

Title (en)

Drop-on-demand ink drop marking apparatus and method.

Title (de)

Tropfenauslösung an einer Markiervorrichtung und Verfahren hierzu.

Title (fr)

Déclencheur de gouttelettes pour un appareil de marquage à gouttes d'encre et méthode correspondante.

Publication

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Application

EP 81305163 A 19811030

Priority

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Abstract (en)

Drop-on-demand ink drop marking apparatus and method of the type employing a plurality of capillaries (8). The capillaries are coupled to a pressurized liquid source (16) to cause the liquid ink (6) to weep from the orifice (7). A drop (11) is formed by stimulating the ink in the capillary (8). High drop generation rates are possible because the weeping ink flow enables the liquid consumed in the process of forming a drop to be more rapidly replaced in the capillary than if capillary action alone is relied upon for the replacement. A laser scanning beam (10) reflected from a rotating polygon mirror (43) is one embodiment for stimulating the ink to cause its expulsion from the capillary, and into flight towards a target (4). The beam heats the ink to expel it. Alternatively, a solid state laser adjacent each capillary is disclosed for stimulating the capillary to expel a drop into flight toward a target.

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