## ALIEN PROPERTY CUSTODIAN

PROCESS FOR SHAPED PROI FOR THE PRODUCTION PRODUCTS AND COATI COATINGS. WHICH ARE RESISTANT TO THE INFLU-ENCE OF MOTOR FUELS, OILS AND SOLVENTS

Fritz Heinrich, Selters, Fritz Duell, Montabaur. and Fritz Tempel, Berlin-Köpenik, Germany; vested in the Alien Property Custodian

No Drawing. Application filed March 10, 1941

The present invention concerns a process for the production of shaped products and coatings, which are resistant to the influence of motor fuels, oils and solvents.

It is known that the condensation products of 5 organic dihalogen compounds, as for example ethylene dlchioride,  $\beta\beta'$ -dichlor-diethylether etc., with alkali polysulfides, which are known as "thioplastes", excel in being motor fuel-proof, oilcellent qualities of the products both in physical and chemical respect, they were, however, too unreliable for practical use: During the employment of these products for technical purposes various come. For example these materials have a disagreeable, penetrating odor, which even by the addition of other smelling substances could not be eliminated. Thus the practical use was restricted to technical purposes. Another disadvantage con- 20 components of the thioplastes, is surprising. sists in that parts of the thioplastes, probably owing to their lower degree of polymerization, were solved by influence of the solvents. Although the solving of these parts of the thioplastes takes place in small quantities, it suffices 25 for rendering the reacting solution impure, by which fact in many cases the use of thioplastes is rendered impossible. By influence of fuels, for example, which must be practically free from sulfur compounds and resinous components, on 30 thioplastes, an amount of such undesired admix-

tures is solved, which will increase the impurity of the fuels to an inadmissible extent.

One has tried to wash off or extract the soluble components of the thioplastes. These measures. however, failed to succeed, both in technical and in economical respect.

According to the present invention it has been found that the disadvantages described as above can be removed in the following simple manner: proof and solvents-proof. In spite of these ex- 10 The protective coating of thioplaste is covered with a layer out of a solution or emulsion from polyacrylic acid or their derivatives, shellac, chiorinated caoutchouc or synthetic resins on the basis of phenol aldehyde, vinyl chloride or the difficultles turned up, which could not be over- 15 like. The kind of coating on the thioplaste depends on the strain, to which the shaped products and coatings will be exposed.

The fact that a single layer, described as above, suffices to prevent diffusion of gaseous and soluble Hereby it is indicated that the components, which are lost or solved, have a very low diffusibility, which probably means a considerable molecular magnitude.

Of course the same effect is produced by putting on several succeeding layers.

> FRITZ HEINRICH. FRITZ DUELL. FRITZ TEMPEL.