

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2022/0352792 A1 Hongo

Nov. 3, 2022 (43) **Pub. Date:**

(54) COLD PRESSURE WELDING APPARATUS, COIL MANUFACTURING APPARATUS, COIL, AND METHOD OF MANUFACTURING THE SAME

(71) Applicant: Aster Co., Ltd., Yokote-shi (JP)

Inventor: Takenobu Hongo, Fukushima (JP)

Assignee: Aster Co., Ltd., Yokote-shi (JP)

Appl. No.: 17/810,183

(22) Filed: Jun. 30, 2022

Related U.S. Application Data

Continuation of application No. 16/864,953, filed on May 1, 2020, which is a division of application No. 16/116,188, filed on Aug. 29, 2018, now Pat. No. 10,742,097, which is a division of application No. 15/105,485, filed on Jun. 16, 2016, now Pat. No. 10,211,710, filed as application No. PCT/JP2014/ 083556 on Dec. 18, 2014.

(30)Foreign Application Priority Data

Dec. 18, 2013	(JP)	 2013-261581
Dec. 15, 2014	(IP)	2014-252885

Publication Classification

(51) Int. Cl. (2006.01)H02K 15/00 B23K 20/02 (2006.01)

> H01F 41/061 (2006.01)

U.S. Cl. CPC H02K 15/0068 (2013.01); B23K 20/02 (2013.01); B23K 20/028 (2013.01); H01F 41/061 (2016.01); B23K 2101/38 (2018.08)

(57)ABSTRACT

The cold pressure welding apparatus includes a first holding part capable of sandwiching a first flat conductor, a second holding part disposed opposite to the first holding part and capable of sandwiching a second flat conductor, and a drive part for moving the first holding part and the second holding part. The drive part can move the first holding part and the second holding part between a first direction separated position and a close position along a first direction. The drive part can move the first holding part and the second holding part between a second direction separated position and a sandwiching position along a second direction.

