

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2024/0213863 A1 SUGIYAMA et al.

Jun. 27, 2024 (43) **Pub. Date:**

(54) HEAT TREATMENT FURNACE AND HEAT TREATMENT METHOD

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(21) Appl. No.: 18/531,150

(22)Filed: Dec. 6, 2023

(30)Foreign Application Priority Data

Dec. 27, 2022 (JP) 2022-210986

Publication Classification

(51) Int. Cl. H02K 15/12 (2006.01)C21D 1/18 (2006.01)

C21D 1/74	(2006.01)
C21D 9/00	(2006.01)
C21D 9/46	(2006.01)
F27B 9/12	(2006.01)
F27D 9/00	(2006.01)

(52) U.S. Cl. CPC H02K 15/125 (2013.01); C21D 1/18 (2013.01); C21D 1/74 (2013.01); C21D 9/0062 (2013.01); C21D 9/46 (2013.01); F27B 9/12 (2013.01); F27D 9/00 (2013.01); F27B 2009/126 (2013.01); F27D 2009/0075

(2013.01)

(57)**ABSTRACT**

Provided is a heat treatment furnace used to anneal a workpiece to be heat-treated, including a heating chamber configured to heat the workpiece, a first cooling chamber configured to cool the workpiece having passed through the heating chamber, a second cooling chamber that is located on a downstream side of the first cooling chamber in a conveying direction of the workpiece and that is configured to cool the workpiece having passed through the first cooling chamber, and an atmosphere gas supply device configured to supply, as an in-furnace atmosphere gas, an exothermic converted gas to each of the first cooling chamber and the second cooling chamber, the atmosphere gas supply device selectively supplying a first gas that is an exothermic converted gas and a second gas that is an exothermic converted gas and that has a dew point lower than a dew point of the first gas.

