

Title (en)  
Ink-jet printhead

Title (de)  
Tintenstrahldruckkopf

Title (fr)  
Tête d'enregistrement à jet d'encre

Publication  
**EP 0792745 A2 19970903 (EN)**

Application  
**EP 97301275 A 19970226**

Priority  
US 60926896 A 19960229

Abstract (en)  
A thermal inkjet printhead includes ejectors wherein a heating surface is disposed within a channel retaining liquid ink. The heating surface defines two distinct portions (30,32), a first portion (30) adapted to dissipate heat at first power density and a second portion (32) adapted to dissipate heat at a second power density. At a certain relatively low voltage or pulse width, nucleation of an ink bubble will occur only at the liquid ink adjacent the first portion (30) of the heating surface, and at a relatively higher voltage or pulse width, nucleation will occur over the first and second portions (30,32). The size of the nucleated bubble directly affects the size of the emitted droplet. The discrete demarcation between the two portions (30,32) of the heating surface permits selectable spot sizes to be created with the ejector. <IMAGE>

IPC 1-7  
**B41J 2/14**; **B41J 2/05**

IPC 8 full level  
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