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MATSUDA(10) **Pub. No.: US 2024/0213837 A1**(43) **Pub. Date: Jun. 27, 2024**(54) **ROTOR, ROTARY ELECTRIC MACHINE,
AND DRIVE APPARATUS**(52) **U.S. Cl.**CPC **H02K 1/32** (2013.01); **H02K 1/276**
(2013.01); **B60K 1/00** (2013.01)(71) Applicant: **NIDEC CORPORATION**, Kyoto (JP)(72) Inventor: **Kazutoshi MATSUDA**, Kyoto (JP)(21) Appl. No.: **18/456,523**(22) Filed: **Aug. 28, 2023**(30) **Foreign Application Priority Data**

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(57)

ABSTRACT

The present invention is a rotor rotatable about a center axis, and includes a rotor core having a plurality of magnet holes and a flow path through which a refrigerant flows, and a plurality of magnets accommodated in each of the plurality of magnet holes. The plurality of magnet holes and the flow path each extend in the axial direction. When viewed in the axial direction, the flow path is surrounded by the plurality of magnets. The plurality of magnets include a first magnet and a second magnet. The plurality of magnet holes include a first magnet hole accommodating the first magnet and a second magnet hole accommodating the second magnet. The first magnet is disposed radially outside the second magnet. When viewed in the axial direction, the shortest distance between the flow path and the first magnet is shorter than the shortest distance between the flow path and the second magnet.

