MAGNETICALLY COUPLED WAFER EXTRACTION PLATFORM

ABSTRACT

A wafer extraction platform that is compatible with a high vacuum transfer system includes magnetically coupled upper and lower assemblies. A vacuum to atmosphere seal on the platform is maintained with two O-rings. Two opposing arrays of spaced, parallel blades in the upper assembly define slots for receiving wafers from a cassette. The upper assembly moves in response to a magnetically coupled linear slide mounted on the lower assembly. The upper assembly moves outside the load lock, and the blades pick up and simultaneously extract the wafers from the cassette. The upper assembly retracts into the load lock, and the wafers are transferred to the process chamber. A linear motor mounted at atmospheric pressure inside the lower assembly permits the horizontal movement of the upper assembly while holding the blades parallel to the wafers. Level adjustment screws and a bellows are used to level the platform.

This Sheet Has Been Replaced

