

Title (en)

A printer for printing on a continuous print medium

Title (de)

Drucker zum Bedrucken von einem bandförmigen Aufzeichnungsträger

Title (fr)

Imprimante pour imprimer sur un substrat d'enregistrement en forme de bande

Publication

EP 0816108 B1 20000628 (EN)

Application

EP 97302467 A 19970410

Priority

GB 9613167 A 19960624

Abstract (en)

[origin: EP0816108A1] A thermal printer for printing on a continuous print medium by ink transfer from a thermal print ribbon has a print head which is pivotally mounted and which is driven in an oscillatory nodding motion by means of a stepper motor so as repeatedly to bring a linear array of energisable printing elements to bear against a platen roller. Both the element array and the platen extend transversely to respective paths of travel of the print medium and the ribbon. The print medium is fed through the printer from an inlet region, between the platen and print head, and thence to an outlet region. The instantaneous rate of travel of the print medium past the print head is substantially the same as the rate of feed of print medium to the printer. Typically this rate is of the order of 250 to 400 mm per second. The ribbon also travels between the print head and the platen, overlying the print medium and is driven in such a manner that it travels at the same rate as the print medium during each printing operation up to a speed equivalent to the maximum printing speed of the print head. This is achieved by driving the ribbon with a motor the speed of which is controlled according to the sensed speed of travel of the print medium, e.g. by coupling the motor to processing circuitry which takes an input signal from a shaft encoder associated with the platen roller. These methods of driving the ribbon have the advantage that the ribbon speed can be varied to take account of different print medium speeds, e.g. due to the requirements of differing packaging processes, and also in response to transient variations in print medium speed during each printing operation. To restore the aspect ratio of characters when the print medium is travelling faster than the speed equivalent to the maximum speed of the print head, lines of dots are skipped. <IMAGE>

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