

Title (en)

A device for direct electrostatic printing (DEP) comprising a printhead structure with a current flow of at most 50 microA between shield electrode and control electrode

Title (de)

Direkte elektrostatische Druckvorrichtung (DEP) mit einer Druckkopfstruktur mit einem maximalen Stromfluss von 50 microA zwischen der Steuerelektrode und der Abschirmelektrode

Title (fr)

Appareil d'impression électrostatique directe comprenant une structure de tête d'impression avec un flux de courant inférieur ou égal à 50 microA entre les électrodes de commande et d'écran

Publication

EP 0719648 A1 19960703 (EN)

Application

EP 95203348 A 19951205

Priority

- EP 95203348 A 19951205
- EP 95200095 A 19950116
- EP 94203764 A 19941227

Abstract (en)

A DEP device is provide that comprises a back electrode (105), a printhead structure (106) comprising individual control electrodes (106a) in combination with printing apertures (107) and a shield electrode (106b), both electrodes separated by an insulating material and a toner delivery means (101) presenting a cloud (104) of dry toner particles in the vicinity of the printing apertures (107), characterised in that the apertures (107) are such that, when applying a potential difference of 200 V between the shield electrode and each individual control electrode, a current of at most 50 mu A flows from each individual control electrode to the shield electrode. A method for producing such a printhead structure is also disclosed.

<IMAGE>

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IPC 8 full level

B41J 2/415 (2006.01)

CPC (source: EP)

B41J 2/4155 (2013.01)

Citation (applicant)

US 3689935 A 19720905 - PRESSMAN GERALD L [US], et al

Citation (search report)

- [A] EP 0377208 A2 19900711 - TOSHIBA KK [JP]
- [A] US 5327169 A 19940705 - THOMPSON MICHAEL D [US]
- [A] US 5278588 A 19940111 - KUBELIK IGOR [CA]
- [A] US 5256246 A 19931026 - KITAMURA TETSUYA [JP]
- [A] PATENT ABSTRACTS OF JAPAN vol. 9, no. 297 (M - 432)<2020> 25 November 1985 (1985-11-25)

Cited by

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