

UNITED STATES PATENT OFFICE.

FRITZ HOFMANN AND LUDWIG TANK, OF ELBERFELD, GERMANY, ASSIGNORS TO FARBENFABRIKEN VORM. FRIEDR. BAYER & CO., OF ELBERFELD, GERMANY, A CORPORATION OF GERMANY.

PROCESS OF PRODUCING ERYTHRENE.

1,010,405.

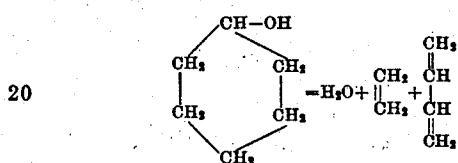
Specification of Letters Patent. Patented Nov. 28, 1911.

No Drawing. Original application filed January 21, 1911, Serial No. 603,892. Divided and this application filed April 11, 1911. Serial No. 620,428.

To all whom it may concern:

Be it known that we, FRITZ HOFMANN and LUDWIG TANK, doctors of philosophy, chemists, citizens of the German Empire, residing at Elberfeld, Germany, have invented new and useful Improvements in Processes of Producing Erythrene, of which the following is a specification.

The present application which is a divisional application from our application Ser. No. 603892 relates to the production of erythrene which can be obtained by heating cyclohexanol above 500° C. Agents promoting the decomposition can be added. This process probably proceeds *e. g.* according to the following equation:



By this process it is possible to obtain this valuable olefin with double bonds in a very simple manner.

In order to illustrate the new process more fully the following example is given, the parts being by weight: 1000 parts of cyclo-

hexanol are dropped into an iron tube heated to 600° C. The decomposition takes place immediately with a lively evolution of gas. Water, cyclohexene and cyclohexanone and also a small quantity of unchanged cyclohexanol distil over. The gases are then fixed by bromin or are directly condensed. Erythrene is thus obtained with a good yield.

The iron tube can be filled with native aluminium sesquioxid.

We claim:—

1. The process for producing erythrene, which process consists in heating above 500° C. cyclohexanol, substantially as described.
2. The process for producing erythrene, which process consists in heating above 500° C. cyclohexanol with the addition of an agent promoting the decomposition, substantially as described.

In testimony whereof we have hereunto set our hands in the presence of two subscribing witnesses.

FRITZ HOFMANN. [L. s.]
LUDWIG TANK. [L. s.]

Witnesses:

ALFRED HENKEL,
H. HEIZLEDER.