

Title (en)

Heat sensitive imaging element and method for making a printing plate therewith

Title (de)

Wärmeempfindliches Aufzeichnungselement und Verfahren zur Herstellung einer Druckform damit

Title (fr)

Élément d'enregistrement thermosensible et méthode pour la fabrication d'un cliché pour l'imprimerie utilisant cet élément

Publication

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Application

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Abstract (en)

The present invention discloses an imaging element comprising on a hydrophilic surface of a lithographic base an image forming layer comprising hydrophobic thermoplastic polymer particles dispersed in a hydrophilic binder and (ii) a compound capable of converting light to heat, said compound being comprised in said image forming layer or a layer adjacent thereto, characterised in that said image forming layer further comprises a cross-linking agent capable of cross-linking said hydrophilic binder upon heating in a ratio between 1 :100 and 200:1 by weight versus the hydrophilic binder. The present invention further provides a method for making a printing plate therewith. According to this method, the above imaging element is preferably exposed by means of a laser and is subsequently developed with plain water or an aqueous liquid.

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Citation (applicant)

- EP 0601240 A1 19940615 - AGFA GEVAERT NV [BE]
- FR 1561957 A 19690404
- US 3476937 A 19691104 - VRANCKEN MARCEL NICOLAS
- US 3580719 A 19710525 - BRINCKMAN ERIC MARIA
- EP 0514145 A1 19921119 - DU PONT UK [GB]
- GB 1419512 A 19751231 - KODAK LTD
- FR 2300354 A1 19760903 - KODAK PATHÉ [FR]
- US 3971660 A 19760727 - STAEHLE HENRY C
- US 4284705 A 19810818 - PHILIPOT GEORGES A, et al
- EP 0514490 A1 19921125 - UNIV TEXAS [US], et al
- EP 0619524 A1 19941012 - AGFA GEVAERT NV [BE]
- EP 0620502 A1 19941019 - AGFA GEVAERT NV [BE]
- EP 0619525 A1 19941012 - AGFA GEVAERT NV [BE]
- EP 0612065 A1 19940824 - EASTMAN KODAK CO [US]
- EP 0615233 A1 19940914 - EASTMAN KODAK CO [US]
- US 5326677 A 19940705 - FLEMING JAMES C [US], et al
- EP 0462763 A1 19911227 - MINNESOTA MINING & MFG [US]
- WO 8101755 A1 19810625 - MINNESOTA MINING & MFG [US]
- US 4370401 A 19830125 - WINSLOW JOHN M, et al
- US 5312721 A 19940517 - GESING INGRID [DE]
- GB 1204495 A 19700909 - AGFA GEVAERT NV [BE]
- US 3669747 A 19720613 - NICHOLSON GEOFFREY C, et al
- US 3166583 A 19650119 - MARTIN ELMORE L, et al
- DE 3515176 A1 19851031 - FUJI PHOTO FILM CO LTD [JP]
- US 5278031 A 19940111 - BOGGS ROGER A [US], et al
- US 5225314 A 19930706 - WATERMAN KENNETH C [US], et al
- US 5227277 A 19930713 - WATERMAN KENNETH C [US]
- EP 0571010 A1 19931124 - AGFA GEVAERT NV [BE]
- EP 0620677 A1 19941019 - AGFA GEVAERT NV [BE]
- EP 0620674 A1 19941019 - AGFA GEVAERT NV [BE]

Citation (search report)

- [XY] FR 1561957 A 19690404
- [X] US 3476937 A 19691104 - VRANCKEN MARCEL NICOLAS
- [Y] US 3580719 A 19710525 - BRINCKMAN ERIC MARIA
- [YD] EP 0514145 A1 19921119 - DU PONT UK [GB]
- [A] EP 0599510 A2 19940601 - DU PONT [GB]
- [A] PATENT ABSTRACTS OF JAPAN vol. 006, no. 196 (M - 161) 5 October 1982 (1982-10-05)
- [AD] J. VERMEERSCH: "A lithographic Printing plate", RESEARCH DISCLOSURE, no. 33303, HAVANT GB, XP000028114

Cited by

US6165685A; EP0982124A3; EP1243413A1; EP0925916A1; EP1584470A3; EP0900653A1; EP1243410A1; US6124425A; EP1025990A1; US5919601A; EP1132200A3; US6939663B2; US6641976B2; US6551757B1; US6790590B2; US6177182B1; WO9821038A1; US6740464B2; EP3032334A1; EP2098376A1; EP2106924A1; EP1356926A1; EP4382306A1; WO2024120763A1; US8419923B2; EP3637188A1; WO2020074258A1; EP2065211A1; US6300032B1; WO2017157579A1; WO2017157572A1; WO2017157578A1; WO2017157571A1; WO2017157576A1; WO2017157575A1

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