

Title (en)

Ink jet printer with improved printhead cooling system

Title (de)

Tintenstrahldrucker mit einem verbesserten Kühlsystem

Title (fr)

Imprimante à jet d'encre ayant un système de refroidissement amélioré

Publication

EP 0870622 A1 19981014 (EN)

Application

EP 98300470 A 19980123

Priority

US 83356297 A 19970407

Abstract (en)

Printhead temperatures are maintained at an optimum temperature by mounting the printheads (52A,54A,56A,58A) in thermal contact with a support bar (46,48,50) through which an interior channel (46A,48A,50A) has been formed. A cooling medium such as water is circulated through the channel (46A,48A,50A), the circulating medium absorbing heat generated by the printhead during operation. In one partial width array embodiment, support bars (46,48,50) are mounted at each end to hollow frame members (42,44). Channels (46A,48A,50A) are formed through the length of the bars (46,48,50) which connect into the interior of the frame members (42,44). Water introduced via a pump/circulation mechanism (62,64) enters the entrance port of one frame member (42), circulates through the bar channel (46A,48A,50A), and exits the other frame member (44) through an exit port. Recirculation is achieved using a feedback loop between a water reservoir (64) and a pump (62). In another embodiment, a plurality of printhead modules (72A) are butted together on a single cooling support bar (73) having a channel therethrough through which water is circulated.

<IMAGE>

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CPC (source: EP)

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