

# UNITED STATES PATENT OFFICE

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## SAFETY PAPER

No Drawing.

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The invention relates to a sensitive paper for use as negotiable instruments, particularly checks, which is made to disclose attempts at alteration of the matter written on the paper.

Sensitive papers for this purpose have been largely used by banks and similar institutions for the purpose of preventing or minimizing check alterations. These sensitive papers have usually comprised a sheet of suitable paper coated with a material which bleaches when an ink eradicator is applied to the paper, indicating in that manner that an attempt has been made to tamper with the paper or the matter written thereon. If the coating on the paper is light in color, as it usually is to contrast with the inks used for printing and writing on the paper, the bleached spot formed when the ink eradicator is applied is often discerned only with difficulty and is not as immediately apparent as an indicator of this character should be. In addition, an expert check raiser may cover such a bleached spot by a deft use of water color.

In accordance with my invention, I provide a sensitive paper or safety paper which produces a dark spot when an ink eradicator is applied thereto. The dark spot cannot be removed and clearly indicates an attempt at alteration.

It is therefore an object of my invention to provide a safety paper which will cause the production of a dark spot when treated with an ink eradicator, and in that manner will prevent alteration of the check or other instrument.

In carrying out my invention, I prepare a fluid material with which the paper intended to be sensitized is treated. One such fluid with which I have secured good results is prepared by dissolving about  $\frac{1}{4}$  ounce of iodine crystals in approximately 5 ounces of alcohol, which may be denatured alcohol. This solution is dark brown in color and would discolor or color objectionably paper to which it was applied. I therefore add to the first solution of iodine in alcohol a second solution. The second solution is preferably effected by adding about  $\frac{1}{8}$  ounce

of sodium thiosulfate, or hypo soda, and about  $\frac{1}{4}$  ounce of cobaltous nitrate to approximately 2 quarts of water. This second solution may be slightly heated if desired to aid in dissolving the cobaltous nitrate and the sodium thiosulfate and then is added to the first solution. The resultant fluid is water white in color and is ready to be used in treating the paper.

Any appropriate method may be used in treating the paper with the fluid, but I prefer to immerse the paper in the fluid until all the minute interstices of the paper have become filled with the fluid. The paper is then permitted to dry after which it has the appearance of ordinary paper and is ready for any of the usual operations such as printing or writing thereon. Upon the application of an ink eradicator to the safety paper, however, a dark spot is produced which immediately gives warning that an attempt has been made to alter the writing or other matter appearing on the paper.

I claim:

1. A fluid for use in producing a safety paper comprising the solution formed by combining approximately five ounces of alcohol, two quarts of water, a quarter ounce of iodine, a quarter ounce of cobaltous nitrate, and one eighth ounce of sodium thio-sulphate.

2. A fluid for use in producing a safety paper comprising the solution formed by combining in solution iodine, cobalt nitrate, and an alkaline thio-sulphate.

In testimony whereof, I have hereunto set my hand.

JOHN GENOESE.

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