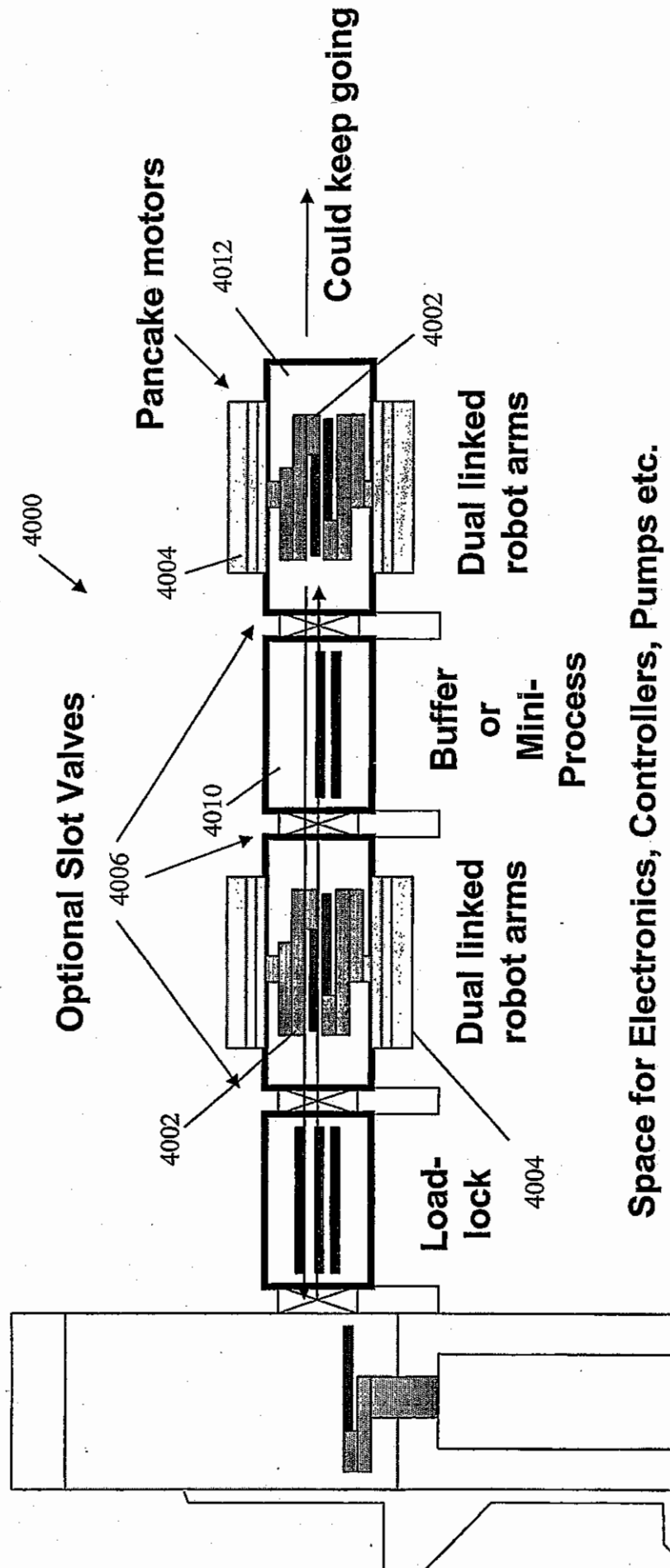


FIG. 3B



Space for Electronics, Controllers, Pumps etc.

FIG. 4

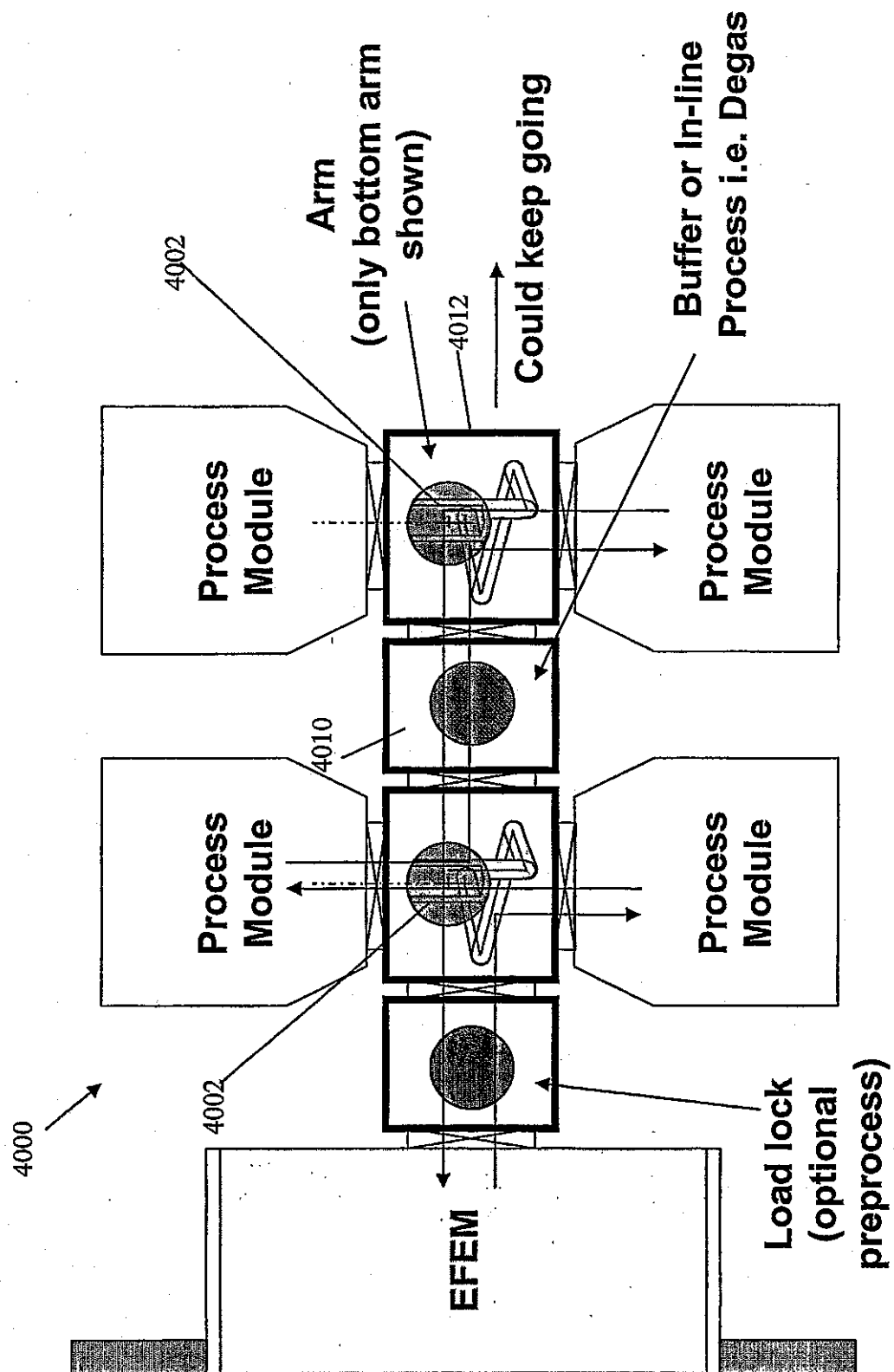


FIG. 5

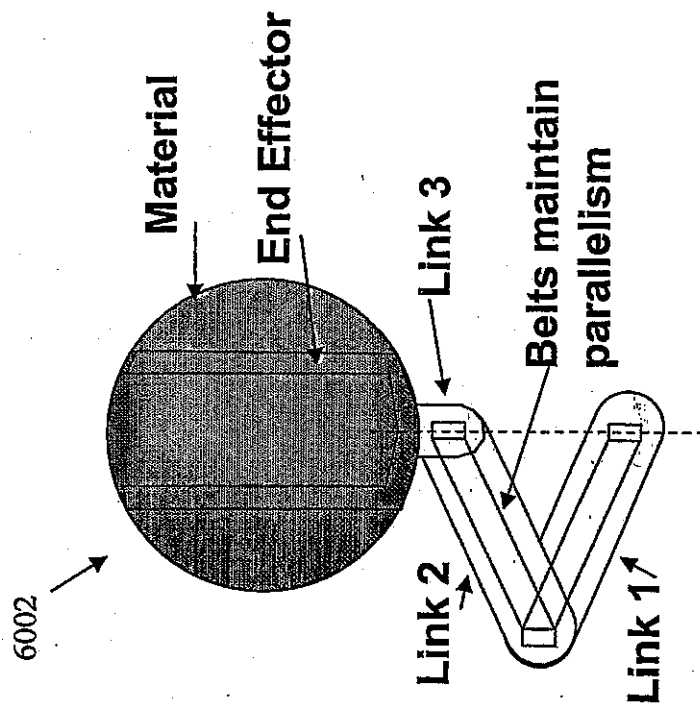
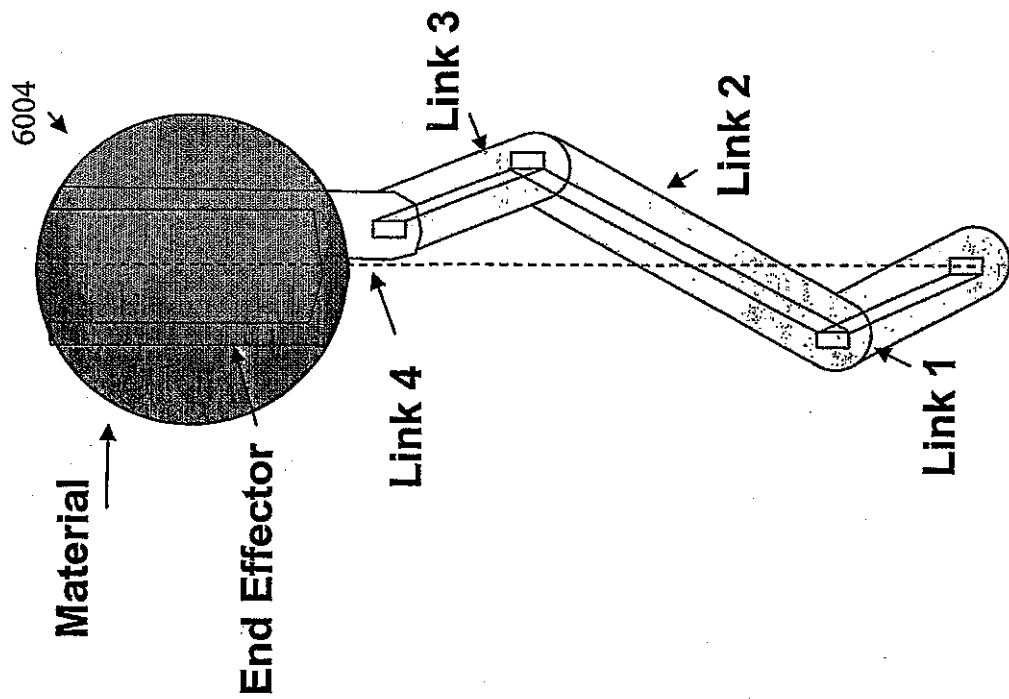


FIG. 6

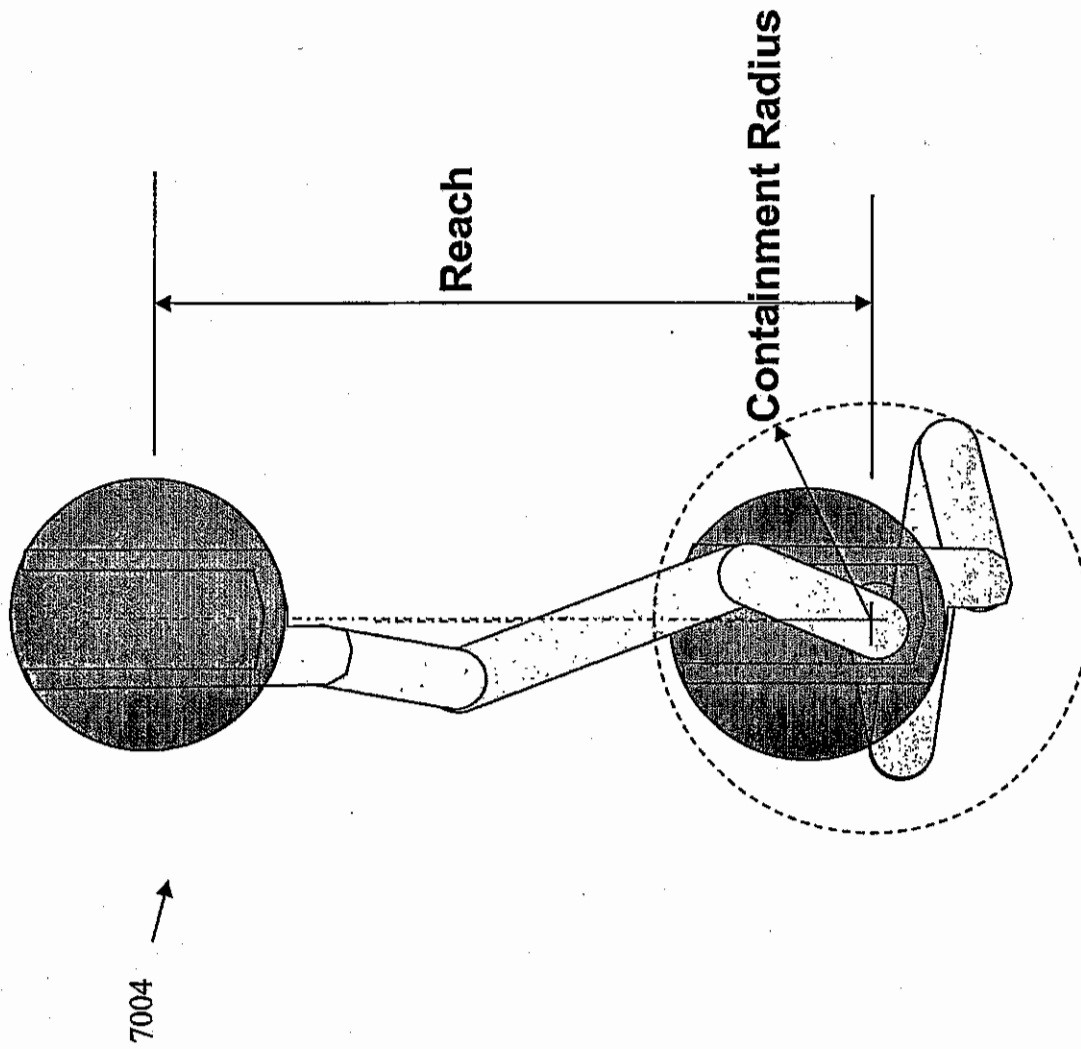


FIG. 7

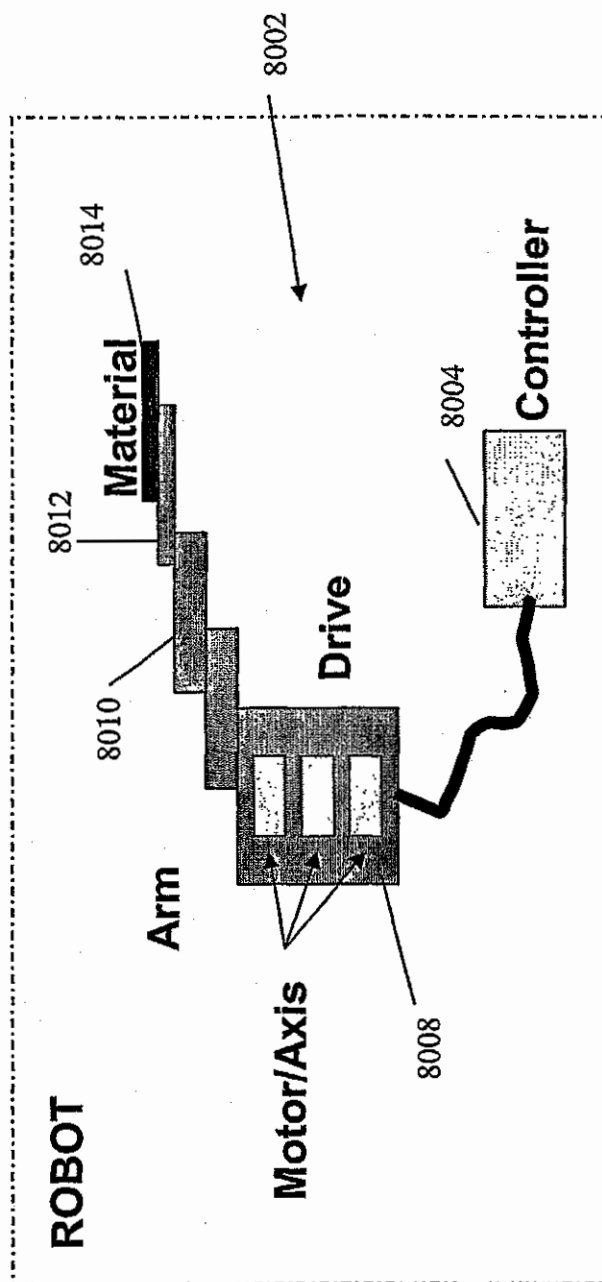


FIG. 8

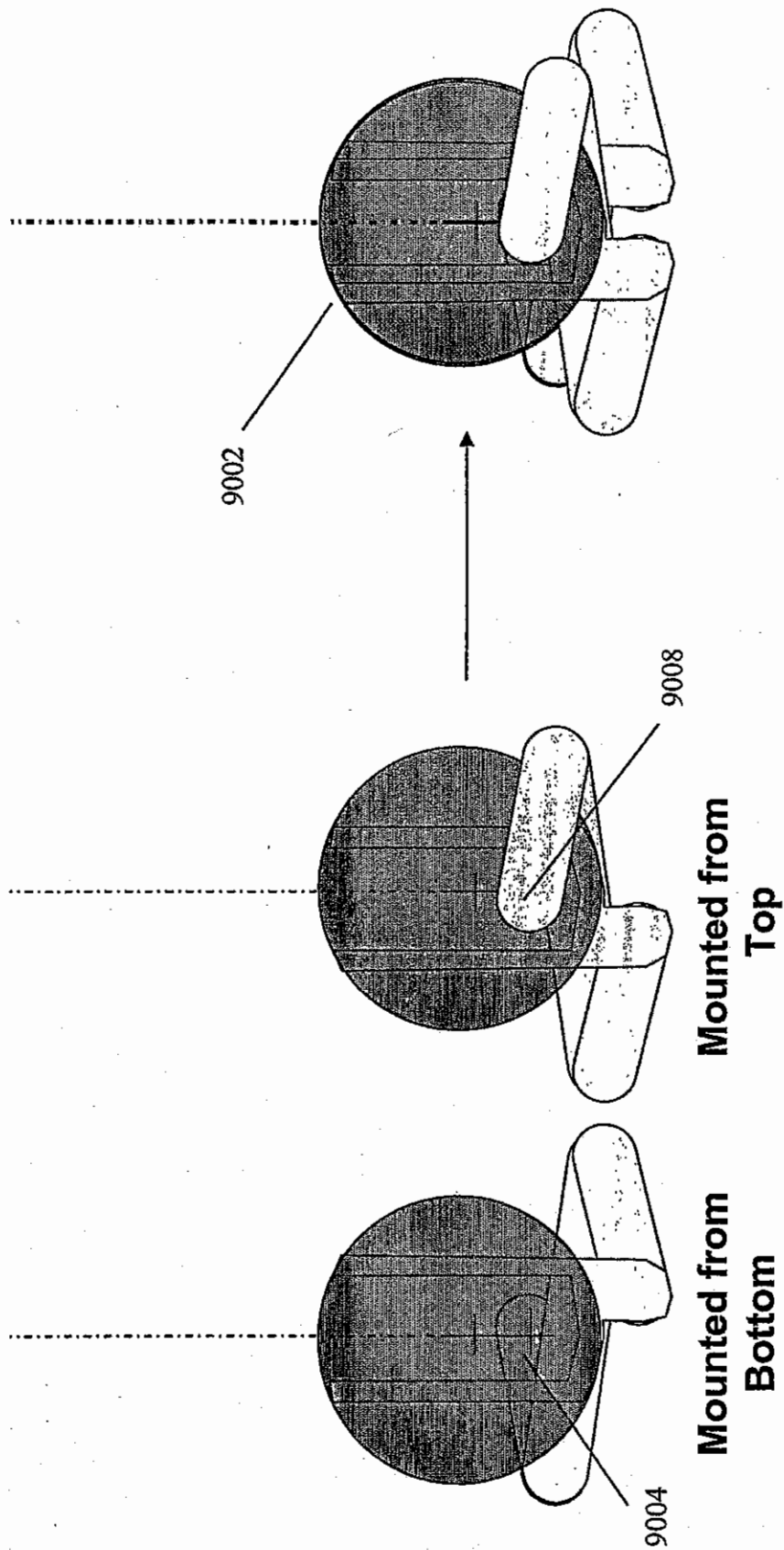


FIG. 9

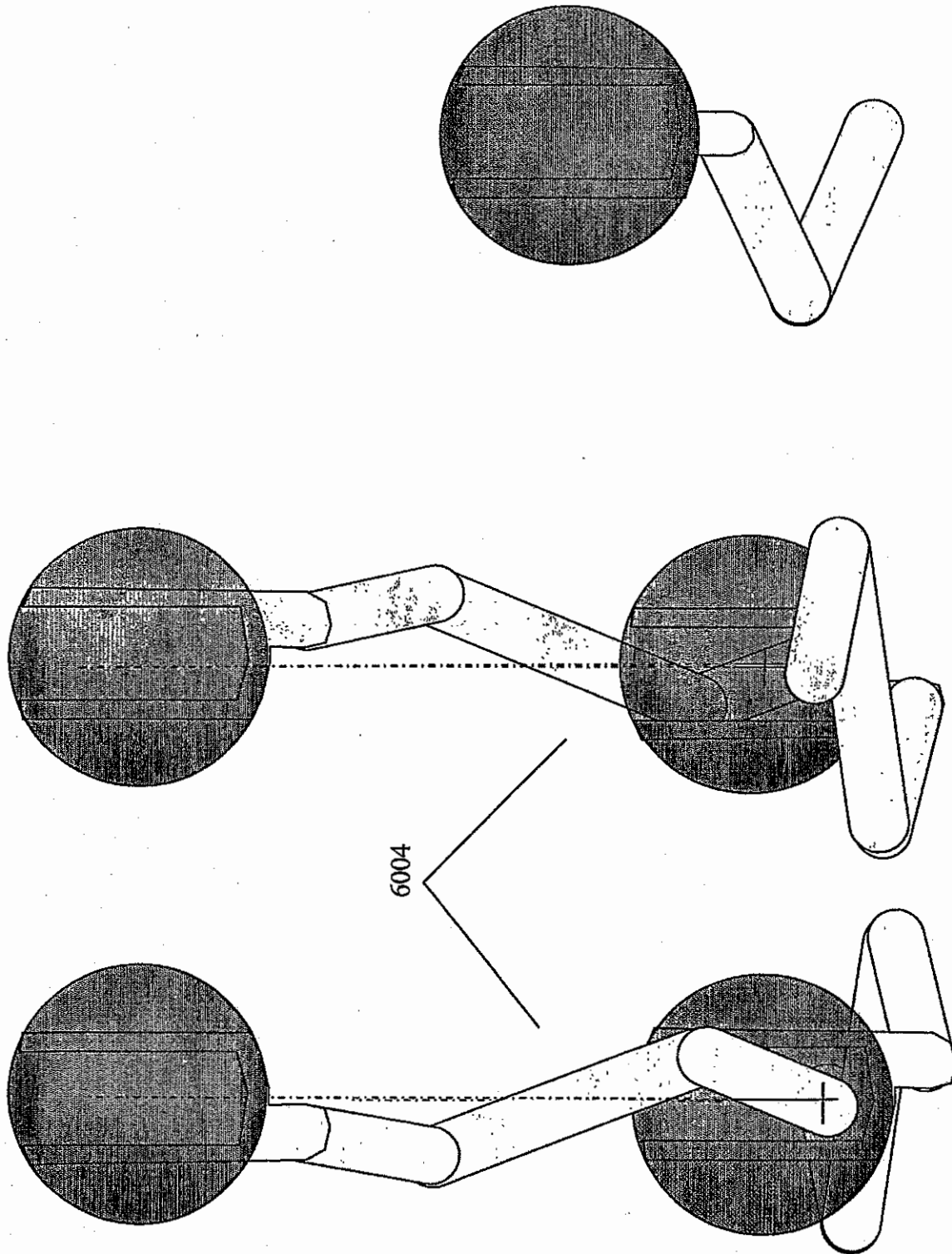


FIG. 10

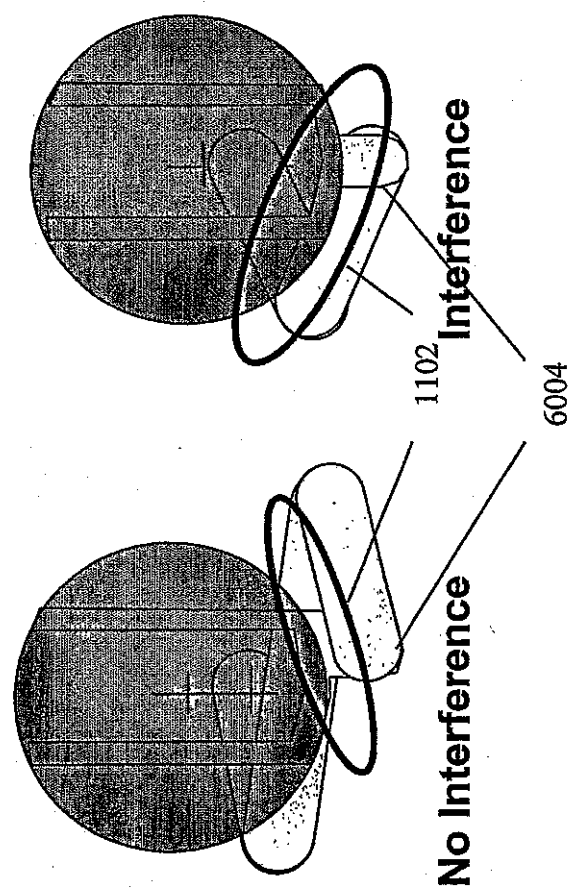


FIG. 11

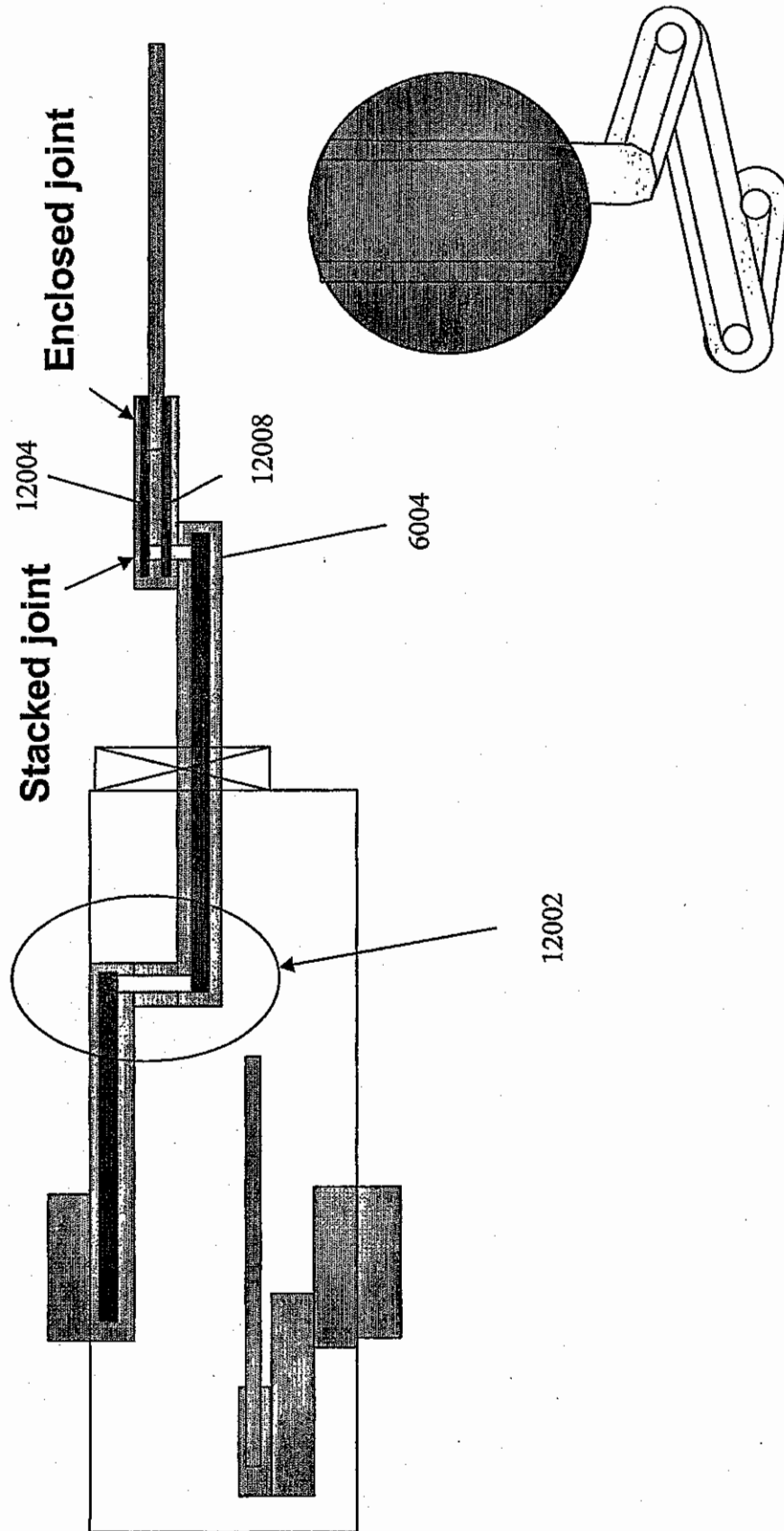
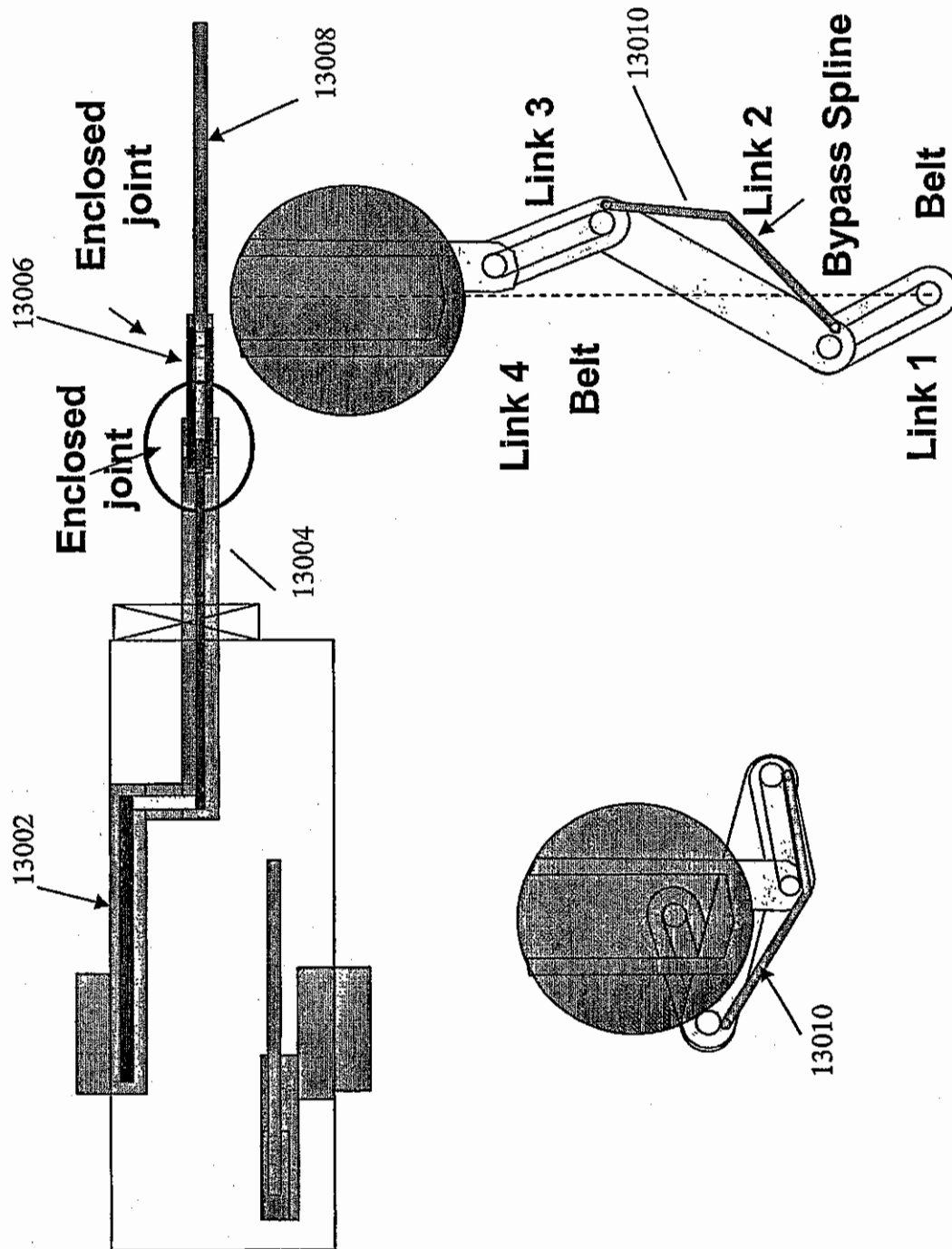


FIG. 12



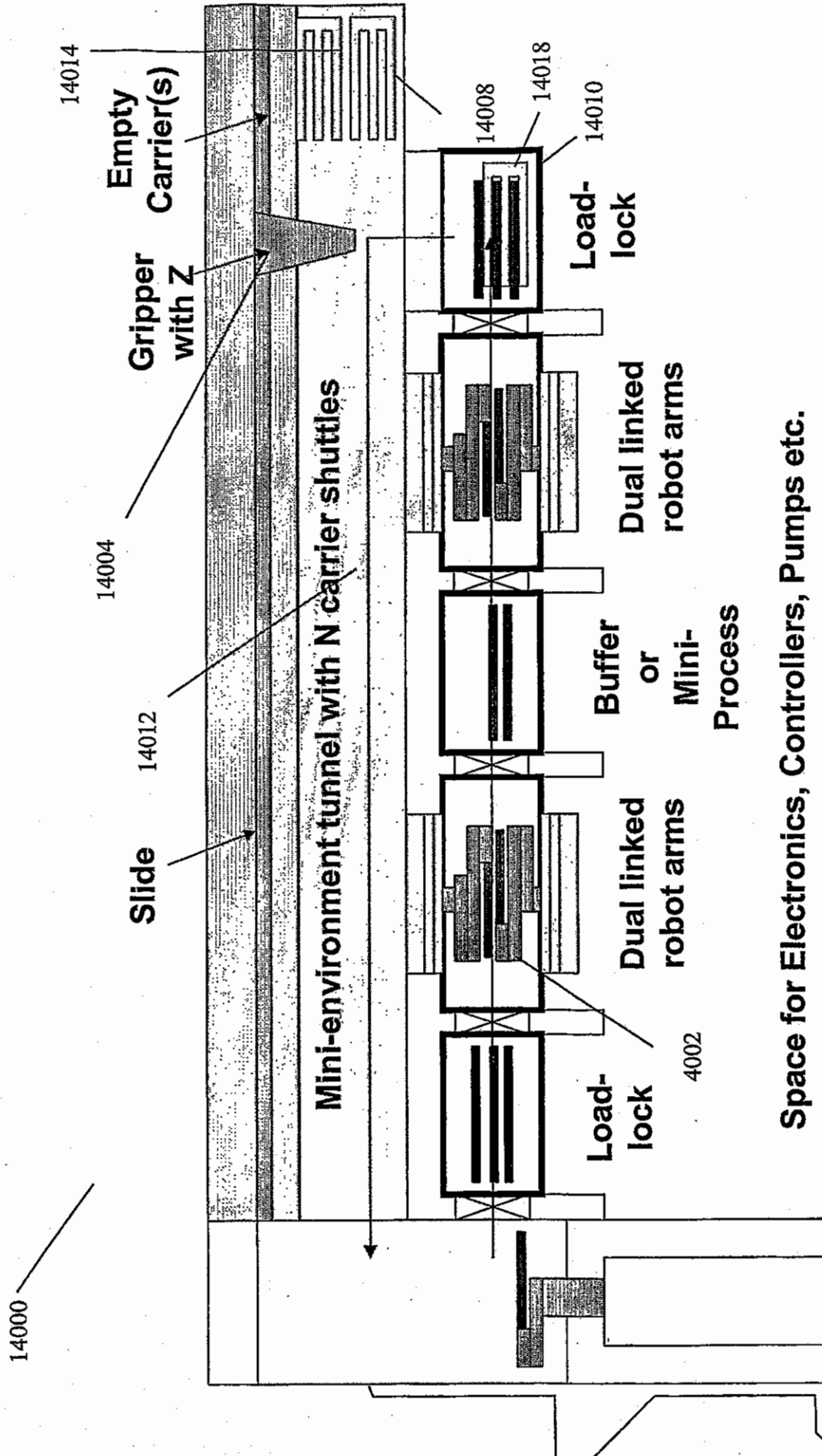


FIG. 14

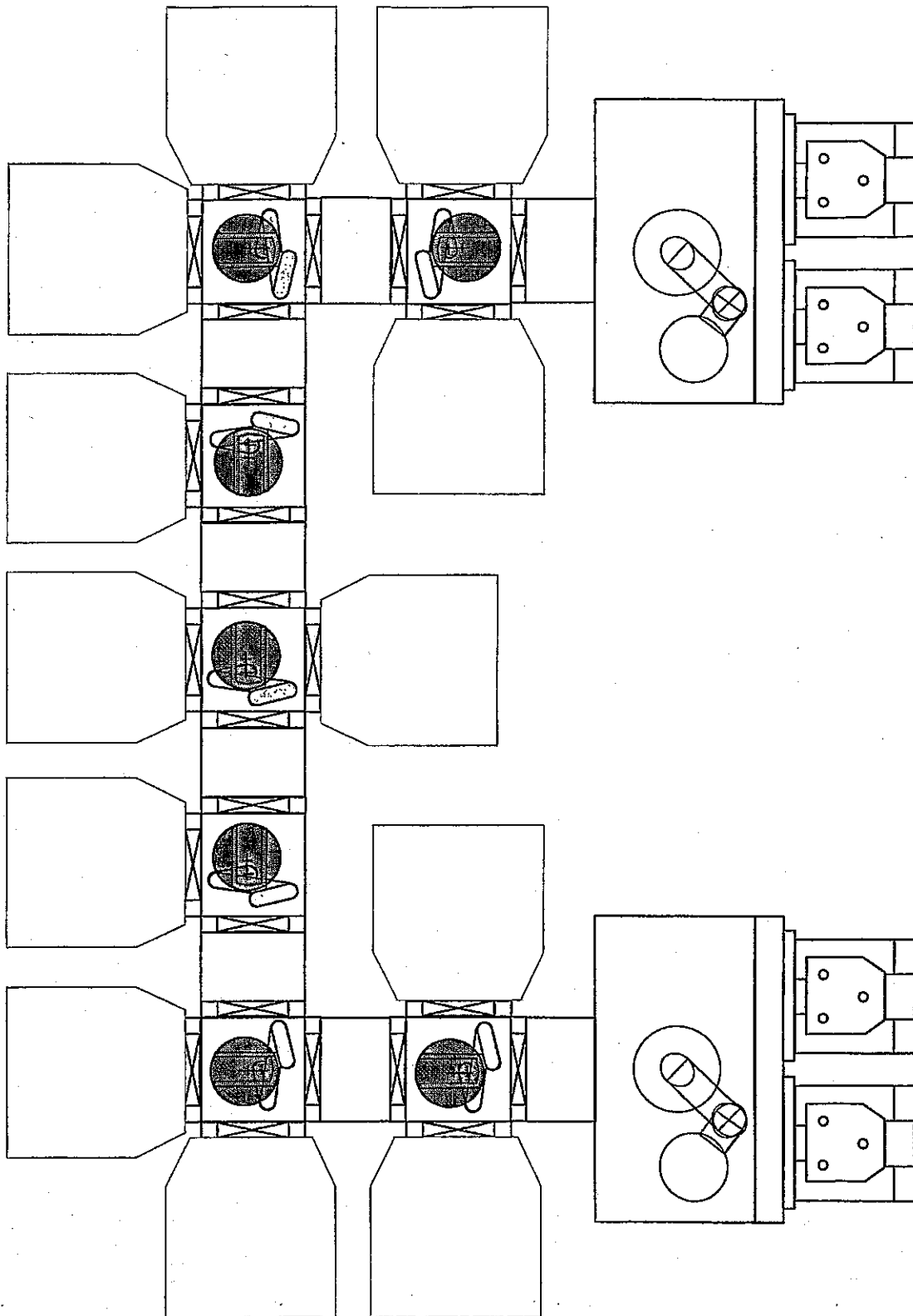


FIG. 14A

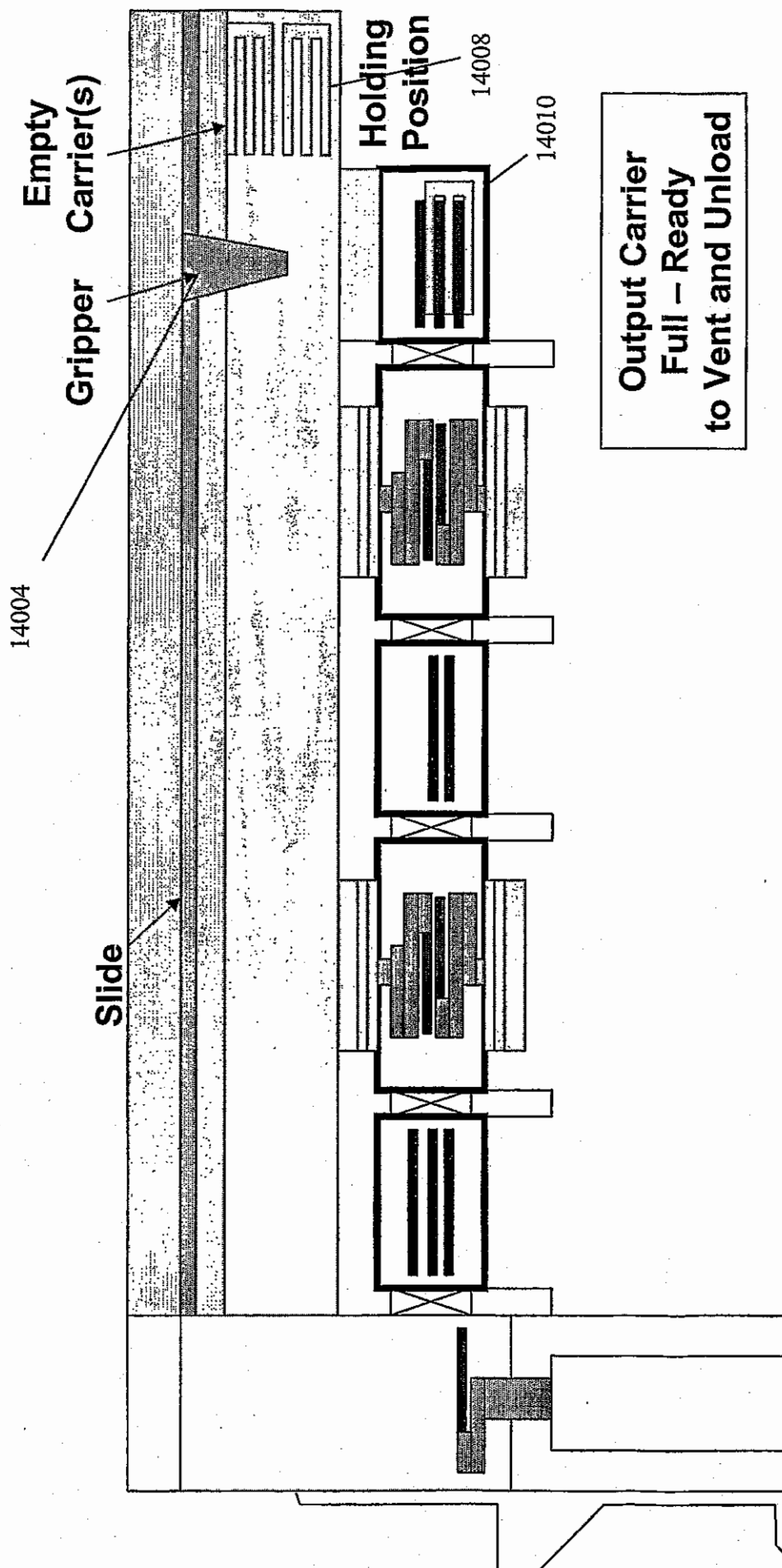


FIG. 15

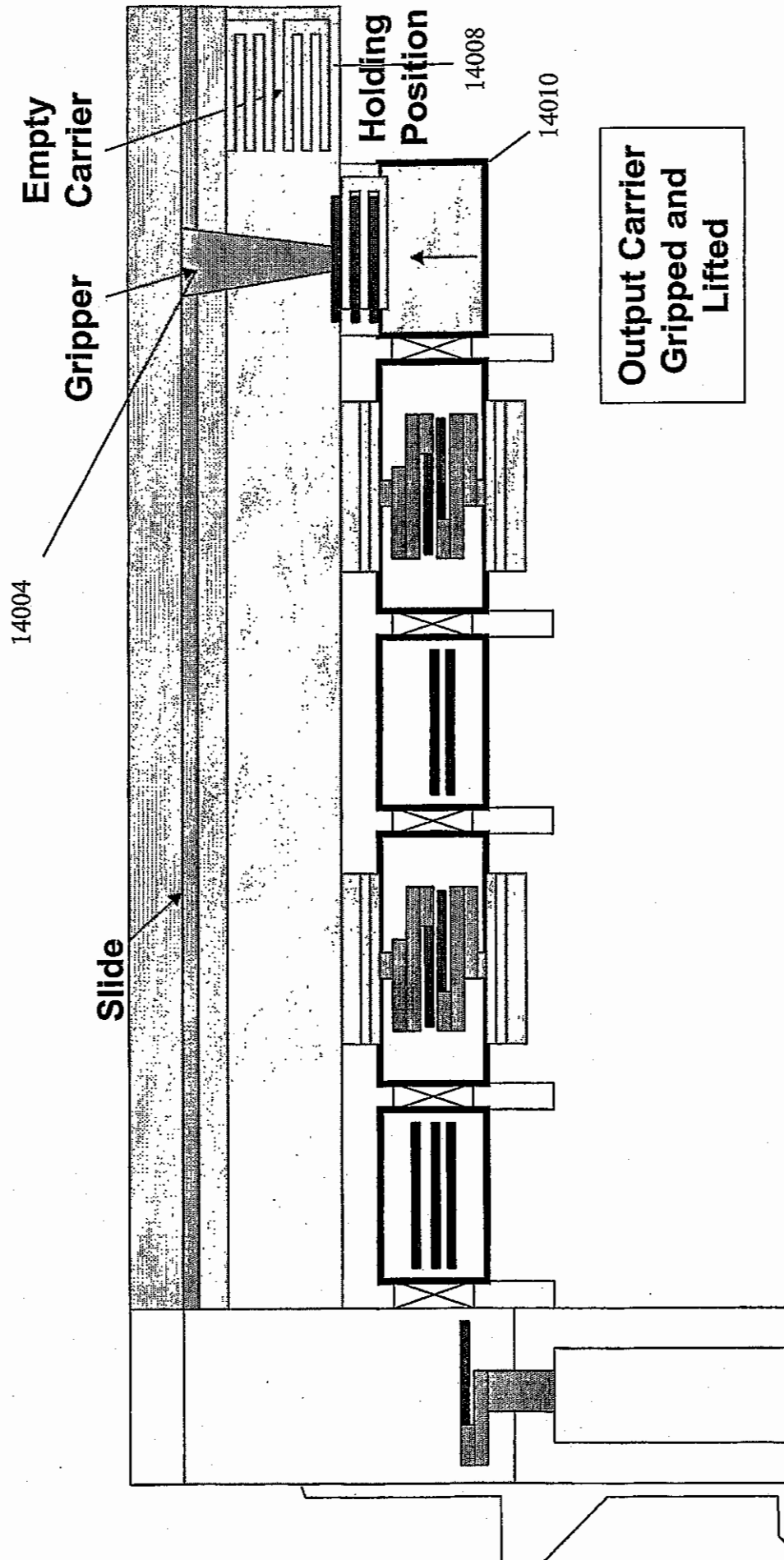


FIG. 16

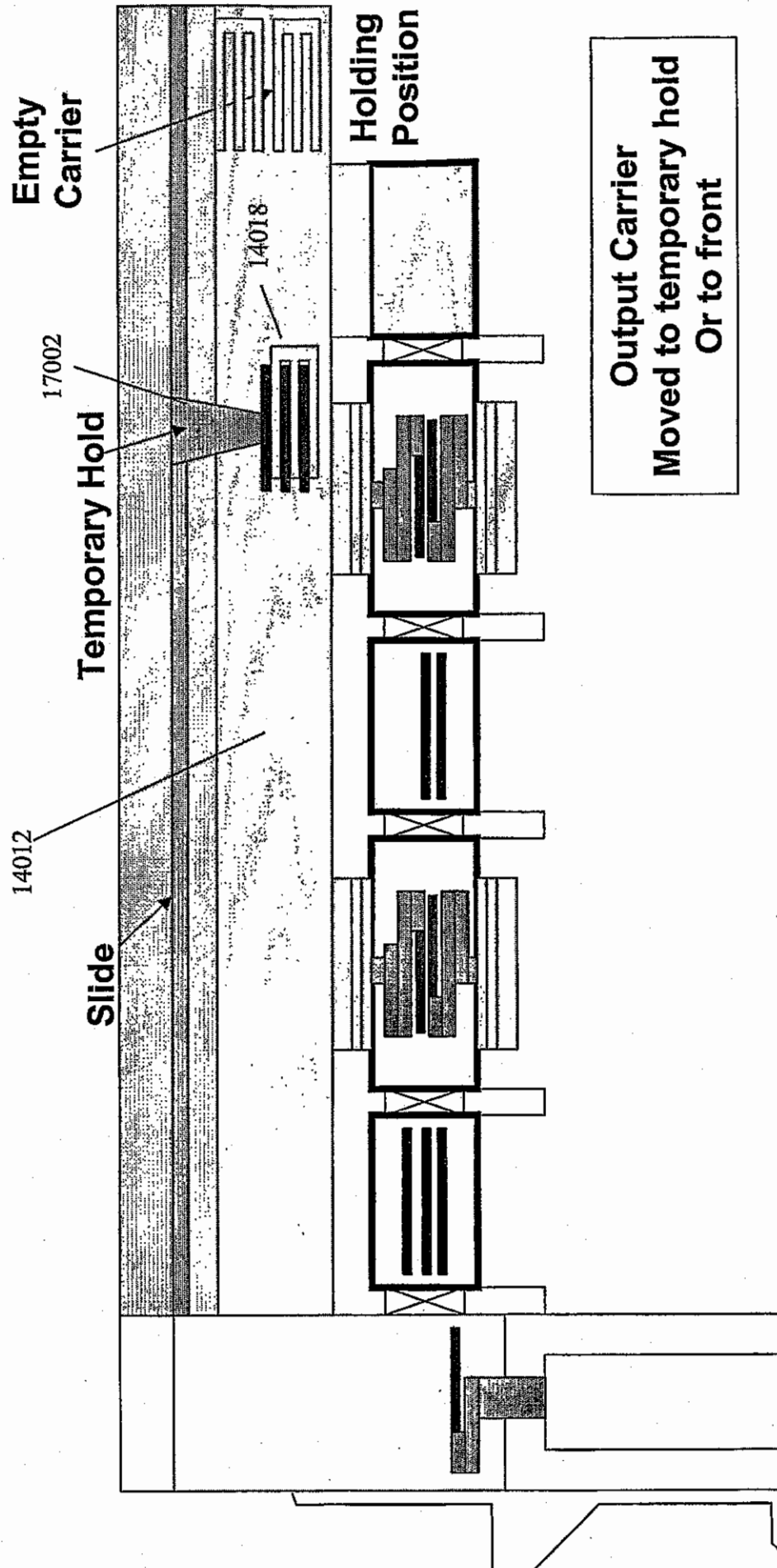


FIG. 17

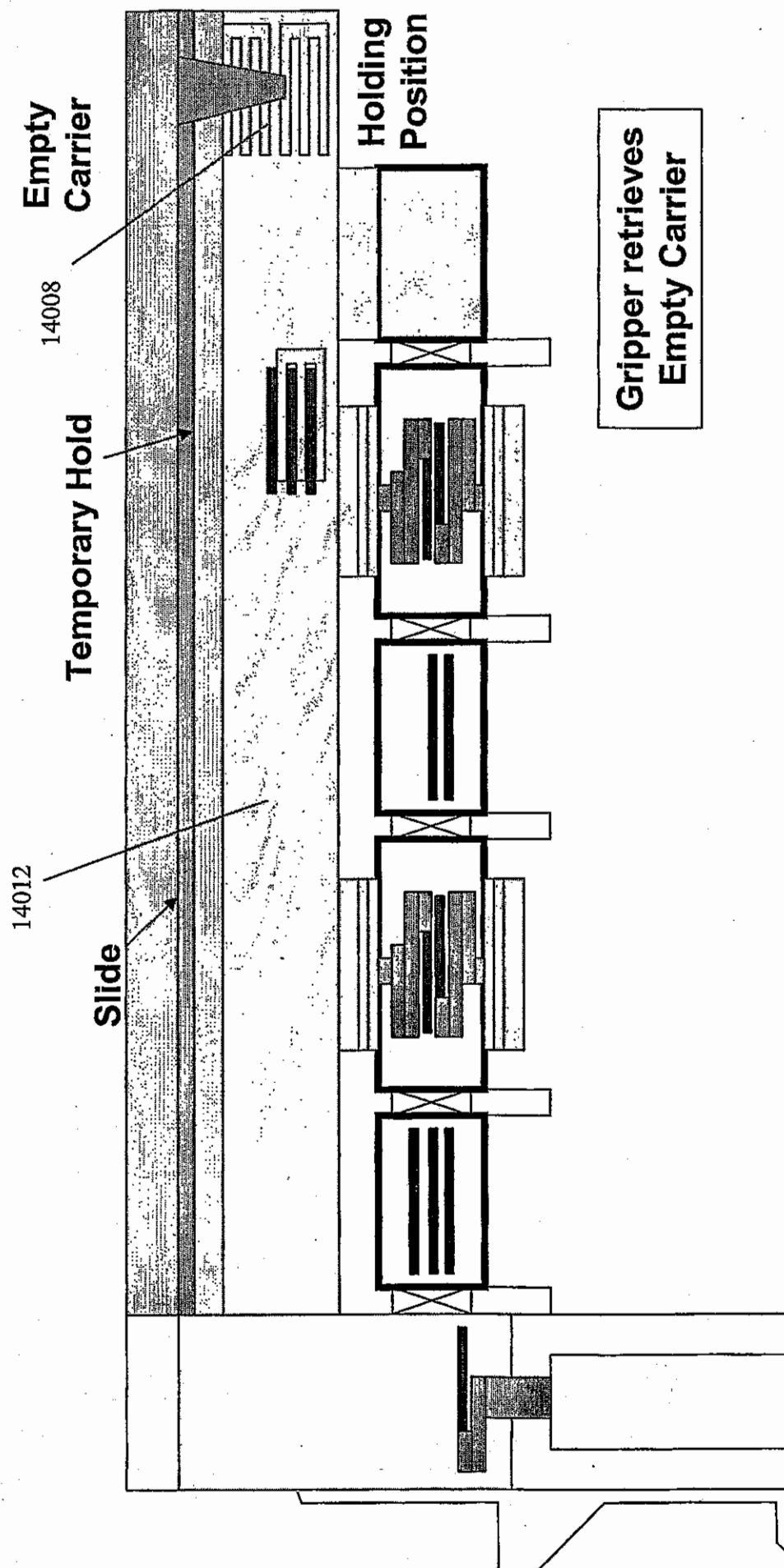


FIG. 18

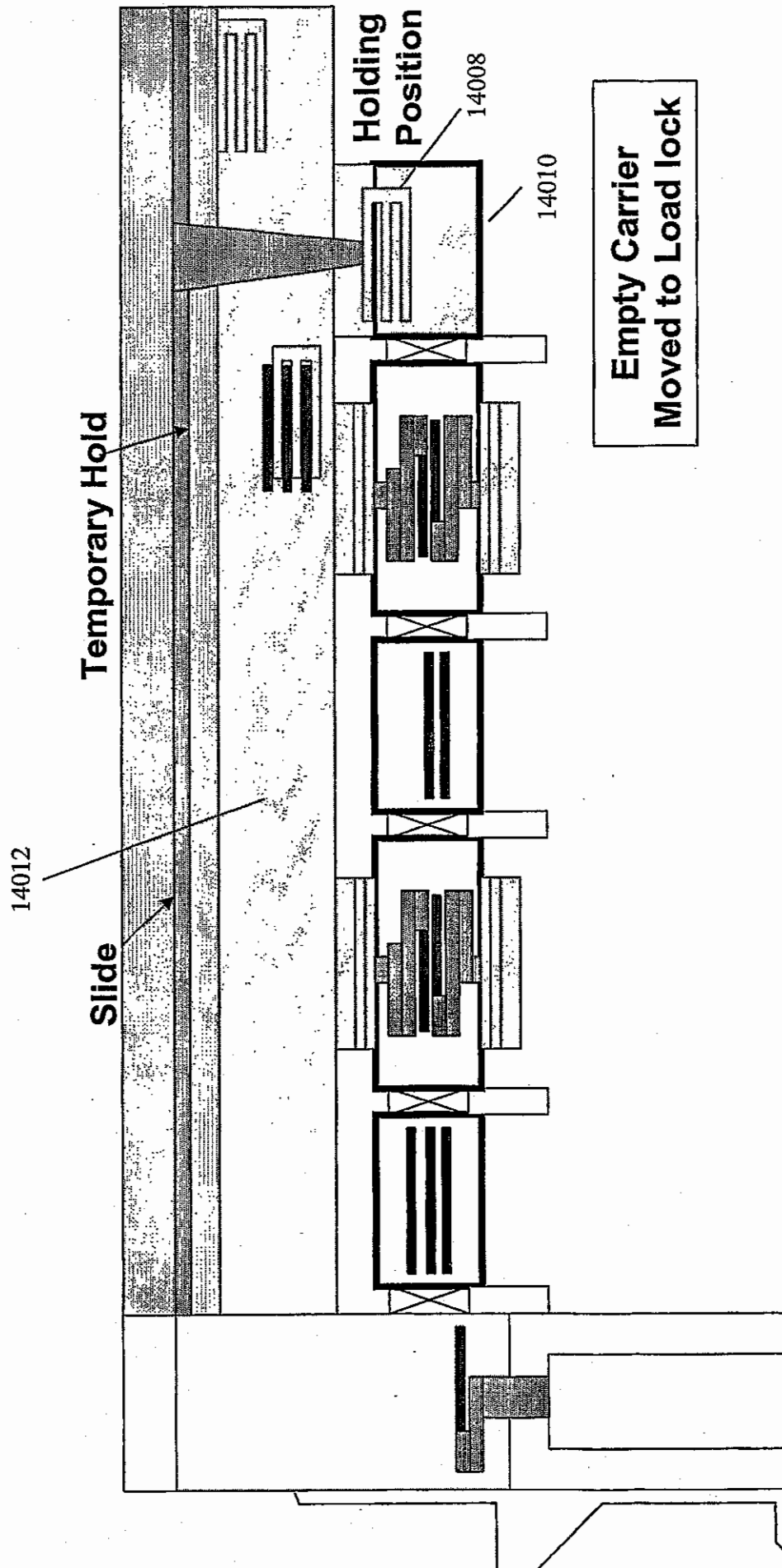


FIG. 19

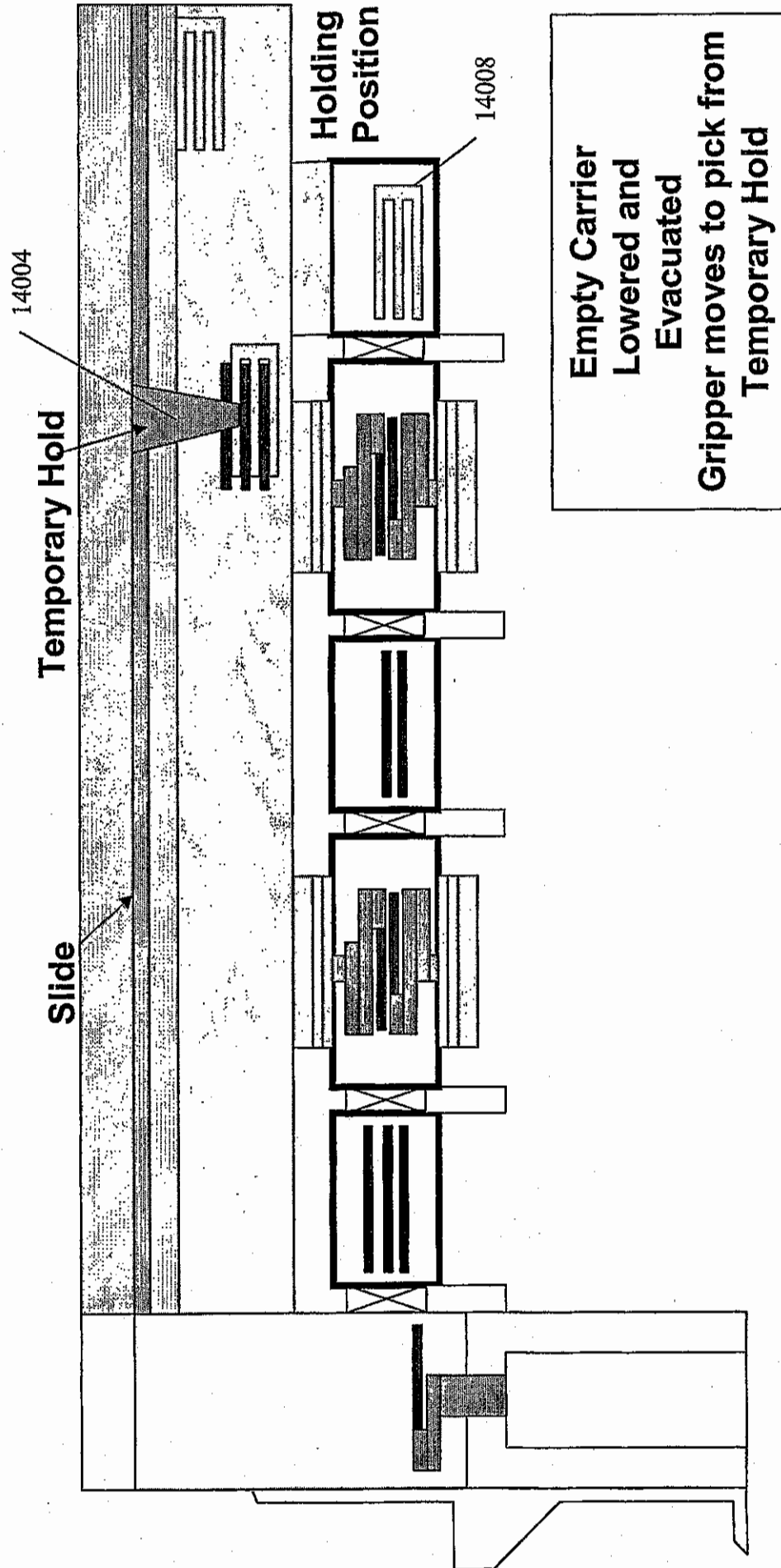


FIG. 20

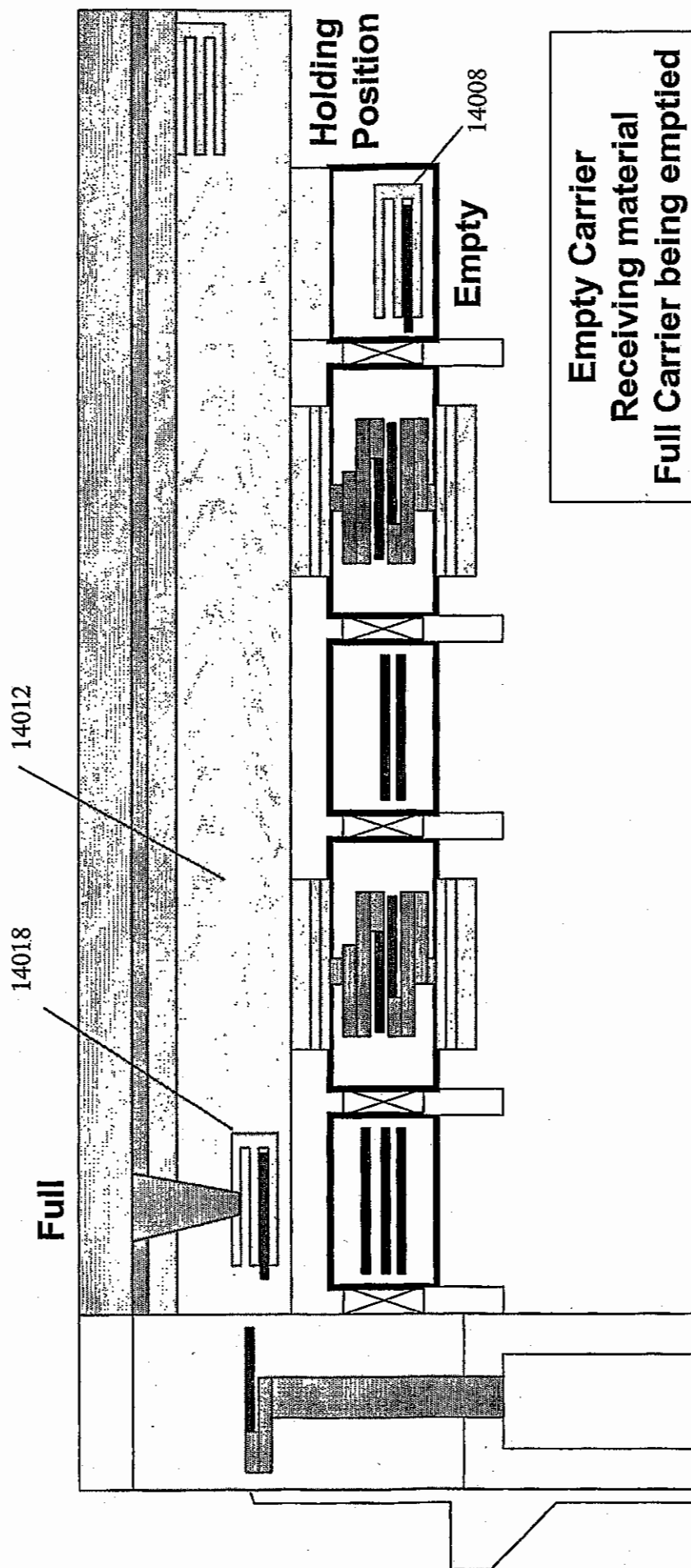


FIG. 21

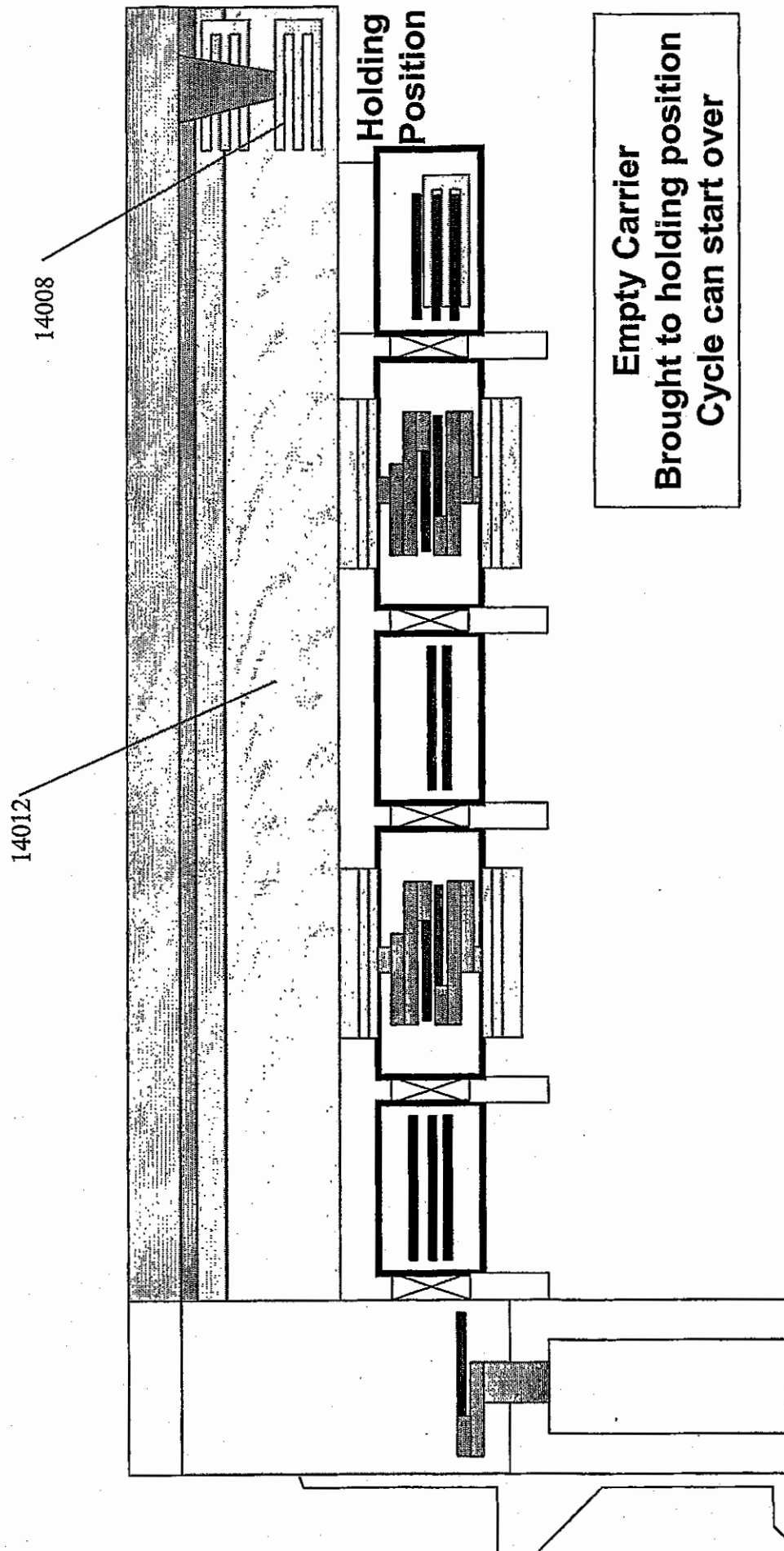


FIG. 22

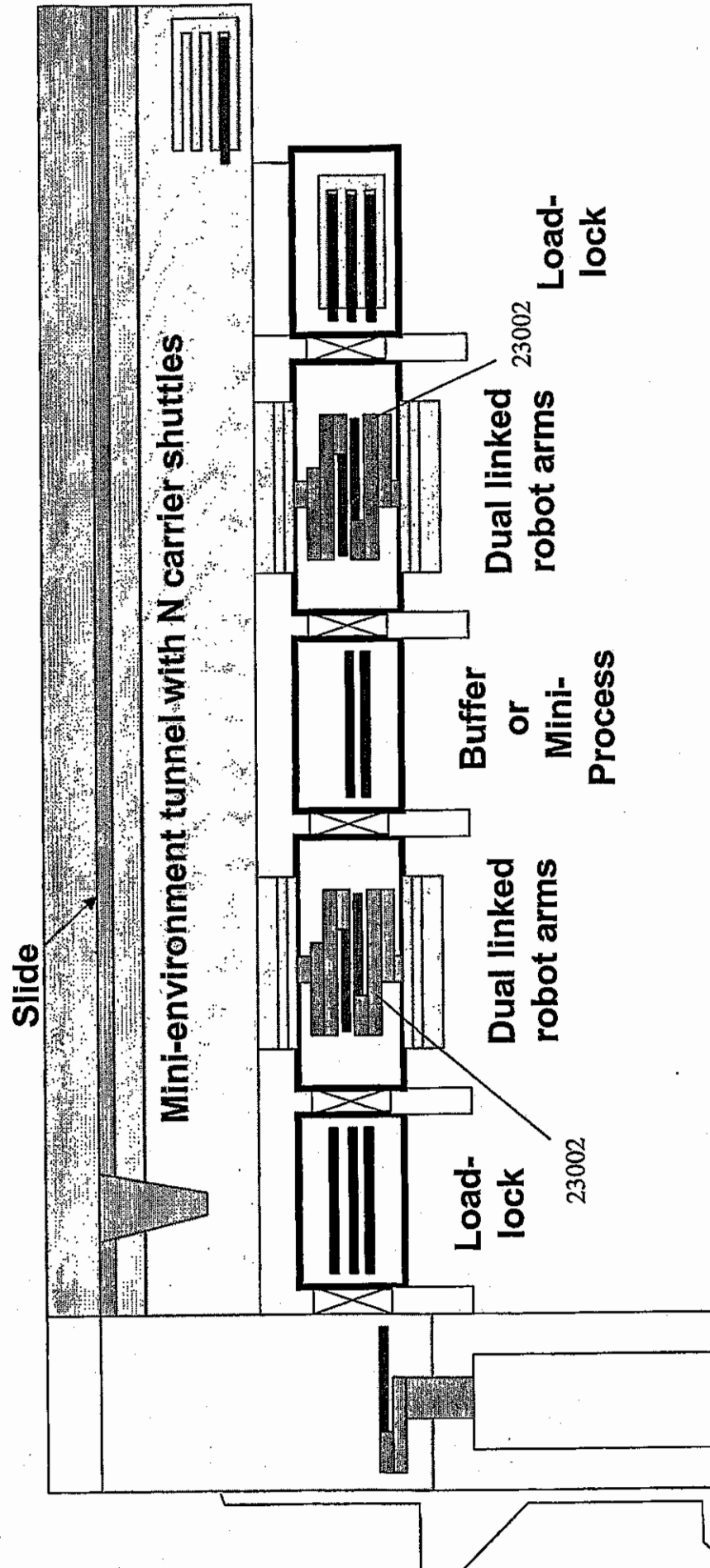


FIG. 23

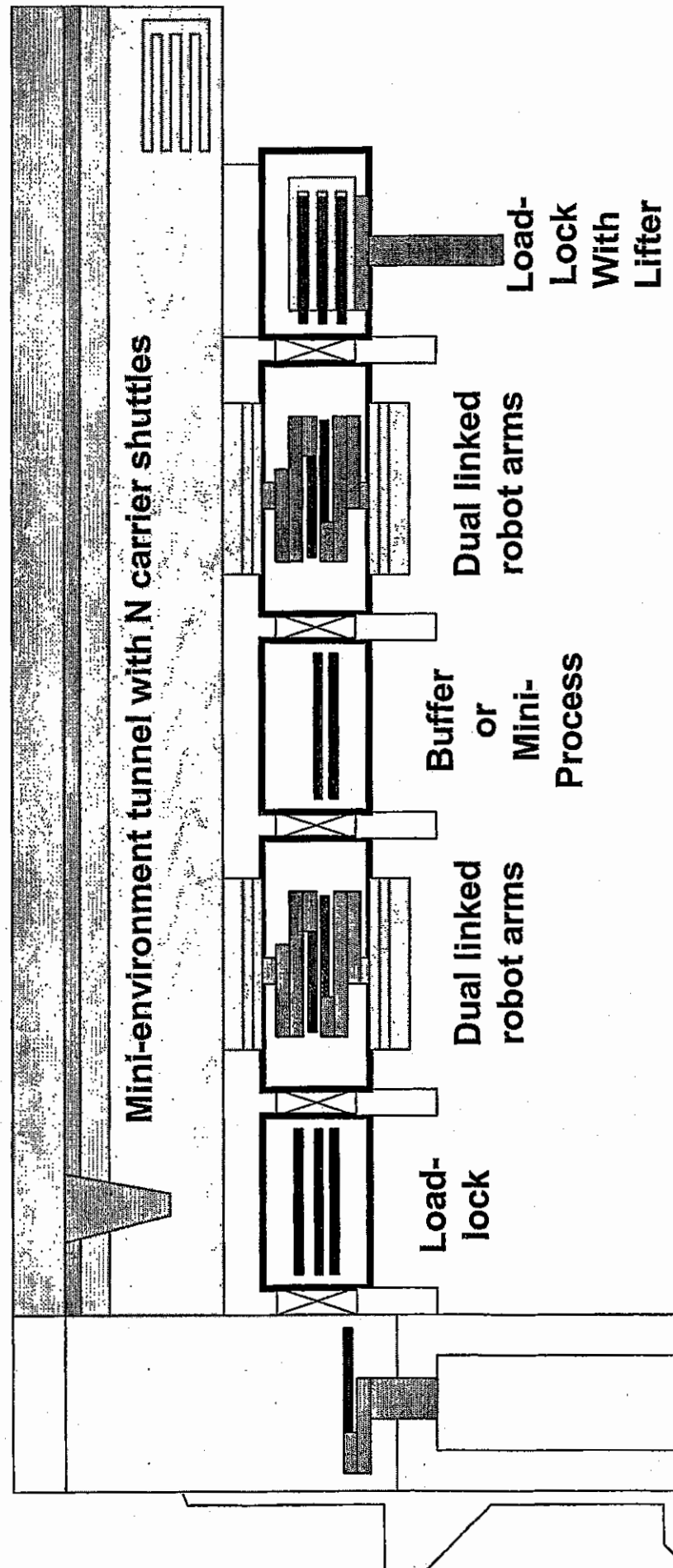


FIG. 24

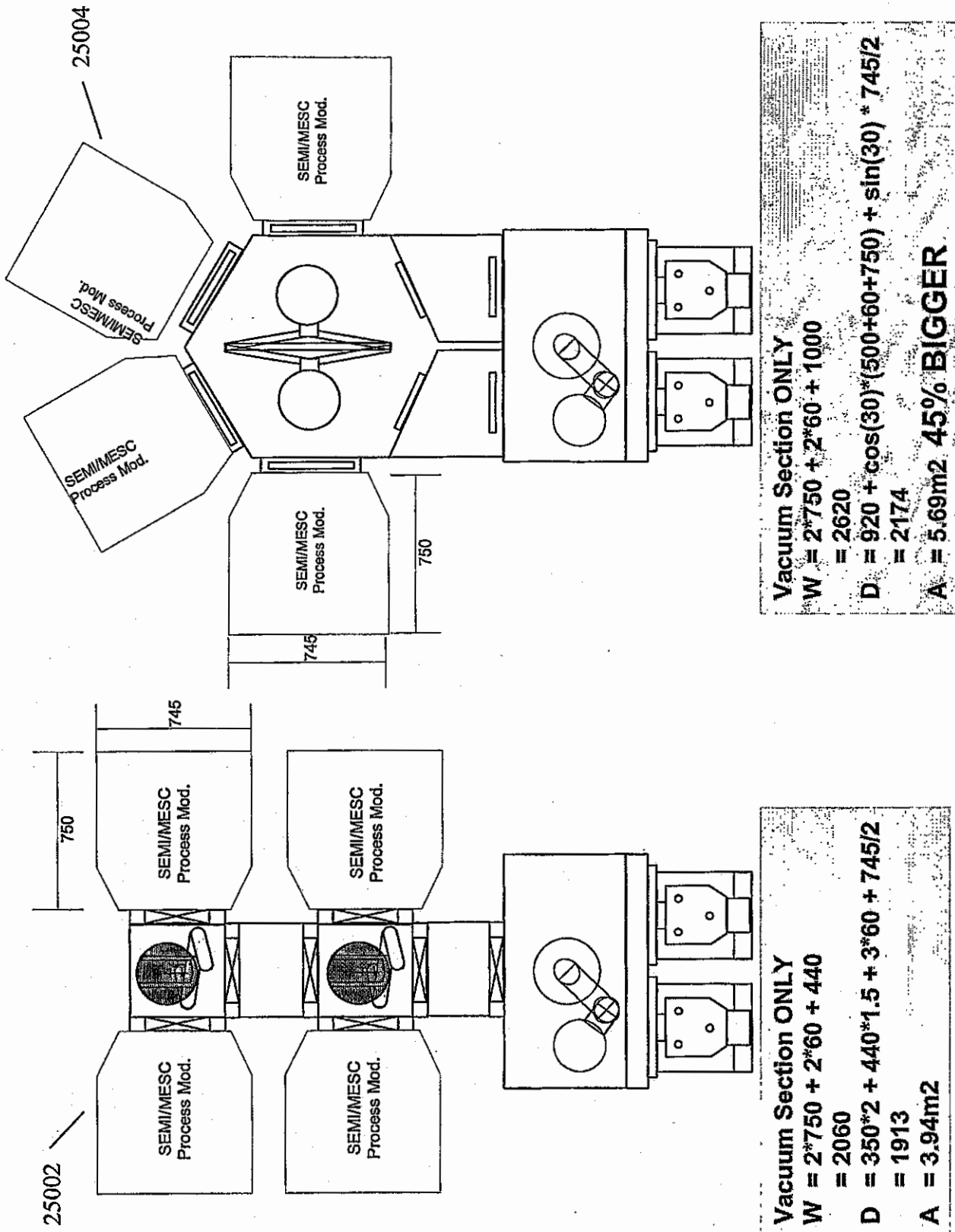
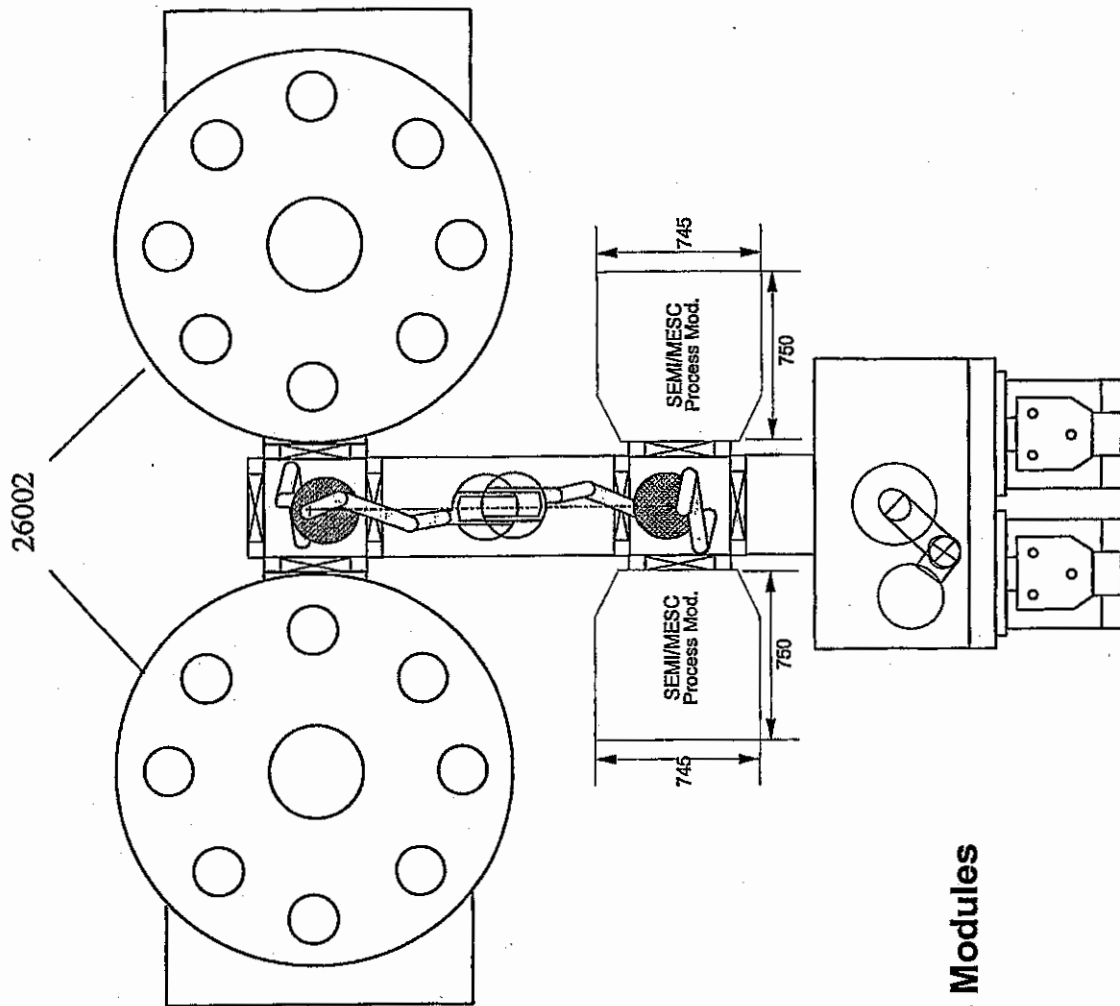


FIG. 25



Can be used with
Multiple very large Process Modules

FIG. 26

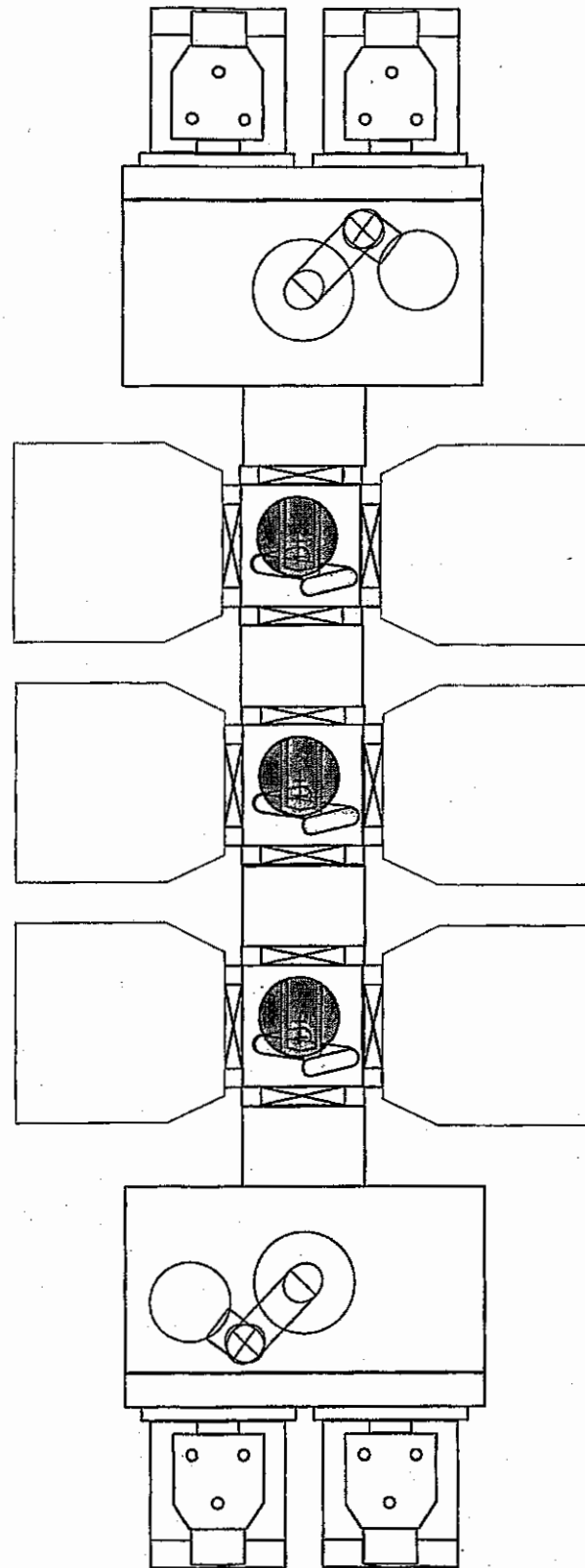


FIG. 27

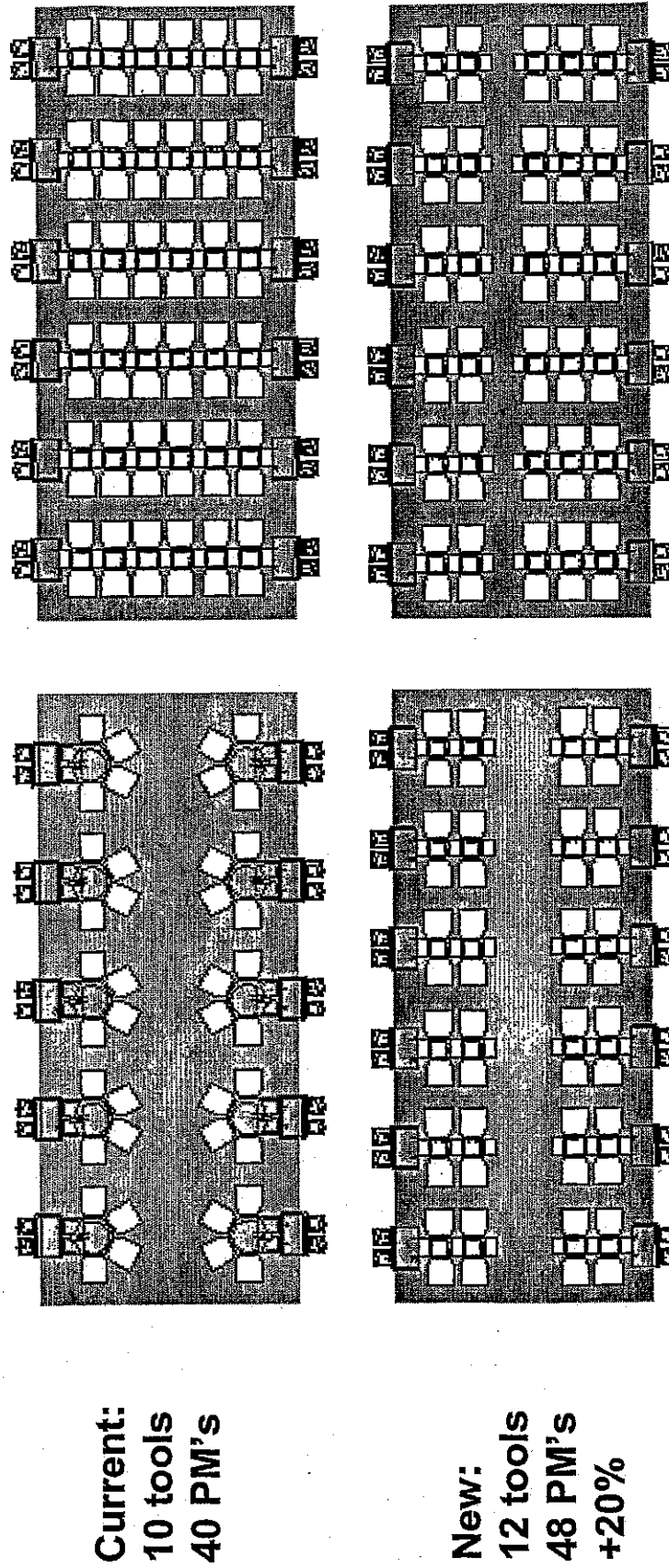


FIG. 28

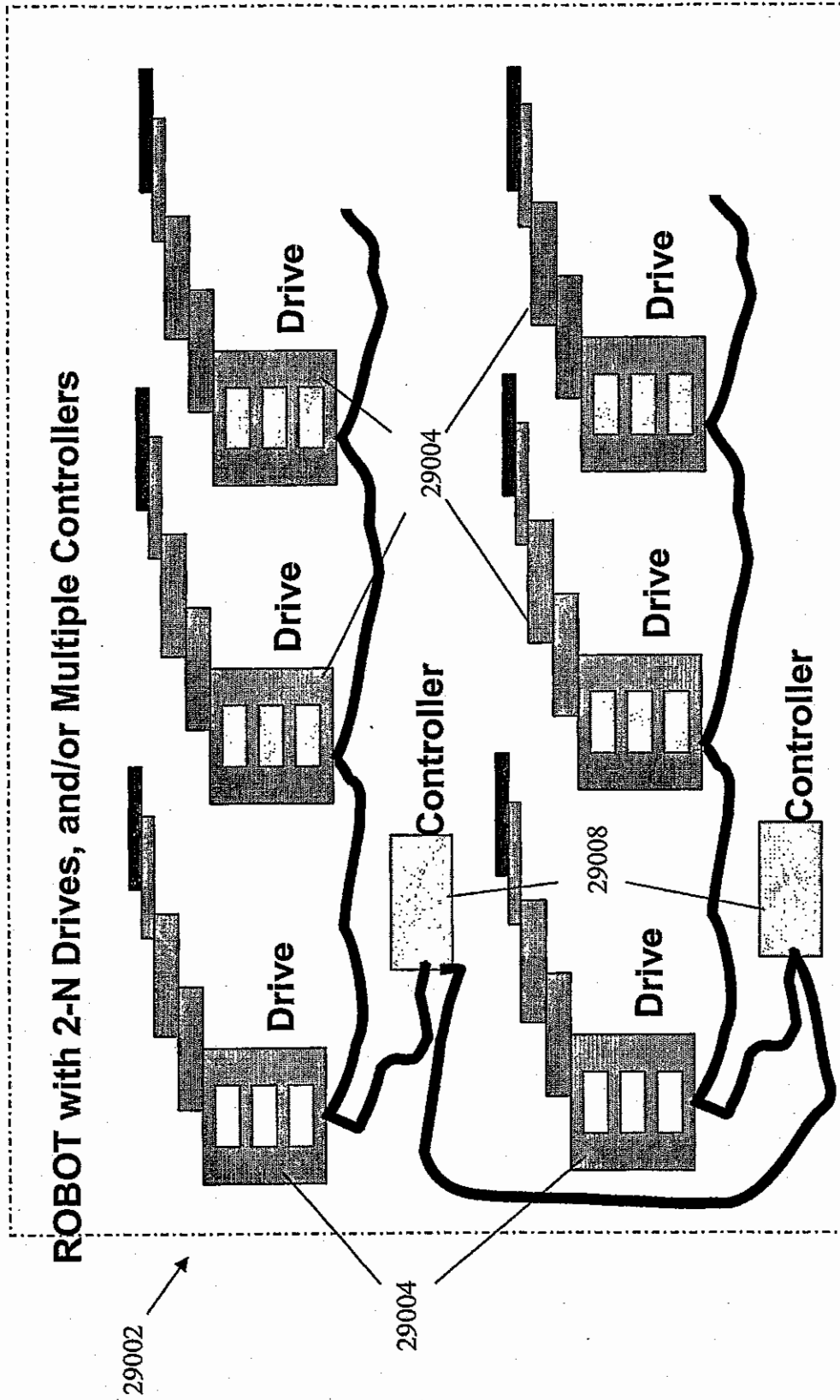


FIG. 29

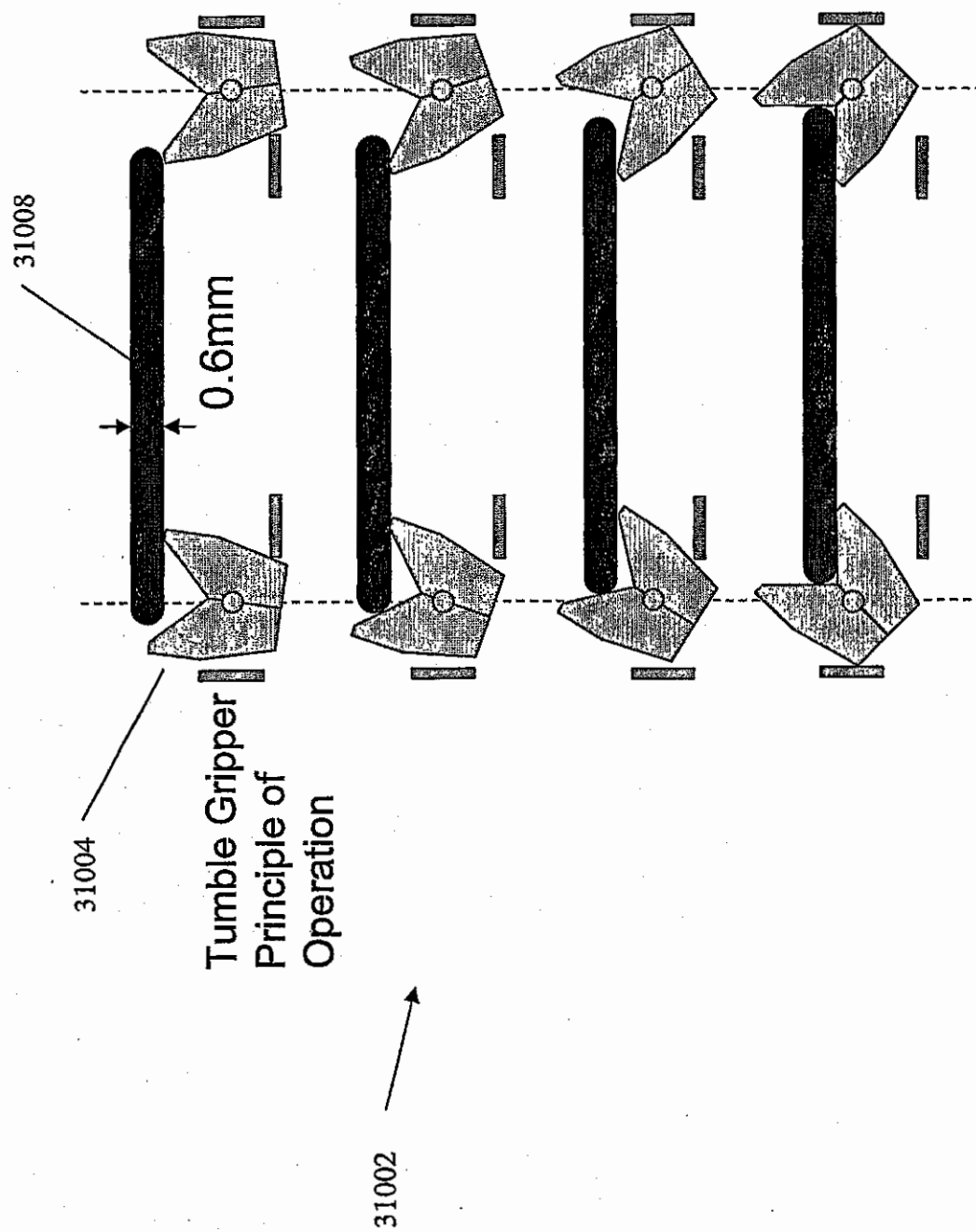


FIG. 31

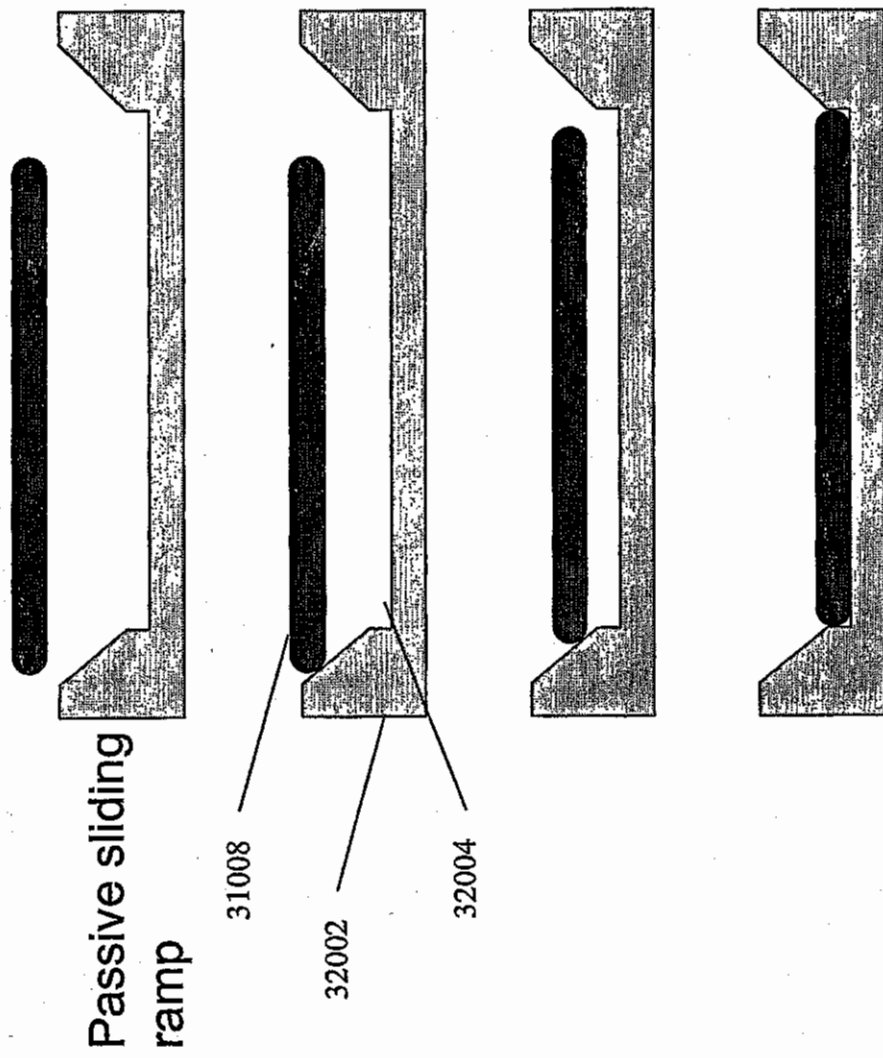


FIG. 32

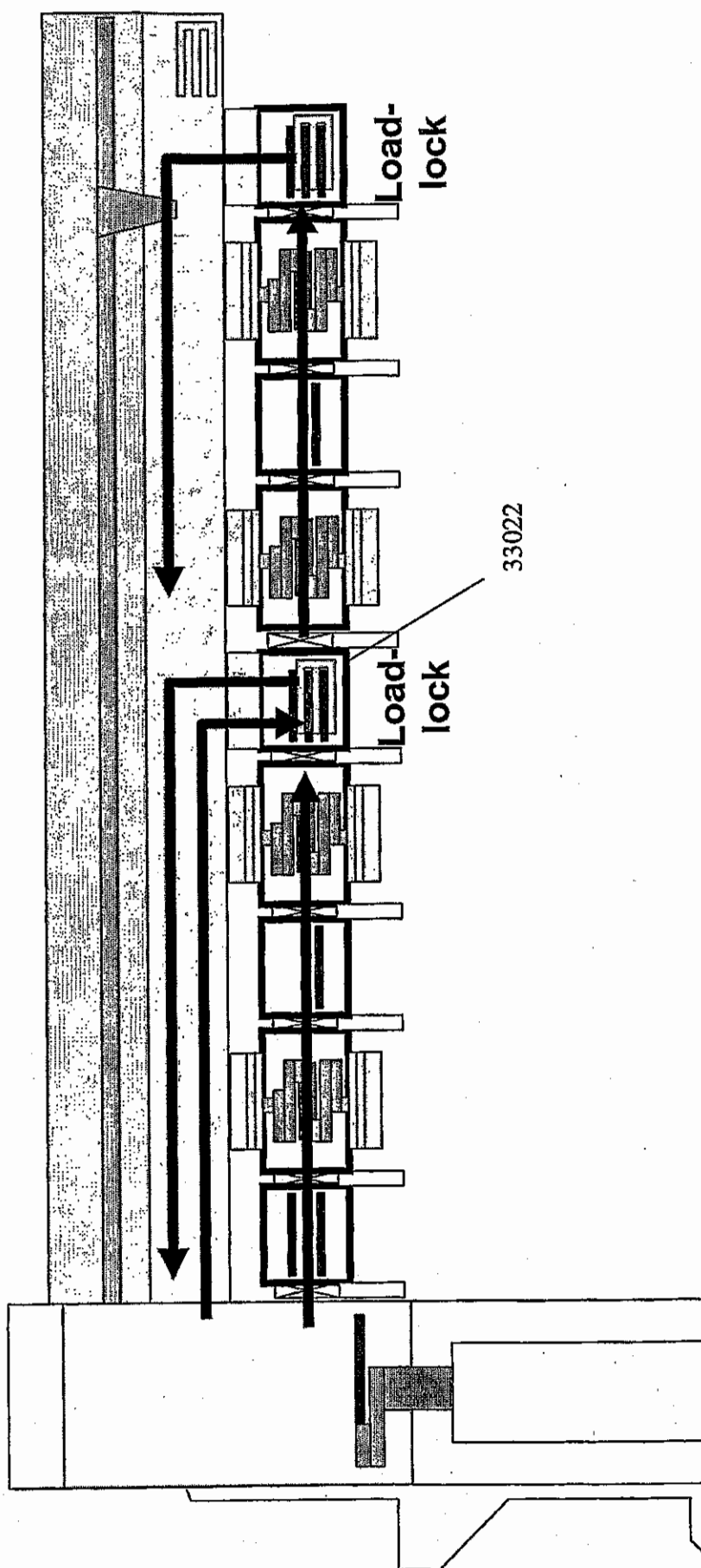


FIG. 33

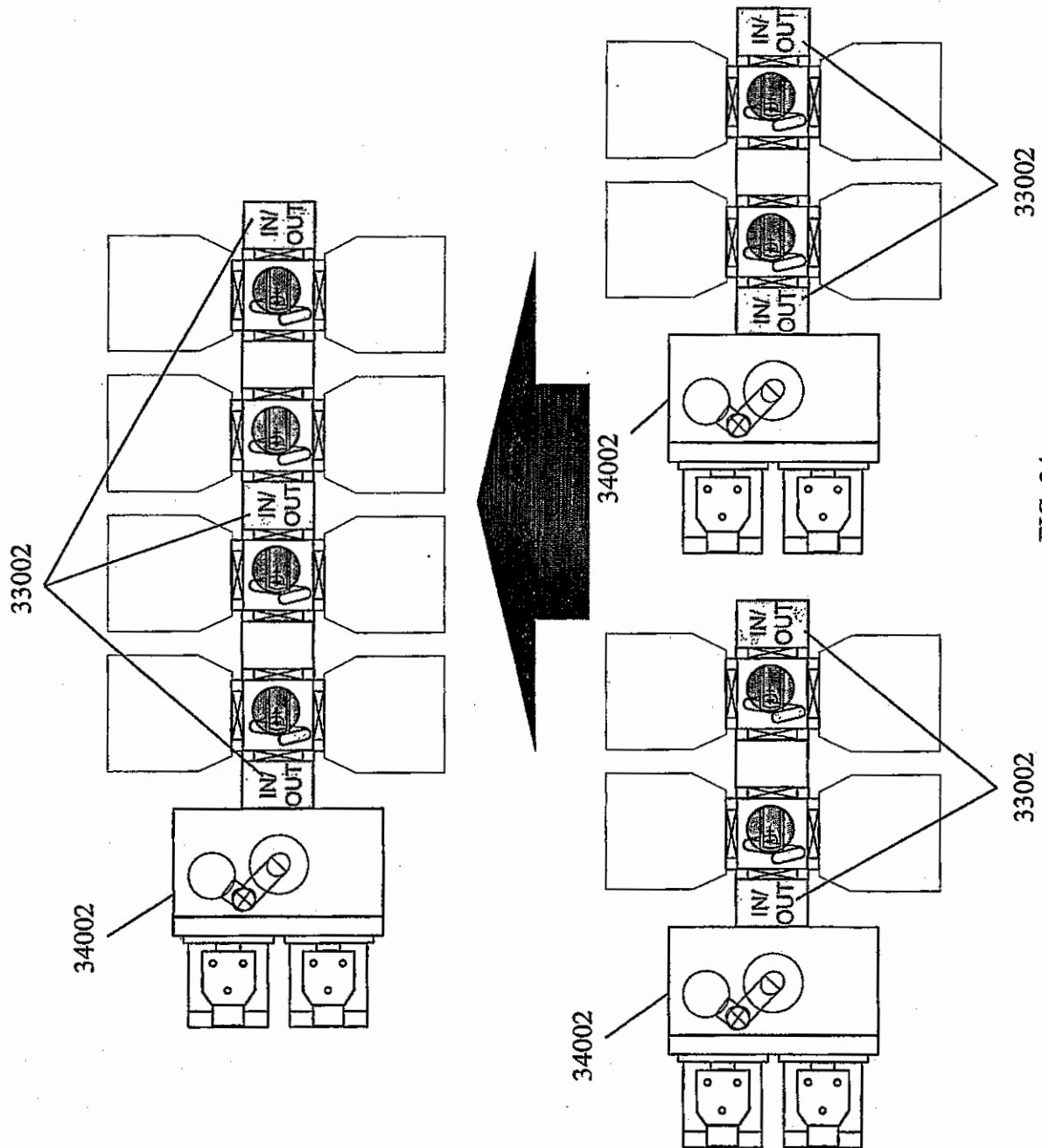


FIG. 34

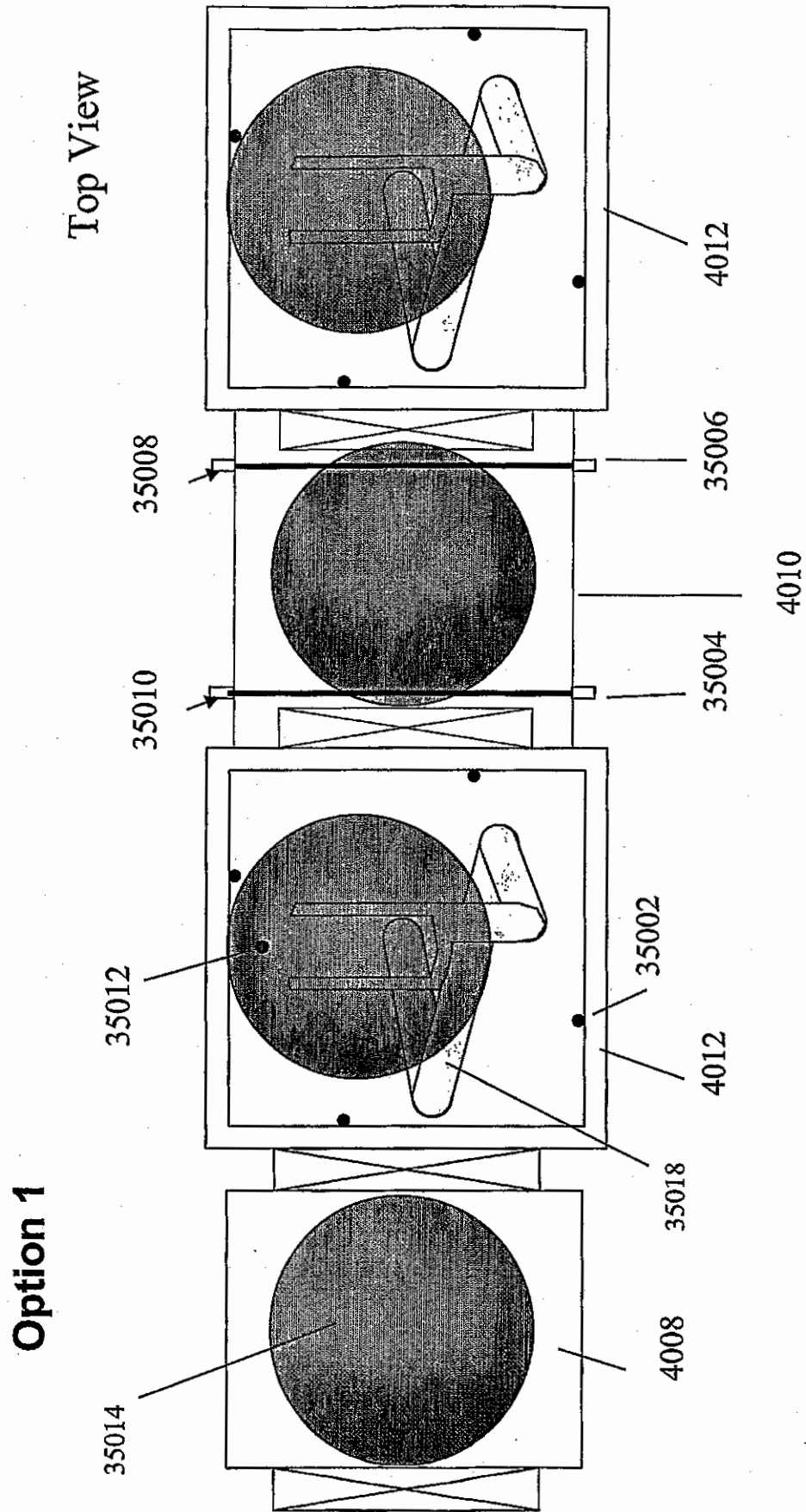


FIG. 35

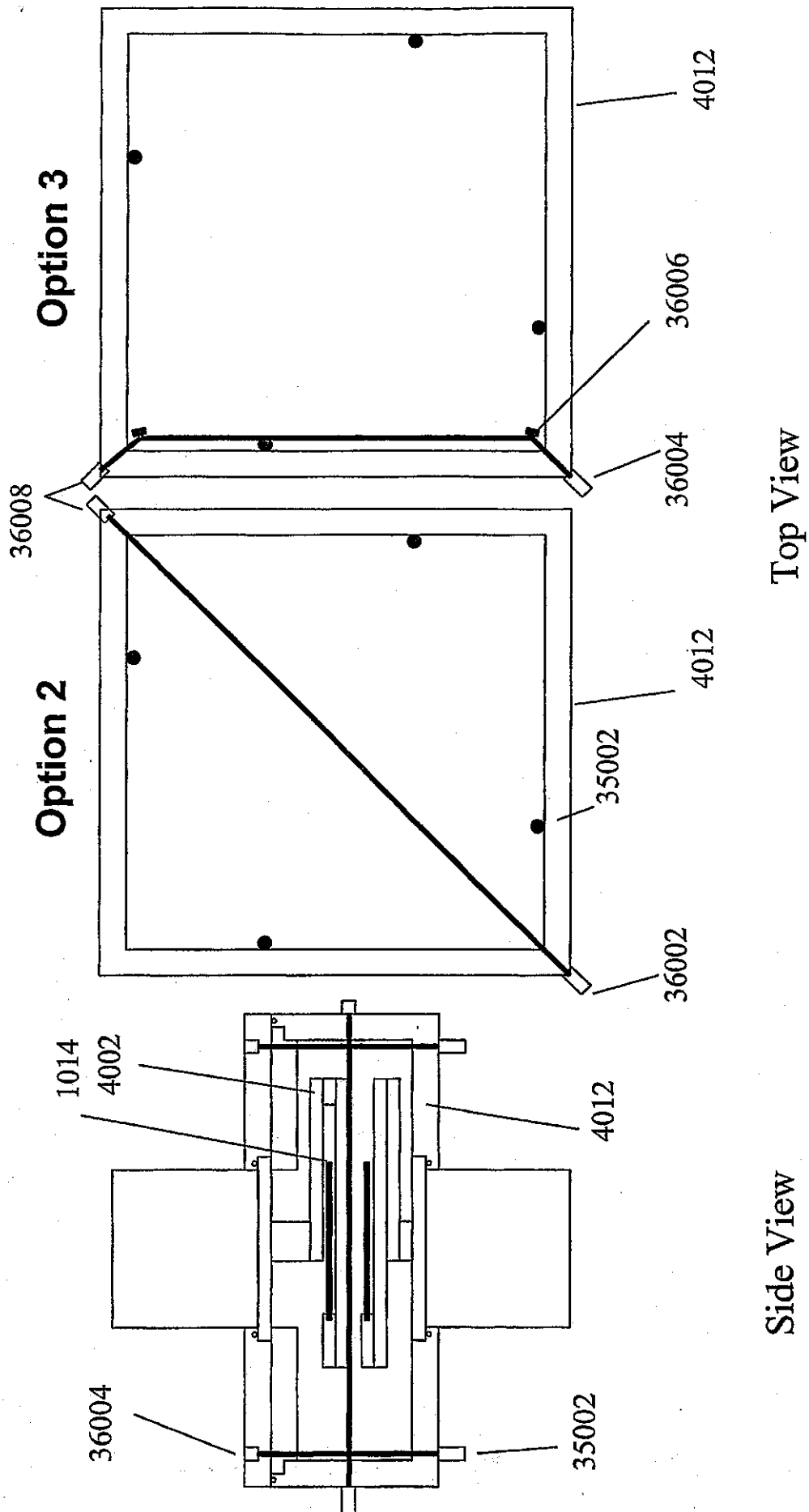


FIG. 36

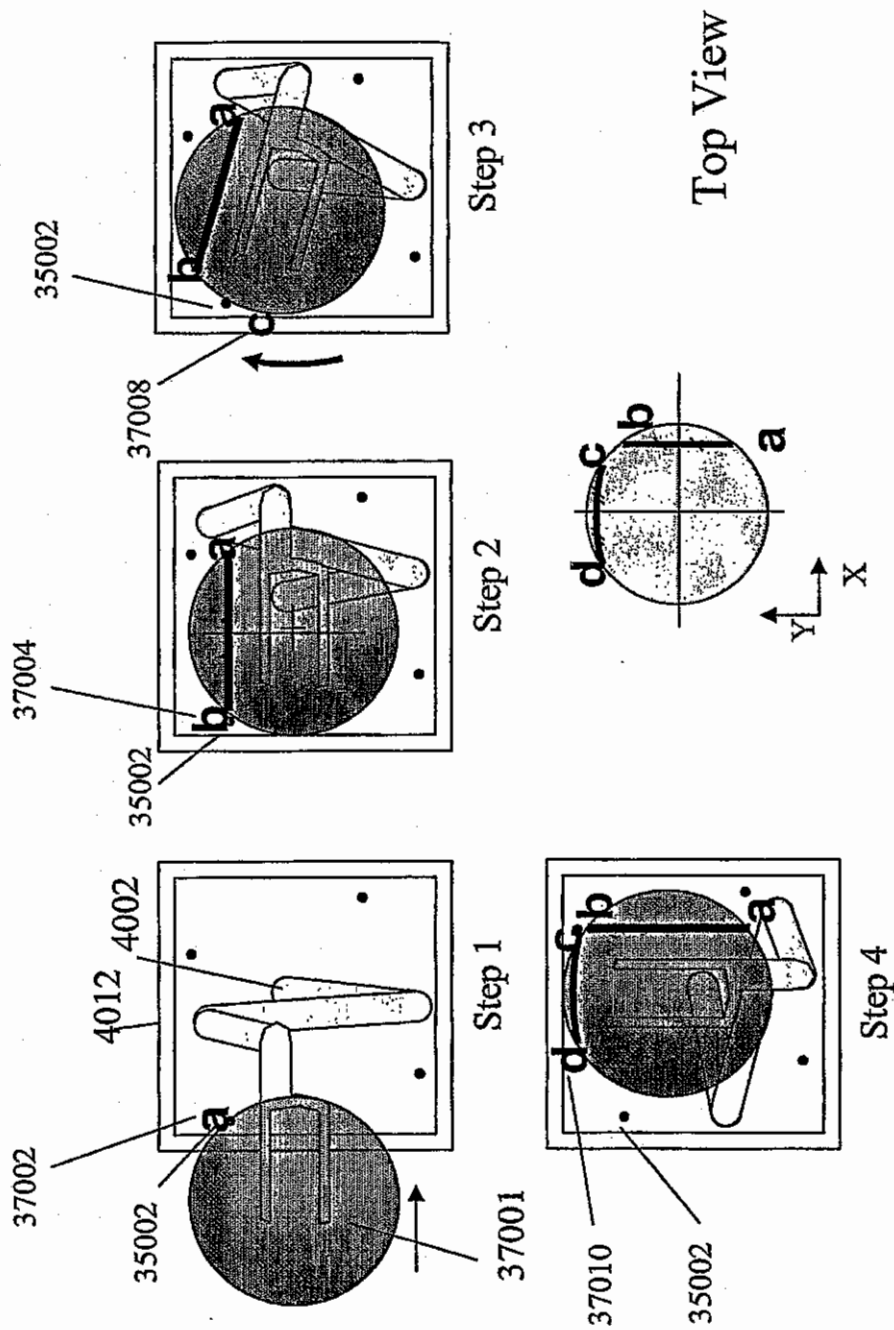


FIG. 37

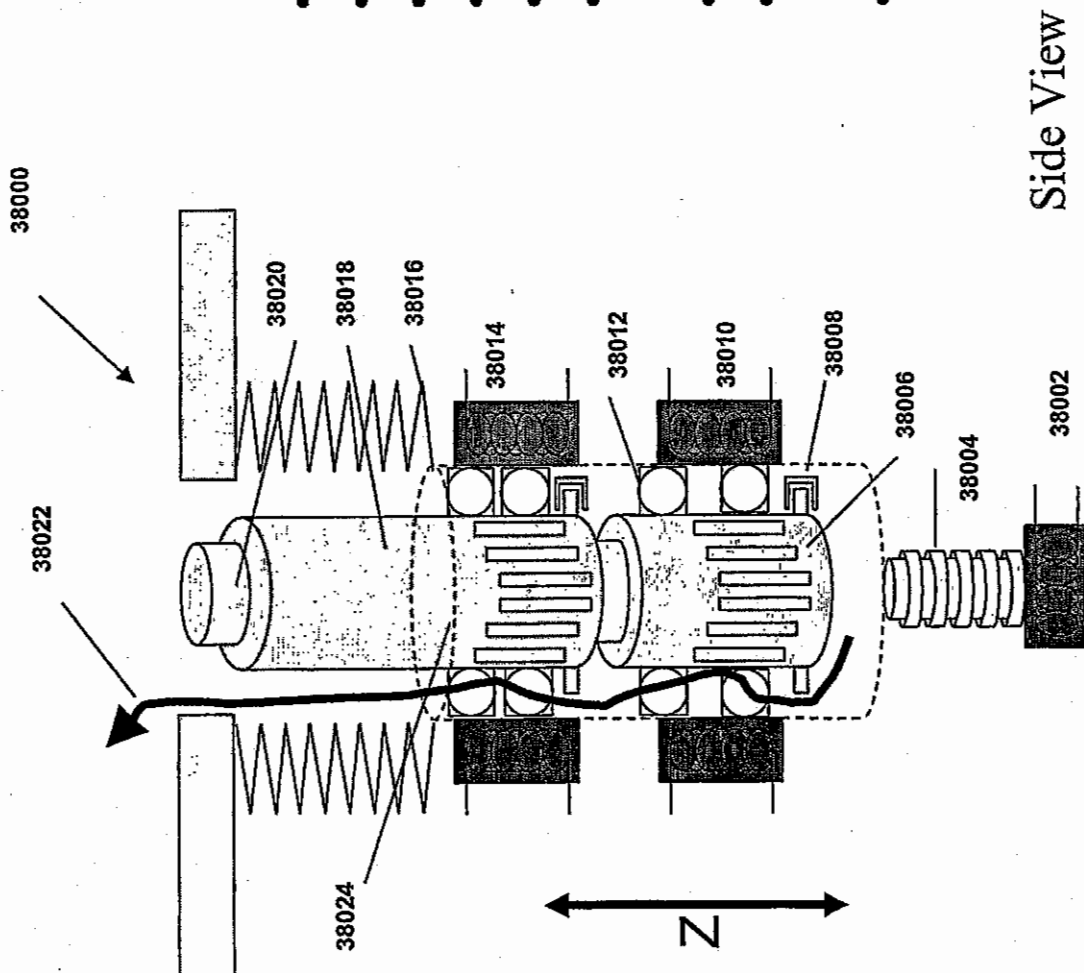


FIG. 38

Current 3 Axis Drive Concept

- Large surface in vacuum
- Low pump speed to bottom
- Encoders in vacuum
- Read heads in vacuum
- Magnets in vacuum
- Bearings in vacuum
- Risk of encoder damage
- Corrosion resistance of various components
- Outgassing of pick-up/LEDs

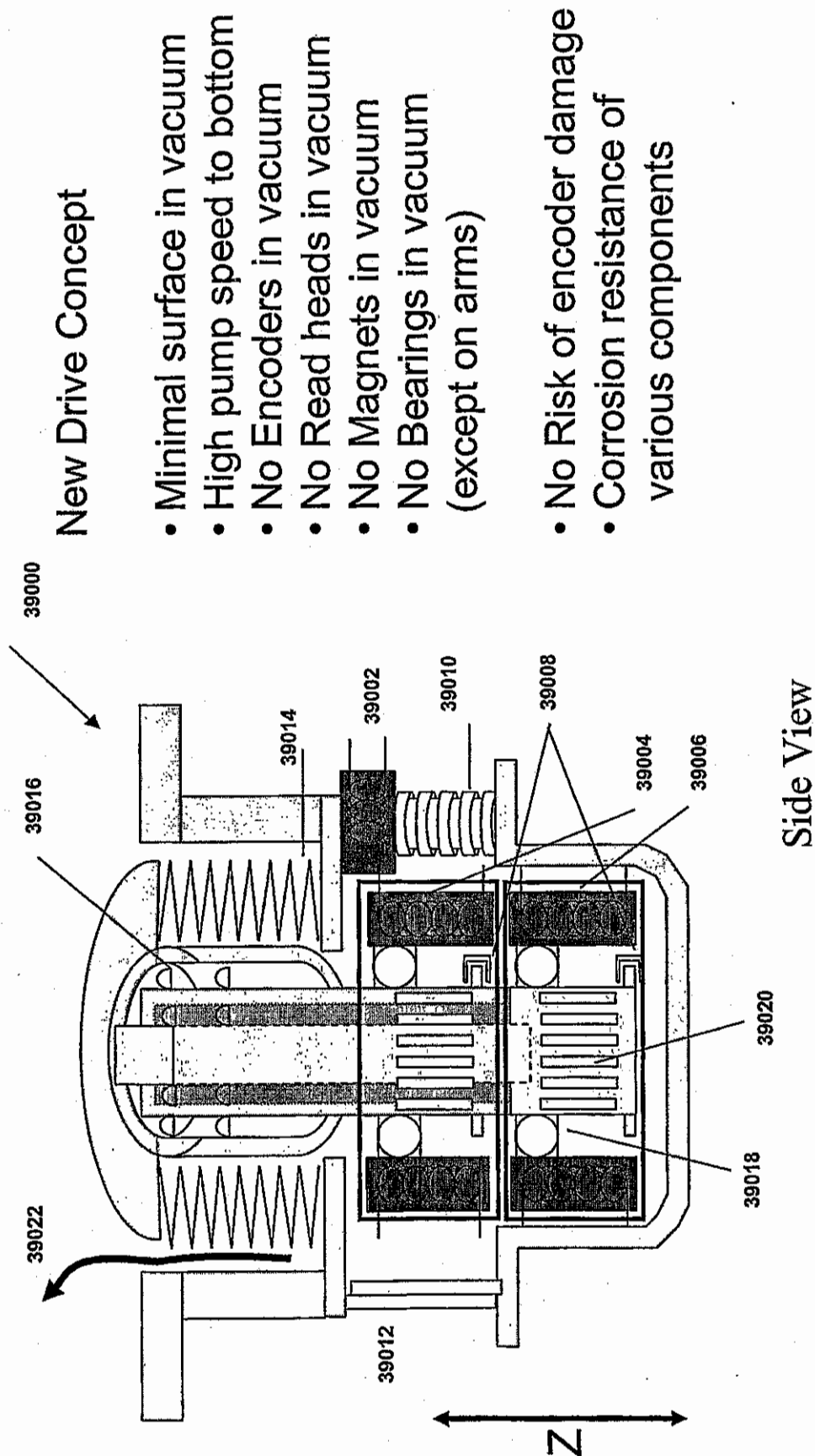
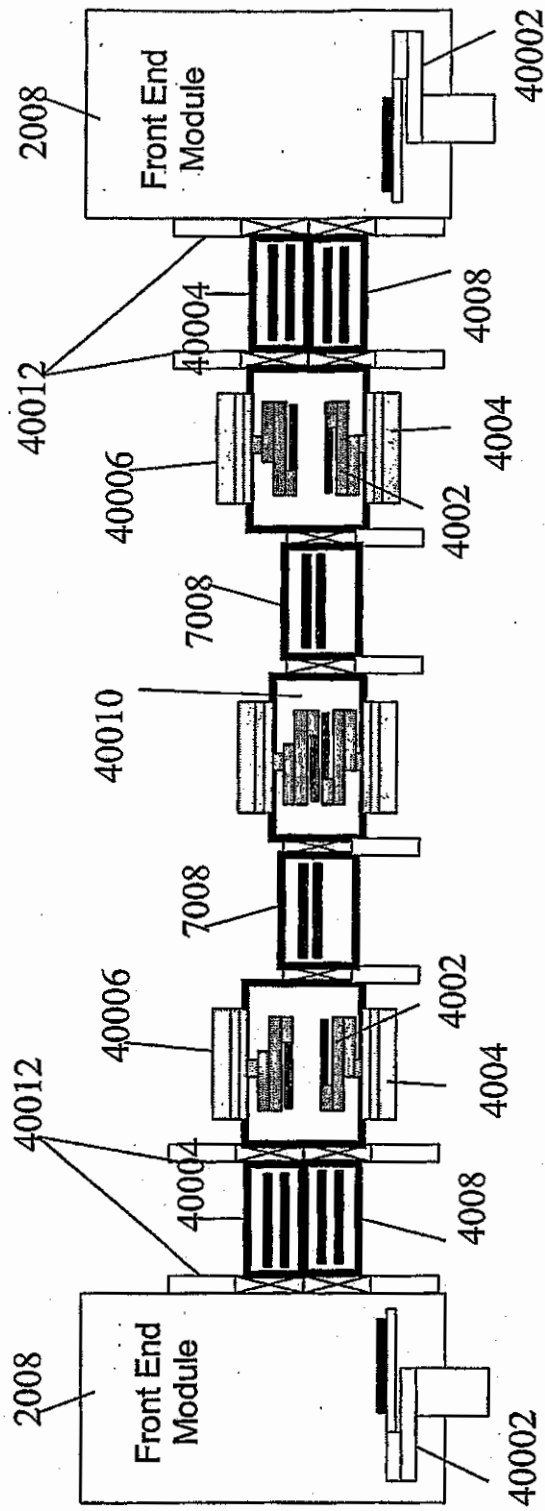


FIG. 39



Side View

FIG. 40B

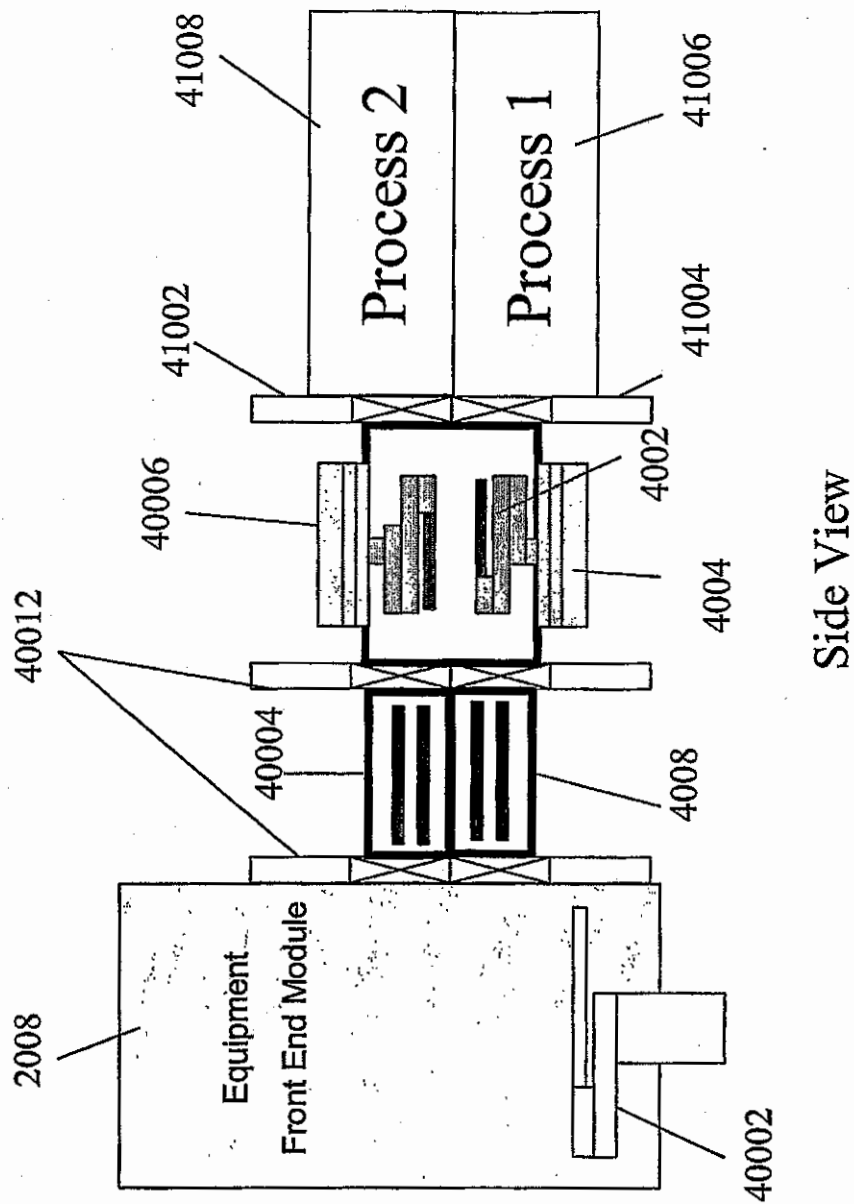
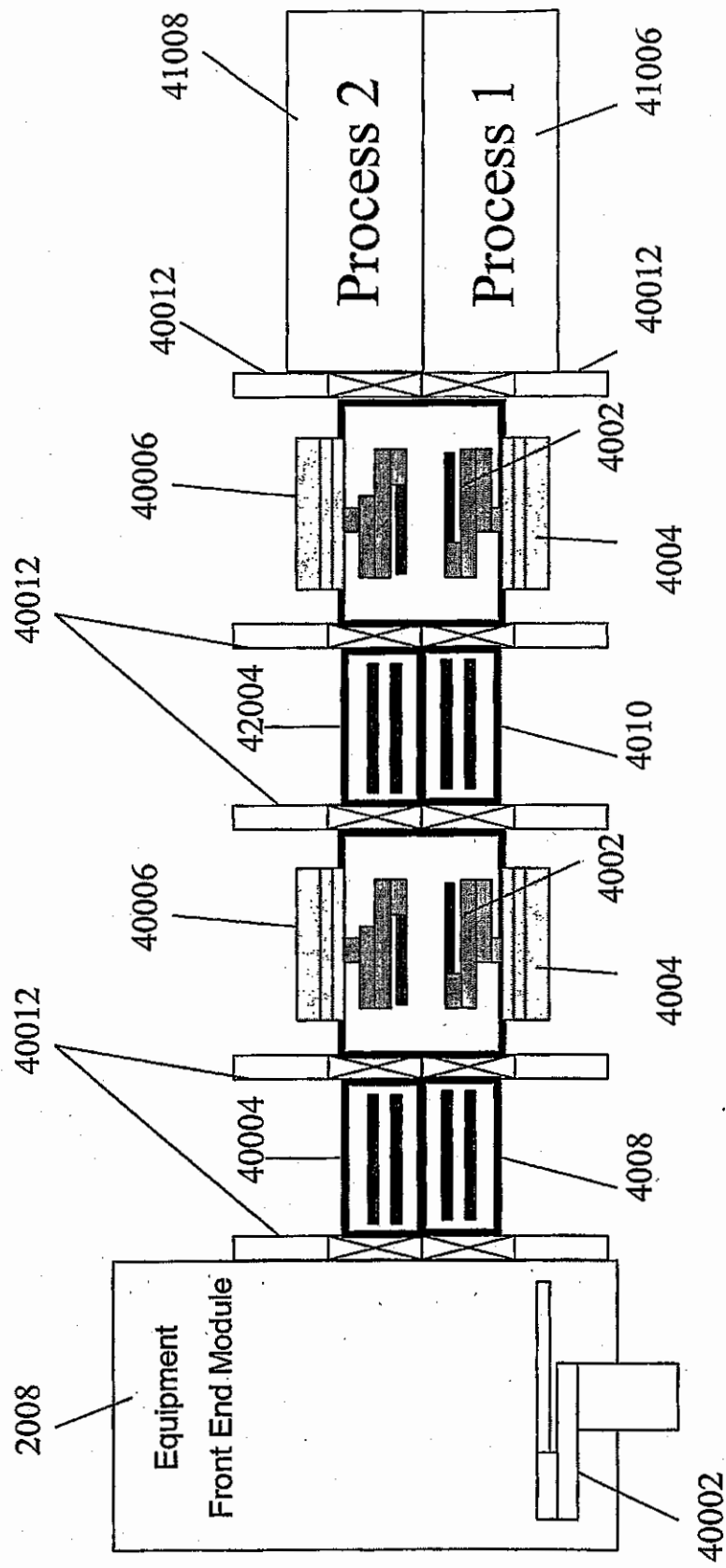


FIG. 41



Side View

FIG. 42

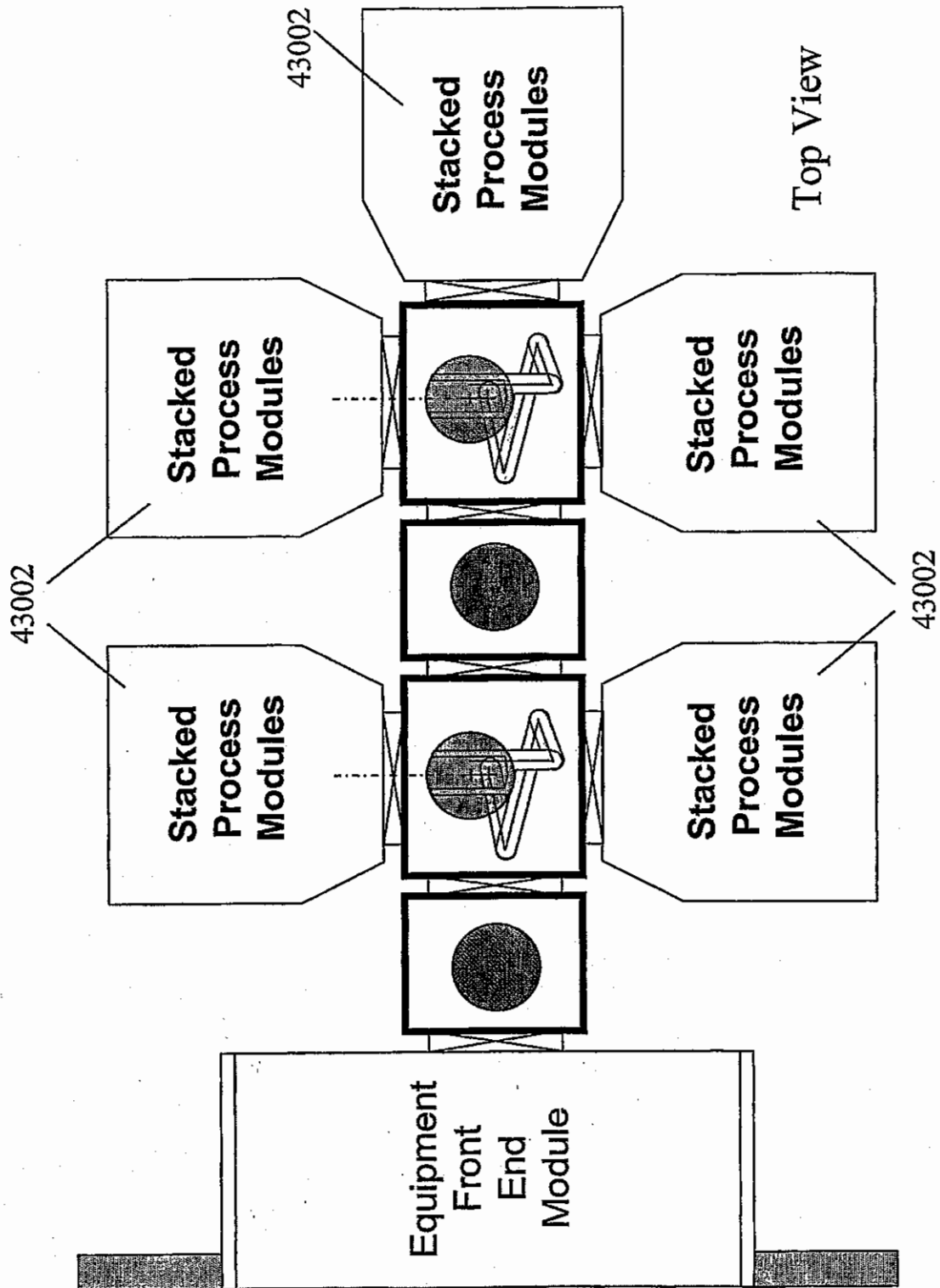


FIG. 43

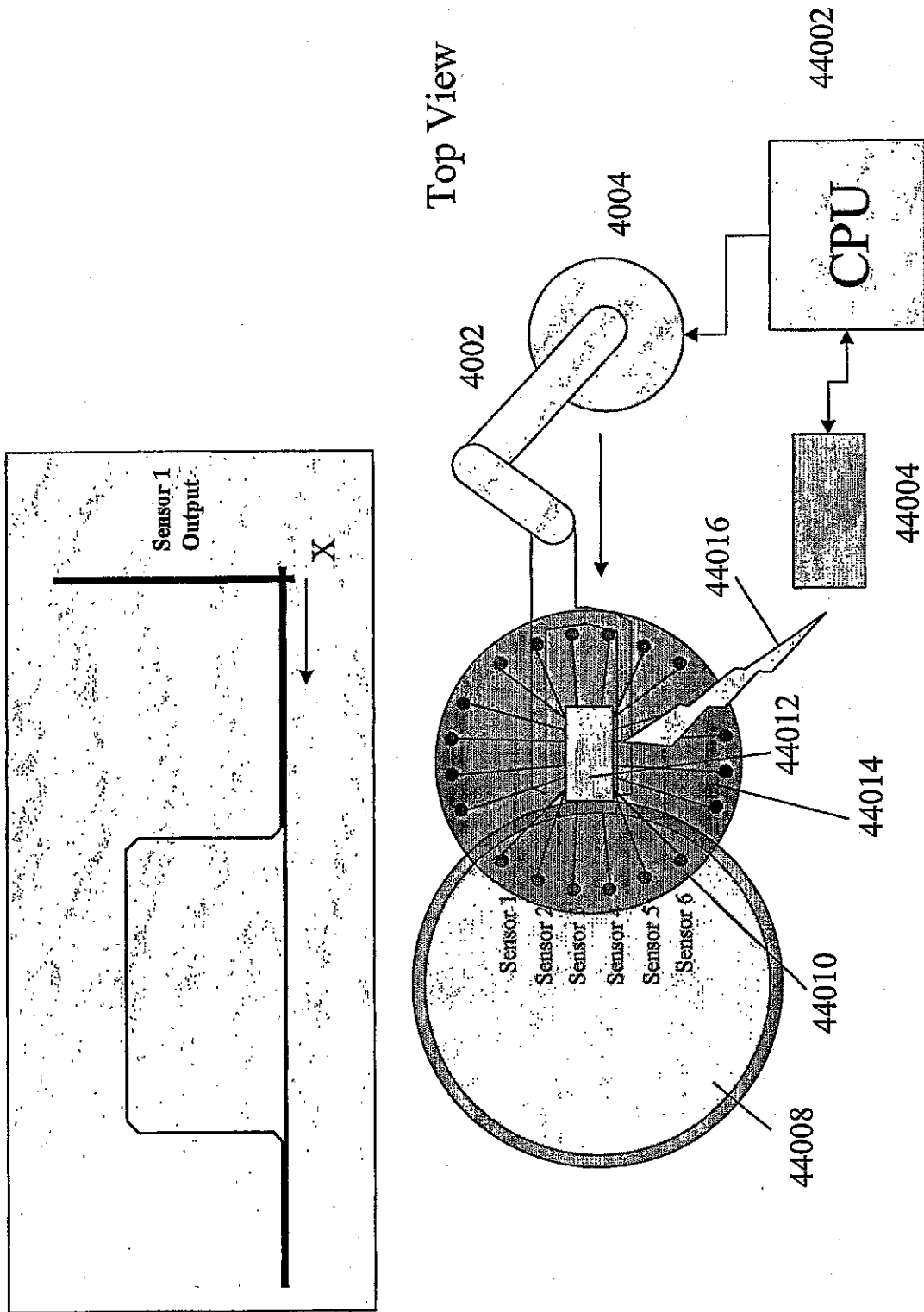


FIG. 44

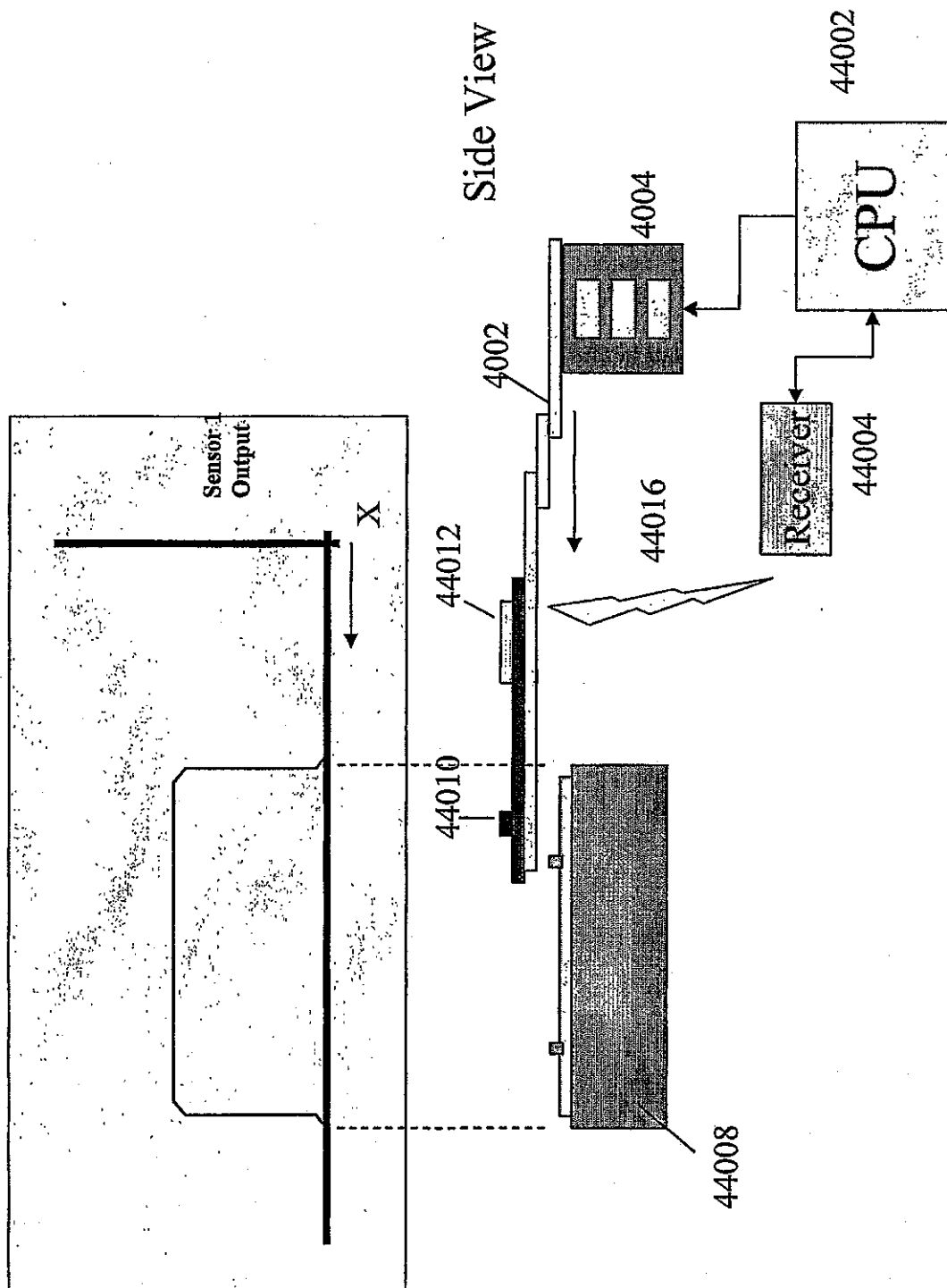


FIG. 45

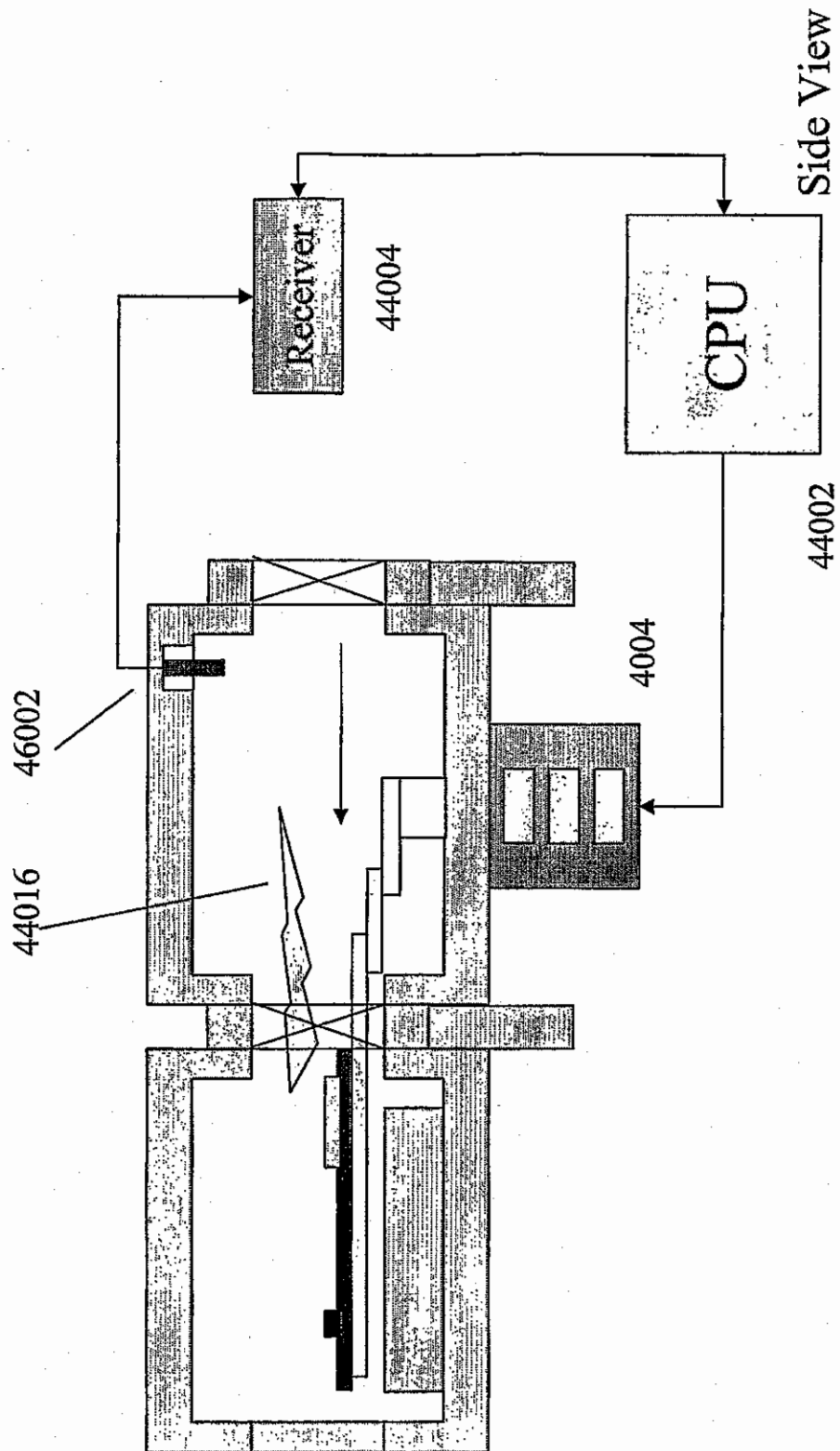


FIG. 46

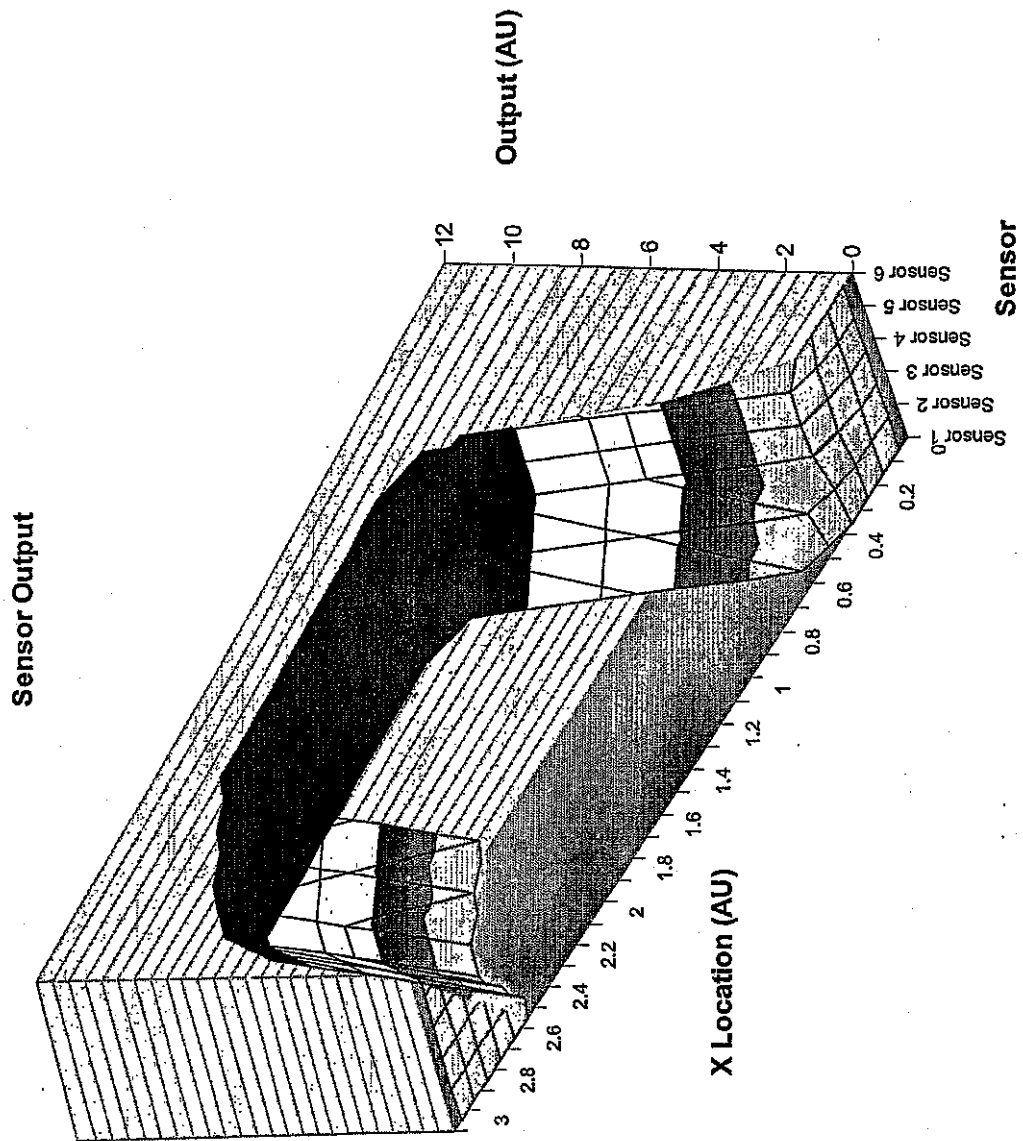


FIG. 47

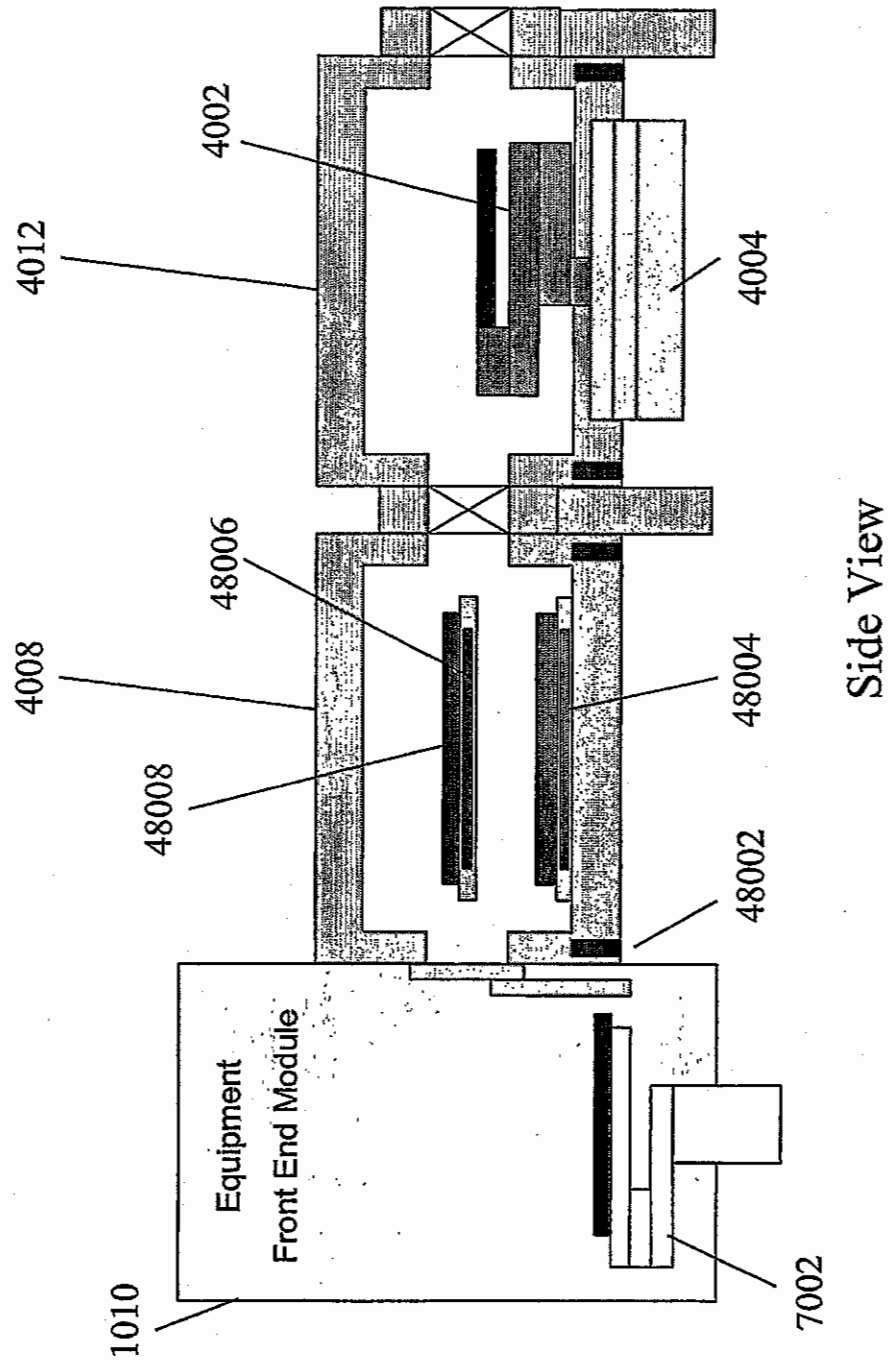


FIG. 48

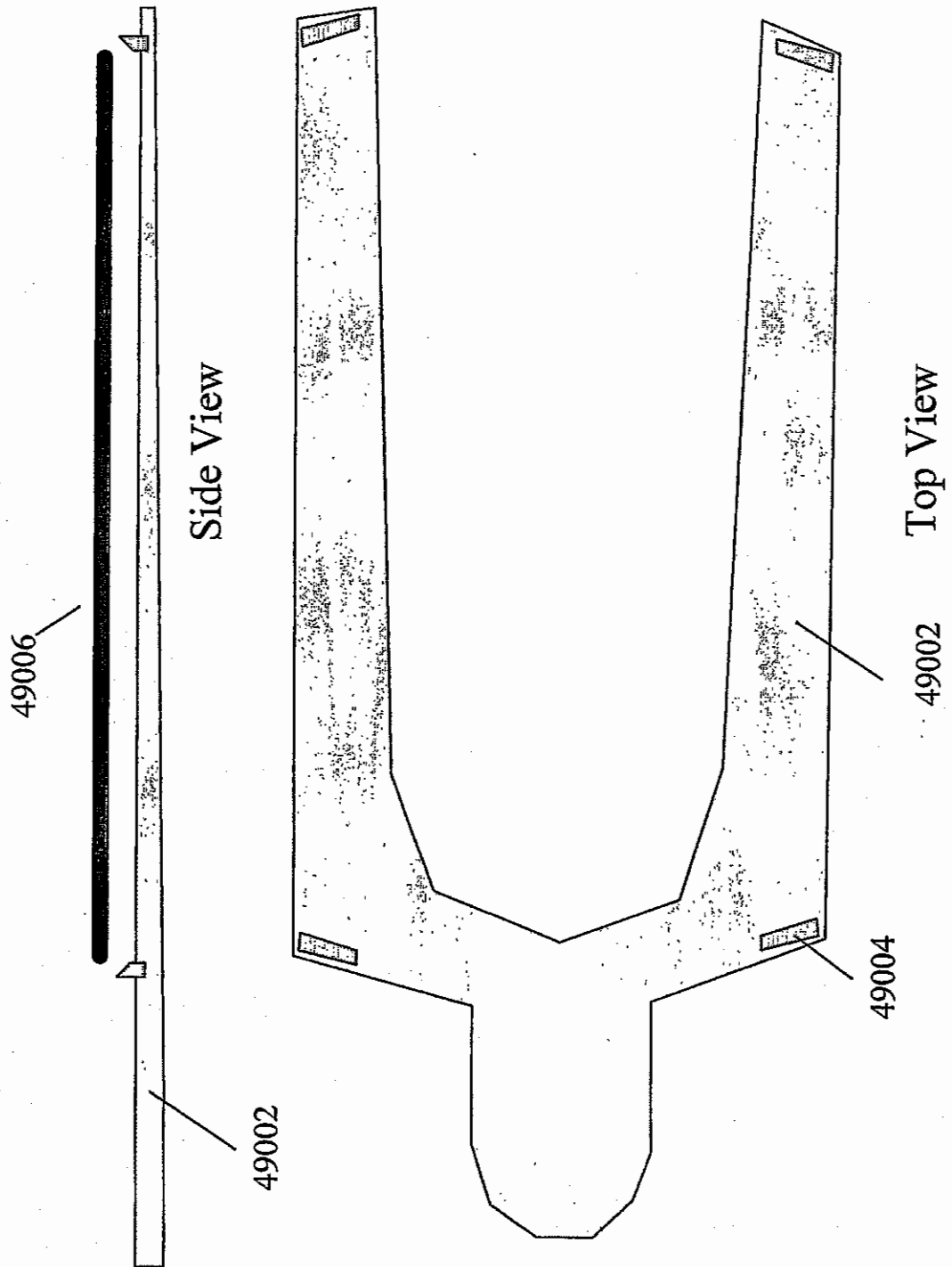


FIG. 49

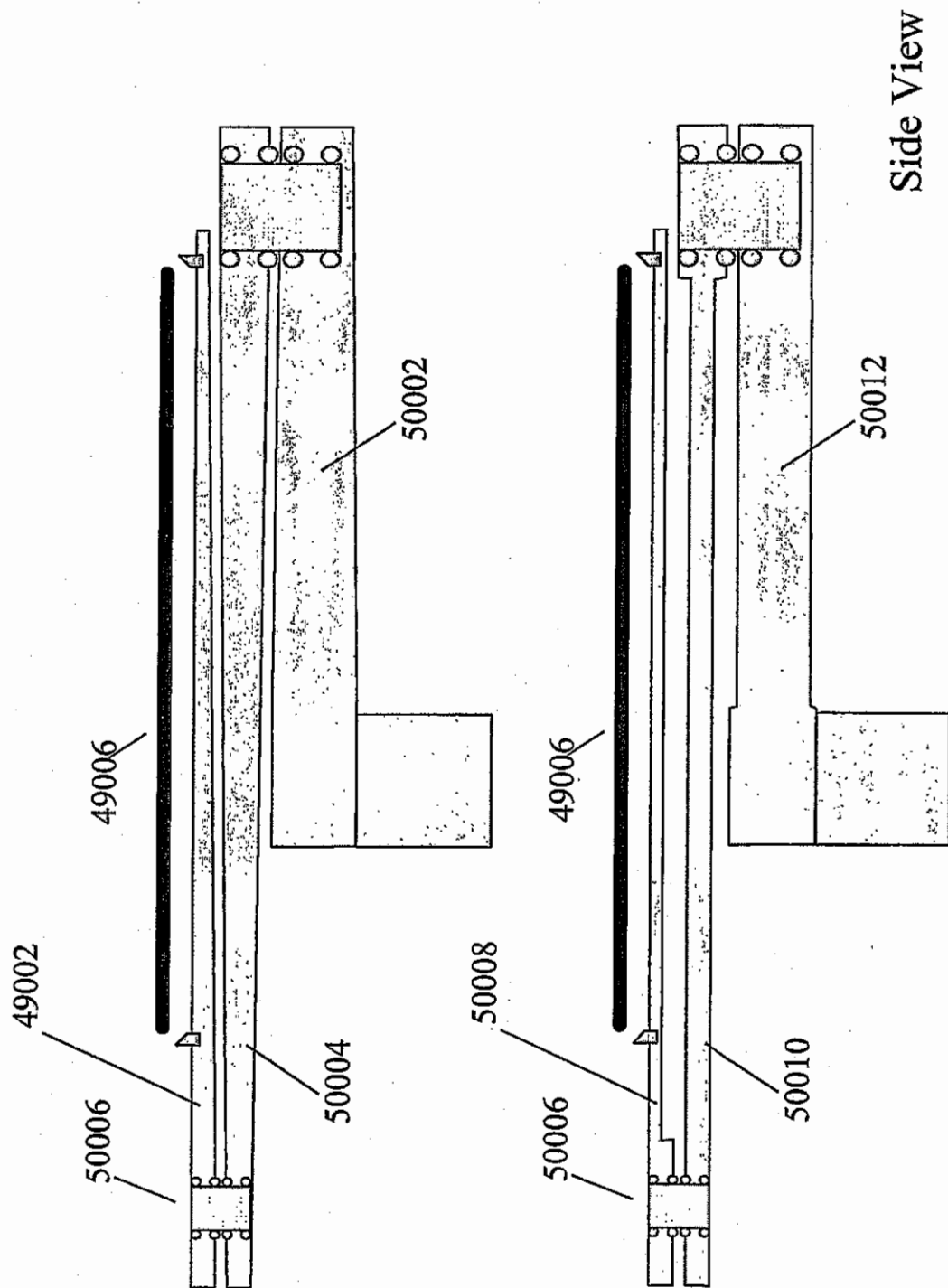


FIG. 50

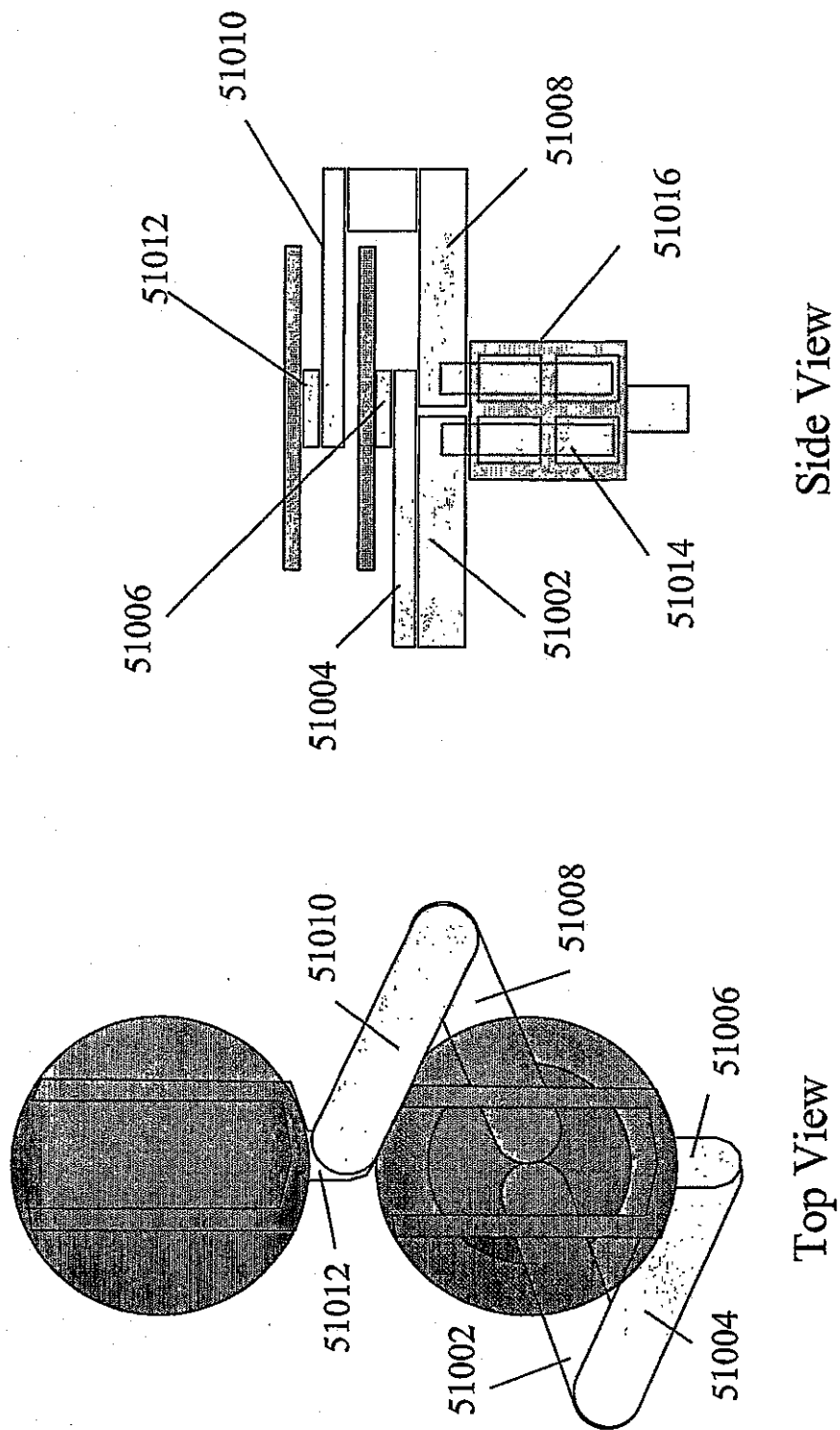


FIG. 51

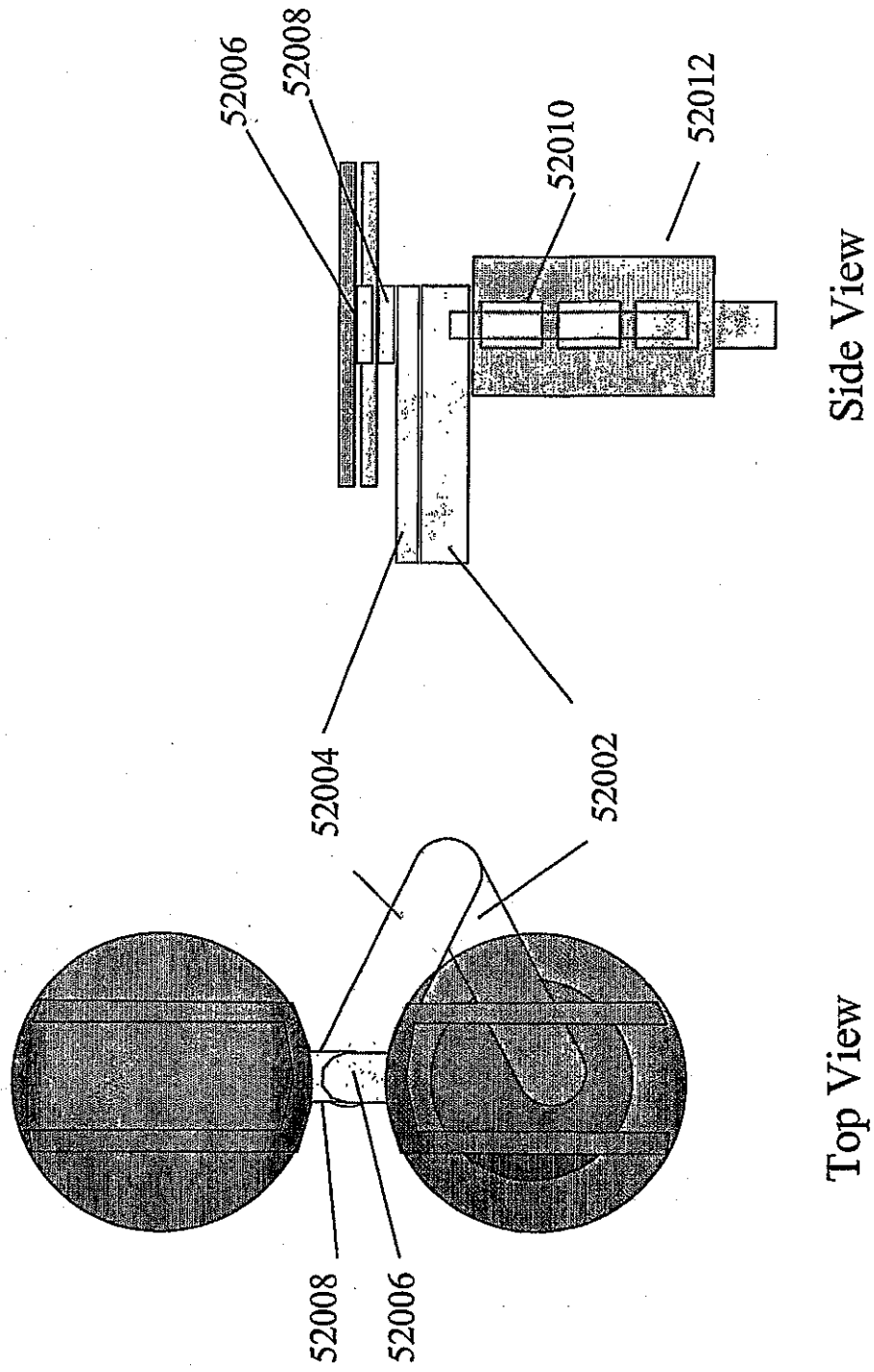
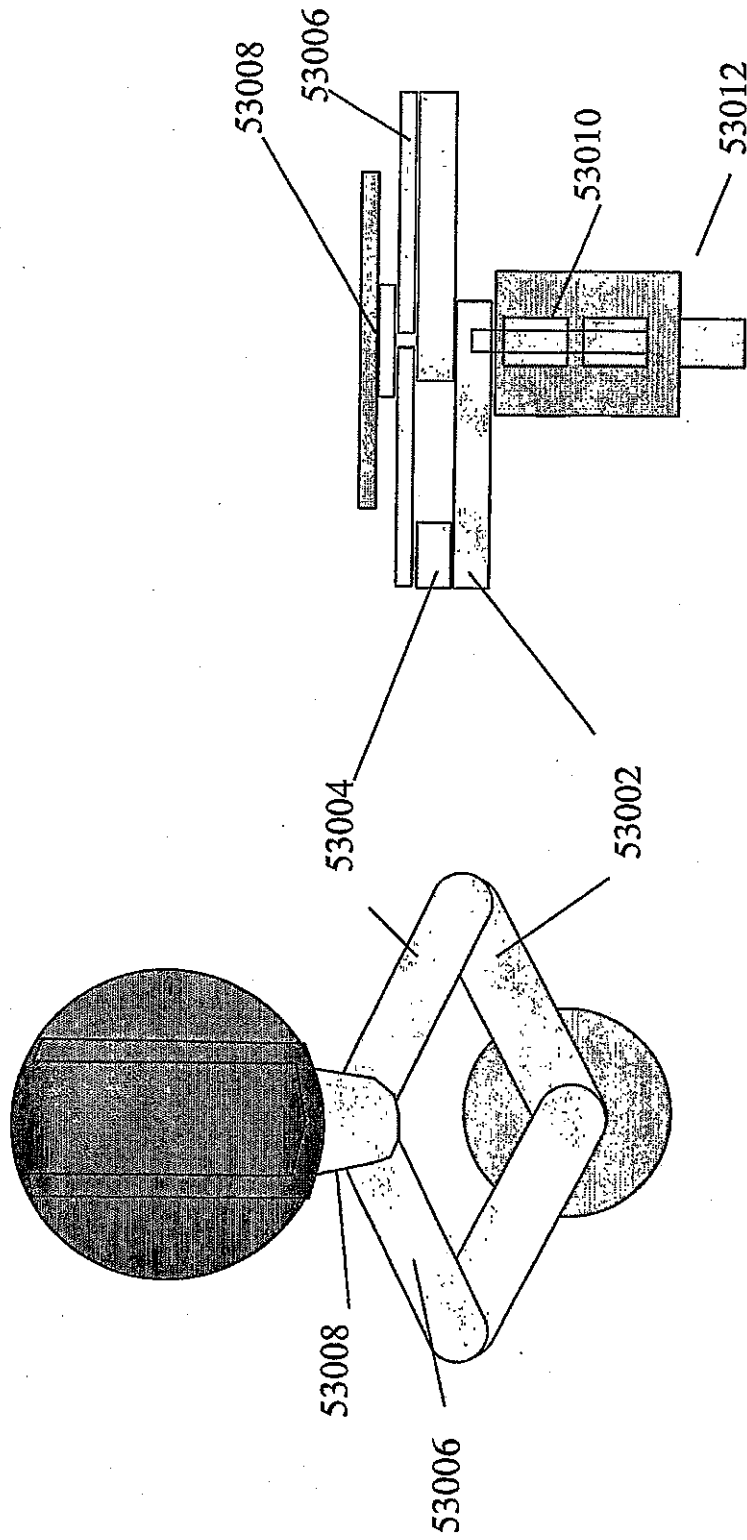
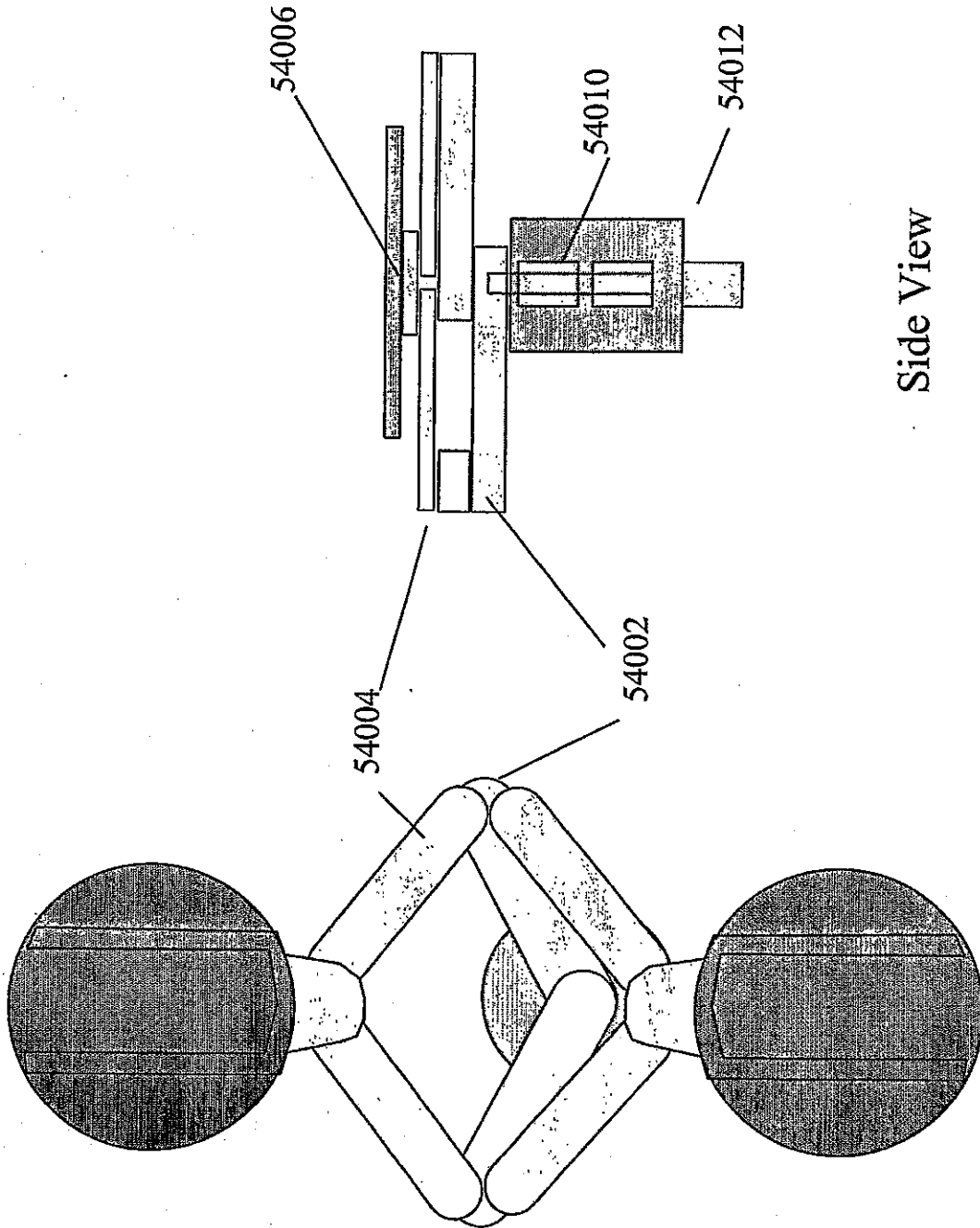


FIG. 52



Top View
Side View

FIG. 53



Top View

FIG. 54

Side View

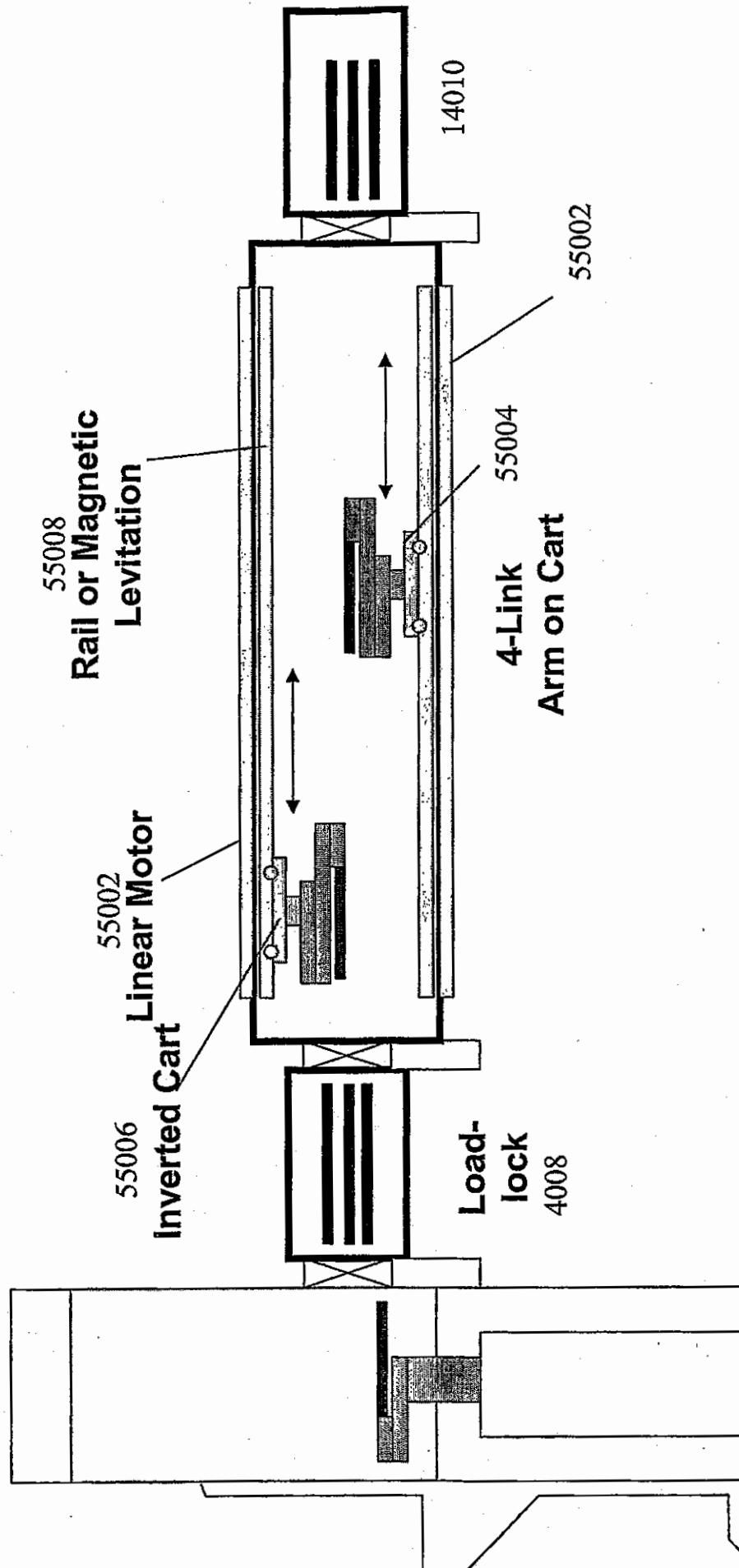


FIG. 55A

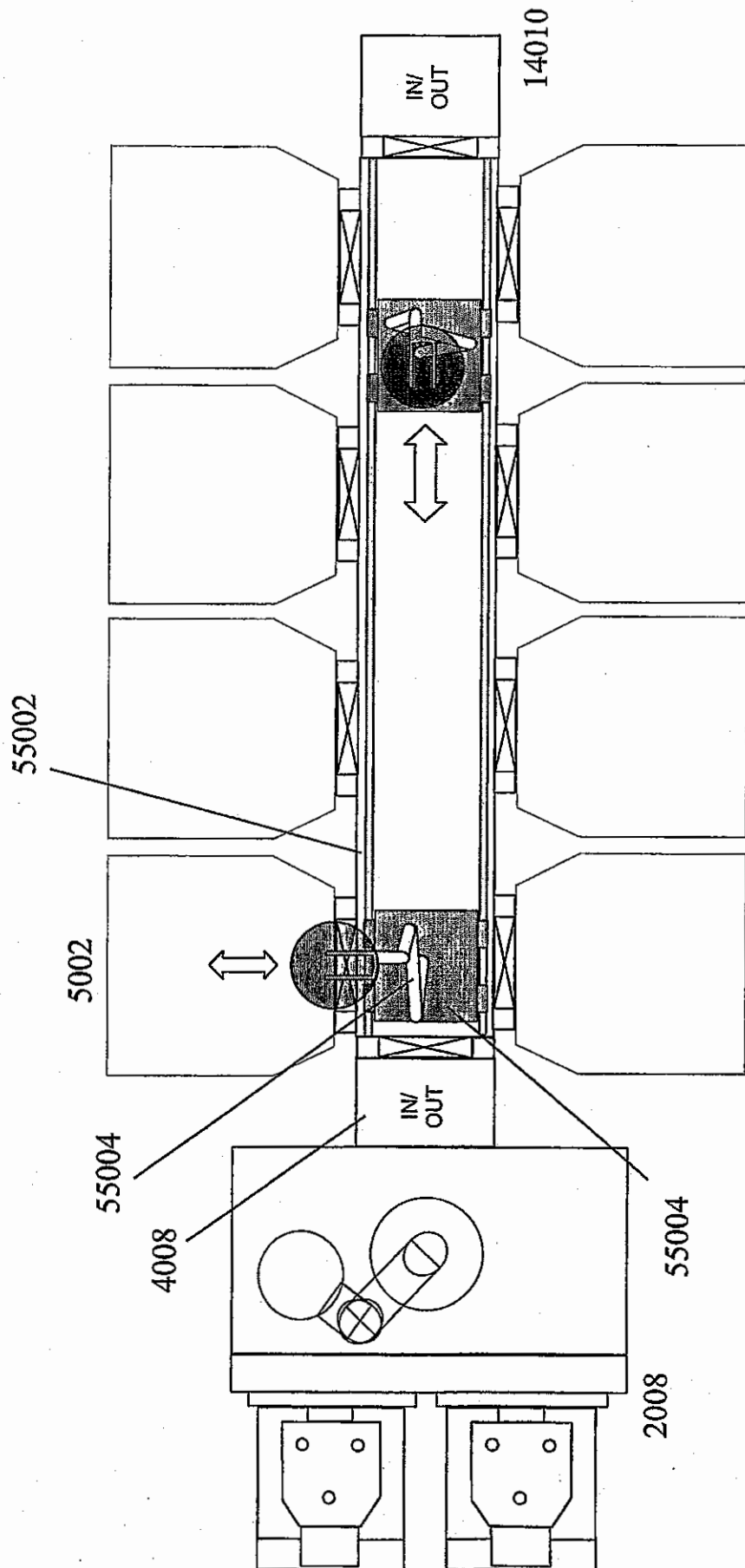


FIG. 55B

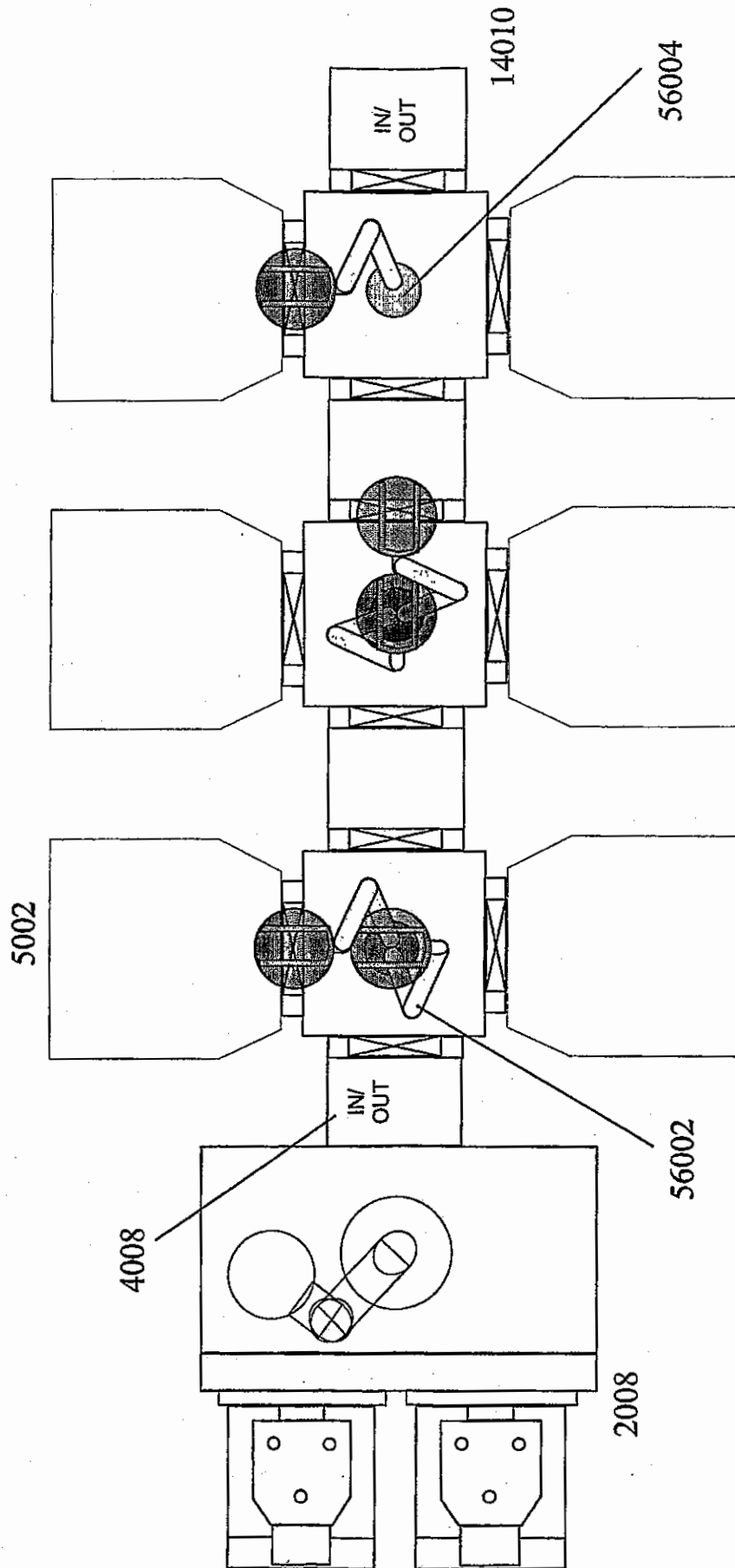


FIG. 56

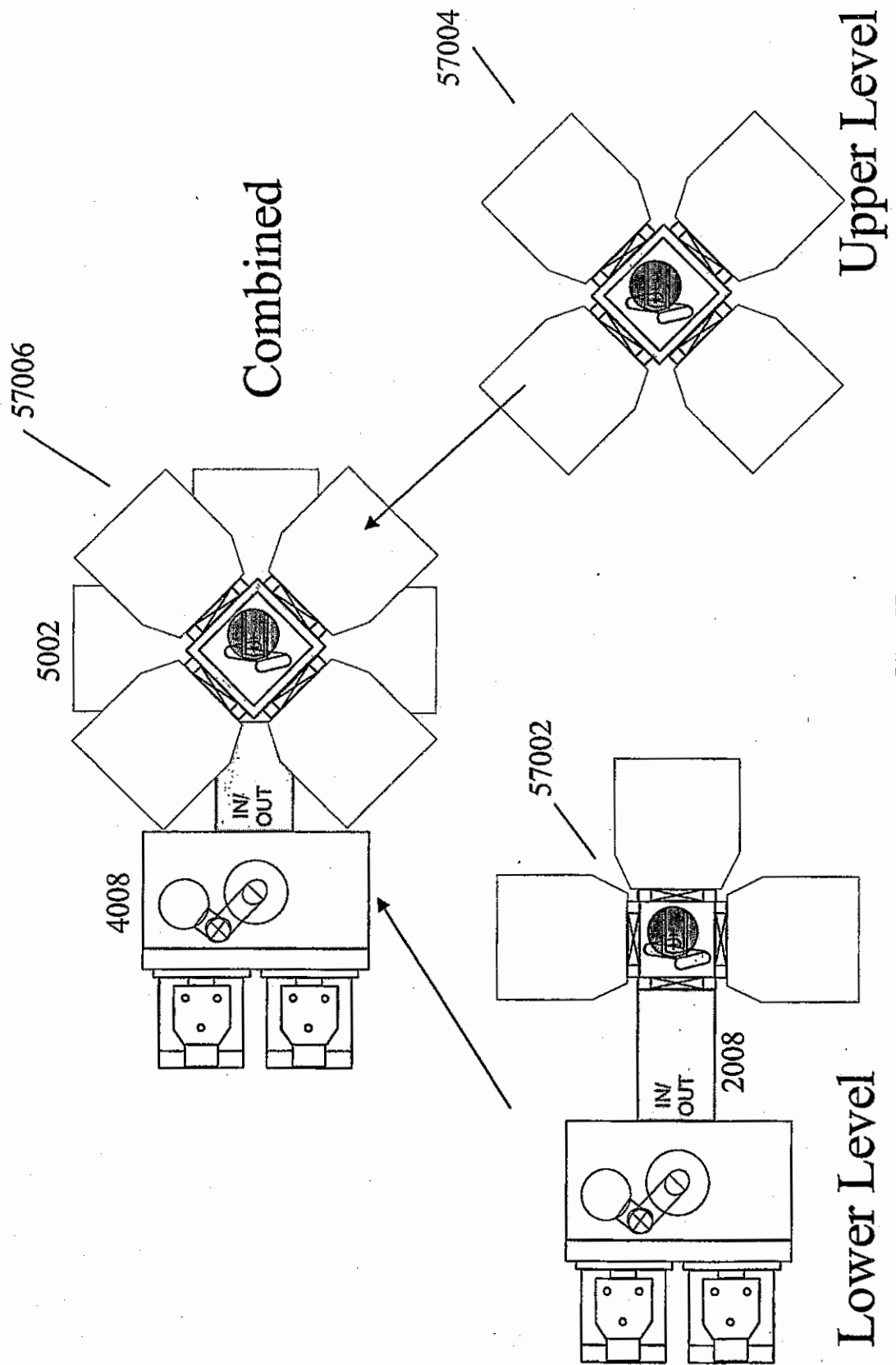


FIG. 57

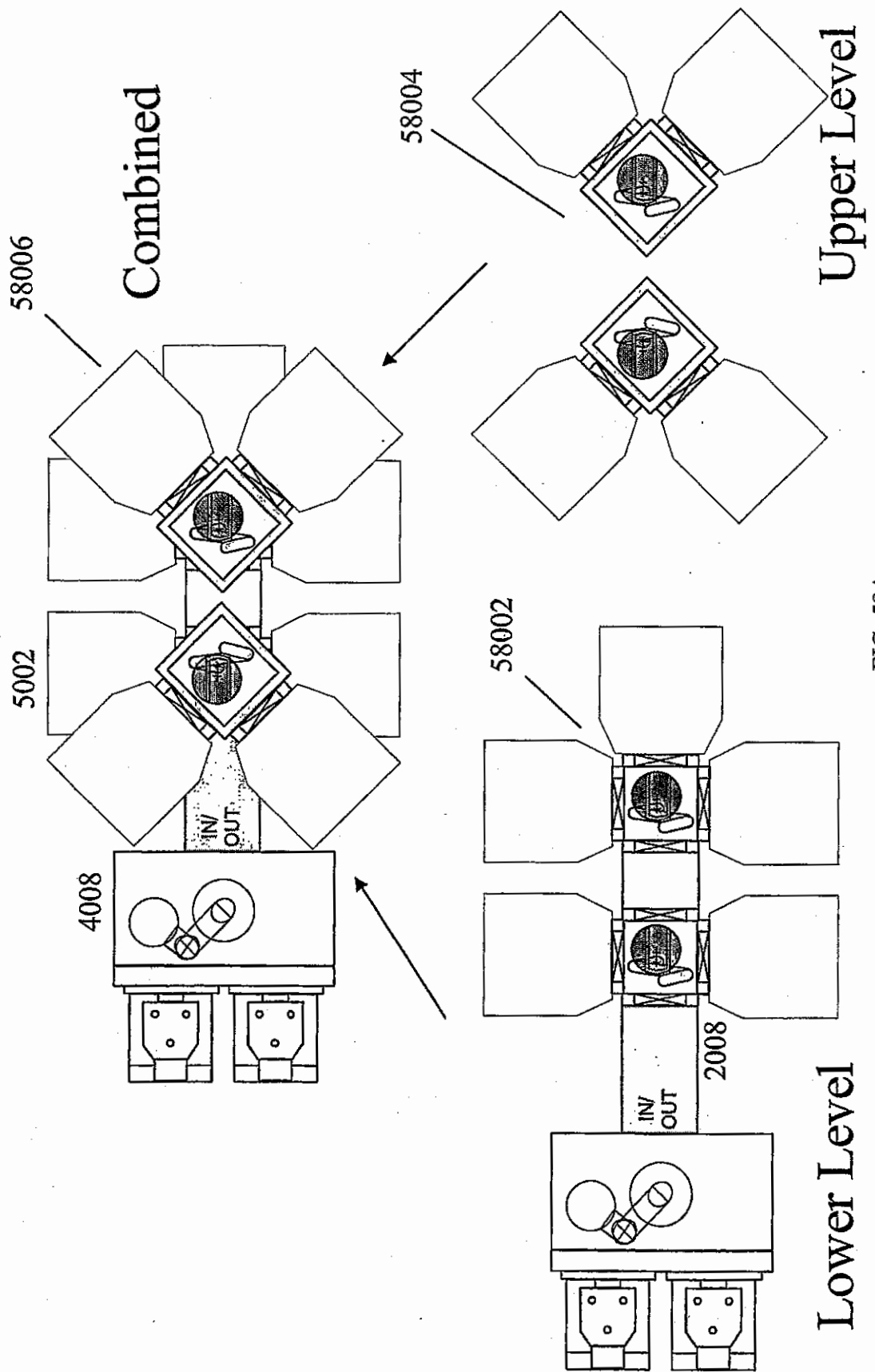


FIG. 58A

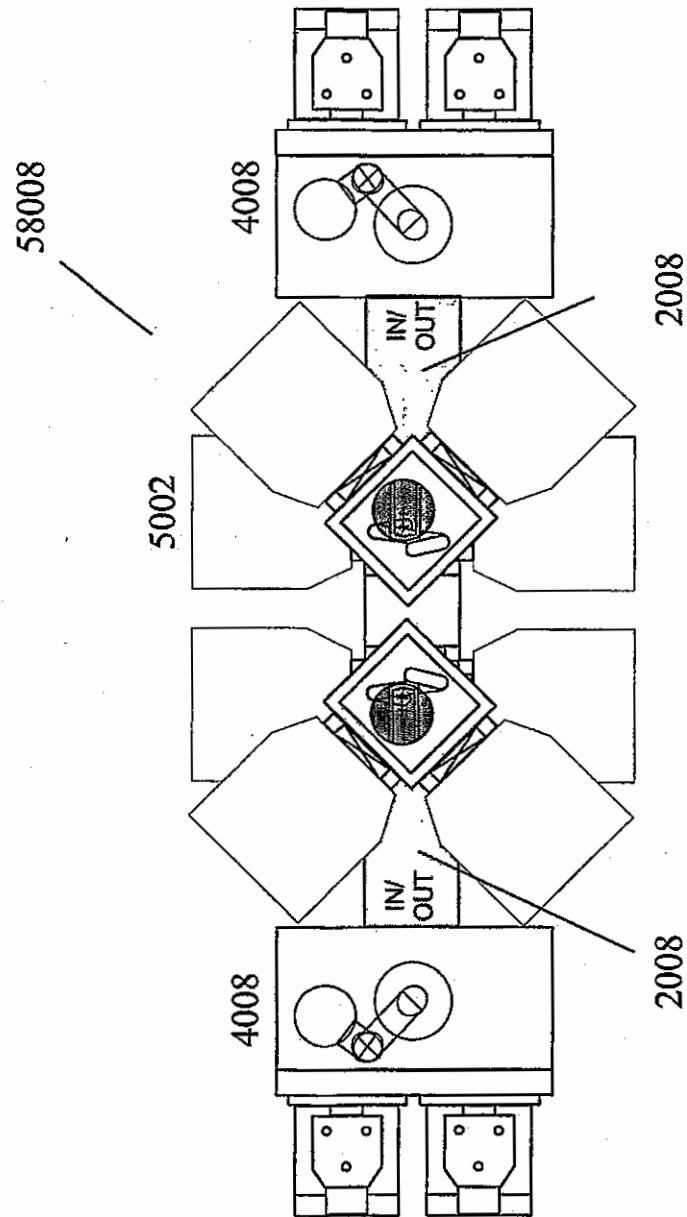


FIG. 58B

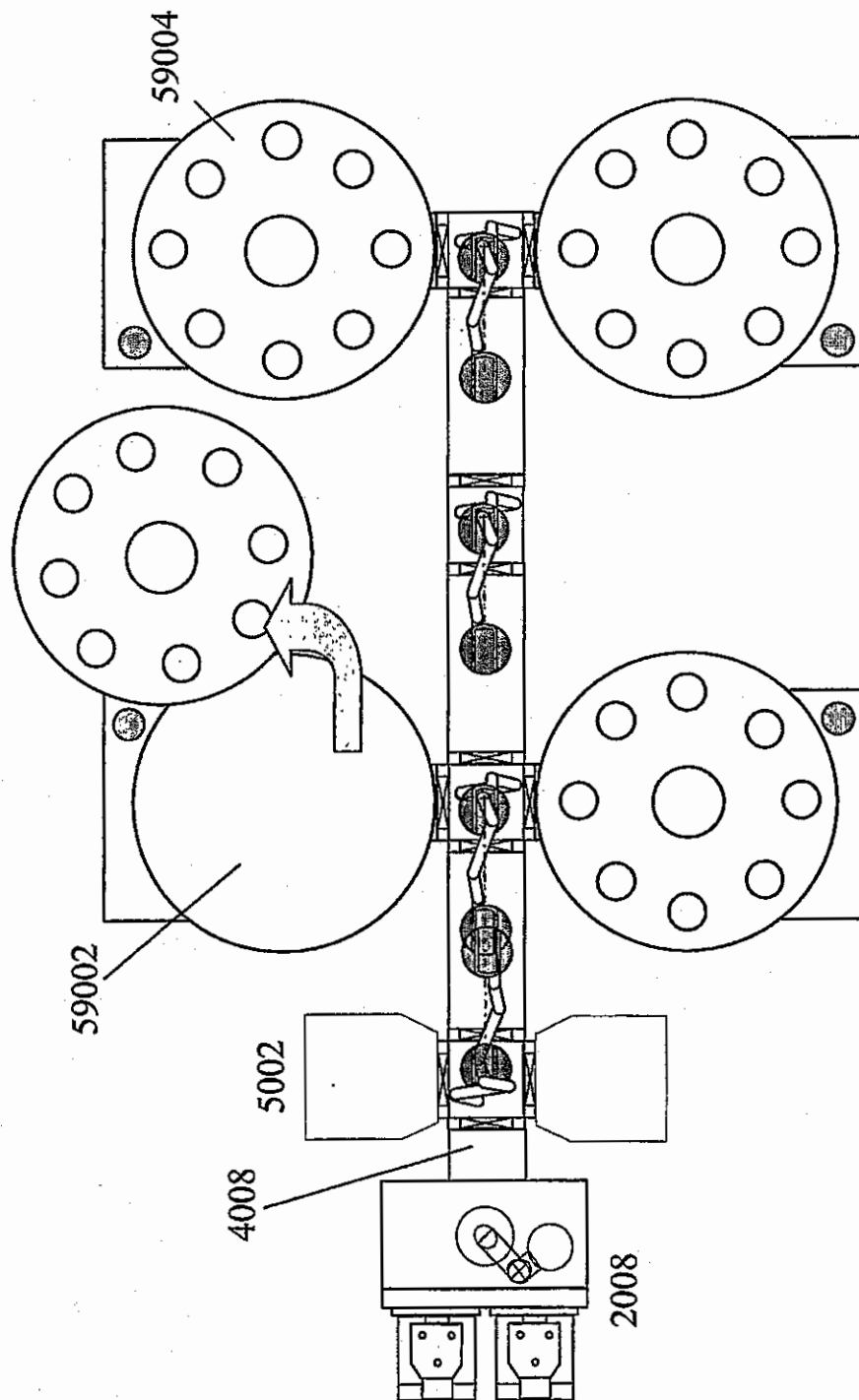


FIG. 59A

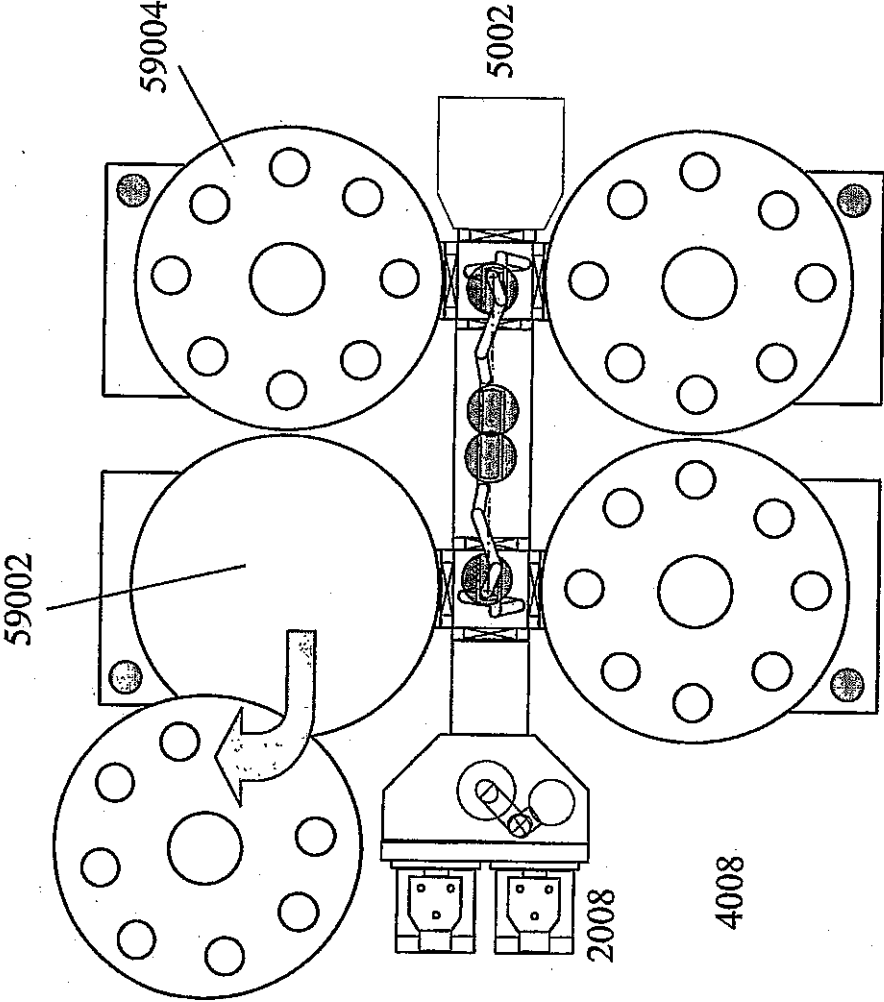
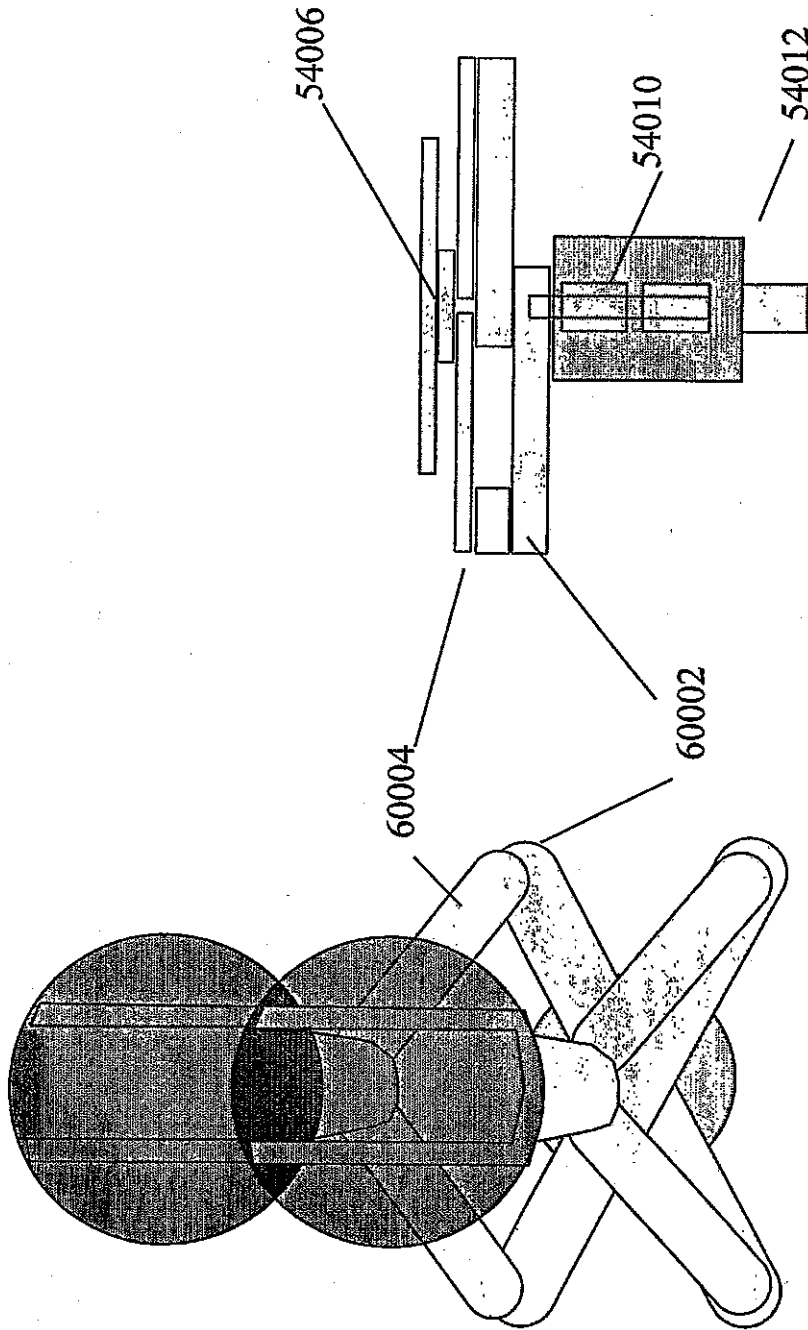


FIG. 59B



Side View

Top View

FIG. 60