

Title (en)
Reversed polarity ink jet imaging

Title (de)
Bilderzeugung durch Tintenstrahl bei inverser Polarität

Title (fr)
Formation d'image à jet d'encre par polarité inverse

Publication
EP 0709198 A2 19960501 (EN)

Application
EP 95307489 A 19951020

Priority
US 33096294 A 19941028

Abstract (en)
A continuous ink jet system includes a linear array of orifices fluidically connected to a fluid supply and pressurization means (18) to produce a linear array of jets, means for stimulating the jets for regular break-up of the jet into a plurality of uniform streams of drops (16), charging means consisting of a linear array of planar conducting elements (12) disposed along the path of motion of the jets, one for each jet, such that placing a preselected voltage on one of the plurality of conducting elements (12) causes an electrostatic charge to be induced on the corresponding jet, the electrostatic charge and the placement of the electrode being such that a charge drop receives a force impulse from the presence of the conducting elements (12), catcher means (22) disposed to catch selected drops with predetermined charge from the charging system, return fluidic means disposed so that drops intercepted by the catcher (22) can be returned through the fluidic system for eventual re-use in forming the jets, means for moving a substrate (30) beneath the catcher (22) means so that drops not intercepted by the catcher means (22) are allowed to impact the substrate (30) to cause printing. The invention provides the improvement of reversing the polarity of the charging means so as to create drops with positive charge.

IPC 1-7
B41J 2/06

IPC 8 full level
B41J 2/06 (2006.01); **B41J 2/085** (2006.01)

CPC (source: EP)
B41J 2/085 (2013.01)

Citation (applicant)

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