

# **Electrostatic Adhesion Forces in Electrophotography**

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## **Abstract**

In electrophotography, images are produced with charged toner particles and photoconductors containing an image-wise surface charge. The toner is tribocharged by contact with magnetic carrier particles and moved into proximity with the photoconductor by magnetic fields acting on the carrier. Toner is removed from the carrier in the electric field of image areas and deposited onto the photoconductor surface, overcoming adhesive forces between the toner and

carrier particles. Electrostatic contributions to adhesion and their importance in electrophotography are discussed.

## **Biography**

Eric Stelter works in electrophotography and related fields at Heidelberg Digital, where he is a senior scientist in the Materials and Advanced Technology group. He began his career at Eastman Kodak after receiving his Ph.D. in physics from the University of Illinois in 1985.