

Title (en)

A device for direct electrostatic printing (DEP) comprising a printhead structure with slit aperture

Title (de)

Vorrichtung zum direkten elektrostatischen Drucken mit einer Druckkopfstruktur mit Schlitzöffnungen

Title (fr)

Dispositif d'impression électrostatique directe avec une structure d'une tête d'impression avec ouvertures à fente

Publication

EP 0780740 B1 20010926 (EN)

Application

EP 95203534 A 19951218

Priority

EP 95203534 A 19951218

Abstract (en)

[origin: EP0780740A1] A DEP device is provided that comprises : a back electrode (105), a printhead structure, comprising an insulating substrate (102), a control electrode (102a) and a slit aperture (103) through which a particle flow can be electrically modulated by the control electrode (102a), a toner delivery means (101), characterised in that only on one side of said slit aperture, control electrodes (102a) are present. In a preferred embodiment the printhead structure is realized by a slit having two sides, side A (SA) and side B (SB), defined by two edges (A and B), which are formed by at least one sheet of insulating material. The insulating material has an elasticity modulus (Young's Modulus, YM) fulfilling the equation $0.1 \text{ GPa} \leq \text{YM} \leq 10 \text{ GPa}$ and the edges A and B being placed with respect to each other at an angle α fulfilling the equation $0^\circ \leq \alpha < 45^\circ$. <IMAGE>

IPC 1-7

G03G 15/34; **B41J 2/415**

IPC 8 full level

B41J 2/385 (2006.01); **B41J 2/415** (2006.01); **G03G 15/34** (2006.01); **B41J 2/06** (2006.01)

CPC (source: EP)

B41J 2/4155 (2013.01); **G03G 15/346** (2013.01); **B41J 2002/061** (2013.01); **G03G 2217/0025** (2013.01)

Cited by

EP0965894A1; EP0895867A3; EP0900658A3; EP0963852A1; EP0963853A1; WO9942907A1; EP0983858A1; US6331046B1; EP1090770A1; US6309049B1

Designated contracting state (EPC)

BE DE FR GB

DOCDB simple family (publication)

EP 0780740 A1 19970625; **EP 0780740 B1 20010926**; DE 69522948 D1 20011031; DE 69522948 T2 20020425; JP 3237818 B2 20011210; JP H09174914 A 19970708

DOCDB simple family (application)

EP 95203534 A 19951218; DE 69522948 T 19951218; JP 35375296 A 19961218