

Title (en)  
METHOD FOR PRODUCING SEED CRYSTAL OF COBALT POWDER

Title (de)  
VERFAHREN ZUM HERSTELLEN EINES IMPFKRISTALLS AUS KOBALTPULVER

Title (fr)  
PROCÉDÉ DE PRODUCTION DE CRISTAL DE GERME DE COBALT

Publication  
**EP 3369499 A1 20180905 (EN)**

Application  
**EP 16859622 A 20161017**

Priority  
• JP 2015210258 A 20151026  
• JP 2016080690 W 20161017

Abstract (en)  
Provided is a production method for obtaining cobalt powder efficiently by the way for increasing reduction reaction efficiency to produce the cobalt powder from a solution containing a cobalt ammine sulfate complex. The method for producing seed crystals of cobalt powder, sequentially including: a complexing step of adding ammonia, an ammonia compound solution, or both of ammonia and an ammonia compound solution to a cobalt sulfate solution to obtain a solution containing a cobalt ammine sulfate complex; a mixing step of adding a solid to the solution containing the cobalt ammine sulfate complex obtained in the complexing step to form a mixture slurry; a reduction and precipitation step of charging a reaction vessel with the mixture slurry obtained in the mixing step, blowing hydrogen gas into the reaction vessel and reducing cobalt contained in the mixture slurry to obtain a cobalt powder slurry containing cobalt precipitate with a cobalt component precipitated on the surface of the solid as cobalt powder; and a solid-liquid separation step of performing solid-liquid separation on the cobalt powder slurry obtained in the reduction and precipitation step to obtain cobalt precipitate and a solution after reduction.

IPC 8 full level  
**B22F 9/26** (2006.01)

CPC (source: EP US)  
**B22F 9/26** (2013.01 - EP US); **B22F 2301/15** (2013.01 - US); **B22F 2304/10** (2013.01 - US); **B22F 2999/00** (2013.01 - EP US); **C22C 1/0433** (2013.01 - EP US)

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