

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 1506856 A2 20050216 (EN)

Application

EP 04078162 A 19990608

Priority

- EP 99928429 A 19990608
- 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 μm , preferably 0.1 to 0.4 μm . 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 1-7

B41C 1/10; **B41N 1/08**; **B41N 1/14**; **B41M 5/40**; **B41M 5/36**

IPC 8 full level

B41C 1/10 (2006.01); **B41M 5/36** (2006.01); **B41M 5/42** (2006.01); **B41N 1/08** (2006.01); **B41M 5/40** (2006.01); **B41M 5/44** (2006.01); **B41M 5/46** (2006.01)

CPC (source: EP)

B41C 1/1016 (2013.01); **B41C 2201/04** (2013.01); **B41C 2210/02** (2013.01); **B41C 2210/06** (2013.01); **B41C 2210/14** (2013.01); **B41C 2210/24** (2013.01); **B41C 2210/26** (2013.01); **B41C 2210/262** (2013.01); **B41C 2210/264** (2013.01); **B41C 2210/266** (2013.01); **B41M 5/368** (2013.01); **B41M 5/42** (2013.01); **B41M 5/44** (2013.01); **B41M 5/465** (2013.01); **B41N 1/08** (2013.01)

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Designated contracting state (EPC)

BE DE ES FR GB IT NL SE

DOCDB simple family (publication)

EP 1506856 A2 20050216; **EP 1506856 A3 20050330**; EP 1506857 A2 20050216; EP 1506857 A3 20050330; EP 1506857 B1 20070425

DOCDB simple family (application)

EP 04078162 A 19990608; EP 04078163 A 19990608