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(54) **Method of customer photoprint annotation**

Verfahren zum Drucken einer Kundenanmerkung auf einem photographisches Bild

Procédé pour imprimer une annotation du client sur une épreuve photographique

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EP-A- 0 291 078 **EP-A- 0 588 056**

• **PATENT ABSTRACTS OF JAPAN vol. 17, no. 273**
(P-1545), 26 May 1993 & JP-A-05 011353 (FUJI
PHOTO FILM), 22 January 1993,

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Description

Field of the Invention

[0001] This invention relates to photographic film processing, and more particularly, to a method for annotating photographic prints with visible information such as messages or diagrams.

Background of the Invention

[0002] It is known in the art relating to photographic printing to print a date or logo or other information on the prints processed from the negatives of a particular photographic film returned for processing. At present, such information is generally limited to the date of processing and the logo or process number of the film processor. However, a need has been recognized to provide processing customers with a means for providing their own written or graphic information to be printed on the front or back of the prints made from the negatives of films supplied by them for processing.

[0003] EP0 588056 A2 discloses a device for obtaining information and printing this information on a photographic envelope.

[0004] JP-A-05-11353 discloses making an index print which includes additional information that can be used for adding for prints.

EP0 0291078 A2 discloses a system for matching an envelope, film and prints that make up a photographic processing order. The system includes the steps of reading a printed barcode from a customer envelope, printing the barcode on a segment of a continuous stock of splice tape and then using the segment of splice tape to join the identified film to another film to form a continuous reel. The barcode can be read after processing the matched to the envelope bearing the same barcode. There is also disclosed the step of encoding at least a portion of the identifying code on the prints made from the film in order to provide a three-way match.

Summary of the Invention

[0005] The present invention provides a method for film processing customers to annotate the photographic prints made from their film with visible information provided by the customer.

[0006] The method involves the steps defined in claim 1.

[0007] More specifically in the method, the customer is provided with a film processing envelope on which the annotated information is placed. The information may be drawn directly by the customer in a space provided on the envelope or it may be drawn or printed onto a separate sticker or card to be attached to or placed within the film processing envelope by the customer. Scanning of the annotated information may be varied to provide either a bitmapped graphics file or a facsimile file

and the scanning may be recorded in black and white or color. If appropriate, the scanned information may be compressed by run length coding or other methods of image processing. Printing of the information on the print may take any suitable form including laser printing on the front of the print or printing on the back of the print using a color ink-jet printer.

[0008] These and other features and advantages of the invention will be more fully understood from the following detailed description of the invention taken together with the accompanying drawings.

Brief Description of the Drawings

[0009] In the drawings:

FIG. 1 is a flow chart illustrating the steps involved in carrying out a preliminary portion of one form of the invention; and

FIG. 2 is a flow chart illustrating steps to be carried out by a photofinisher in conducting the photofinishing portions of a process in accordance with one form of the invention.

Detailed Description of the Invention

[0010] FIG. 1 illustrates the preliminary steps taken by a customer, indicated by numeral 10, in order to prepare a film for processing in accordance with one form of the invention. In carrying out the process, the customer first obtains a processing envelope 12 on which a space is provided for writing a message, drawing a design or providing other visible information for printing on the pictures resulting from the photofinishing process. The customer then writes his message 14 on the envelope 12. The exposed film 16 to be processed is then inserted into the envelope 12 to form the package 18 which is supplied at 20 to the photofinishing representative or location and shipped at 22 to the photofinisher.

[0011] FIG. 2 illustrates the steps carried out by the photofinisher in processing film according to one embodiment of the invention. At block 24 the customer order is received by the photofinisher who first presorts the film at 26 according to the type of film processing required by the exposed film in the envelope. The sorted film to be developed by the same process is then removed from its envelope at 28. In accordance with conventional practice, the film may be added to other films to form a large film roll 30 which is then processed in processing equipment at 32. Concurrently, the customer envelopes are separated from the film at 34 and the messages provided on the envelopes by the customer are scanned at 36. The scanning creates a reproducible file, such as a bitmap file at 38 which is stored for later use. At the same time the envelopes are stored at 40 for subsequent use. The processed film negatives are then printed at 42 by conventional printing equipment

which is modified to also print the customer message. The message is provided by retrieving the stored files and providing the necessary information to the printing equipment to permit printing of the message on the back or front of the prints for the customer order. The prints are then placed with the negatives from the order in the previously stored envelope at 44 and the envelope with the prints and negatives is returned to the customer at 46.

[0012] In the case of films which require a different type of processing, the presort separates them into an alternative processing track at 48 which then is taken with the same steps as indicated with the prior process from removing the film from the envelopes to returning of the prints and negatives to the customer.

[0013] Numerous variations of the specific process described are possible within the concepts embodied in the invention. For example, instead of providing a space on the processing envelope for annotation by the customer, the message could be printed upon a sticker to be affixed to the envelope at a later time or it could be placed upon a card or sheet to be placed in the envelope with the film. Also, the message could be typed or computer printed instead of being handwritten by the customer. These and other forms of providing visible information for reprinting on the prints are intended to be included within the scope of the invention.

[0014] The manner of scanning the annotated surface containing the visible information and creating the reproducible file also may involve many variations. The reproducible files that may be formed include bitmapped graphics files, image processed files, or facsimile files. However, any other form of stored or storable or useable information is considered to be within the scope of the invented process. Further, the manner of printing the information on the prints may be varied to include printing in black and white or in color on the front or on the back of the prints. Laser printing, ink jet printing and other forms including direct photographic printing on the front of the prints are all considered within the scope of the process. Also, if desired, the process may include providing a separate or individual message for each of the prints to be made from the film returned for processing and the scanning process can be carried out so as to identify and connect the scanned messages with the respective prints to be made from the negatives resulting from the film processing.

[0015] Although the invention has been described by reference to a specific embodiment, it should be understood that numerous changes may be made within the scope of the inventive concepts described. Accordingly, it is intended that the invention not be limited to the described embodiment, but that it have the full scope defined by the language of the following claims.

Parts List

[0016]

- | | | |
|----|-----|----------------------|
| 5 | 10. | customer |
| | 12. | envelope |
| | 14. | message |
| | 16. | film |
| | 18. | package |
| 10 | 20. | order supplied |
| | 22. | order shipped |
| | 24. | order received |
| | 26. | film presort |
| | 28. | film removed |
| 15 | 30. | film roll |
| | 32. | processing equipment |
| | 34. | film separated |
| | 36. | messages scanned |
| | 38. | bitmap file |
| 20 | 40. | envelope storage |
| | 42. | negatives printed |
| | 44. | prints to envelope |
| | 46. | prints returned |
| 25 | 48. | alternative track |

Claims

- | | | |
|----|----|---|
| 30 | 1. | A method of annotating a photographic print with customer provided visible information, the method comprising the steps of: |
| | | providing a film processing envelope (12) adapted to receive photographic film (16) for processing; |
| 35 | | associating a space to be annotated on said processing envelope; |
| | | providing the visible information (14) on said space, so as to form an annotated surface; |
| 40 | | scanning said annotated surface containing said visible information (14); |
| | | creating a reproducible information file containing said visible information; characterised by the step of: |
| 45 | | printing said visible information (14) from said file into a photographic print during photofinishing processing. |
| 50 | 2. | The method of claim 1 characterized by: |
| | | temporarily storing said reproducible file; and retrieving said reproducible file for printing. |
| 55 | 3. | The method of claim 1 characterized in that said reproducible file is one of a bitmapped graphics file and a facsimile file. |

4. The method of claim 1 **characterized by** the step of:

providing a film processing envelope (12) with a designated area in which a customer may record annotated information.

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5. The method of claim 1 **characterized by** the step of providing a plurality of designated areas corresponding to a number of prints to be processed.

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6. The method of claim 1 **characterized in that** said scanning is conducted in black and white using on and off pixels.

7. The method of claim 1 **characterized in that** said scanning is conducted in color and with full gray scale.

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8. The method of claim 1 **characterized in that** said printing includes printing on one of a front and a back of said print.

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Patentansprüche

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1. Verfahren zum Versehen eines fotografischen Prints mit einer Anmerkung eines Kunden in Form einer sichtbaren Information, mit den Schritten:

- Bereitstellen einer Filmbearbeitungstasche (12) zum Aufnehmen eines fotografischen Films (16) zur Entwicklung;
- Zuordnen eines mit der Anmerkung zu versehenen Bereichs auf der Filmbearbeitungstasche;
- Versehen des Bereichs mit der sichtbaren Information (14), um eine Fläche für die Anmerkung zu schaffen;
- Abtasten der Fläche mit der die sichtbare Information (14) enthaltenden Anmerkung;
- Erzeugen einer reproduzierbaren Informationsdatei mit der sichtbaren Information, **gekennzeichnet durch** den Schritt:

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- Drucken der sichtbaren Information (14) von der Datei auf einen fotografischen Print während der Bildbearbeitung.

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2. Verfahren nach Anspruch 1, **gekennzeichnet durch** die Schritte:

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- vorübergehendes Speichern der reproduzierbaren Datei und
- Wiederauffinden der reproduzierbaren Datei zum Drucken.

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3. Verfahren nach Anspruch 1, **dadurch gekennzeichnet, dass** es sich bei der reproduzierbaren

Datei um eine Bitmap-Grafikdatei und um eine Faksimile-Datei handelt.

4. Verfahren nach Anspruch 1, **gekennzeichnet durch** den Schritt:

- Bereitstellen einer Filmbearbeitungstasche (12) mit einem vorgegebenen Bereich, in dem ein Kunde seine Anmerkungen notieren kann.

5. Verfahren nach Anspruch 1, **gekennzeichnet durch** den Schritt:

- Bereitstellen einer Vielzahl vorgegebener Bereiche entsprechend einer Anzahl zu verarbeitender Prints.

6. Verfahren nach Anspruch 1, **dadurch gekennzeichnet, dass** das Abtasten in Schwarzweiß erfolgt unter Verwendung von Ein- und Aus-Pixeln.

7. Verfahren nach Anspruch 1, **dadurch gekennzeichnet, dass** das Abtasten in Farbe erfolgt und mit voller Grauskala.

8. Verfahren nach Anspruch 1, **dadurch gekennzeichnet, dass** das Drucken auf einer Vorder- oder Rückseite des Prints erfolgt.

Revendications

1. Procédé d'annotation d'une épreuve photographique avec des informations visibles fournies par le client, le procédé comprenant les étapes suivantes :

la fourniture d'une enveloppe de traitement de film (12) conçue pour recevoir un film photographique (16) en vue d'un traitement, l'association d'un espace devant être annoté sur ladite enveloppe de traitement, la disposition des informations visibles (14) sur ledit espace, de façon à former une surface annotée,

le balayage par scanner de ladite surface annotée contenant lesdites informations visibles (14),

la création d'un fichier d'informations reproductible contenant lesdites informations visibles, **caractérisé par** l'étape suivante :

l'impression desdites informations visibles (14) provenant dudit fichier dans une épreuve photographique durant le traitement de photofinition.

2. Procédé selon la revendication 1, **caractérisé par** :

la mémorisation temporaire dudit fichier reproductible, et
la récupération dudit fichier reproductible en vue d'une impression.

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3. Procédé selon la revendication 1, **caractérisé en ce que** ledit fichier reproductible est un fichier choisi parmi un fichier graphique en mode points et un fichier de facsimilé.

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4. Procédé selon la revendication 1, **caractérisé par** l'étape consistant à :

prévoir une enveloppe de traitement de film (12) avec une zone désignée dans laquelle un client peut enregistrer des informations annotées.

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5. Procédé selon la revendication 1, **caractérisé par** l'étape consistant à prévoir une pluralité de zones désignées correspondant à un nombre d'épreuves devant être traitées.

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6. Procédé selon la revendication 1, **caractérisé en ce que** ledit balayage est réalisé en noir et blanc en utilisant des pixels actifs et inactifs.

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7. Procédé selon la revendication 1, **caractérisé en ce que** ledit balayage par scanner est réalisé en couleur et avec une échelle de gris complète.

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8. Procédé selon la revendication 1, **caractérisé en ce que** ladite impression comprend l'impression sur l'un d'un recto et d'un verso de ladite épreuve.

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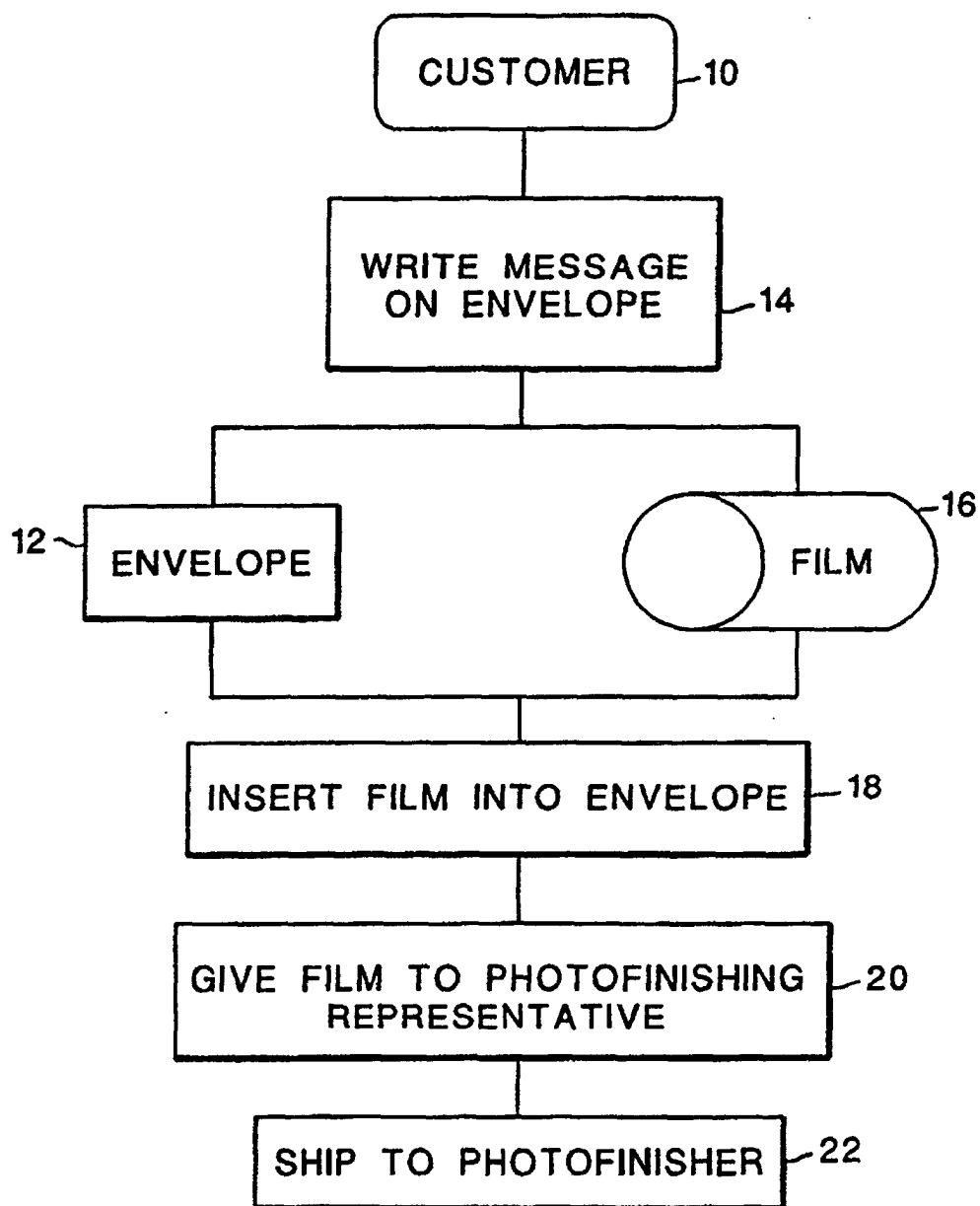


FIG. 1

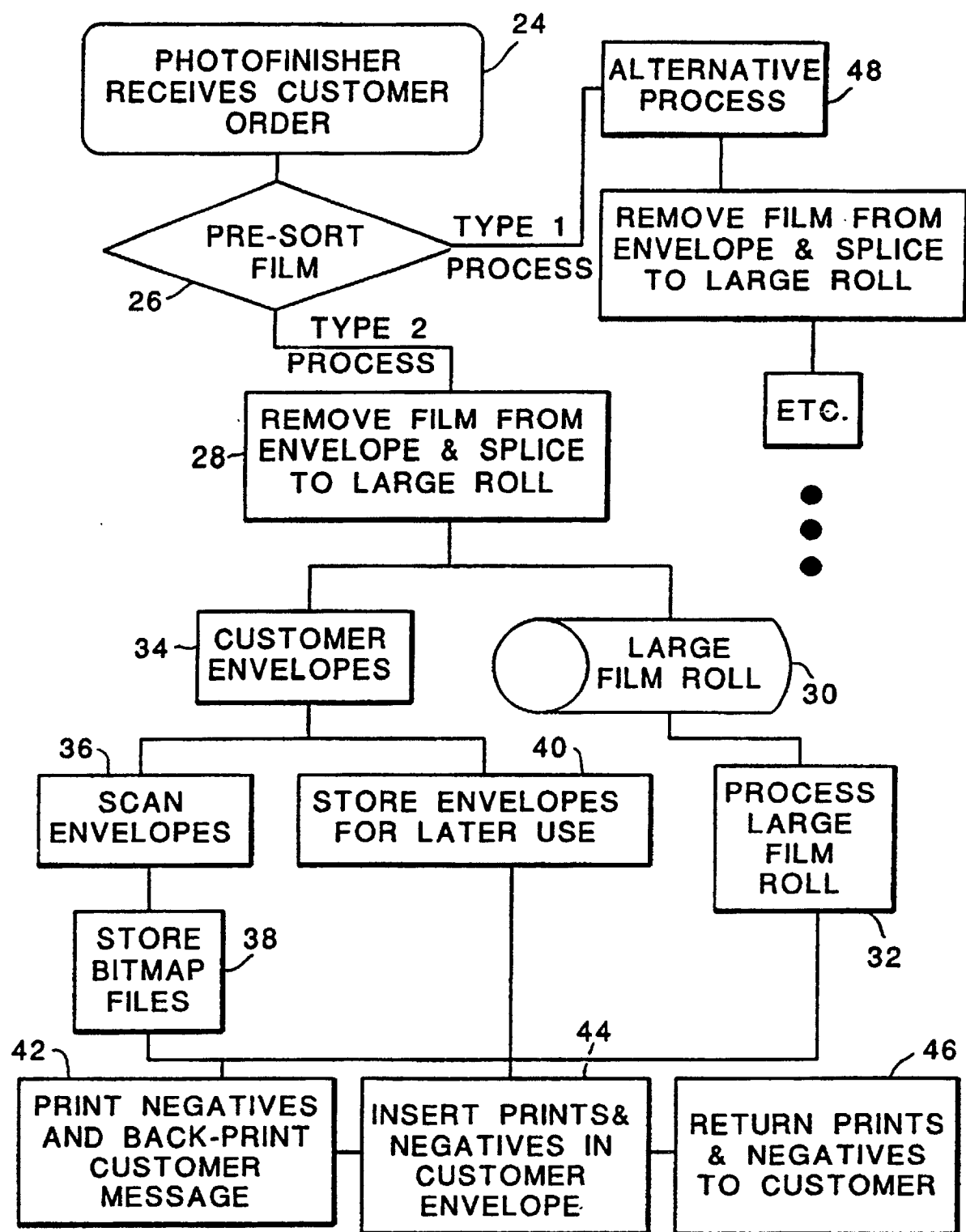


FIG. 2