

(19)



Europäisches Patentamt  
European Patent Office  
Office européen des brevets

(11) Publication number:

**0 221 472**  
**A3**

(12)

# EUROPEAN PATENT APPLICATION

(21) Application number: **86114790.8**(51) Int. Cl.4: **B41F 33/00**(22) Date of filing: **24.10.86**(30) Priority: **25.10.85 JP 237515/85**(43) Date of publication of application:  
**13.05.87 Bulletin 87/20**(84) Designated Contracting States:  
**CH DE FR GB IT LI SE**(88) Date of deferred publication of the search report:  
**10.08.88 Bulletin 88/32**

(71) Applicant: **DAI NIPPON INSATSU KABUSHIKI KAISHA**  
**1-1, Kaga-Cho 1-Chome Ichigaya**  
**Shinjuku-Ku**  
**Tokyo 162(JP)**

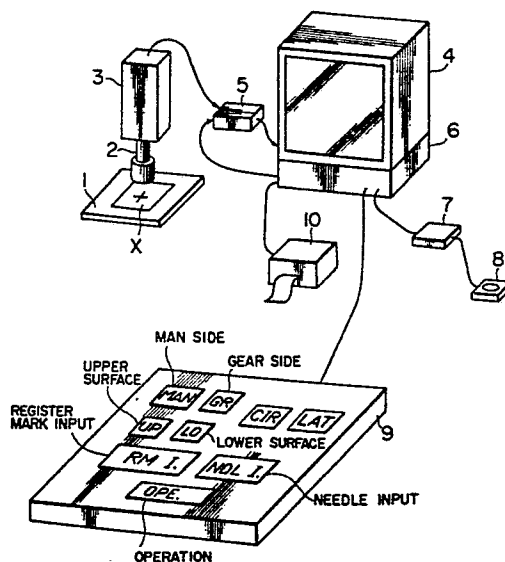
(72) Inventor: **Kobayasha, Michiaki**  
**6-4-504, Sakurada 3-Chome**  
**Washimiya-Machi**  
**Kitakatsushika-Gun Saitama-Ken(JP)**  
Inventor: **Suzuki, Daiji**  
**1-4-35-305, Tsurumi, Tsurumi-Ku**  
**Yokohama-Shi Kanagawa-Ken(JP)**  
Inventor: **Yamada, Kenji**  
**c/o Shoshi Ryo 47, Nando-Machi**  
**Shinjuku-Ku Tokyo-To(JP)**

(74) Representative: **Behn, Klaus, Dipl.-Ing.**  
**Patentanwalt Lindenberg 34**  
**D-8134 Pöcking bei München(DE)**

(54) **An apparatus and a method for measuring registration errors of a print.**

(57) A handy type image inputting device is utilized to be set over a portion of a print (x) to be inspected to input the image of the registration marks. The image inputted by the device is displayed on a display device (4) so as to provide an enlarged image to be observed for measurement of registration error. At least two kinds of registration marks such as those which have no spacings when registration is completed and those which have regular spacings when registration is completed may be utilized.

**FIG. 1**



**EP 0 221 472 A3**



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)
X	EP-A-0 000 328 (HEIDELBERGER DRUCKMASCHINEN) * Abstract; claims 1-4,8; figures 1-4; page 2, line 28 - page 3, line 19; page 10, lines 1-13 *	1,7	B 41 F 33/00
Y	DE-A-2 848 963 (VEB POLYGRAPH LEIPZIG) * Claims 1,2,5,9; figures 1,2; page 7, lines 17-27; page 9, lines 14-28 *	1,2,7	
A	---	3-6	
Y	DE-C-3 136 705 (MAN-ROLAND) * Claims 1-5; figures 1,2 *	1,2,7	
A	---	3-6	
Y,P	EP-A-0 177 885 (DAI NIPPON INSATSU K.K.) * Abstract; claims 1-14; figures 1,3-9 *	1,2,7	
Y	FR-A-2 512 738 (MAN-ROLAND) * Claims 1,2; figures 1-3 *	1,2,7	TECHNICAL FIELDS SEARCHED (Int. Cl.4)  B 41 F B 41 L G 06 K
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 27-04-1988	Examiner GREINER E. F.
<b>CATEGORY OF CITED DOCUMENTS</b> 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			