PATENT SPECIFICATION



Convention Date (Germany): April 18. 1925.

250,890

Application Date (in United Kingdom): June 13, 1925. No.15,413 / 25.

(Application for Patent of Addition to No. 243,670: Convention Date (Germany): v. 28, 1924.)

Complete not accepted.

COMPLETE SPECIFICATION.

A Process for Converting Mercury into another Element.

We, SIEMENS & HALSKE AKTIEN-GESELLSCHAFT, of Berlin-Siemensstadt, Germany, a German company, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention is an improvement in or 10 modification of the invention described and claimed in Specification No. 243,670.

In the parent Specification No. 243,670 there is described a process for converting mercury into another element in which the mercury is subjected to electric shocks. It has now been found that precious metals, especially gold, are produced in mercury when the mercury is electrically disturbed by passing there-through an electric current of sufficient strength.

For example, two electrodes of a desired metal may be allowed to dip into the mercury at a definite distance from 25 each other and the current passed through the mercury with the aid of these electrodes. The quantity of gold produced in the mercury naturally depends upon the strength of the current 30 and the duration of the operation. Advantageously, as strong a current as possible is passed through the mercury. The action takes place with direct current as well as with alternating current.

It has further been found that the quantity of gold formed is greater when the electrodes employed remain passive to the mercury for example, iron which becomes coated with a layer of oxide that renders it passive. In this case the 40 action of the current is obviously reinforced owing to the fact that directly on the electrodes there are produced cathode rays which act on the mercury surrounding the electrodes and lead to the disrup- 45 tion of the atoms.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we 50 claim is:—

1. The improvement in or modification of the process for converting mercury into another element described and claimed in Specification No. 243,670 55 characterised by the feature that an electric current is passed through mercury, whereupon the resulting gold is separated for the mercury.

2. A process according to Claim 1, 60 characterised by the feature that the current is led to the mercury by means of electrodes which consist of a substance that is passive to the mercury.

3. The improvement in or modification 65 of the process for converting mercury into another element substantially as hereinbefore described.

Dated this 13th day of June, 1925.

HASELTINE, LAKE & Co., 28, Southampton Buildings, London, England, and 15, Park Row, New York, N.Y., U.S.A., Agents for the Applicants.

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