



(12) **EUROPEAN PATENT APPLICATION**
published in accordance with Art. 153(4) EPC

(43) Date of publication:
17.10.2018 Bulletin 2018/42

(51) Int Cl.:
G03D 3/00 ^(2006.01) **G03C 5/08** ^(2006.01)
G03C 11/04 ^(2006.01)

(21) Application number: **16871949.0**

(86) International application number:
PCT/CN2016/078927

(22) Date of filing: **11.04.2016**

(87) International publication number:
WO 2017/096743 (15.06.2017 Gazette 2017/24)

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA ME
Designated Validation States:
MA MD

(71) Applicant: **Cai, Yuan**
Beijing 100021 (CN)

(72) Inventor: **Cai, Yuan**
Beijing 100021 (CN)

(74) Representative: **Thoma, Michael**
Lorenz Seidler Gosse
Rechtsanwälte Patentanwälte
Partnerschaft mbB
Widenmayerstraße 23
80538 München (DE)

(30) Priority: **07.12.2015 CN 201510886782**

(54) **"SPLASHING" TYPE PHOTOGRAPHIC PRINTING METHOD FOR CLASSICAL PHOTOGRAPHIC PRINTS**

(57) The present invention relates to a splashing type photographic printing method for classical photographic prints. The method comprises the following steps: controlling room humidity; dividing an operation area and a theme-prominent area on a piece of classical photographic printing paper; splashing a liquid reagent onto the classical photographic printing paper; coarsely adjusting the liquid reagent using a pipette and then finely adjusting same using absorbent paper, and absorbing the redundant liquid reagent using the absorbent paper; after resting the classical photographic printing paper for 2-15 minutes, and naturally drying or wind-drying; placing a photographic film above the paper, and irradiating by an ultraviolet lamp; separating the photographic film from the classical photographic printing paper and washing the classical photographic printing paper in a classical cleaning solution, and then taking out the classical photographic printing paper. The technical solution changes the conventional even brushing approach in photographic printing, provides people with a new visual sense of a photographic print by making non-prominent portions in a photographic print in a state of natural water flow, and deepens the external and internal connotations of a picture by incorporating the ink-splashing skill for vigorous and bold freehand brushwork in Chinese painting and calligraphy into old traditional photographic printing, implements more stereoscopic and diversified picture pres-

entation, and breaks the traditional form of spreading an image all over a print, thus also greatly improving the aesthetic property and the visibility.



Figure 1

Description

Technical Field

[0001] The invention relates to a photographic printing technology for classical photographic prints and particularly relates to a splashing type photographic printing method for classical photographic prints.

Background Art

[0002] In a photographic development method for classical traditional photographic prints, a plurality of methods involving platinum (platinum palladium), protein, iron salt, silver salt, iron silver, blue printing, chrome-plated silver lactate and the like are collectively called a classical photographic printing method. Offering quite rich tones and rarely causing color fading, the classical photographic printing method is very suitable for making collectable products. In addition to the abundant contrast, subtle gray scale, unique tone, rich layers and extremely perfect detail expression, the classical photographic printing method enables the creation of a photographer to become permanent, and thus can be regarded as a perfect combination of the science and technology and the art, establishing a dominant position of the classical traditional photographic prints. The World War I and the World War II in the 20th century resulted in worldwide lack of resources, and the classical traditional photographic prints, requiring a huge number of expensive and rare metals, were forbidden by all countries in the world, despite the unique performance and effects

[0003] However, existing classical photographic prints all employ an even brushing approach and are controlled through the photosensitive sun-curing time; the process cannot satisfy higher artistic pursuit of people but just conduct copying in original photos, simply stagnating on the ancient classical photographic printing technology. What needs to be done is to further expand and create art works of higher level and break shackles imposed by traditional classical form of spreading an image all over a photographic print.

Technical Problems

[0004] In view of this, the present invention primarily aims to provide a splashing type photographic printing method for classical photographic prints. The technical solution provides people with a new visual sense of a photographic print by imaging non-prominent portions in a photographic print through a splashing approach and forming various water flow patterns, and deepens the external and internal connotations of a picture, implements more stereoscopic and diversified picture presentation, thus greatly improving the aesthetic property and the visibility. Resuming the technique in current era of digital image, more than 180 years later since initial application thereof, and tightly combining the digital tech-

nology with the classical photographic printing technology, are undoubtedly of new times value and significance to the innovation of image language and the expansion of creation ways of photographic art.

Technical Solutions

[0005] To achieve the aim, the present invention adopts the following technical solutions.

[0006] A splashing type photographic printing method for classical photographic prints comprises the following steps:

- (A) controlling room humidity to 30-60% RH, and dividing an operation area and a theme-prominent area on a piece of classical photographic printing paper, by use of a pencil according to the size of a photographic film;
- (B) splashing a liquid reagent onto the operation area on the classical photographic printing paper; picking up the classical photographic printing paper and enabling the liquid reagent to flow toward one side, so as to reflux the liquid reagent without flowing out of the operation area;
- (C) absorbing some of the liquid reagent, largely accumulated in the theme-prominent area on the classical photographic printing paper, by use of a pipette into the pipette; coarsely adjusting the liquid reagent on the position with less or no liquid reagent accumulated in the theme-prominent area; finely adjusting the liquid reagent in the theme-prominent area by use of absorbent paper, and absorbing redundant liquid reagent by use of the absorbent paper;
- (D) resting the classical photographic printing paper for 2-15 minutes, and naturally drying or wind-drying;
- (E) placing a photographic film above the classical photographic printing paper on which the liquid reagent is splashed, and irradiating for 2-15 minutes by an ultraviolet lamp;
- (F) separating the classical photographic printing paper from the photographic film, and putting the separated classical photographic printing paper in a classical developing solution; and
- (G) taking out the developed classical photographic printing paper and washing with water; cleaning the classical photographic printing paper in a classical cleaning solution to remove residual liquid reagent thereon; taking out the classical photographic printing paper, and washing again with clean water for 20 minutes.

Beneficial Effects

[0007] The technical solution has the following beneficial effects: in a splashing type photographic printing method for classical photographic prints, the technical solution changes the conventional even brushing approach in classical photographic print, provides people

with a new visual sense of a photographic print by imaging non-prominent portions in classical photographic print through a splashing approach and forming a natural water flow, and deepens the external and internal connotations of a picture, and implements more stereoscopic and diversified picture presentation, and greatly improves the aesthetic property and the visibility by incorporating the ink-splashing skill for vigorous and bold free-hand brushwork in Chinese painting and calligraphy into old traditional photographic printing. Resuming the technique in current era of digital image, more than 180 years later since initial application thereof, and tightly combining the digital technology with the classical photographic printing technology, are undoubtedly of new times value and significance to the innovation of image language and the expansion of creation ways of photographic art.

Brief Description of the Drawings

[0008] Fig. 1 is a design sketch of an actual photo of classical photographic print generated by the technical solution of the present invention.

Detailed Description of the Invention

[0009] Specific embodiments of the present invention are elaborated below in conjunction with the drawings.

[0010] The splashing type photographic printing method for classical photographic prints provided by the invention comprises the following steps:

(A) controlling room humidity to 30-60% RH, and dividing an operation area and a theme-prominent area on a piece of classical photographic printing paper, by use of a pencil according to the size of a photographic film;

(B) splashing a liquid reagent onto the operation area on the classical photographic printing paper; picking up the classical photographic printing paper and enabling the liquid reagent to flow toward one side, so as to reflux the liquid reagent without flowing out of the operation area;

(C) absorbing some of the liquid reagent, largely accumulated in the theme-prominent area on the classical photographic printing paper, by use of a pipette into the pipette; coarsely adjusting the liquid reagent on the position with less or no liquid reagent accumulated in the theme-prominent area; finely adjusting the liquid reagent in the theme-prominent area by use of absorbent paper, and absorbing redundant liquid reagent by use of the absorbent paper;

(D) resting the classic photographic printing paper for 2-15 minutes, and naturally drying or wind-drying;

(E) placing a photographic film above a piece of platinum paper on which the liquid reagent is splashed, and irradiating for 2-15 minutes by an ultraviolet lamp;

(F) separating the classical photographic printing pa-

per from the photographic film, and putting the separated classical photographic printing paper in a classical developing solution; and

(G) taking out the developed classical photographic printing paper and washing with water; cleaning the classical photographic printing paper in a classical cleaning solution to remove residual liquid reagent thereon; taking out the classical photographic printing paper, and washing again with clean water for 20 minutes.

[0011] As shown in Fig. 1, the photo originally shows a young woman with long hair. In the technical solution, half of the face is taken as a theme-prominent area, and the liquid reagent splashed onto the classical photographic printing paper fully develops the half face of the woman by use of a pipette and absorbent paper; the elegant hair of the woman in the photo is developed through the outline appearing as the liquid reagent is splashed. Therefore, people not only get the highlighted beauty, but also enjoy further reverie.

[0012] With the technical solution, in practical work, by employing the ink-splashing skill in traditional Chinese painting into the classical photographic printing method, an original plane pattern is improved into a stereoscopic pattern from an artistic level, thus greatly improving the sense of depth and highlighting the theme more noticeably.

[0013] As shown in Fig. 1, the flow of the platinum photographic printing technology, one of the classical photographic printing technologies, is adopted as an example, and different photographic printing technologies apply different methods and flows.

[0014] The above description is merely preferred feasible embodiments of the present invention and is not intended to limit the protection scope of the present invention.

Claims

1. A splashing type photographic printing method for classical photographic prints, **characterized by** comprising the following steps:

(A) controlling room humidity to 30-60% RH, and dividing an operation area and a theme-prominent area on a piece of classical photographic printing paper, by use of a pencil according to the size of a photographic film;

(B) splashing a liquid reagent onto the operation area on the classical photographic printing paper; picking up the classical photographic printing paper and enabling the liquid reagent to flow toward one side, so as to reflux the liquid reagent without flowing out of the operation area;

(C) absorbing some of the liquid reagent, largely accumulated in the theme-prominent area on

the classical photographic printing paper, by use
of a pipette into the pipette; coarsely adjusting
the liquid reagent on the position with less or no
liquid reagent accumulated in the theme-prom- 5
inent area; finely adjusting the liquid reagent in
the theme-prominent area by use of absorbent
paper, and absorbing redundant liquid reagent
by use of the absorbent paper;
(D) resting the classic photographic printing pa- 10
per for 2-15 minutes, and naturally drying or
wind-drying;
(E) placing a photographic film above the classic
photographic printing paper on which the liquid
reagent is splashed, and irradiating for 2-15 min- 15
utes by an ultraviolet lamp;
(F) separating the classical photographic print-
ing paper from the photographic film, and putting
the separated classical photographic printing
paper in a classical developing solution; and
(G) taking out the developed classical photo- 20
graphic printing paper and washing with water;
cleaning the classical photographic printing pa-
per in a classical cleaning solution to remove
residual liquid reagent thereon; taking out the 25
classical photographic printing paper, and
washing again with clean water for 20 minutes.

30

35

40

45

50

55



Figure 1

INTERNATIONAL SEARCH REPORT

International application No.

PCT/CN2016/078927

A. CLASSIFICATION OF SUBJECT MATTER

G03D 3/00 (2006.01) i

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

G03D; G03B; B44D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

CNPAT; CNKI; WPI; EPODOC: medical solution, photo+, photographic w paper, chemical, spill+, flow+, expos+, develop+, rins+

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	CN 2358467 Y (LI, Zunjiang), 12 January 2000 (12.01.2000), description, page 1, line 26 to page 2, line 26, and figure 1	1
A	CN 2252350 Y (LI, Guochao), 16 April 1997 (16.04.1997), the whole document	1
A	CN 2358468 Y (CUI, E), 12 January 2000 (12.01.2000), the whole document	1
A	CN 2365692 Y (LU, Bingtao), 23 February 2000 (23.02.2000), the whole document	1
A	JP 2000338644 A (KONISHIROKU PHOTO IND.), 08 December 2000 (08.12.2000), the whole document	1
A	JP 58149049 A (NISHI, S.), 05 September 1983 (05.09.1983), the whole document	1
A	EP 0355034 B1 (FUJI PHOTO FILM CO., LTD.), 02 November 1994 (02.11.1994), the whole document	1

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	
"E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	"&" document member of the same patent family

Date of the actual completion of the international search

12 August 2016 (12.08.2016)

Date of mailing of the international search report

31 August 2016 (31.08.2016)

Name and mailing address of the ISA/CN:
State Intellectual Property Office of the P. R. China
No. 6, Xitucheng Road, Jimenqiao
Haidian District, Beijing 100088, China
Facsimile No.: (86-10) 62019451

Authorized officer

ZHANG, Zhongqing

Telephone No.: (86-10), 010-62413617

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

PCT/CN2016/078927

5	Patent Documents referred in the Report	Publication Date	Patent Family	Publication Date
	CN 2358467 Y	12 January 2000	None	
	CN 2252350 Y	16 April 1997	None	
10	CN 2358468 Y	12 January 2000	None	
	CN 2365692 Y	23 February 2000	None	
	JP 2000338644 A	08 December 2000	None	
	JP 58149049 A	05 September 1983	None	
15	EP 0355034 B1	02 November 1994	US 5019850 A	28 May 1991
			DE 68919159 D1	08 December 1994
			EP 0355034 A2	21 February 1990
			DE 68919159 T2	09 March 1995
20				
25				
30				
35				
40				
45				
50				
55				

Form PCT/ISA/210 (patent family annex) (July 2009)