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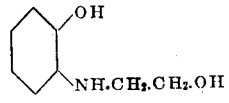
UNITED STATES PATENT OFFICE

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PROCESS OF DEVELOPING PHOTOGRAPHIC MATERIALS AND NEW PHOTOGRAPHIC DEVELOPERS

No Drawing. Application filed July 19, 1928, Serial No. 294,050, and in Germany August 18, 1927.

The present invention relates to a new process of developing photographic materials and to new photographic developers, more particularly to photographic developers comprising as a developing agent 2-hydroxyethylamino-1-hydroxybenzene, the constitution formula of which is:



We found that photographic developers containing 2-hydroxyethylamino-1-hydroxybenzene as a constituent have great stability both in the solid condition and in alkaline solution. They also have the remarkable properties of developing the latent photographic image in a silver halide emulsion without fog, even in solutions free from potassium bromide. 2-hydroxyethylamino-1-hydroxybenzene was hitherto unknown, its manufacture has been described in our Patent Number 1,712,716, dated May 14, 1929, and consists in the condensation of 2-amino-1-hydroxybenzene with ethylenechlorhydrin or ethylene oxide.

A suitable developer consists, for example, of a solution of 1 gram of the sulphate of 2-hydroxyethylamino-1-hydroxybenzene in 200 cc. of water containing 9 grams of crystallized sodium sulphite and 5 grams of potassium carbonate.

We claim:

1. A new photographic developer containing with other developer-ingredients 2-hydroxyethylamino-1-hydroxybenzene.

2. A new photographic developer containing together with other developer-ingredients sodium sulphite and 2-hydroxyethylamino-1-hydroxybenzene.

3. A photographic developer comprising an alkaline solution containing together with other developer-ingredients sodium sulphite and 2-hydroxyethylamino-1-hydroxybenzene.

4. A photographic developer comprising together with other developer-ingredients sodium sulphite, potassium carbonate and 2-hydroxyethylamino-1-hydroxybenzene.

5. A photographic developer comprising together with other developer-ingredients sodium sulphite, potassium carbonate, potassium bromide and 2-hydroxyethylamino-1-hydroxybenzene.

6. The process of developing photographic materials which comprises treating the same with a solution containing 2-hydroxyethylamino-1-hydroxybenzene.

7. The process of developing photographic materials which comprises treating the same with a solution containing together with other developer-ingredients 2-hydroxyethylamino-1-hydroxybenzene.

8. The process of developing photographic materials which comprises treating the same with a solution containing together with other developer-ingredients sodium sulphite and 2-hydroxyethylamino-1-hydroxybenzene.

9. The process of developing photographic materials which comprises treating the same with an alkaline solution containing together with other developer-ingredients sodium sulphite and 2-hydroxyethylamino-1-hydroxybenzene.

10. The process of developing photographic materials which comprises treating the same with a solution containing together with other developer-ingredients sodium sulphite, potassium carbonate and 2-hydroxyethylamino-1-hydroxybenzene.

11. The process of developing photographic materials which comprises treating the same with a solution containing together with other developer-ingredients sodium sulphite, potassium carbonate, potassium bromide and 2-hydroxyethylamino-1-hydroxybenzene.

In testimony whereof, we affix our signatures.

GUSTAV REDDELIEN.
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