

(19)



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11) Publication number:

0 454 133 A3

(12)

EUROPEAN PATENT APPLICATION(21) Application number: **91106720.5**(51) Int. Cl.⁵: **H01C 17/22, B41J 2/345**(22) Date of filing: **25.04.91**

(30) Priority: **26.04.90 JP 113879/90**
26.04.90 JP 113880/90

(43) Date of publication of application:
30.10.91 Bulletin 91/44

(84) Designated Contracting States:
DE FR GB

(86) Date of deferred publication of the search report:
13.01.93 Bulletin 93/02

(71) Applicant: **MATSUSHITA ELECTRIC
INDUSTRIAL CO., LTD.**

**1006, Oaza Kadoma
Kadoma-shi, Osaka-fu, 571(JP)**

(72) Inventor: **Yoshiike, Nobuyuki**
3-17, Asukano-Kita 3-chome
Ikoma City, 630-01(JP)
Inventor: **Watanabe, Yoshihiro**
20-19, Taishibashi 1-chome
Asahi-ku, Osaka City 535(JP)

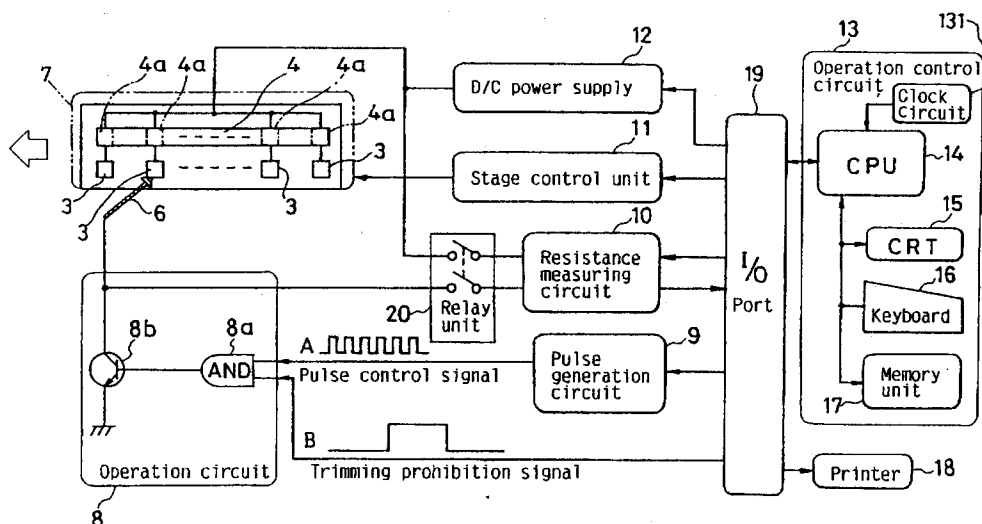
(74) Representative: **Dr. Elisabeth Jung Dr. Jürgen
Schirdewahn Dipl.-Ing. Claus Gernhardt**
P.O. Box 40 14 68 Clemensstrasse 30
W-8000 München 40(DE)

(54) **Thermal print head trimming apparatus and method for trimming resistance of a thermal print head.**

(57) A thermal print head trimming apparatus trims the resistances of heating resistor elements (4a). The apparatus divides the measured resistance data into plural groups by their variation range, and applies pulse signal of high-voltage by a probe electrode (6) to the heating resistor elements (4a) in the

plural groups except a group that includes the lowest resistance values of the heating resistor elements (4a). Thereby the whole resistances of the heating resistor elements (4a) in the thermal print head are trimmed to agree with the lowest resistance values.

FIG. 1





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number

EP 91 10 6720

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.5)
X A	US-A-4 782 202 (SAWAE ET AL.) * the whole document * ---	1,2,4 3,5,9	H01C17/22 B41J2/345
A	DE-A-3 616 217 (ANT NACHRICHTENTECHNIK) * column 3, line 24 - line 51; figure 1 * ---	1	
X	EP-A-0 342 243 (MATSUSHITA ELECTRIC) * the whole document * ---	3	
A	PATENT ABSTRACTS OF JAPAN vol. 6, no. 220 (M-169)5 November 1982 & JP-A-57 125 066 (MITSUBISHI DENKI) 4 August 1982 * abstract * -----	3,5	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			H01C
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 17 NOVEMBER 1992	Examiner PUHL A.T.
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			