

Title (en)
A liquid ink printing apparatus and system

Title (de)
Apparat und System zum Drucken mit flüssiger Tinte

Title (fr)
Appareil et système d'impression à l'encre liquide

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Abstract (en)
[origin: WO9632279A1] A new printing system is disclosed for drop on demand printing. This printing mechanism divides the printing process into two stages; a drop selection means to select drops to be printed which generates a difference in meniscus position between selected drops and unselected drops of fluidized ink; and a drop separation means, attracting the ink of said drops to a substrate, the attraction being insufficient to overcome the surface tension of drops in an unselected meniscus position but being sufficient to overcome the surface tension of drops in a selected meniscus position so as to cause movement of the drops to the substrate. The drop selection means can produce a difference in meniscus position in the absence of the drop separation means. The separation of drop selection means from drop separation means significantly reduces the energy required to select which ink drops are to be printed. Only the drop selection means must be driven by individual signals to each nozzle. The drop separation means can be a field or condition applied simultaneously to all nozzles.

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