

Title (en)  
PRINTER, IN PARTICULAR A MATRIX LINE PRINTER

Publication  
**EP 0239077 A3 19890315 (DE)**

Application  
**EP 87104330 A 19870324**

Priority  
US 84409286 A 19860326

Abstract (en)  
[origin: US4741267A] A weight unbalance shuttle drive for flexure mounted carriages (11) is disclosed. The weight unbalance shuttle drive comprises a pair of motors (49) attached to the flexure mounted carriage (11). Mounted on the shaft of each motor is an unbalancing weight (51). When the motors (49) are energized the unbalancing weights (51) produce carriage drive forces in alternating directions resulting in the carriage (11) being shuttled back and forth. The mass and shape of the unbalancing weights (51) is chosen to produce the desired carriage displacement at the desired system operating frequency. The rotary positions of the unbalance weights (51) is chosen to produce the desired force/displacement amplitude.

IPC 1-7  
**B41J 25/28**

IPC 8 full level  
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CPC (source: EP US)  
**B41J 25/006** (2013.01 - EP US)

Citation (search report)

- [A] US 4227455 A 19801014 - PENNEBAKER WILLIAM B
- [A] US 4349828 A 19820914 - FISCHBECK KENNETH H, et al
- [A] US 4543884 A 19851001 - KIKUCHI HIROSHI [JP], et al
- [A] US 4481880 A 19841113 - KUROSAWA MAKOTO [JP], et al
- [A] US 4278019 A 19810714 - MEIER JOHANN H
- [A] EP 0082329 A2 19830629 - IBM [US]

Designated contracting state (EPC)  
CH DE FR GB IT LI NL SE

DOCDB simple family (publication)  
**EP 0239077 A2 19870930; EP 0239077 A3 19890315; EP 0239077 B1 19910508; CA 1272154 A 19900731; DE 3769821 D1 19910613; JP S62233258 A 19871013; US 4741267 A 19880503**

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**EP 87104330 A 19870324; CA 532951 A 19870325; DE 3769821 T 19870324; JP 6926787 A 19870325; US 84409286 A 19860326**