

Title (en)

Method for detecting and correcting an intrusion of air into a printhead substrate of an ink jet cartridge.

Title (de)

Verfahren zur Erkennung und Korrektur eingedrungener Luft im Druckkopf-Substrat einer Tintenstrahldruckpatrone.

Title (fr)

Méthode de détection et de correction d'intrusion d'air dans un substrat de tête d'impression d'une cartouche à jet d'encre.

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Application

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Priority

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Abstract (en)

An intrusion of air (22) into the ink chambers (24) of a printhead substrate (50) is a symptom of either a depleted ink supply (26) or a deprived printhead substrate (50). When the printer (20) attempts to print with a depleted ink supply (30) or a deprived printhead substrate (50), the printhead substrate (50) must absorb all of the energy dissipated in the ink chambers (24) to eject the drops. This causes the printhead substrate (50) to reach high temperatures. The present invention detects a depleted ink supply (26) and a deprived printhead (50) by monitoring the temperature of the printhead substrate (50) and comparing this temperature with a threshold (84, 90, 96). When this temperature exceeds the threshold (84, 90, 96) for more than an allotted amount of time, then corrective action is taken. <IMAGE>

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