Title: CONVEX PRINTING TABLE

Abstract: The present invention is a convex printing table for use with wide-format and super wide-format digital printers, which print on flexible substrate (6) up to 5 meters in width. The convex profile of the table creates contact force (30) between the flexible substrate and the support surface(4). This contact force lessens the formation of wrinkles in the flexible substrate (6) during the printing process, which permits the print heads to be positioned closer to the flexible substrate (6) than with the flat tables currently in use. The size and number of wrinkles and the distance of the print heads from the flexible substrate (6) impact the overall quality of the finished product. The convex printing table also provides a plurality of flat printable regions, enabling use with a four-color digital printer. The print heads are deployed so as to allow all four print heads to apply printing medium simultaneously and during passes across the flexible substrate (6) in either direction, which increases the quality of the color of the finished product.
(88) Date of publication of the international search report: 10 April 2003

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.
**INTERNATIONAL SEARCH REPORT**

**INTERNATIONAL APPLICATION**

<table>
<thead>
<tr>
<th>IPC(7)</th>
<th>B41B 17/00; B41J 2/005; B32B 3/00, 21/14</th>
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<tr>
<td>US CL</td>
<td>358/1.12, 1.9, 1.16, 1.15, 1.14, 101/5, 8, 93, 228; 156/238, 240, 541, 1</td>
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**A. CLASSIFICATION OF SUBJECT MATTER**

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S.: 358/1.12, 1.9, 1.16, 1.15, 1.14, 101/5, 8, 93, 228; 156/238, 240, 541,

Documented in other minimum documentation to the extent that such documents are included in the fields searched

Electronic data base searched, other than minimum documentation, to the extent that such documents are included in the fields searched

Please see continuation sheet

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

<table>
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<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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<tbody>
<tr>
<td>Y</td>
<td>US 6,151,130 A (Liguori et al.) 21 November 2000, See the entire patent.</td>
<td>1-10</td>
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<tr>
<td>Y</td>
<td>US 5,379,056 A (WALTER et al.) 3 January 1995 See entire patent.</td>
<td>1-10</td>
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<tr>
<td>Y</td>
<td>US 5,248,363 A (Hale) 28 September 1993 See entire patent.</td>
<td>1</td>
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Other documents are listed in the continuation of Box C.

**Date of the actual completion of the international search**

15 November 2002 (15.11.2002)

**Date of mailing of the international search report**

80 FEB 2003

**Name and mailing address of the ISA/US**

Commissioner of Patents and Trademarks
Box PCT
Washington, D.C. 20231

**Authorized officer**

Edward Coles

**Telephone No.** 703-305-4700

**Form PCT/ISA/210 (second sheet) (July 1998)**
Continuation of B. FIELDS SEARCHED Item 3:
EAST DATA BASE
(flexible near3 substrate) near6 print$3; feed$3 near3 path; (digital near2 print$3) (plurality near3 print adj heads)