

Title (en)

Melt-on-demand solid ink thermal ink jet printhead.

Title (de)

Thermo-Tintenstrahldruckkopf mit auf Anforderung schmelzender fester Tinte.

Title (fr)

Tête d'impression thermique à jet d'encre du type à encre solide et fonctionnant par fusion-à-la-demande.

Publication

EP 0564742 A2 19931013 (EN)

Application

EP 92311748 A 19921223

Priority

US 86389592 A 19920406

Abstract (en)

The present invention is a melt-on-demand printhead (20) that keeps the entire solid ink supply (24) at room temperature until it receives a print command, then it rapidly applies a distributed heat over a large surface area of the ink supply (24) without the aid of thermal conductors to transport the heat. A portion of the solid ink (24) melts and travels into the drop ejector (28) that expels an ink drop to the medium within seconds of when the printhead (20) received a print command. The melt-on-demand thermal ink jet printhead (20) has a solid ink supply (24), a drop ejector (28) located near the solid ink supply (24), and a thin-film solid ink heater (38) located near a large surface area of the solid ink supply (24) that it rapidly heats.

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IPC 8 full level

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