

Title (en)

PRINT HEAD GAP ADJUSTING DEVICE FOR A PRINTER, IN PARTICULAR FOR A MATRIX NEEDLE PRINTER

Publication

EP 0360728 B1 19930804 (DE)

Application

EP 89730187 A 19890816

Priority

DE 3830880 A 19880908

Abstract (en)

[origin: JPH0381174A] PURPOSE: To simply constitute a printing head interval adjusting apparatus to accurately control a printing head interval by converting an electric analogue signal generated from a detection element to an electronic digital signal to control a stepping motor and forming an operation drive device for a pair of eccentric-disposed pins to a guide axle by the stepping motor. CONSTITUTION: The detection element 5 of a printing head interval adjusting device supports the detection roller 5a supported at one end of a detection lever 16 in a rotatable manner and the support device 15 provided to the other end 14b of the detection lever 14 cooperates with the sensor 16 of an electronic circuit for generating an analogue signal. An operational amplifier 19 is positioned behind the sensor 16 to be connected thereto and an analogue/digital converter 20 is positioned behind the operational amplifier 19 to be connected thereto and a driver circuit 22 is positioned behind the converter 20 to be connected thereto. The digitalized signal taken out of the driver circuit 22 controls a stepping motor 12. An electric motor pinion drives the gear segments 29 fixed to the eccentric-disposed pins 10 of a guide shaft 9 in a non-rotatable manner through gears 28 on the shaft of the stepping motor 12. The gear segments 29 can move to a fundamental position in the direction of a stopper 30.

IPC 1-7

B41J 25/304

IPC 8 full level

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CPC (source: EP US)

B41J 25/308 (2013.01 - EP US); **B41J 25/3088** (2013.01 - EP US)

Citation (examination)

PATENT ABSTRACTS OF JAPAN, unexamined applications, Field M, Band 10, Nr. 109, 23.04.1986; JP A 60 240 483.

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