

Title (en)

MULTI-ELECTRODE ION GENERATING SYSTEM FOR ELECTROSTATIC IMAGES.

Title (de)

IONENERREGENDES SYSTEM MIT MEHREREN ELEKTRODEN FÜR ELEKTROSTATISCHE BILDER.

Title (fr)

SYSTEME DE GENERATION D'IONS A ELECTRODES MULTIPLES POUR IMAGES ELECTROSTATIQUES.

Publication

**EP 0243348 A4 19890725 (EN)**

Application

**EP 85905181 A 19851015**

Priority

US 8501990 W 19851015

Abstract (en)

[origin: WO8702452A1] An ion generator for the formation of electrostatic images includes two electrodes (a "control electrode" (13) and a "driver electrode" (12)) at opposite faces of a solid dielectric member (11) which are electrically actuated to form ions in an air region adjacent the control electrode (13); a third, "screen" electrode (21); and an additional, "deflection" electrode (31), which together with the screen electrode (21) modulates ion flow to an imaging surface. Ions of a given polarity attracted toward the imaging surface by an accelerating field resulting from a direct current potential of the control electrode (13). The screen electrode (21) is maintained at a screen potential (28) to control passages of ions through one or more apertures (22) therein, while a further, deflection potential (31) applied to the deflection electrode (31) provides an additional lever of control over the size, shape, and location of the resulting electrostatic images. The deflection electrode (31) may take the form of a conductive member on one side of the ion path, or two or more conductors straddling this path. This arrangement provides an additional level of multiplexing, simplifies the requirements of electronic drive circuitry, and improves image definition.

IPC 1-7

**G01D 15/06**

IPC 8 full level

**B41J 2/415** (2006.01); **G03G 15/05** (2006.01); **G03G 15/32** (2006.01)

CPC (source: EP)

**B41J 2/415** (2013.01); **G03G 15/323** (2013.01)

Citation (search report)

- [E] US 4675703 A 19870623 - FOTLAND RICHARD A [US]
- [E] JP S61100475 A 19860519 - CANON KK
- [Y] PATENT ABSTRACTS OF JAPAN, vol. 6, no. 241 (P-158)[1119], 30th November 1982; & JP-A-57 138 659 (SONY K.K.) 27-08-1982
- [A] PATENT ABSTRACTS OF JAPAN, vol. 7, no. 245 (P-233)[1390], 29th October 1983; & JP-A-58 129 439 (KONISHIROKU SHASHIN KOGYO K.K.) 02-08-1983
- See references of WO 8702452A1

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)

**WO 8702452 A1 19870423**; EP 0243348 A1 19871104; EP 0243348 A4 19890725; JP S63501490 A 19880609

DOCDB simple family (application)

**US 8501990 W 19851015**; EP 85905181 A 19851015; JP 50458885 A 19851015