

Title (en)
Print element actuator for a wire printer.

Title (de)
Vorrichtung zur Betätigung einer Nadel in einem Nadeldruckwerk.

Title (fr)
Dispositif de commande d'éléments d'impression à fil.

Publication
EP 0019706 A1 19801210 (FR)

Application
EP 80101919 A 19800410

Priority
US 4318379 A 19790529

Abstract (en)
1. Print element actuator for a wire printer of the type including : an electro-magnet (58) and a permanent magnet, each of them having the form of a hollow cylinder, an armature (50) affixed to the print wire and positioned within said electro-magnet and said permanent magnet so that said armature can move a predetermined distance between a metal back stop (54) and a front stop (64), a first magnetic circuit, including the electromagnet, the armature and the front stop, and through which flux flows when the electro-magnet is energized, this flux controlling the forward movement of the print wire, a second magnetic circuit, including the permanent magnet and the armature and through which flux flows when the electro-magnet is not energized, this flux controlling the reverse movement of the print wire, this actuator being characterized in that : a cylindrically shaped hollow piece (76) is positioned between the electro-magnet and the permanent magnet to set up a magnetic circuit with the electro-magnet, the front stop and the armature and the backside stop is formed of a non-magnetic material.

Abstract (fr)
Dispositif de commande du déplacement d'un fil d'impression (52) comportant une armature (50) fixée à ce fil et dont le déplacement vers la butée avant (64) est commandé par le flux produit par l'électroaimant (58) lorsqu'il est excité, son déplacement vers la butée arrière (54) étant commandé par le flux produit par l'aimant permanent (56) lorsque l'électroaimant de l'aimant permanent (56) lorsque l'électroaimant n'est pas excité. Un anneau magnétique (76) sépare l'électroaimant de l'aimant permanent, cet anneau permettant de diminuer la réluctance du circuit magnétique produit par l'électroaimant. Ce dispositif est utilisé dans les imprimantes à matrice de points.

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B41J 7/84; **H01F 7/16**

IPC 8 full level
B41J 2/285 (2006.01); **B41J 9/38** (2006.01); **H01F 7/16** (2006.01); **H01F 7/122** (2006.01)

CPC (source: EP)
B41J 2/285 (2013.01); **H01F 7/1615** (2013.01); **H01F 7/122** (2013.01)

Citation (search report)
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EP 0019706 A1 19801210; **EP 0019706 B1 19830921**; AU 529042 B2 19830526; AU 5813980 A 19801204; BR 8003344 A 19801230; CA 1136198 A 19821123; DE 3064880 D1 19831027; ES 491905 A0 19810216; ES 8103411 A1 19810216; IT 1151029 B 19861217; IT 8020721 A0 19800318; IT 8020721 A1 19820618; JP S55161673 A 19801216; JP S6122638 B2 19860602

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