

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

**EP 1506857 B1 20070425 (EN)**

Application

**EP 04078163 A 19990608**

Priority

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- US 9030098 P 19980623
- US 30186699 A 19990429

Abstract (en)

[origin: EP1506856A2] 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.

IPC 8 full level

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