



Printer with a Print Head Distance-setting Device

Abstract

A print head-to-paper distance setting means for a printer has a print head (1) mounted on a carriage slide (5) by a spring clip (13) with interposed resilient layer (12). The printing element end (1a) of the print head (1) is moved briefly by the carriage (5) and an associated drive into contact with the paper (7) whereby a slight displacement of the print head (1) relative to the carriage (5) occurs. This displacement is sensed using a light-emitting diode and phototransistor assembly (14,15,16) on the carriage (5) and in conjunction with a reflecting surface (17) on the print head (1). This sets a datum by which correct positioning of the print head (1) relative to the paper (7) may be achieved taking into account paper thickness and number of plies. A signal processing and filtering circuit is used to compensate for vibration and other disturbances. In a further embodiment a part of the carriage (5) itself has a probe which is displaceable to produce relative movement between two surfaces carrying parts of the sensor.

Fig. 1