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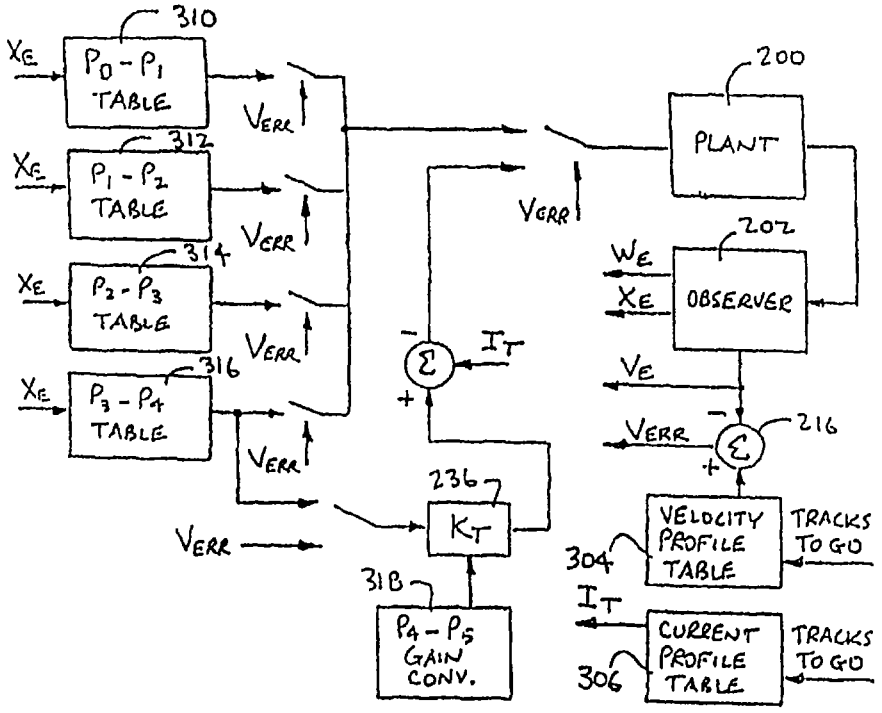


162162

(54) Title: CURRENT PROFILE SHAPING TO REDUCE DISC DRIVE SEEK TIME VARIATION AND ACOUSTIC NOISE GENERATION

(57) Abstract

Apparatus and method for reducing the generation of acoustic noise in a disc drive (100). A seek is carried out to move a head (120) from an initial track to a destination track on a disc (106) in relation to a velocity profile table (304) which provides a sequence of demand velocities indicative of the desired velocity as the head is decelerated to the destination track. During the seek, current (300) is applied to an actuator motor (116) to accelerate the head away from the initial track in relation to tables (310, 312, 314, 316) storing open loop current command values. A gain convergence block (318) increments servo gain (236) to provide a smooth transition between open and closed loop operation. Thereafter, the head is decelerated by applying current in relation to velocity error and current command values from a current profile table (306) defining deceleration of the head using maximum current.



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