

## Title (en)

Positive-working thermal imaging element and positive-working lithographic printing plate precursor

## Title (de)

Positiv arbeitendes thermisches bilderzeugendes Element und positiv arbeitender lithographischer Druckplattenvorläufer

## Title (fr)

Élément thermique travaillant en positif et formateur d'images et plaque d'impression lithographique travaillant en positif

## Publication

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## Application

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- US 30186699 A 19990429
- US 9030098 P 19980623

## Abstract (en)

A positive-working thermal imaging element, which can be imaged by thermal energy is made up of a hydrophilic substrate, and a composite layer structure composed of two layer coatings. The substrate has a roughened surface of average roughness Ra in the range from 0.1 to 0.8  $\mu\text{m}$ , preferably 0.1 to 0.4  $\mu\text{m}$ . The first layer of the composite is composed of an aqueous developable polymer mixture containing a photothermal conversion material which is contiguous to the hydrophilic substrate. The second layer of the composite is composed of one or more non-aqueous soluble polymers which are soluble or dispersible in a solvent which does not dissolve the first layer. The second layer may also contain a photothermal conversion material. The positive-working thermal imaging element is exposed with an infrared laser or a thermal print head. Upon aqueous development of the imaged positive-working thermal imaging element unexposed portions are ink-receptive.

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## Citation (applicant)

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