

ABSTRACT

MICROACTUATOR FOR A DISC DRIVE SUSPENSION

5 An electrostatic microactuator for a slider in a disc drive is characterised
— in that it is formed from a single crystal silicon wafer. This provides a
microactuator that has very low parasitic capacitance, virtually no mechanical or
thermal creep, or mismatch problems as may occur when parts are separately
fabricated. It also allows for efficient mass production by allowing for many of
10 the microactuators to be simultaneously formed from the single crystal silicon
wafer. The microactuator comprises a first (stationary) part (22) for attachment
to a flexure of a head positioning system in a disc drive and a second
(movable) part (24) to which a slider is attachable, which is pivotally coupled
(42, 44) to the first part. The first and second parts include elongate strips (30,
15 32) which are interdigitated to provide comb electrodes.

(Figure 7)