

DEFENSIVE PUBLICATION

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PHOTOGRAPHIC BLEACH COMPOSITIONS

Lynn R. Hotter, 1669 Lake Ave., Rochester, N.Y. 14650

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No Drawing. 10 Pages Specification

Solutions containing (1) a trivalent iron complex of an aminopolycarboxylic acid, such as ammonium ferric ethylenediamine tetraacetate, and (2) an alkali metal or ammonium bromide or iodide salt are effective bleach solutions for use in color photographic processes. Following use of such bleach solutions to oxidize photographic silver images and removal of the oxidation products from the photographic element with a thiosulfate fixing solution, the silver can be recovered in high yield from the fixing solution using conventional electrolytic methods of silver recovery. This is an important advantage as compared to known bleach-fix compositions containing a trivalent iron complex of an aminopolycarboxylic acid as a bleaching agent and a thiosulfate as a fixing agent since it is difficult to recover silver from such bleach-fix solutions by electrolytic means because of the presence of iron salts. The level of bromide or iodide salt in the bleach solution should be such that substantially no fixing occurs but substantial conversion of silver to silver halide occurs. Preferably, the bleach solution should contain about 30 to about 400 grams of the iron complex and about 3 to about 20 grams of iodide salt or about 50 to about 350 grams of bromide salt per liter.