

19



Europäisches Patentamt
European Patent Office
Office européen des brevets

11 Publication number:

**0 290 219
A3**

12

EUROPEAN PATENT APPLICATION

21 Application number: **88303981.0**

51 Int. Cl.5: **B41J 19/20**

22 Date of filing: **03.05.88**

30 Priority: **02.05.87 JP 109589/87**
19.05.87 JP 121550/87

43 Date of publication of application:
09.11.88 Bulletin 88/45

84 Designated Contracting States:
DE FR GB IT

88 Date of deferred publication of the search report:
04.07.90 Bulletin 90/27

71 Applicant: **BROTHER KOGYO KABUSHIKI
KAISHA**
**35, 9-chome, Horita-dori Mizuho-ku
Nagoya-shi, Aichi-ken(JP)**

72 Inventor: **Sasaki, Ryoichi c/o Brother Kogyo
Kabushiki Kaisha**
**35, 9-chome, Horita-dori Mizuho-ku
Nagoya-shi Aichi-ken(JP)**
Inventor: **Sata, Youji c/o Brother Kogyo
Kabushiki Kaisha**
**35, 9-chome, Horita-dori Mizuho-ku
Nagoya-shi Aichi-ken(JP)**

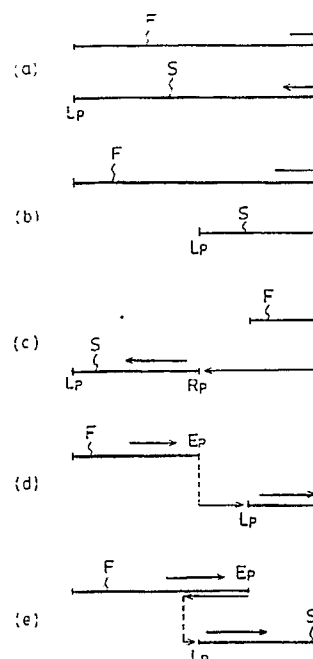
74 Representative: **Senior, Alan Murray et al
J.A. KEMP & CO 14 South Square Gray's Inn
London WC1R 5EU(GB)**

54 Carriage movement control in a printer.

57 In a printing apparatus wherein the print direction is selected properly on a print line basis so that the path of movement of a carriage (22) becomes shortest, a problem exists that intervals between characters are not kept constant due to backlash or elongation of a wire of a carriage driving system when the print direction is reversed.

The disclosed is a printing apparatus which performs regulation of the positional errors of the carriage (22) due to backlash and wire elongation by moving the carriage to the print start position after moving it to the print position preceding the print start position when the print direction of a print line is reverse to the print direction of the succeeding print line (5), and a printing apparatus which performs regulation likewise the above-mentioned in the case where the direction of movement of the carriage (22) to the relocation position is reverse to the print direction of succeeding printing when the original position of the carriage (22) is set again in response to a suspension of printing.

Fig. 4



EP 0 290 219 A3



EP 88303981.0

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)
A	<u>EP - A - 0 068 122</u> (IBM) * Fig. 3; abstract *	1,3,4	B 41 J 19/20
A	<u>EP - A2 - 0 140 389</u> (SIEMENS) * Fig. 2; abstract *	2,3,4,8	
A	<u>US - A - 4 180 335</u> (YAMADA) -----		
The present search report has been drawn up for all claims			
Place of search VIENNA		Date of completion of the search 18-04-1990	Examiner MEISTERLE
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			