

Title (en)
Ink-jet system

Title (de)
Tintenstrahlsystem

Title (fr)
Système à jet d'encre

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Application
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Abstract (en)
Ink-jet system comprising an ink channel (16) between an ink reservoir (18) and a nozzle (14), and pressurizing means (20, 22) arranged adjacent to the ink channel for generating in the ink liquid an acoustic pressure wave propagating in the ink channel, so that an ink droplet is expelled from the nozzle, wherein the ink channel (16) has a square cross section and a depth d which is larger than the height of the nozzle (14), such that energy losses due to reflection of the acoustic wave at the transition from the ink channel to the nozzle are minimized, the pressurizing means comprise a first electromechanical transducer (20) with a plate-like expansible member having a height H in the direction of the depth of the ink channel such that the ratio H/d is smaller than the ratio between the respective elastic modules of the expansible member and the ink liquid, and at least one second electromechanical transducer (22) is arranged at said ink channel (16) and is energized to create a pressure bias in the ink volume before the same is pressurized by the first transducer. <IMAGE>

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