Patented Sept. 8, 1931 1,822,416

UNITED STATES PATENT OFFICE

FREDERICK C. NONAMAKER, OF GLOUCESTER CITY, NEW JERSEY, ASSIGNOR TO FURNESS CORPORATION, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF NEW JERSEY

ART OF DELUSTERING ARTIFICIAL SILK

No Drawing. Application filed September 26, 1929. Serial No. 395,477.

This invention relates to the delustering of artificial silk.

In carrying out my invention I employ a cellulose compound having a different index of refraction from that of the cellulose in the finished thread itself, this cellulose compound being applied in ground or pulverized form. The ground material may be cellulose, cellulose esters or an intermediate compound, kapok or other suitable cellulose bearing material. Modified cellulose, such as hydro-cellulose, oxycellulose and the like may be used. It is mixed in the cellulose solution from which the thread is spun, the mixture being preferably homogeneous. The cellulose solution, after preparation, has no dissolving power on the ground cellulose and it is not affected. There is thus dispersed throughout the cellulose solution, and, therefore, throughout the precipitated filaments of the thread, innumerable infinitesimal particles of cellulose of a different index of refraction. This has the effect of increasing the opacity of the thread and its covering power.

As a specific example, I may employ cotton linters moistened with about a one-half percent hydrochloric acid solution. The linters so moistened are then dried substantially completely, the drying driving off the acid and leaving hydro-cellulose. Hydro-cellulose is extremely brittle so that it can be ground to a very fine state of division sufficient to permit of its introduction into the cellulose solution and of the spinning of such mixture through the spinnerets.

I claim:—

1. The herein described process which consists in mixing a cellulose solution with fine ground cellulose particles having a different index of refraction from the cellulose of the thread, and in spinning the thread from the mixture.

2. The herein described process which comprises moistening cotton linters with an acid solution and heating the moistened linters to drive off the acid and to dry the same, in grinding the so dried linters, in mixing the ground material in a cellulose solution, and in spinning the thread therefrom.

In testimony whereof I have hereunto signed my name.

FREDERICK C. NONAMAKER.