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UNITED STATES PATENT OFFICE.

ERNST HEINZE, OF WIESDORF-ON-THE-RHINE, GERMANY, ASSIGNOR TO FARBENFABRIKEN VORM. FRIEDR. BAYER AND CO., OF LEVERKUSEN, NEAR COLOGNE-ON-THE-RHINE, GERMANY.

PROCESS FOR PRODUCING THE HYDROXIDES OF ALKALI METALS OR OF ALKALINE-EARTH METALS.

No Drawing. Application filed October 6, 1924. Serial No. 742,057.

To all whom it may concern:

Be it known that I, ERNST HEINZE, a citizen of Germany, residing at Wiesdorf-on-the-Rhine, in the State of Prussia, Germany, have invented new and useful Improvements in Processes for Producing the Hydroxides of Alkali Metals or of Alkaline-Earth Metals, of which the following is a specification.

I have found a new and valuable process for producing the hydroxides of the alkali forming metals, that is, the alkali metals and the alkaline earth metals, which process is of a great technical value. It consists in decomposing amalgams of the metals with water in the presence of alloys which are not attacked by the amalgams, water and lyes. The known reaction between water and amalgams is very much accelerated by using such alloys, as an alloy of iron with 21 per cent chromium, 6 per cent nickel and 0,3 per cent carbon or an alloy of iron with 75 per cent to 100 per cent of chromium.

As examples of such alloys I give the following:—

Iron with 22,4% of chromium and 7,4% of nickel.

Iron with 11,4% of chromium and 4,1% of nickel

Iron with 7,9% of chromium and 3,2% of nickel.

Iron with 14,2% of chromium.

Iron with 75% of chromium.

Iron with 100% of chromium.

It is profitable to move the alloy against the amalgam or to stir the mixture. One may also use stirrers made of such alloys.

I claim:—

1. The process of producing the hydroxides of the alkali forming metals, which process consists in treating an amalgam of an alkali forming metal with water in the presence of an alloy of iron with chromium, substantially as described.

2. The process of producing the hydroxides of the alkali forming metals, which process consists in treating an amalgam of an alkali forming metal with water in the presence of an alloy of iron with chromium and nickel, substantially as described.

In testimony whereof I have hereunto set my hand.

ERNST HEINZE.