

Title (en)  
Ink cartridge for ink jet printer

Title (de)  
Farbstoffkassette für Tintenstrahldrucker

Title (fr)  
Cartouche à encre pour imprimante par jet d'encre

Publication  
**EP 0771664 A1 19970507 (EN)**

Application  
**EP 96305747 A 19960805**

Priority  
US 55014395 A 19951030

Abstract (en)  
In a inkjet print cartridge (10) ink flows from the reservoir around the edge of the silicon substrate (28) before being ejected out of the nozzles (72). During operation, warm thermal boundary layers of ink form adjacent the substrate (28) and dissolved gases in the thermal boundary layer of the ink form the bubbles. If the bubbles to grow larger than the diameter of subsequent ink passageways these bubbles choke the flow of ink to the vaporization chambers. This results in causing some of the nozzles (72) of the printhead (10) to become temporarily inoperable. The disclosure describes a method of avoiding such a malfunction in a liquid inkjet printing system by providing a bubble tolerant manifold design. <IMAGE>

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**B41J 2/175**; **B41J 2/19**

IPC 8 full level  
**B41J 2/14** (2006.01); **B41J 2/175** (2006.01); **B41J 2/19** (2006.01)

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**B41J 2/1404** (2013.01); **B41J 2/14145** (2013.01); **B41J 2/17513** (2013.01); **B41J 2/17553** (2013.01); **B41J 2/19** (2013.01);  
**B41J 2002/14387** (2013.01)

Citation (applicant)  
• US 31989394 A 19941006  
• US 99510992 A 19921222  
• US 55014390 A 19900709

Citation (search report)  
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• [Y] PATENT ABSTRACTS OF JAPAN vol. 015, no. 485 (M - 1188) 9 December 1991 (1991-12-09)  
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• [Y] PATENT ABSTRACTS OF JAPAN vol. 014, no. 135 (M - 0949)<4078> 14 March 1990 (1990-03-14)

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