(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 1 614 541 A3

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
07.06.2006 Bulletin 2006/23

(43) Date of publication A2:
11.01.2006 Bulletin 2006/02

(21) Application number: **05106259.4**

(22) Date of filing: **08.07.2005**

(51) Int Cl.:
B41C 1/10 *(2006.01)*

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR
Designated Extension States:
AL BA HR MK YU

(30) Priority: **08.07.2004 EP 04103252**
21.06.2005 EP 05105440

(71) Applicant: **AGFA-GEVAERT**
2640 Mortsel (BE)

(72) Inventors:
- **Callant, Paul**
  2640, Mortsel (BE)
- **Loccufier, Johan**
  2640, Mortsel (BE)
- **Williamson, Alexander**
  2640, Mortsel (BE)
- **Andriessen, Hieronymus**
  2640, Mortsel (BE)
- **Jung, Jürgen**
  2640, Mortsel (BE)
- **Geukens, Christel**
  2640, Mortsel (BE)
- **Louwet, Jos**
  2640, Mortsel (BE)
- **Van Damme, Marc**
  2640, Mortsel (BE)
- **Vermeersch, Joan**
  2640, Mortsel (BE)

(54) **Method of making a lithographic printing plate.**

(57) A method for making a lithographic printing plate is disclosed which comprises the steps of :

i) providing a lithographic printing plate precursor comprising

- an aluminum support with a grained and anodized surface having CIE 1976 color coordinates L^*_{sup} which is not less than 70 and a^*_{sup} and b^*_{sup} each in the range from -4 to +4; and
- a coating on said support which comprises an image-recording layer comprising an infrared-sensitized photopolymerizable or photocurable composition; which together form a coated support having a CIE 1976 lightness value L^*_{nonexp} which is not less than 50;

ii) image-wise exposing the coating to infrared light, thereby

- inducing polymerization or curing of the composition at exposed areas; and
- forming a visible print-out image in the coating of which the lightness difference ΔL^* is at least 5, wherein ΔL^* is defined as L^*_{nonexp} minus L^*_{exp}, wherein L^*_{exp} is the CIE 1976 lightness value of the coated support at exposed areas;

iii) removing non-exposed areas of the coating with a developer. The combination of an essentially white support, an essentially colorless or only slightly colored coating and a lightness difference between non-exposed and exposed areas of at least 5 provides a print-out image with a high contrast, which enables convenient image quality control before developing the plate.

EP 1 614 541 A3

European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 05 10 6259

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
P,X, D	EP 1 508 440 A (FUJI PHOTO FILM CO., LTD) 23 February 2005 (2005-02-23) * abstract * * paragraph [0028] - paragraph [0058] * * paragraph [0072] - paragraph [0079] * * paragraph [0125] - paragraph [0175] * * example 3 *	1-13,15	INV. B41C1/10
X	US 2003/068575 A1 (YANAKA HIROMITSU) 10 April 2003 (2003-04-10) * abstract * * paragraph [0010] - paragraph [0054] * * paragraph [0076] - paragraph [0078] * * example 1 *	1-13,15	
P,A, D	EP 1 502 736 A (FUJI PHOTO FILM CO., LTD) 2 February 2005 (2005-02-02) * abstract * * paragraph [0028] - paragraph [0074] * * paragraph [0088] - paragraph [0116] * * paragraph [0142] - paragraph [0168] * * paragraph [0319] - paragraph [0334] * * examples 1-8 *	1-16	TECHNICAL FIELDS SEARCHED (IPC) B41M
A	EP 1 300 241 A (FUJI PHOTO FILM CO., LTD) 9 April 2003 (2003-04-09) * abstract * * paragraph [0012] - paragraph [0031] *	1-16	
A	EP 1 428 676 A (KONICA MINOLTA HOLDINGS, INC) 16 June 2004 (2004-06-16) * abstract * * paragraph [0068] - paragraph [0076] *	1-16	

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	7 April 2006	Vogel, T

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

EPO FORM 1503 03.82 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 05 10 6259

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

07-04-2006

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 1508440 A	23-02-2005	JP 2005067006 A	17-03-2005
		US 2005039620 A1	24-02-2005
US 2003068575 A1	10-04-2003	JP 2003084432 A	19-03-2003
EP 1502736 A	02-02-2005	JP 2005047181 A	24-02-2005
		US 2005028697 A1	10-02-2005
EP 1300241 A	09-04-2003	CN 1408558 A	09-04-2003
		US 2003129522 A1	10-07-2003
EP 1428676 A	16-06-2004	JP 2004188848 A	08-07-2004
		US 2004134365 A1	15-07-2004

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82