

ALIEN PROPERTY CUSTODIAN

CONVERSION PRODUCTS OF RUBBER

August Amann and Arthur Greth, Wiesbaden, Germany; vested in the Alien Property Custodian

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This invention is an improvement over Patent Number 2,200,715 and differs therefrom in the respects hereinafter indicated.

It has now been found that the conversion reaction of the rubber can be furthermore improved by replacing the isomerizing acids, which are not reactive to phenol, by their anhydrides. By doing this the decomposition reactions are almost completely eliminated, the resulting conversion products are more uniform and of improved quality. It has also been found that the acid anhydrides convert the rubber into a product which is soluble in linseed, chinawood or other varnish oils within a shorter time as the corresponding acids. It is also an essential advantage that the acid anhydrides, which are to be used, are less corrosive to the kettle material as for example iron etc., so that on the one side the reaction-rawproduct is obtained in a pure form and on the other side it is easier to supply suitable kettles.

Suitable acid anhydride are the anhydrides of the phosphoric and before all phosphorpentoxide. However also the anhydrides of the acids mentioned in the main patent are suitable f. i. the anhydrides of boric acid, trichlor-acetic acid and

the like. The amount of anhydride to be used corresponds the the amounts given in the main patent. The rubber conversion product is isolated from the reaction rawmaterial in the same way as described in the main patent or in the first amendment.

The process may be effected under pressure at temperatures above the boiling point of the phenol.

Example

570 parts of phenol, 375 parts of crepe rubber and 24.5 parts of phosphorpentoxide are heated for 4-6 hours to 170° at atmospheric pressure. After this time the conversion of the rubber is completed and the resinous product freed from the phenol by repeated precipitation from its toluol solution with alcohol. The purified product is soluble in hydrocarbons, linseed oil, china wood oil etc.

The conversion reaction can be completed within 1-1½ hours by applying pressure, the product possesses excellent varnish properties.

AUGUST AMANN.
ARTHUR GRETH.