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**TAKAKUWA et al.**(10) **Pub. No.: US 2022/0368188 A1**(43) **Pub. Date: Nov. 17, 2022**(54) **WATERPROOF FAN****F04D 29/52** (2006.01)**F04D 19/00** (2006.01)(71) Applicant: **SANYO DENKI CO., LTD.**, Tokyo  
(JP)(52) **U.S. Cl.**CPC ..... **H02K 3/44** (2013.01); **H02K 5/163**(2013.01); **H02K 7/085** (2013.01); **H02K****21/22** (2013.01); **F04D 29/522** (2013.01);**F04D 19/002** (2013.01)(72) Inventors: **Munenori TAKAKUWA**, Tokyo (JP);  
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A waterproof fan includes: a rotor including a rotating blade capable of rotating about a rotation axis; a stator including a plurality of stator cores extending in a radial direction relative to the rotation axis, and a winding wound around each of the stator cores; a frame including a housing space opening toward one side of the rotation axis; a circuit board electrically connected to the winding and housed in the housing space; a waterproofing resin portion covering the stator and the circuit board to block the opening of the housing space; and a positioning member provided in the housing space and configured to position the circuit board at a position away from an inner wall of the housing space.

