

Title (en)

Ultrasonic cleaning of ink jet printhead cartridges

Title (de)

Ultraschall-Reinigung von Tintenstrahldruckkopfpatronen

Title (fr)

Nettoyage par ultrasons des cartouches de tête d'impression à jet d'encre

Publication

EP 0988977 A1 20000329 (EN)

Application

EP 99202982 A 19990913

Priority

US 15972598 A 19980924

Abstract (en)

Ink jet printing apparatus for receiving an ink cartridge (72,74,76,78) defining an orifice structure having at least one orifice plate (72a,74a,76a,78a) with a plurality of nozzles for ejecting ink droplets onto a receiver to form an image, cleaning of the orifice structure of debris is providing by at least one actuable ultrasonic transducer (81,82,83,84) operatively associated with and spaced from the nozzles; and a thin layer (meniscus) of viscous fluid (81a,82a,83a,84a) provided between and in contact with the ultrasonic transducer and the orifice plate to transmit the ultrasound energy through that fluid media. The actuable ultrasonic transducer produce ultrasonic sound waves which pass through the thin viscous fluid layer and impinge upon the orifice structure and dislodges debris. <IMAGE>

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Citation (search report)

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