Title (en)
DOT PRINTING DEVICE, PARTICULARLY FOR MATRIX LINE PRINTERS

Publication
EP 0047883 B1 19850703 (DE)

Application
EP 81106536 A 19810822

Priority
US 18613480 A 19800911

Abstract (en)
[origin: US4351235A] A dot printing mechanism for dot matrix line printers comprising a plurality of hammer modules (45) mounted on a carriage (43) that is shuttled back and forth along a print line is disclosed. Each module includes a plurality of cantilevered print hammers (47) formed of a resilient ferromagnetic material. Each of the print hammers includes an anvil (49) on one face of its cantilevered outer end, adapted to print a dot when the associated hammer is actuated. The modules (45) are mounted on opposite sides of the print line and positioned such that the hammers (47) of juxtaposed modules are interleaved and such that the anvils (49) all lie along the print line. Further, each hammer forms part of a magnetic circuit that includes a permanent magnet (51), a post (57) and ferromagnetic paths between the permanent magnet and post. The post supports a coil (59) and is positioned near the cantilevered end of the print hammer (47), on the side opposite of the anvil (49). In the absence of current through the coil (59), the print hammer (47) is attracted to the post by the magnetic field produced by the permanent magnet (51) and, thus, cocked. The cocked hammers (47) are selectively released to create dots by the selective energization the coils. The selective energization is such that the coils (59) produce a magnetic field that counteracts the magnetic post attraction force created by the permanent magnet (51).

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