ABSTRACT OF THE DISCLOSURE

In a magnetic disk drive for reading two or more positional information signals of multi-phases, a positional signal that is always continuous even at switching points where signals of different phases are switched and excellent in linearity is produced in order to precisely position the head at an arbitrary point on a track. N' signal and Q' signal are calculated at each sampling time from the equations

$$N' \text{ signal} = N \text{ signal} / \sqrt{(|N \text{ signal}|^2 + |Q \text{ signal}|^2)}$$

$$Q' \text{ signal} = Q \text{ signal} / \sqrt{(|N \text{ signal}|^2 + |Q \text{ signal}|^2)}$$

so that the positional signal is normalized at the intersections between N signal and Q signal, and these positional information signals are connected so that the head can be positioned properly.

This Sheet Has Been Replaced

