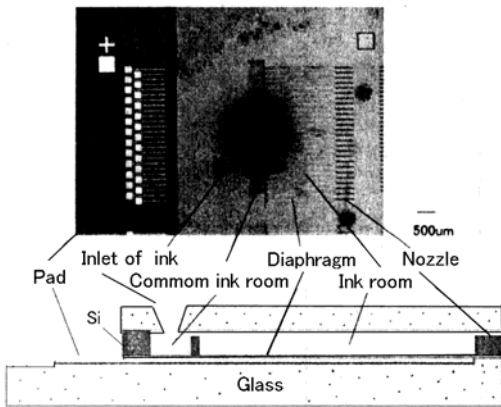
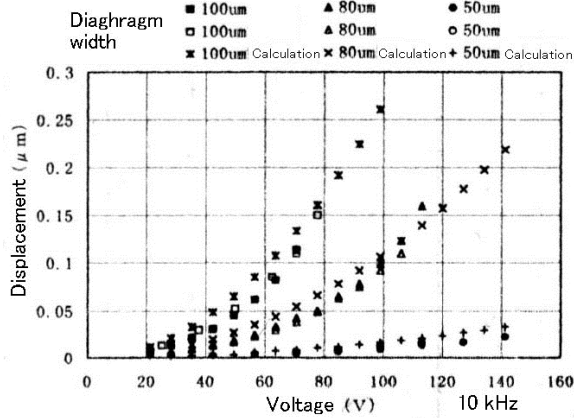


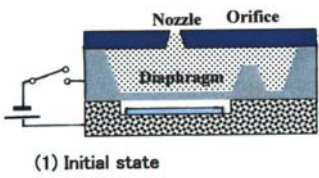
# Electrostatic Inkjet Head for High Speed Low Power Line Printer (Tohoku Univ.-Sony)



Electrostatic inkjet print head (Tohoku Univ. – Ricoh)



Reference : Y.Satoh, S.Katoh, M.Esashi, A Basic Study of Electrostatic Micropump, Technical Report IEE of Japan, PS-97-33 (1997) pp.63-68



(1) Initial state

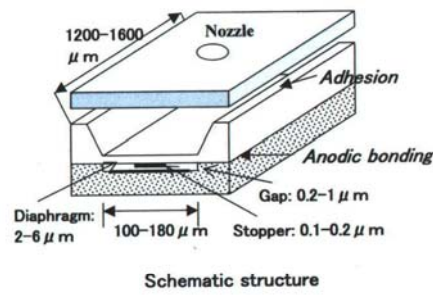


(2) DC voltage applied

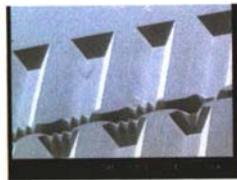


(3) DC voltage is stopped and Ink is ejecting

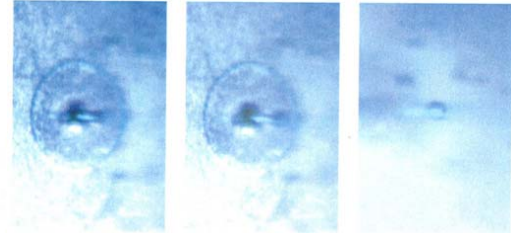
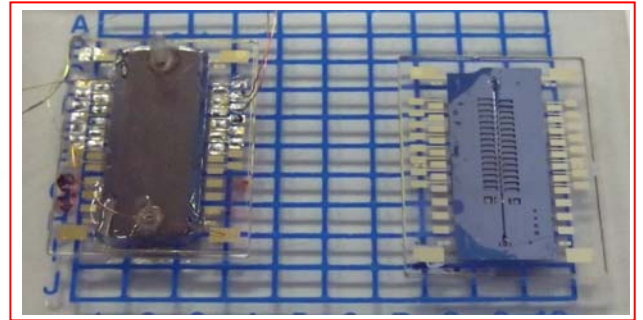
Principle



Schematic structure

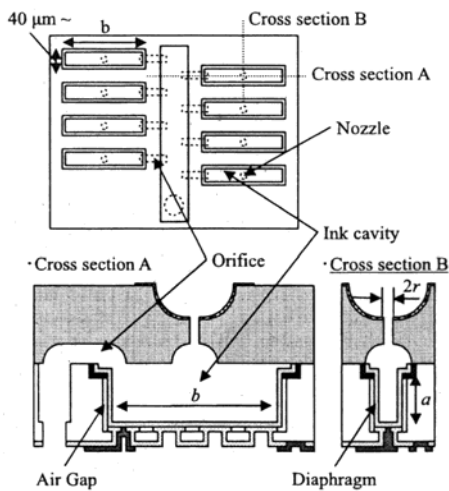


Cavity

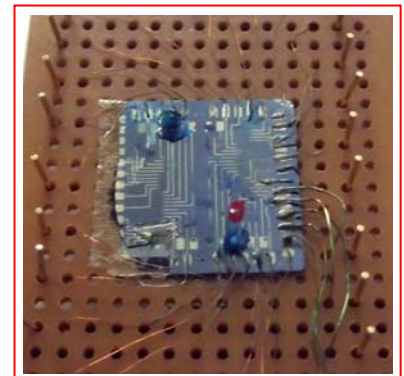
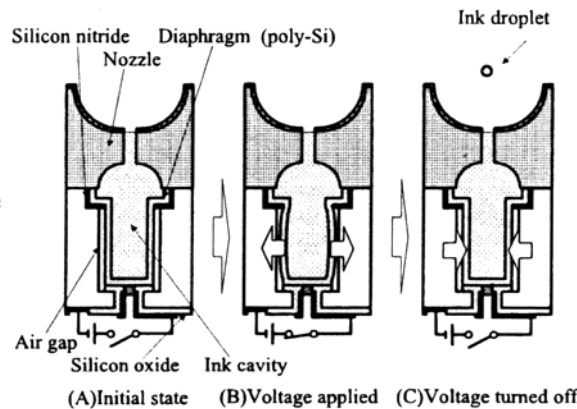


Strobe observation of the ink ejection

Electrostatic inkjet print head for high speed low power line printer (Tohoku Univ. – Sony)



Electrostatic inkjet print head with vertical diaphragms



Reference : T.Norimatsu, S.Tanaka and M.Esashi, Vertical Diaphragm Electrostatic Actuator for a High Density Ink Jet Printer Head, Trans. IEE of Japan, 125-E (2005) pp.350-354