

1 INKJET PRINTING: MASK-ROTATION-ONLY AT PAGE EXTREMES;
2 MULTIPASS MODES FOR QUALITY & THROUGHPUT ON PLASTIC MEDIA

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5 ABSTRACT OF THE DISCLOSURE
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7 Images are printed using marks formed in pixel arrays
8 by a scanning print head. For transparent and glossy
9 media, with poor absorbance, drying is enhanced by a
10 multipass (preferably six-pass) print mode in which the
11 total number of ink drops or spot is allocated among
12 correspondingly multiple masks, though some may be dupli-
13 cates. To further hasten drying, heat is applied --
14 through the medium, from the opposite side as that on
15 which ink is deposited -- but the amount of heat is
16 strictly moderated, particularly for nontransparent glossy
17 media, to accommodate the hypersensitivity of these media
18 to heat-induced warping. Heating for glossy media is
19 preferably restricted to about one-third the power used
20 for drying plain paper. Convective drying too is promot-
21 ed, by operating a fan over the printed image. Certain
22 special techniques well-suited for plain-paper printing
23 have been found undesirable for use with plastic media;
24 these techniques include so-called "resolution-enhanced
25 technology", bidirectional printing (particularly of
26 black), and optical-density controlled printing speed. At
27 top and bottom of each page or sheet of printing medium,
28 where it is undesirable to operate with the pen partly off
29 the edge of the sheet, and where also the printing medium
30 is constrained from only one direction rather than being
31 held taut beneath the pen, the print mask is rotated while
32 the printing medium is held stationary -- thereby entirely
33 avoiding reliance upon accuracy of print-medium advance.

(Fig. 2)

This Sheet Has Been Replaced



THIS SHEET HAS BEEN
REPLACED