

Title (en)  
DOT MATRIX PRINTER.

Title (de)  
PUNKTMATRIX DRUCKER.

Title (fr)  
IMPRIMANTE A MATRICE DE POINTS.

Publication  
**EP 0073810 A1 19830316 (EN)**

Application  
**EP 82901066 A 19820219**

Priority  
US 24199881 A 19810309

Abstract (en)  
[origin: WO8203123A1] Dot matrix printer including at least one print head (40) and driving means (54) for causing movement of the print head in side to side direction relative to a record medium (50) movable past the print head so as to enable the print head to print a line on the record medium. Prior art driving systems used for moving a print head in a side to side manner required considerable energy. In the present invention the driving system includes spring means (44, 46) operably connected with the print head and electrodynamic drive means (54) causing the spring means to oscillate at a frequency corresponding with the natural frequency of the assembly of spring means and print head so as to bring about oscillating motion of the print head in side to side direction. This arrangement reduces significantly the energy required for acceleration and deceleration of the print head.

Abstract (fr)  
Imprimante a matrice de points comprenant au moins une tete imprimante (40) et des organes d'entrainement (54) provoquant le déplacement de la tete d'impression dans une direction allant d'un cote a l'autre par rapport a un support d'enregistrement (50) defilant devant la tete d'impression de maniere a permettre a celle-ci d'imprimer une ligne sur le support d'enregistrement. Les systemes d'entrainement de l'art anterieur utilises pour deplacer une tete d'impression d'un cote a l'autre demandaient une energie considerable. Dans la presente invention, le systeme d'entrainement comprend un organe a ressort (44, 46) relie a la tete d'impression ainsi qu'un organe d'entrainement electro-dynamique (54) provoquant l'oscillation de l'organe a ressort selon une frequence correspondant a la frequence naturelle de l'ensemble constitue par l'organe a ressort et la tete imprimante, de maniere a provoquer un mouvement d'oscillation de la tete imprimante se deplacant d'un cote a l'autre. Cet agencement permet de reduire de facon notable l'energie requise pour l'acceleration et le freinage de la tete d'impression.

IPC 1-7  
**G01D 15/16**

IPC 8 full level  
**B41J 2/485** (2006.01); **B41J 19/20** (2006.01); **B41J 25/00** (2006.01); **G06K 15/10** (2006.01)

CPC (source: EP)  
**B41J 19/20** (2013.01); **B41J 25/006** (2013.01)

Designated contracting state (EPC)  
DE FR GB NL

DOCDB simple family (publication)  
**WO 8203123 A1 19820916**; CA 1192083 A 19850820; EP 0073810 A1 19830316; JP S58500243 A 19830217

DOCDB simple family (application)  
**US 8200207 W 19820219**; CA 397809 A 19820308; EP 82901066 A 19820219; JP 50108982 A 19820219