

[54] DIRECT POSITIVE PHOTOGRAPHIC MATERIALS AND A METHOD OF FORMING DIRECT POSITIVE IMAGES

[75] Inventors: Noriyuki Inoue; Tatsuo Heki; Hidetoshi Kobayashi; Naoyasu Deguchi; Shigeo Hirano, all of Kanagawa, Japan

[73] Assignee: Fuji Photo Film Co., Ltd., Kanagawa, Japan

[21] Appl. No.: 184,552

[22] PCT Filed: Aug. 14, 1987

[86] PCT No.: PCT/JP87/00609

§ 371 Date: Jun. 7, 1988

§ 102(e) Date: Jun. 7, 1988

[87] PCT Pub. No.: WO88/01402

PCT Pub. Date: Feb. 25, 1988

[30] Foreign Application Priority Data

Aug. 15, 1986 [JP] Japan 61-190628

[51] Int. Cl.⁵ G03C 1/485; G03C 5/26

[52] U.S. Cl. 430/409; 430/410; 430/544; 430/547; 430/598; 430/955

[58] Field of Search 430/409, 410, 544, 547, 430/598, 955

[56] References Cited

U.S. PATENT DOCUMENTS

- 4,390,618 3/1979 Takagi .
4,582,779 4/1986 Kubota et al. 430/409
4,618,572 10/1986 Mihayashi et al. 430/543
4,628,024 3/1981 Takagi .
4,656,123 4/1987 Mihayashi et al. 430/543
4,724,199 12/1978 Takagi .
4,746,601 5/1988 Mihayashi et al. 430/543
4,835,091 5/1989 Inoue et al. 430/378

Primary Examiner—Paul R. Michl
Assistant Examiner—Janet C. Baxter
Attorney, Agent, or Firm—Sughrue, Mion, Zinn, Macpeak & Seas

[57] ABSTRACT

The invention provides (1) direct positive photographic photosensitive materials in which at least one type of FR compound which releases fogging agent or development accelerator or a precursor thereof in accordance with the amount of silver developed when the silver halide is being developed is included in a direct positive photographic material comprising at least one layer of non-pre-fogged internal latent image type silver halide emulsion on a support, and (2) a method of forming direct positive images of which the distinguishing features are that in a method for the formation of direct positive images in which a direct positive photographic photosensitive material comprising at least one layer of non-pre-fogged internal latent image forming silver halide emulsion on a support is processed, after image exposure, in a surface developer, at least one type of FR compound which releases fogging agent or development accelerator or precursors thereof is included in the said photographic material, and that the said photosensitive material is subjected to a fogging process and to a development process during and/or after the said fogging process.

It is possible by means of this invention to obtain direct positive photographic materials which have excellent stability with respect to the passage of time and especially good stability with respect to the passage of time under conditions of high temperature and high humidity.

Moreover, it is possible to obtain direct positive photographic materials and a method of forming direct positive images which have a high maximum image density and a high resolving power.

Moreover, it is possible to obtain direct positive photographic materials and a method of forming direct positive images with which direct positive images which have a satisfactorily high color density can be obtained, even on processing in highly stable developers of low pH.

12 Claims, No Drawings