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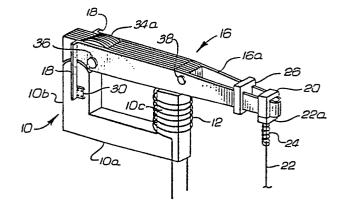
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## (54) Actuator for dot matrix printhead.

An improved dot matrix actuator is provided which includes a magnetic circuit formed of a yoke assembly (10) and a pivotal armature (16). The armature is pivotally supported with respect to the yoke by means of a flexure (18) assembly which eliminates the need for a true pivot between the two elements. The elements are shaped so as to maintain a constant small air gap therebetween so as to maximize the magnetic efficiency of the device while eliminating wear. The device is operated just below saturation of the magnetic circuit in order to maximize efficiency. In addition, the actuator includes several features for maximizing its speed and operational efficiency.



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## **EUROPEAN SEARCH REPORT**

Application number

EP 85 10 1689

Category A	of rele	ith indication, where appropriate, vant passages	Relevant to claim	CLASSIFICATION OF THE
A		Turn pussages	to claim	APPLICATION (Int. Cl.4)
	DE-A-2 935 994 (	IBM DEUTSCHLAND)		B 41 J 7/84
	* Page 4, line 3 34; figure 1 *	31 - page 5, line	1,4	H 01 F 7/14
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Α	US-A-3 991 869 (	H.R. BERREY)		
	* Column 5, line	es 9-40; figure 4 *	1-3,7	
A	US-A-4 136 978 (	J.E. BELLINGER)		
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A	vol. 17, no. 1, 340,341; Armonk,	SCLOSURE BULLETIN, June 1974, pages New York, US ectromagnetic actua-	·	
	* Whole article	*	8	TECHNICAL FIELDS SEARCHED (Int. CI.4)
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Y : par doo A : tecl	CATEGORY OF CITED DOCL ticularly relevant if taken alone ticularly relevant if combined w current of the same category hnological background n-written disclosure	E: earlier pater after the filir ith another D: document c L: document c	it document, i g date ted in the app ted for other	ying the invention but published on, or polication reasons nt family, corresponding



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Thep	The present European patent application comprised at the time of filing more than ten claims.					
		All claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims.				
		Only part of the claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid,				
		namely claims:				
		No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.				
х	LA	ACK OF UNITY OF INVENTION				
		h Division considers that the present European patent application does not comply with the requirement of unity of				
inven	tion a	and relates to several inventions or groups of inventions,				
name	ely:	1) Claims 1-8: The wire matrix printer actuator assembly				
		2) Claim 9: Vibration damping means				
		3) Claim 10: The wire guide means				
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[		All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.				
[		Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid,				
		namely claims:				
į	KX	None of the further search fees has been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims,				
		namely claims: 1-8				