Patented Oct. 23, 1934 1,977,680

UNITED STATES PATENT OFFICE

1,977,680

TRANSFER AND TRANSFER MARKING COMPOSITION

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No Drawing. Application April 19, 1929, Serial No. 356,616

4 Claims. (Cl. 41—33)

My invention relates to a new and improved transfer and a new and improved transfer marking composition.

One of the objects of my invention is to provide a transfer having an impression or marking thereon, said impression or marking having a fusible base so that the impression can be readily transferred by means of an ordinary hot iron.

Another object of my invention is to provide a transfer having a transfer marking which will not age upon exposure to the air to any substantial extent.

Another object of my invention is to provide a transfer having a marking made of a composition which sets sufficiently to give a good clear impression when it is cooled and slightly oxidized.

Another object of my invention is to provide a transfer having a marking made of a fusible composition which is not too brittle so that the marking or impression will not break off the paper.

Another object of my invention is to provide a transfer having a marking or impression which is sufficiently tacky to permit the paper base of the transfer to be wound into a long spiral roll, the said composition being not too tacky so that the danger of offsetting is eliminated.

Other objects of my invention will be set forth in the following description, it being understood that the above general statement of the objects of my invention is intended to generally explain the same and not to limit it in any manner.

Heretofore various fusible substances such as the resins have been employed to form the base or vehicle of a fusible marking composition used in connection with heat transfers. According to my invention, this fusible base or vehicle is largely composed of certain synthetic resins known in the trade as the "Amberols". The name "Amberol" is used in the trade to designate a product which is also identified by the names "Albertol" and "Albertole". These products are generally referred to in the textbook entitled "Synthetic Resins and Their Plastics" by Carlton Ellis, published in 1923, pages 147 and 148. Generally speaking, these products are phenol-formaldehyde condensation resins which have been caused to condense in the presence of an added resin, such as common rosin, so that the resultant product is soluble in benzol, acetone, and the like. These resins are also soluble in fatty oils, such as linseed oil. These products appear on the market in a number of different varieties and I prefer to use the so-called "G 8 grade". I prefer to combine this resin with a suitable fusible waxy material such as beeswax, and with a processed oil, such as processed rapeseed oil.

As an example of my invention, (although I do not wish to be limited thereto), I prefer to form the fusible transfer vehicle of ten parts of Amberol (G 8), three parts of beeswax, and two parts of processed rapeseed oil. The Amberol and the beeswax can be melted at a temperature of about 100° C., intermixed, and then mixed with the rapeseed oil. Various coloring matters such as bronze powder and various pigments can be intermixed with the said fusible vehicle.

The fusible marking composition can be applied to an ordinary paper transfer base by any suitable means, such as intaglio rollers. When the ink is melted and printed upon the paper base, it slightly oxidizes so that it is sufficiently hardened and cooled by the oxidation to make a clear sharp impression which is flexible and sufficiently tacky to cling to the paper without any chipping when the transfer is wound into spiral form.

It has heretofore been a difficulty with transfers of this type that they could not be wound into compact spiral form immediately after printing because the impression would offset. The use of the improved composition materially shortens the time for setting the impression on the paper transfer base. Moreover, the improved composition does not become more infusible upon being aged, to the extent of becoming non-transferable. Hence, fresh transfers are immediately available for use and they can be stored for a long time, because the marking composition retains its fusible properties.

Instead of using blown or processed rapeseed oil, I could use blown or processed castor oil, linseed oil, China-wood oil, etc. Likewise, instead of using beeswax, I could use paraffin, japan wax, Montan wax, and the like.

The phenol-formaldehyde condensation product is of a difficulty fusible nature. However, the resin is sufficiently fusible so that by proper choice of the ingredients, the proper combination is secured of a composition which has a proper degree of fusibility.

I have shown a preferred embodiment of my invention, but it is clear that numerous changes and omissions could be made without departing from its spirit.

I claim:

1. A transfer comprising a paper strip upon which a fusible marking is imprinted, said fusible marking having a fusible base, said fusible base having a major proportion of a phenol-formaldehyde condensation resin which has been

condensed in the presence of an additional resin.

2. A transfer comprising a paper strip upon which a fusible marking is imprinted, said fusible marking having a fusible base, said fusible base having a major proportion of a phenol-formaldehyde condensation resin which has been condensed in the presence of an additional resin, said fusible base also containing a minor proportion of a blown vegetable oil.

3. A transfer comprising a paper strip upon which a fusible marking is imprinted, said fusible marking having a fusible base, said fusible base having a major proportion of a phenol-formaldehyde condensation resin which has been condensed in the presence of an additional resin, said fusible base also containing minor proportions of additional fusible material and of a blown oil.

4. A transfer comprising a paper strip upon which a fusible marking is imprinted, said fusible marking having a fusible base, said fusible base having a major proportion of a phenol-formaldehyde condensation resin which has been condensed in the presence of an additional resin, said fusible base also containing minor proportions of a wax and of a blown oil.

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