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⑤④ **A method and an arrangement for controlling the method of operation of a matrix printer.**

⑤⑦ A matrix printer comprises a printing head which includes a plurality of printing needles (11) each having a respective electromagnetic maneuvering device (10) by means of which the needle, carried by a spring-biased, movable armature (12), can be caused to carry out a working cycle, which includes a working stroke and a subsequent return stroke. The maneuvering device (10) is activated by temporarily lowering the magnetomotive force in the magnetic circuit (12,14) of the device from a previous, constant value. The previously attracted armature (12) will herewith commence to move in a direction away from the stationary part (14) of the magnetic circuit as a result of the spring force acting on the armature. The magnetomotive force is then caused to return to its previous value. For the purpose of reducing the noise and wear generated by the armature (12) and to reduce the tendency of the armature to rebound, the armature is slowed down during the final stage of its return stroke, by again lowering the magnetomotive force temporarily for a limited part of the time taken to effect the return stroke.

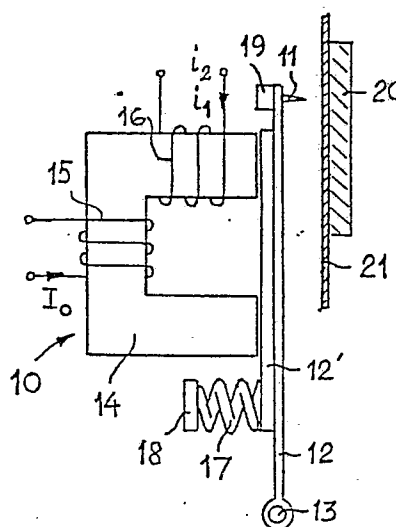


Fig. 1



EP 88 85 0387

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)
Y	US-A-4 273 039 (LUO et al.) * Abstract; figures 1-4,6; column 2, lines 4-56; column 3, line 38 - column 4, line 23 * ---	1-8	B 41 J 9/42 B 41 J 7/34
Y	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 * ---	1-8	
A	DE-A-2 238 605 (O. VIERLING) * Page 1, lines 10-21; page 2, lines 12-15; page 5, line 1 - page 6, line 8; figure 2 * ---	1,3,5,7	
A,P	GB-A-2 195 481 (CANON K.K.) * Abstract; figures; page 2, lines 47-118; page 3, line 26 - page 4, line 29 * ---	1-8	
A	US-A-4 348 119 (A.B. 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; column 8, lines 15-20 * ---	1-3,5-7	TECHNICAL FIELDS SEARCHED (Int. Cl.4) B 41 J
A	IBM TECHNICAL DISCLOSURE BULLETIN, vol. 22, no. 10, March 1980, page 4348, New York, US; A.B. HABICH: "Print hammer rebound control" ---	1,4,5,8	
A,P	US-A-4 744 684 (T. MAEKAWA) -----		
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 12-05-1989	Examiner ROBERTS N.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			