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PROCESS FOR PRODUCING BERYLLIUM ALLOYS

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2 Claims. (Cl. 75—17)

This invention relates to a process for producing beryllium alloys.

In the copending application of Wilhelm Rohn, Serial No. 710,730, filed February 10, 1934, there is disclosed, inter alia, a process for forming beryllium alloys in which, for example, a bath of molten metal containing, for instance, metals of the iron group (iron, nickel, cobalt and manganese) or metals of the chromium group (chromium, molybdenum, tungsten and uranium) is prepared and carbon is dissolved in the metal bath, and the bath is then brought into reaction with beryllium oxide. The reaction between the beryllium oxide and the carbon dissolved in the metal bath is carried out under a reduced partial pressure of oxygen which may be effected, for example, by introducing into the reaction chamber an excess of hydrogen or other inert or reducing gases or by evacuating said reaction chamber.

According to the present invention the carbon is introduced in the form of beryllium carbide and the metal bath, with the beryllium carbide dissolved therein, is brought into reaction with beryllium oxide. It is particularly useful to melt the base metal, for example, nickel, cobalt or iron, in a crucible or on a hearth of beryllium oxide and to add the beryllium carbide even before initial liquefying or after partial or complete fusion.

By the use of beryllium carbide the base metal is particularly enriched from the reaction of the beryllium carbide and the beryllium oxide.

In other respects the process is preferably carried out as set forth in said copending application.

I claim:

1. The process for producing beryllium alloys which includes dissolving beryllium carbide into a bath of molten metal with which the beryllium is to be alloyed, and bringing beryllium oxide into reaction with said bath.

2. The process for producing beryllium alloys which includes dissolving beryllium carbide into a bath of molten metal with which the beryllium is to be alloyed, and bringing beryllium oxide into reaction with said bath in a crucible lined with beryllium oxide.

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