This Sheet Has Been Replaced

ABSTRACT

NEGATIVE PRESSURE AIR BEARING SLIDER

A negative-pressure air bearing slider structure includes a slider surface facing a data storage medium, the surface having a leading edge relative to the motion of the data storage medium. A U-shaped rail with a closed end facing the leading edge and an open end facing the trailing edge is formed on the slider surface. The closed end of the U-shaped rail extends laterally across substantially less than the width of the slider surface. In a first set of embodiments, there is a single U-shaped rail centered between two side rails. In a second set of embodiments, there are two U-shaped rails, each disposed along a respective side of the slider surface.