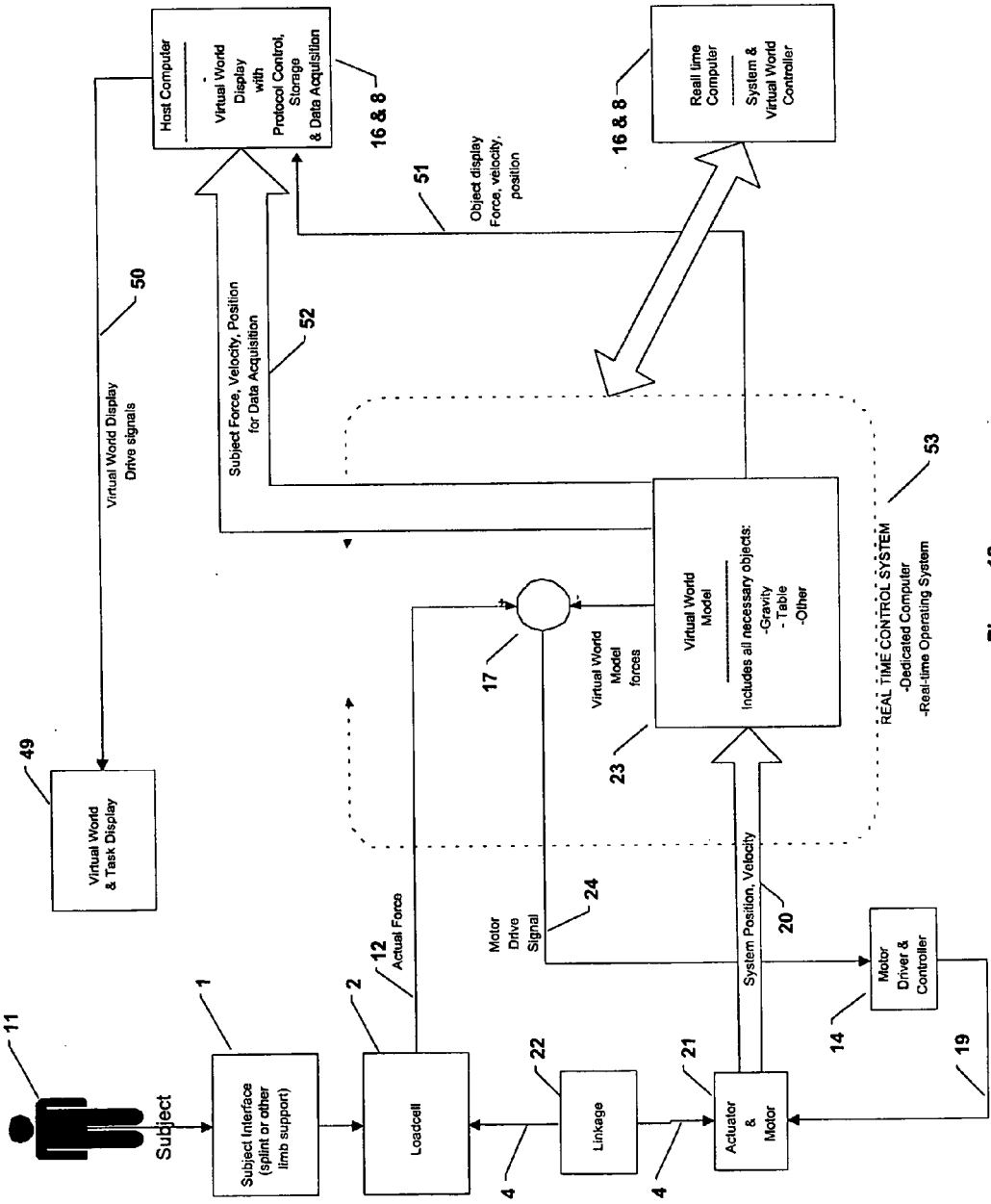
Host Computer
Virtual World Display with Protocol Control, Storage & Data Acquisition
16 & 8
Reall time Computer
System & Virtual World Controller
16 & 8
51
Object display Force, velocity, position
50
Virtual World Display Drive signals
52
Subject Force, Velocity, Position for Data Acquisition
53
REAL TIME CONTROL SYSTEM
-Dedicated Computer
-Real-time Operating System
Virtual World Model
Includes all necessary objects:
-Gravity
-Table
-Other
17
Virtual World Model forces
23
49
Virtual World & Task Display
24
Motor Drive Signal
System Position, Velocity
20
12
Actual Force
Motor Driver & Controller
14
11
1
2
22
21
19
Subject
Subject Interface (splint or other limb support)
Loadcell
Linkage
Actuator & Motor
4
4

Figure 18