Title (en)

Ink jet printer head gap controlling apparatus

Title (de

Tintenstrahldrucker mit Druckspalteinstellung eines Druckkopfes

Title (fr)

Imprimante à jet d'encre avec dispositif pour régler l'espacement de la tête d'impression

Publication

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Application

EP 96401273 A 19960612

Priority

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Abstract (en)

The present invention is an ink jet printer head gap controlling apparatus which is provided with the capability of regulating the gap between a print head (82) and a paper sheet (22) so that a variety of paper sheets can be automatically processed therethrough irrespective of the thicknesses of each paper sheet thereof. The invention includes a pickup roller (40) for picking up a paper sheet (22) one-by-one from a plurality of paper sheets stacked in a cassette (20), a transfer roller (50) for transferring the picked-up paper sheet (22) forwardly along the periphery thereof, a first supporting member (60) for guiding and elastically supporting the transferred paper sheet, a supporting roller (70) formed at one side portion of a cartridge carrier (80) so as to move horizontally along with the first supporting member (60) and supporting the first supporting member (60), a second supporting member (90) elastically supporting another side portion of the cartridge carrier (80) to maintain a certain distance between a rotation axle of the supporting roller (70) and the first supporting member (60) and regulating the gap between the print head (82) and the printing paper sheet (22) transferred onto the guiding plate, and an extracting roller (100) for outwardly extracting therefrom the paper sheet (22) printed using the ink jetted from a nozzle (84) of the print head (82). <IMAGE>

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CPC (source: EP KR)

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- [X] EP 0435695 A2 19910703 CANON KK [JP]
- [X] EP 0650846 A2 19950503 HEWLETT PACKARD CO [US]
- [A] US 4010834 A 19770308 LINDER EBBE
- [A] EP 0418815 A2 19910327 CANON KK [JP]
- [A] REX, D.K.: "PRINTHEAD ADJUSTMENT", IBM TECHNICAL DISCLOSURE BULLETIN, vol. 26, no. 12, May 1984 (1984-05-01), NEW YORK US, pages 6373 6374, XP002012313
- [A] PATENT ABSTRACTS OF JAPAN vol. 14, no. 237 (M 976)<4180> 21 May 1990 (1990-05-21)

Cited by

US6129461A; EP0854049A3

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