Title (en)

INDIVIDUAL-SHEET FEEDING DEVICE

Publication

EP 0027546 A3 19820929 (FR)

Application

EP 80105499 A 19800915

Priority

US 8582679 A 19791017

Abstract (en)

[origin: EP0027546A2] 1. A paper sheet feed apparatus for a printer having a cylindrical platen (12) for holding and advancing a sheet of paper. said platen comprising first and second pressure means for applying a sheet of paper against the platen between an input portion and an output portion, of the type including : - a rectangular tray (21) for supporting thereon a paper sheet stack, one edge of which is provided in close and parallel relationship with said platen (12), - sheet separation means for separating the lower most sheet from the remaining portion of the stack, comprising at least a sheet shingler wheel (29) located in a recessed portion of said tray (21) and able to cooperate with lower most sheet (30a) of the stack, - rotation drive means (32) to effect rotation of said wheel (29), - guiding means for driving said lower most sheet onto said platen, - support means for supporting printed sheets and, - removal means for removing said printed sheet from said platen and for driving it onto said printed sheet support means, characterized in that : - said tray (21) includes a rear support (24) and a forward support (26, 27) separated by said recessed portion, for respectively supporting thereon the rear and forward ends of a stack of paper, said forward end being the one the closest to said platen, - said separation means include : - control means (31) responsive to a first command for driving said drive means (32) in a first direction tending to move the lower most sheet (30a) backwards, and - first sensing means (35) for sensing when the edge of said lower most sheet (30a) is no longer supported by said forward support (26, 27) of tray (21) at which time said forward edge is separated from the remaining portion of the paper stack by gravity, for generating in response to said sensing a second control signal and applying said signal to said control means (31) for driving said driving means (32) into the opposite direction, which drives said lower most sheet (30a) forward, - said guiding means are located under said forward support (26, 27) for cooperating id with the forward edge of said lower most sheet (30a) when said forward edge has been separated from the remaining portion of the paper stack and moves in said opposite direction and for orientating said sheet toward said first pressure means of said platen, - said removal means (46, 47) are located above said guiding means and said tray (21), and - said printed sheet support means are comprised of a cover (95) which, in operating position, covers the paper stack provided on said tray and, in the same time, allows the lower most sheet of the paper stack to be applied onto said shingler wheel with a uniform pressure.

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IPC 1-7
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B41J 13/00

IPC 8 full level

B65H 1/02 (2006.01); **B41J 13/00** (2006.01); **B41J 13/10** (2006.01); **B65H 1/06** (2006.01); **B65H 3/00** (2006.01); **B65H 3/06** (2006.01); **B65H 7/18** (2006.01); **B65H 83/00** (2006.01)

CPC (source: EP)

B41J 13/103 (2013.01)

Citation (search report)

- [Y] DE 2054935 A1 19720510 ANKER WERKE AG
- [Y] US 3350089 A 19671031 NICCOLI GEORGE J
- [A] US 2237874 A 19410408 JOHN BRAUN KARL
- [D] US 4165870 A 19790828 FALLON JOHN L [US], et al

Cited by

EP0320048A3; EP0036072B1

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