

Title (en)
Matrix print head.

Title (de)
Matrixdruckkopf.

Title (fr)
Tête d'impression matricielle.

Publication
EP 0157727 A2 19851009 (DE)

Application
EP 85730036 A 19850305

Priority
DE 3412855 A 19840403

Abstract (en)
1. A matrix print head with printing wires (8) which can be operated to print selectively by means of an electromagnet coil (21) allocated to each printing wire (8) with magnetic hinged armatures (18) for the dot-wise formation of characters on a record carrier (3), with the printing wires (8) resting against the inner ends of the associated hinged armatures (18) and being mounted and guided in a forward part of the print head housing (5) and the magnetic hinged armatures (18) in the rear part of the print head housing (5), and with the electromagnet coils (21) being combined on a base plate (24) to form a magnet block (23) and the base plate (24) being connected to the print head housing (5), with the base plate (24) of the magnet block (23) together with the magnet yokes (22a and 22b) consisting of a one-piece coil holder (25) receiving the electromagnet coils (21), the coil holder (25) being connected to a coaxially aligned core bushing (27), the printing wires (8) extending away from the side of the magnetic hinged armatures (18) which is opposite the side of these hinged armatures (18) facing the base plate (24), and the point of rotation of the hinged armatures being located between the two hinged armature ends and on the respective inner pole arms (22b) of the magnet yokes (22a, 22b), characterised in that the coil holder (25) is rigidly connected to the core bushing (27), with the end face (28) of the core bushing (27) which faces the inner hinged armature ends lying at an exact tolerance distance (30) from the end face (29) of the magnet yokes (22a, 22b) due to subsequent machining, and that a stop disc (31) is arranged on the core bushing (27) centrally for the inner ends of the magnetic hinged armatures (18) in such a manner that its stop surface (31b) is at a tolerance distance from the end face (29) of the magnet yokes (22a, 22b).

Abstract (de)
Ein solcher Matrixdruckkopf weist dem Druckwiderlager (2) mit Aufzeichnungsträger (3) bzw. Farbband (4) gegenüberliegend eine Drucknadelführungsbaugruppe (1) auf, in der die Drucknadeln (8) in Führungen (6, 7, 17) gleitend geführt sind und an die Drucknadelführungsbaugruppe (1) schliesst die Drucknadelantriebsbaugruppe (15) an. Um eine wirtschaftlich herstellbare, bei günstigen Herstelltoleranzen und während des Betriebes auf Lebenszeit besonders stabile Funktionsweise zu erzielen, wird vorgeschlagen, dass die Grundplatte (24) des Magnetblocks (23) zusammen mit den Magnetjochen (22a bzw. 22b) aus einem einstückigen, die Elektromagnetspulen (21) aufnehmenden Spulenträger (25) besteht und dass der Spulenträger (25) mit einer Anschlagscheibe (31) für die Magnetanker (18) aufweisenden Kernbuchse (27) verbunden ist, die zu einem Kühlkörper (32) mit Kühlrippen (33) weitergebildet ist.

IPC 1-7
B41J 3/12

IPC 8 full level
B41J 2/235 (2006.01); **B41J 2/22** (2006.01); **B41J 2/275** (2006.01); **B41J 29/00** (2006.01); **B41J 29/377** (2006.01)

CPC (source: EP)
B41J 2/275 (2013.01); **B41J 29/377** (2013.01)

Cited by
CN1090099C; CN104553346A

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI NL

DOCDB simple family (publication)
EP 0157727 A2 19851009; **EP 0157727 A3 19861230**; **EP 0157727 B1 19900905**; AT E56182 T1 19900915; DE 3412855 A1 19851003; DE 3412855 C2 19910613; DE 3579487 D1 19901011; JP H0481513 B2 19921224; JP S60225764 A 19851111

DOCDB simple family (application)
EP 85730036 A 19850305; AT 85730036 T 19850305; DE 3412855 A 19840403; DE 3579487 T 19850305; JP 6890285 A 19850401