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COLOR PHOTOGRAPHIC REVERSAL
PROCESS

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4 Claims. (Cl. 95—2)

This invention relates to an improvement in the color photographic reversal processes.

In French Patent No. 828,754 there is described a process for the production of photographic color pictures composed of component color images in which the photographic material is subjected to an exposure independent of the normal exposure and the second exposure is adjusted in the production of each component color image so as to correct a previously determined faulty color reproduction of the photographic material. In one form of this known process there is used for the second exposure multi-layer material in which the light sensitive layers are separated from each other by yellow filters, the latter not being decolorized at the first development.

Our present invention has for an object to provide a process in which the yellow filter layers are omitted and after the first development and before the second exposure the light sensitive layers are colored yellow. For the second exposure there may be used for example controlled blue-violet light.

Further objects of our invention will be apparent from the following description.

For example an exposed multi-layer film, the layers of which are respectively blue-sensitive, green-sensitive and red-sensitive is in the first place subjected to a first development in a black-and-white developer and after removing the silver is thoroughly washed. The film is then treated in a solution of a yellow dyestuff, for example tartrazine so that all layers are dyed yellow and is then caused to travel in such a manner that for the second exposure blue-violet light may act both on the layer side and on the support side. The intensity of this blue-violet light is controlled in accordance with the necessary color correction by electrical resistances or diaphragms.

When the blue-violet light falls from both sides equally strongly on the yellow colored film, all three layers are uniformly illuminated without preference to any layer. When it is desired that the blue-green image which is to be produced in the layer next to the support is to be weakened in consequence of the tendency of this layer to a greenish strain, the intensity of the light falling on the support side must be more or less reduced

so that from the layer side the blue-violet light may act with greater intensity or chiefly only from this side on the three layers of the photographic material. When the light falling on the support side is throttled or completely obstructed, the blue-violet light acting on the support side cannot illuminate the three layers equally. There follows therefore a preferential treatment of the topmost layer which contains the yellow image and only a weak effect on the bottom layer in which the blue-green image is contained. In this case therefore there is a less strong exposure of the bottom layer in which the blue-green image is produced so that this color in the finished image is less strong.

Conversely by strong violet light on the support side and feeble light on the layer side the development of the bottom blue-green layer is strengthened and the formation of the yellow dyestuff image is depressed in the topmost layer.

The development after the second exposure is conducted in the usual manner.

We claim:

1. In a process of producing photographic color pictures involving the exposure of a photographic material comprising a plurality of silver halide emulsion layers each of which is sensitized for a different spectral region, development of said exposed layers with an ordinary developer, removal of silver from said layers and a washing thereof, the improvement which comprises correcting the color balance between the component records by dyeing said layers yellow, simultaneously exposing all of said layers to blue-violet light, while adjusting the intensity of said light to insure a proper color balance between said component records and color developing said layers in their respective subtractive colors.

2. The process as defined in claim 1, wherein said material is re-exposed on both sides.

3. The process as defined in claim 1, wherein the material is dyed with tartrazine.

4. The process as defined in claim 1, wherein the material has a blue-sensitive layer, a green-sensitive layer and a red-sensitive layer.

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