

Title (en)  
Method and apparatus for printing onto a continuously advancing web of work material

Title (de)  
Verfahren und Gerät zum Drucken auf eine durchlaufende Materialbahn

Title (fr)  
Procédure et appareil pour imprimer sur un matériau de bande défilant en continu

Publication  
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Application  
**EP 99119634 A 19991004**

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Abstract (en)  
In an apparatus (20, 320) for printing on a web of work material (26, 326) continuously advanced in an X coordinate direction at a velocity  $v_{wx}$ , at least one print head (86, 286) having a plurality of print elements (100) arranged in a scanning array (102, 302) extending in the X direction is repetitively movable relative to the apparatus (20, 320). The scanning array (102, 302) moves at a velocity  $v_a$  along a path that includes at least one scan segment and at least one repositioning segment. As the scanning array (102, 302) traverses the scan segment it has a first velocity component  $v_{ax}$  in the X direction, and a second velocity component  $v_{ay}$  in a Y direction perpendicular to the X direction. The first velocity component  $v_{ax}$  is equal to the velocity  $v_{wx}$  so that the scanning array (102, 302) in traversing the scan segment, scans a swath on the web (26, 326) parallel to the Y direction, having a swath height  $h_s$ . The velocity component  $v_{ay}$  is such that in the time taken for the array (102, 302) to move along the full extent of the scan segment the web (26, 326) advances a distance  $h_w$  in the X direction that is less than  $h_s$ . The array (102, 302) then travels along the repositioning segment such that prior or equal to a time taken for the web (26, 326) to advance a distance  $d = h_s - h_w$  the print head (86, 286) is positioned for movement along the scan segment, thereby causing successive swaths of the web scanned by the array to be positioned immediately adjacent to one another. <IMAGE> <IMAGE>

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