

PHLEGMATIZED METAL POWDER OR ALLOY POWDER AND METHOD AND REACTION VESSEL FOR THE PRODUCTION THEREOF

Abstract

A method and a device are described for the production of metal powder or alloy powder of a moderate grain sizes less than 10 μm , comprising or containing at least one of the reactive metals zirconium, titanium, or hafnium, by metallothermic reduction of oxides or halogenides of the cited reactive metals with the aid of a reducing metal, wherein said metal powder or alloy powder is phlegmatized by adding a passivating gas or gas mixture during and/or after the reduction of the oxides or halogenides and/or is phlegmatized by adding a passivating solid before the reduction of the oxides or halogenides, wherein both said reduction and also said phlegmatization are performed in a single gas-tight reaction vessel which can be evacuated.

[Fig. 1]