

Title (en)

Electrostatic field control method and apparatus.

Title (de)

Verfahren und Vorrichtung zur Regulierung eines elektrostatischen Feldes.

Title (fr)

Méthode et dispositif de régulation d'un champ électrostatique.

Publication

EP 0098509 A2 19840118 (EN)

Application

EP 83106300 A 19830628

Priority

US 39317382 A 19820628

Abstract (en)

For electrophotographic imaging in which a photoconductive surface is moved past a corona generating device, charged, exposed and toned, a method and apparatus for establishing a predetermined apparatus surface voltage charge on the photoconductive surface at the start of the toning function and providing exposure control thereof. The photoconductive surface is charged with a ramped, staircase pattern of corona output levels. A selected region of the photoconductive surface is moved over an exposure lamp to provide exposed and unexposed regions, exposure taking place for a predetermined period of time to illuminate and at least partially discharge the selected, exposed region of the photoconductive surface. The electrostatic field charge on said surface is detected and related to the movement of the photoconductive surface. The detected charge levels for the exposed and unexposed regions are compared to a predetermined signal to provide a comparison signal for control tasks. The predetermined signal includes both the desired electrostatic field charge levels and a profile of the characteristics of the particular exposure lamp. The predetermined signal is stored in a control logic unit memory, the measured signal and the predetermined signal compared and control signals provided to regulate the a) corona output level, b) the exposure light intensity and c) the duration of exposure in accordance with both the detected signal and the predetermined stored signal.

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G03G 15/00 (2006.01); **G03G 15/02** (2006.01)

CPC (source: EP)

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Cited by

GB2146132A; US4616923A; US4884107A; EP0180984A3; US4655580A; EP0185884A1; US4780680A; AU590732B2

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