

UNITED STATES PATENT OFFICE.

JULIUS STOCKHAUSEN, OF CREFELD, GERMANY.

COMPOUND OR EMULSION AND PRODUCTION OF SAME.

966,136.

Specification of Letters Patent.

Patented Aug. 2, 1910.

No Drawing.

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To all whom it may concern:

Be it known that I, JULIUS STOCKHAUSEN, a subject of the German Emperor, residing at Crefeld, Germany, have invented a new and useful Compound or Emulsion and Production of the Same; and I do hereby declare the following to be a full, clear, and exact description of the same.

The present improvements relate to a compound or emulsion, especially useful as a detergent soap for dry cleaning, chemical washing and as an emulsifier in the removal of fat and grease.

Soap (such as ordinary laundry soap, Marseille soap, or olive oil soap) is only in a small measure (about 5%) clearly soluble in hydrocarbon-chlorid (such as carbon-tetrachlorid, etc.)

My new compound, which is characterized by the inclusion of soap of castor oil, preferably neutral soap of castor oil, will, however, form a clear solution with a considerably greater quantity of soap—up to thirty or forty per cent. of soap.

My new compound consists of a mixture containing neutral soap of castor oil, soap (such as ordinary laundry soap, Marseille soap, or olive oil soap), a sulfo-oleaginous body (such as sulfonated fats, or oils, or fatty acids or oleic acids, or Turkey-red oil, or sulfonated soaps produced by treating the before mentioned sulfonated products with excess of alkali) and hydrocarbon chlorids (such as tetrachlorid of carbon, tetra- or pentachlorethane, tri- or perchlorethylene, etc.)

To produce my new compound, I may proceed as follows:

Example I: 100 parts of soap obtained by treating sulfonated oils and fats with more than 6% of caustic soda preferably at higher temperatures, which soap is commercially known as "Monopol-soap," are dissolved in little water, and then mixed with 60 to 80 parts of tetrachlorid of carbon and 5 to 15 parts of neutral castor oil soap, the mass thus obtained is mixed with 10 to 30 parts of ordinary laundry soap, instead of which olive oil soap may be employed.

Example II: 100 parts of Turkey-red oil are mixed with 30 to 50 parts of tetrachlor-

ethane and 5 to 15 parts of neutral castor oil soap, finally the mass thus obtained is dissolved in little water and mixed with 10 to 30 parts of laundry soap or olive oil soap.

The mixture can be employed for removal of fats, or for washing, and give, in many cases, a certain luster.

What I claim is:

1. A new compound containing soap of non-sulfonated castor oil, a sulfo-oleaginous body and hydrocarbon-chlorid.

2. A new compound containing soap of non-sulfonated castor oil, a sulfo-oleaginous body, Marseille soap and a hydrocarbon chlorid.

3. A new compound containing neutral soap of non-sulfonated castor oil, a sulfo-oleaginous body, and a hydrocarbon chlorid.

4. A new compound containing neutral soap of non-sulfonated castor oil, a sulfo-oleaginous body, Marseille soap and a hydrocarbon chlorid.

5. A new compound containing neutral soap of non-sulfonated castor oil, sulfonated castor oil, Marseille soap and tetrachlorid of carbon.

6. A process for producing a detergent compound, consisting in treating sulfonated oil with excess of alkali, and adding thereto a hydrocarbon chlorid and soap of non-sulfonated castor oil.

7. A process for producing a detergent compound, consisting in treating sulfonated oil with excess of alkali, and adding thereto a hydrocarbon chlorid, soap of non-sulfonated castor oil and Marseille soap.

8. A process for producing a detergent compound, consisting in treating sulfonated oil with excess of alkali, and adding thereto a hydrocarbon chlorid and neutral soap of non-sulfonated castor oil.

9. A process for producing a detergent compound, consisting in treating sulfonated castor oil with excess of alkali, and adding thereto tetrachlorid of carbon, and soap of non-sulfonated castor oil.

10. A process for producing a detergent compound, consisting in treating sulfonated castor oil with excess of alkali; and adding thereto tetrachlorid of carbon and neutral soap of non-sulfonated castor oil.

11. A process for producing a detergent compound, consisting in treating sulfonated castor oil with excess of alkali, and adding thereto tetrachlorid of carbon, neutral soap
5 of non-sulfonated castor oil and Marseille soap.

In testimony whereof, I have signed my

name to this specification in the presence of two subscribing witnesses.

JULIUS STOCKHAUSEN.

Witnesses:

HENRY QUADFLIEG,

AUGUST SCHMETZ.