

Title (en)
THERMAL IMAGING SYSTEM

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Application
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Priority
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Abstract (en)
[origin: EP0413569A2] A thermal imaging device having a print surface adapted to provide localised heating to a medium comprising a thermally activatable component of an imaging forming system, the device comprising the following sequential layers: (a) a transparent or semi-transparent electrically conductive layer, (b) a photoconductive layer which when illuminated by radiation of 633nm wavelength and intensity of 4.0×10^{-6} W/m² has a conductivity of at least 0.01 S/cm and a photosensitive ratio of at least 1×10^{-3} , (c) an electrically conductive layer in electrical contact with the photoconductive layer (b) and in contact with: (d) an abrasion-resistant wear layer, or, (e) a layer comprising said thermally activatable component of an image forming system; wherein the layers are constructed and arranged such that when a voltage potential is applied across layers (a) and (c) and the device is exposed through layer (a), the exposed areas of layer (b) become conductive enhancing current flow and generating heat in layer (b) at points corresponding to the exposed areas and causing localised heating at the adjacent areas of the print surface sufficient to thermally activate said component of an image forming system. The thermal imaging devices are suitable for developing thermally sensitive paper or effecting thermal transfer of a colourant, dye, toner or other image forming material.

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• [X] US 2798959 A 19570709 - MONCRIEFF-YEATES ALEXANDER J
• [Y] FR 2087778 A5 19711231 - IBM
• [YD] GB 2004077 A 19790321 - PHILIPS NV
• [YD] US 4470055 A 19840904 - TODOH HIDEMASA [JP]
• [A] FR 2368066 A1 19780512 - EASTMAN KODAK CO [US]

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