

## Title (en)

Radiation-sensitive mixture, recording material using this mixture, and method for preparing a printing plate

## Title (de)

Strahlungsempfindliches Gemisch, damit hergestelltes Aufzeichnungsmaterial, und Verfahren zur Herstellung einer Druckplatte

## Title (fr)

Mélange photosensible, matériau pour l'enregistrement utilisant ce mélange, et procédé pour la fabrication d'une plaque d'impression

## Publication

**EP 1359008 A1 20031105 (DE)**

## Application

**EP 02100424 A 20020429**

## Priority

EP 02100424 A 20020429

## Abstract (en)

A heptamethine-cyanine dye (I) is used as the infrared-absorber in a light-sensitive mixture (II) containing a radically-polymerisable (meth)acrylate monomer and/or oligomer with at least 2 (meth)acrylate groups and at least one photo-oxidisable group, a photoinitiator, an IR-absorbing dye and a polymeric organic binder. Independent claims are also included for (1) recording material for the production of printing plates, with a substrate and a layer of (II) (2) a method for the production of printing plates from this material by exposure to an IR laser beam in the wavelength range 700-1200 nm so as to form an image, followed by development with organic solvent(s) or aqueous alkaline solution

## Abstract (de)

Die Erfindung betrifft ein strahlungsempfindliches Gemisch, das ein radikalisch polymerisierbares Acrylat- oder Methacrylat-Monomer und/oder -Oligomer mit mindestens zwei Acrylat- und/oder Methacrylatgruppen und mindestens einer photooxidierbaren Gruppe, einen Photoinitiator, ein organisches polymeres Bindemittel sowie einen als IR-absorbierenden Farbstoff wirkenden Hepta-methincyanin-Farbstoff enthält. Sie betrifft weiterhin ein Aufzeichnungsmaterial mit einem Träger und einer photopolymerisierbaren Schicht sowie ein Verfahren zur Herstellung einer Druckplatte aus diesem Aufzeichnungsmaterial. Das Aufzeichnungsmaterial zeichnet sich durch eine gesteigerte Lichtempfindlichkeit aus.

## IPC 1-7

**B41C 1/10**; **B41M 5/36**; **B41M 5/40**; **C09B 55/00**

## IPC 8 full level

**G03F 7/004** (2006.01); **B41C 1/10** (2006.01); **B41M 5/36** (2006.01); **C09B 23/00** (2006.01); **C09K 3/00** (2006.01); **G03F 7/00** (2006.01); **G03F 7/027** (2006.01); **G03F 7/032** (2006.01); **G03F 7/09** (2006.01); **G03F 7/11** (2006.01); **B41M 5/40** (2006.01); **B41M 5/46** (2006.01)

## CPC (source: EP)

**B41C 1/1008** (2013.01); **B41C 2210/04** (2013.01); **B41C 2210/06** (2013.01); **B41C 2210/12** (2013.01); **B41C 2210/22** (2013.01); **B41C 2210/24** (2013.01); **B41C 2210/26** (2013.01); **B41C 2210/264** (2013.01); **B41C 2210/266** (2013.01); **B41M 5/465** (2013.01)

## Citation (applicant)

- EP 0315988 A2 19890517 - NIPPON PAINT CO LTD [JP]
- EP 0441542 A1 19910814 - GEN ELECTRIC [US]
- EP 0563925 A1 19931006 - FUJI PHOTO FILM CO LTD [JP]
- EP 1106381 A1 20010613 - FUJI PHOTO FILM CO LTD [JP]
- EP 1091247 A2 20010411 - FUJI PHOTO FILM CO LTD [JP]
- DE 2718259 A1 19781102 - HOECHST AG
- EP 0137452 A1 19850417 - HOECHST AG [DE]
- DE 19915717 A1 20001012 - AGFA GEVAERT AG [DE]
- DE 19933139 A1 20010125 - AGFA GEVAERT AG [DE]

## Citation (search report)

- [X] EP 1176007 A2 20020130 - FUJI PHOTO FILM CO LTD [JP]
- [X] EP 1162078 A2 20011212 - FUJI PHOTO FILM CO LTD [JP]
- [XD] EP 1106381 A1 20010613 - FUJI PHOTO FILM CO LTD [JP]
- [E] EP 1223196 A2 20020717 - FUJI PHOTO FILM CO LTD [JP]
- [E] EP 1203660 A1 20020508 - FUJI PHOTO FILM CO LTD [JP]

## Cited by

EP3431290A1; WO2019015979A1; CN109814337A; EP1788429A1; WO2015086659A1; WO2006058731A3; WO2005085372A1; EP4382306A1; WO2024120763A1; US7901494B2; US8187373B2; EP1788443A1; EP1788450A1; EP2772805A1; US7316891B2; EP3637188A1; WO2020074258A1; WO2013182328A1; EP4239411A1; WO2023165919A1; EP1788442A1; EP1614541A2; EP2214056A2; US7767382B2; EP2278404A2; WO2014198820A1; WO2019179996A1; WO2019179995A1; WO2006058731A2; EP3875271A1; WO2021175571A1; EP2186637A1; EP2916171A1; WO2019219560A1; WO2019219570A1; WO2019219565A1; WO2019219577A1; WO2019219574A1; EP3815900A1; WO2021083729A2; WO2022128283A1; EP1788431A2; EP1788448A1; EP3441223A1; WO2019029945A1; EP1788435A1; EP3587112A1; WO2019243037A1; EP4223534A1; WO2023148114A1; EP1788449A1; EP3892469A1; WO2021204502A1; EP4035897A1; WO2022161760A1; EP4129682A1; WO2023011820A1; EP1788434A1; EP1788444A1; EP3474073A1; WO2019076584A1; EP3587113A1; WO2019243036A1; EP3650938A1; WO2020094368A1; EP3922462A1; WO2021249754A1

## Designated contracting state (EPC)

DE FR GB

## DOCDB simple family (publication)

**EP 1359008 A1 20031105**; **EP 1359008 B1 20050831**; DE 50204080 D1 20051006; JP 2003344997 A 20031203

## DOCDB simple family (application)

**EP 02100424 A 20020429**; DE 50204080 T 20020429; JP 2003125528 A 20030430