Title: IMPROVED INK PRINTHEAD AND METHOD THEREOF

Abstract: An improved ink jet printhead for an ink jet printer and method therefor. The printhead includes a semiconductor substrate containing ink ejection devices. A thick film layer is attached to the substrate. A nozzle plate is attached to the thick film layer. The nozzle plate contains a plurality of ink ejection nozzles corresponding to the ink ejection devices. The printhead contains flow features having a height dimension and a width dimension formed therein for flow of ink to the plurality of ink ejection devices for ejection through the nozzles. At least a portion of the flow feature dimensions for at least one of the nozzles is formed in both the thick film layer and laser ablated in the nozzle plate, wherein the thick film layer contains at least 12 of the flow feature dimensions.
INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US04/35656

A. CLASSIFICATION OF SUBJECT MATTER

IPC:  B41J 2/08 (2006.01)

USPC:  347/20,44,47,56,61,62,64,65,67
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.: 347/20,44,47,56,61,62,64,65,67

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

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>US 6,024,440 A (MURTHY et al.) 15 February 2000 (15.02.2000), column 3, lines 7-11, column 4 ins 27-31, column 5, lines 40-57</td>
<td>5-6,12-13,20-21</td>
</tr>
</tbody>
</table>

Further documents are listed in the continuation of Box C.  
See patent family annex.

Date of the actual completion of the international search: 18 March 2006 (18.03.2006)

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