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[54]	RESO CIRCU		DRIVE OSCILLATOR	
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[51] [52]	Int. Cl. U.S. Cl	L		;
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[56]	References Cited			
	U	S. PAT	TENT DOCUMENTS	
	2,544,646 2,817,779 3,742,492 3,842,681	12/1957 6/1973 10/1974	Proctor	i :
	2 002 052	11/107/	TT 1 == 4.40 =	

4,019,391 4/1977 Ljung 73/505 4,044,297 8/1977 Nobue et al. 331/116 R X

FOREIGN PATENT DOCUMENTS

0771774 10/1980 U.S.S.R. 310/317

4,578,650

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[57] ABSTRACT

An electronic drive circuit for driving an actuator mass for a sensor apparatus is disclosed. The driver requires no compensation or bridge elements. The actuator mass is directly driven by a square wave drive signal such that all of the capacitors loading errors associated with the driven actuator means are concentrated in time to that time interval in which the drive signal traverses between its two stable states. A sensor circuit connected to monitor the sensor output response signal is blanked out during the drive signal transition time interval. which effectively eliminates the transition drive noise energy from the sensed output signal.

12 Claims, 2 Drawing Figures

