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(54) **A method and arrangement for monitoring the modus operandi of matrix printers.**

(57) A matrix printer includes a printing head which incorporates a plurality of printing needles (11), each of which can be maneuvered individually with the aid of a respective electromagnetic maneuvering device (10), by means of which the printing needle (11), carried by a spring-biassed, movable armature (12), can be caused to carry out a working cycle, upon activation of the maneuvering device, this working cycle including a working stroke, during which the needle (11) is moved in a direction towards a printing anvil (20) for the purpose of printing a punctiform sign on a record carrier (21) located in front of the printing anvil, and a subsequent return stroke, during which the printing needle (11) is returned to a withdrawn rest position. For the purpose of enabling simple inexpensive, but nevertheless reliable monitoring of the manner of working of the printer, it is proposed that the movement of at least one printing needle (11) during at least a part of a needle working cycle is monitored by detecting changes in the magnetic flux in the magnetic circuit (12, 14) of an associated maneuvering device (10) caused by movement of the needle (11).

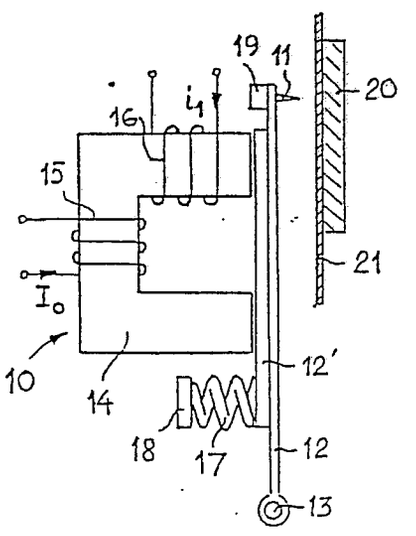

Fig. 1

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EUROPEAN SEARCH REPORT

Application Number

EP 88 85 0386

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
X	IBM TECHNICAL DISCLOSURE BULLETIN, vol. 21, no. 11, April 1979, pages 4454-4456, New York, US; R.W. ARNOLD et al.: "Control of rebound energy in a coil-actuated hammer" * Whole document *	1,4,6-8	B 41 J 9/42 B 41 J 7/34
A	IDEM	2,3,9, 10	
Y	US-A-4 348 119 (CARSON, Jr. et al.) * Abstract; figures 1,3-5; column 2, line 57 - column 3, line 4; column 4, lines 29-68; column 5, line 46 - column 7, line 33 *	1-10	
Y	US-A-4 538 930 (J.C. DUNFIELD) * Abstract; figures; column 1, lines 1-11; column 2, lines 33-68; column 4, lines 3-9 *	1-10	
A	EP-A-0 042 032 (IBM CORP.) * Abstract; figures 1-4; page 6, lines 1-19; page 10, lines 1-19; page 14, lines 9-17; page 16, lines 3-8,33-34 *	1-7,9, 10	TECHNICAL FIELDS SEARCHED (Int. Cl.4) B 41 J
A,P	GB-A-2 195 481 (CANON K.K.) * Abstract; figures; page 2, lines 47-118; page 3, line 76 - page 4, line 29 *	1-4,6,9 ,10	
A	US-A-4 353 656 (G. SOHL et al.)		
A	US-A-4 273 039 (LUO et al.)		

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	12-05-1989	ROBERTS N.

CATEGORY OF CITED DOCUMENTS

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