Nov. 18, 1924. 1,515,722

W. J. BOYD

TRANSFER METALLIZED MEDIUM

Filed May 13 , 1924

Fig. 1.

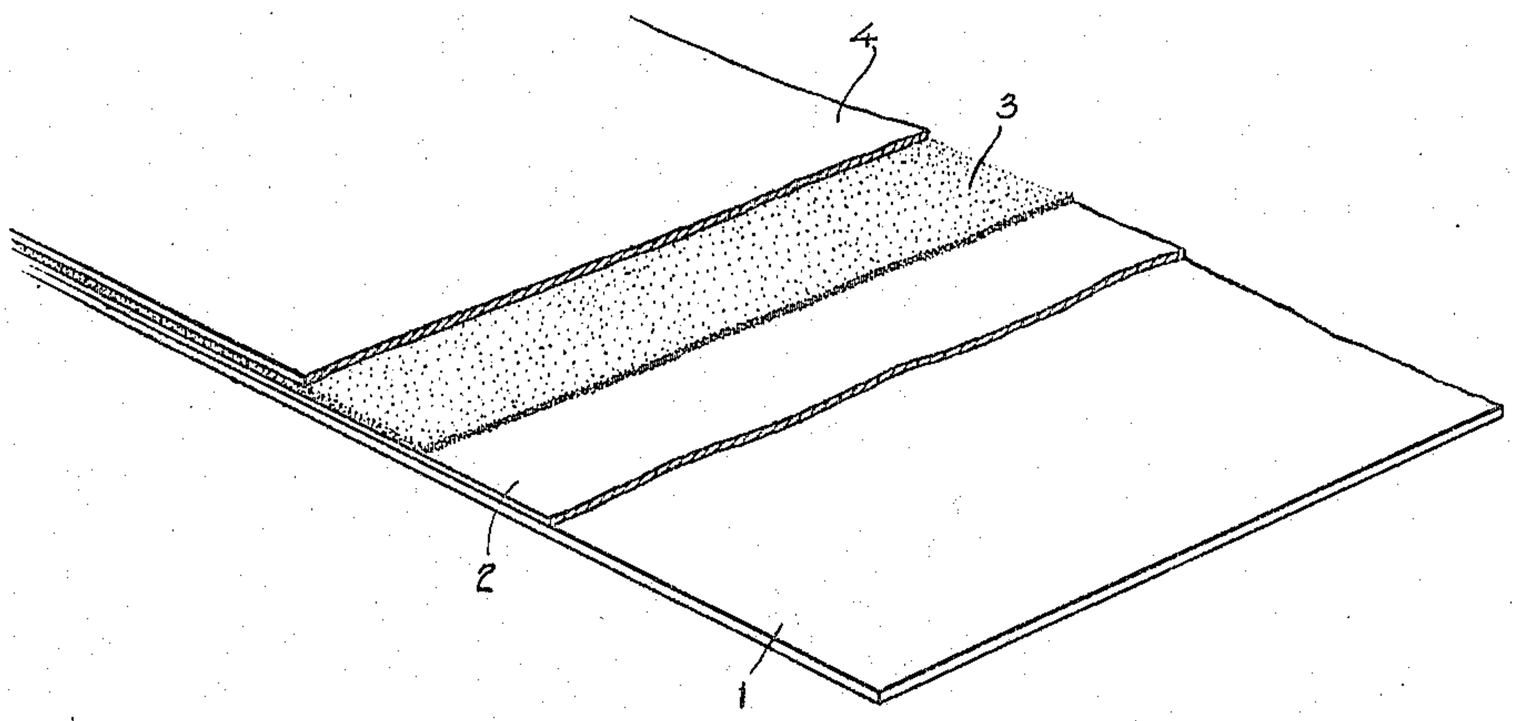
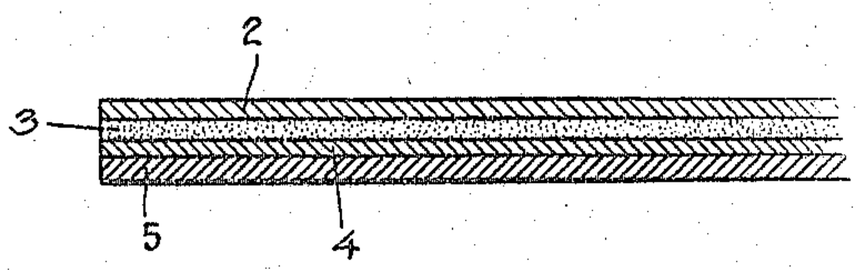


Fig. 2.



INVENTOR,
William J. Boyd,
BY
Henry J. Locke,
ATTORNEY.

Patented Nov. 18, 1924. 1,515,722

UNITED STATES PATENT OFFICE.

WILLIAM J. BOYD, OF YONKERS, NEW YORK, ASSIGNOR TO PEERLESS ROLL LEAF CO., INC., OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

TRANSFER METALLIZED MEDIUM.

Application filed May 13, 1924. Serial No. 712,988.

To all whom it may concern:

Be it known that I, WILLIAM J. BOYD, a citizen of the United States of America, residing at Yonkers, county of Westchester, State of New York, have invented certain new and useful Improvements in Transfer Metallized Mediums, of which the following is a specification.

This invention relates to improved metallic transfer media.

The object of this invention is to provide a transfer medium for metallizing purposes, either in the form of a sheet or roll, whereby improved metallizing effect, including "depth" is attained for various textiles, leather or like article to which the metallic media is transferred by hot stamping, or by tipping or like procedure.

Pursuant to my invention, the foil of metal or mass of comminuted metallic powder, as in the form of a layer, is applied to a face of a sheet or strip of paper or like carrier by means of a releasable composition, and on the outer face of the metallic layer is applied a layer embodying suitable sizing admixed with rice starch. Such outer layer of the transfer medium, it will be observed, is disposed between the metallic layer and the textile or like article in the procedure of the hot stamping, or tipping or other transfer operation, and the improved result attained by my invention prevents the tarnishing or darkening of the metal and also effects a "depth" of the metallic layer by conjoint action of the glue and rice starch.

Further features of the invention will be more fully understood from the following detail description and the accompanying drawings, in which—

Fig. 1 is a diagrammatic view in broken away perspective showing a portion of a strip of paper having on one face thereof a resinous releasable composition, on the outward face of which is disposed metallic powder and an outermost coating of sizing embodying rice starch distributed therein; and

Fig. 2 is a diagrammatic view of an article ornamented with the transfer paper roll indicated Fig. 1, whereby in the transfer hot stamping operation, the sizing coating embodying rice starch is disposed between the layer of metallic powder and the article ornamented, the theretofore resinous releasable composition becoming fused and constituting in the finished product an outer resinous coating.

Referring to Fig. 1, the strip of paper is indicated at 1. The layer of releasable composition is indicated at 2, and usually comprises bees wax and rosin or other resins, having a fusing point or point of plasticity to effect release from the paper strip at the temperature of the heated die in the hot stamping, tipping or other heated transfer operation.

The layer 3 represents gold leaf, silver leaf, or preferably for the purposes of the present invention, metallic alloy powder to sufficient fineness and selected in color as a substitute for gold, silver or like precious metals. For such purpose, bronze or other alloys of brass may be employed as a substitute for gold and alloys of aluminum as a substitute for silver, platinum or the like.

The above features are disclosed generally in United States Patent No. 1,444,345, entitled Transfer metallic deposits, Paul R. Heygel, inventor, granted on February 6th, 1923, to Peerless Roll Leaf Co., Inc., assignee, to which company the present application has been assigned in entire rights, title and interests.

As an example of a heated transfer impression machine for the purpose of employing metallic transfer media, embodying the present invention, I cite the die of the character described in United States Patent No. 1,333,168, Nelson E. Funk, inventor, and assignor to Peerless Roll Leaf Co., Inc., granted March 9th, 1920.

The outermost layer 4 of the marketed roll leaf is a coating of shellac or other suitable sizing in which is distributed rice starch in finely divided condition. Preferably, the rice starch is distributed uniformly in the sizing or shellac coating.

In Fig. 2, I have illustrated the application of the marketed roll leaf to an article such as the front cover 5 of a bookcase, bearing any desired impression of wording or configuration as an ornamentation. By the heated transfer operation, the theretofore shellac or sizing coating 4 is now positioned between the article 5 and the layer 3 of metal foil or metallic alloy powder; the theretofore layer 2 of releasable composition has, by the transfer operation, become now the outermost coating in the fin-

ished article, the resin of the layer 2 having become fused with the bees wax constituent and upon cooling serves as a shellac or like sizing coating of the finished article.

The function of the rice starch distributed in the now intermediate sizing layer 4, is to increase markedly the "depth" of the tone or color of the metallic powder and thus enables the use of metallic powder as a true substitute for genuine leaf of gold, silver or other precious metals.

The rice starch interposed between the article ornamented and the metallic powder serves also as an opaque screen to preclude any light effect of light waves passing through the metallic layer and otherwise reflected by the surface of the article ornamented.

The "whiteness" of the rice starch particles serves also to act as a luminous screen to increase the brilliancy of the metallic powder.

Whereas I have described my invention by reference to specific forms thereof, it will be understood that many changes and modifications may be made without departing from the spirit of the invention.

I claim:

1. A metallic transfer medium comprising a carrier strip, a layer of heat releasable composition on one face of said strip, a layer of metallic powder on the outward face of said layer of releasable composition and an outermost sizing layer comprising sizing and rice starch.

2. A metallic transfer medium comprising a carrier strip, a layer of heat releasable composition on one face of said strip, a layer of metallic powder on the outward face of said layer of releasable composition and an outermost sizing layer comprising rice starch distributed in the sizing.

3. A metallic transfer medium comprising a carrier strip, a layer of heat releasable composition on one face of said strip, a layer of metallic powder on the outward face of said layer of releasable composition and an outermost sizing layer comprising rice starch distributed in minute particles in the sizing.

4. A metallic transfer medium comprising a carrier strip, a layer of heat releasable composition on one face of said strip, a layer of metallic powder on the outward face of said layer of releasable composition and an outermost sizing layer embodying rice starch distributed substantially uniformly in the sizing.

In testimony whereof I have signed this specification this 10th day of May, 1924.

WILLIAM J. BOYD.