

Title (en)

Method for reducing spray in thermal ink jet pens firing polymer-containing inks.

Title (de)

Verfahren zur Sprühreduzierung in Thermo-Farbstrahlschreibern mit Polymeren enthaltender Tinte.

Title (fr)

Méthode pour réduire les éclaboussements dans les dispositifs d'écriture thermiques par jet d'encre utilisant de l'encre contenant des polymères.

Publication

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Application

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Priority

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Abstract (en)

Spray (or satellite drops) in thermal ink-jet pens firing inks containing polymer dispersants for pigments is reduced by increasing the distance between the firing resistor (10) and the nozzle (12). This may be done by offsetting the resistor with respect to the nozzle, increasing the thickness of the orifice plate (14), increasing the thickness of the barrier layer (18) which defines the firing chamber (20) and supports the nozzle plate, or recessing the resistor deeper into the substrate (16) on which it is supported. Any or all of the foregoing may be implemented to reduce spray. A combination of thicker top plates and offsetting the nozzle relative to the resistor is particularly efficacious in reducing spray. <IMAGE>

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