

Title (en)

Method and apparatus for directly transferring developed images from a photoconductive drum to a print medium.

Title (de)

Verfahren und Gerät für direktes Übertragen entwickelter Bilder von einer photoleitenden Trommel auf einen Aufzeichnungsträger.

Title (fr)

Procédé et appareil à transfert direct d'images développées d'un tambour photoconductif sur un support d'impression.

Publication

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Application

EP 92118751 A 19921102

Priority

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Abstract (en)

Method and apparatus for electrophotographically transferring a developed color image on the surface of a photoconductive drum (10) directly to an adjacent print media (30). The print media (30) is operative to pass between the one abutting surface location on the photoconductive drum (10) and an adjacent surface location on a transfer roller (28) which is connected to receive a DC bias voltage (42). Once a composite color image has been developed on the surface of the photoconductive drum (10), this surface is illuminated with light (76) within a chosen wavelength range and intensity to thereby cause hole-electron pairs (88) within a layer (90) of the photoconductive drum (10) to recombine and thereby reduce the net voltage across the photoconductive surface layer or layers (78, 86, 90) to a level on the order of about thirty (30) volts (Fig. 2C). In this manner, the DC bias voltage (42) applied to the direct transfer roller (28) can be made larger than otherwise possible, thereby increasing the maximum achievable electrostatic field strength between the surface of the transfer roller (28) and the photoconductive drum (10). This feature of increasing the electrostatic field strength across the print medium (30) improves image transfer fidelity and print quality during the electrophotographic printing process. <IMAGE>

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