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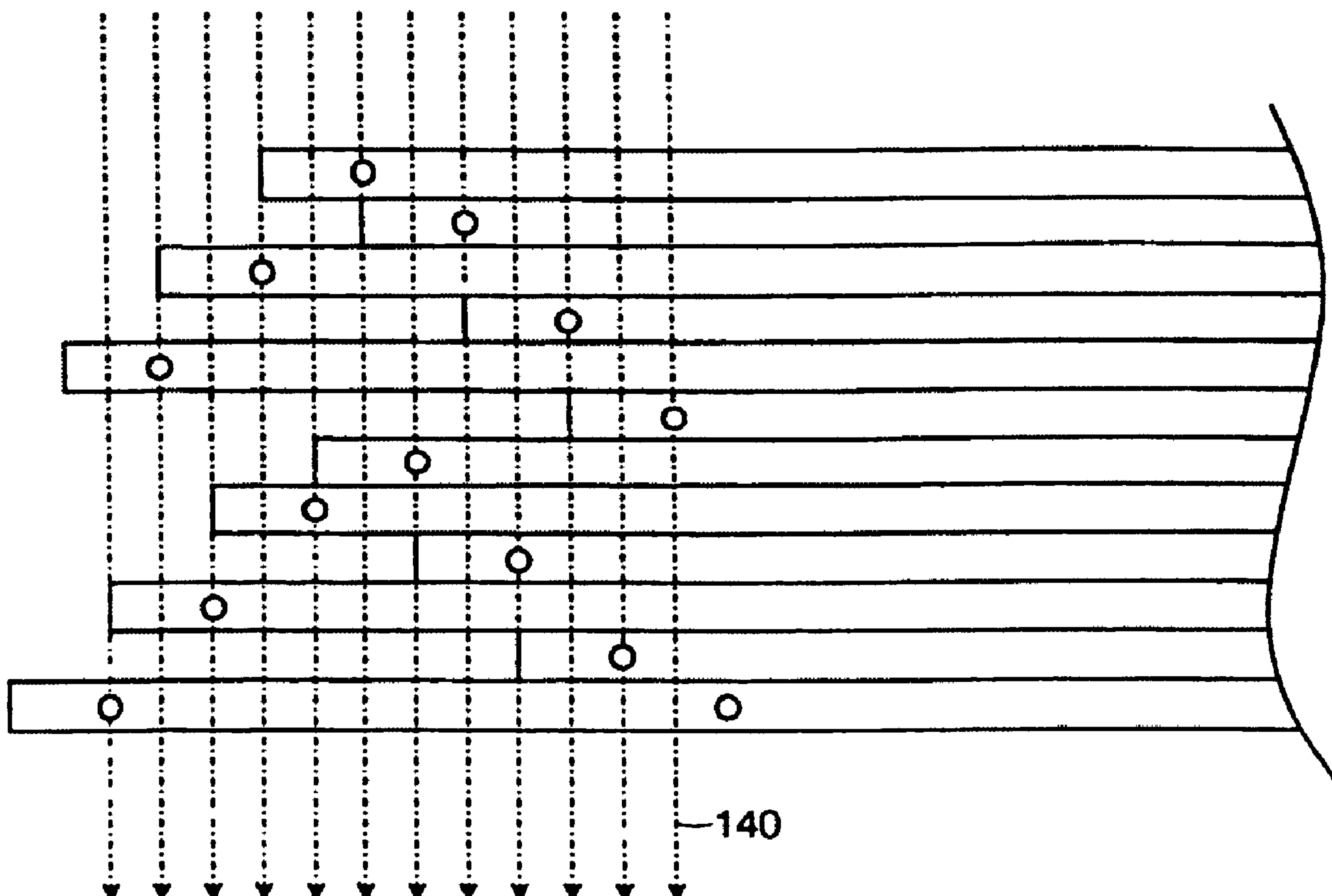
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(54) Titre : IMPRESSION A JET D'ENCRE A PASSAGE UNIQUE  
(54) Title: SINGLE-PASS INKJET PRINTING



(57) Abrégé/Abstract:

A single-pass print head has multiple orifice plates each serving some but not all of the area to be printed. The head has multiple orifice plates each serving some but not all of the area to be printed.



## SINGLE-PASS INKJET PRINTING

### Background

5           This invention relates to single-pass inkjet printing.

          In typical inkjet printing, a print head delivers ink in drops from orifices to pixel positions in a grid of rows and columns of closely spaced pixel positions.

          Often the orifices are arranged in rows and columns. Because the rows and columns in the head do not typically span the full number of rows or the full number  
10       of columns in the pixel position grid, the head must be scanned across the substrate (e.g., paper) on which the image is to be printed.

          To print a full page, the print head is scanned across the paper in a head scanning direction, the paper is moved lengthwise to reposition it, and the head is scanned again at a new position. The line of pixel positions along which an orifice  
15       prints during a scan is called a print line.

          In a simple scheme suitable for low resolution printing, during a single scan of the print head adjacent orifices of the head print along a stripe of print lines that represent adjacent rows of the pixel grid. After the stripe of lines is printed, the paper is advanced beyond the stripe and the next stripe of lines is printed in the next  
20       scan.

          High-resolution printing provides hundreds of rows and columns per inch in the pixel grid. Print heads typically cannot be fabricated with a single line of orifices spaced tightly enough to match the needed printing resolution.

          To achieve high resolution scanned printing, orifices in different rows of  
25       the print head can be offset or inclined, print head scans can be overlapped, and orifices can be selectively activated during successive print head scans.





















































