

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2022/0360149 A1 HIRABAYASHI et al.

(43) Pub. Date:

Nov. 10, 2022

(54) MOTOR

(71) Applicant: MINEBEA MITSUMI Inc., Nagano

(72) Inventors: Koichiro HIRABAYASHI, Hirakata-shi (JP); Akiko IKUTA, Fukuroi-shi (JP);

Yukimasa MATSUMURA, Kikugawa-shi (JP); Kazuaki SATO, Yonago-shi (JP); Minoru KURODA, Sakaiminato-shi (JP); Bora IN, Yonago-shi (JP)

(21) Appl. No.: 17/813,064

(22) Filed: Jul. 18, 2022

Related U.S. Application Data

Continuation of application No. 15/693,881, filed on Sep. 1, 2017, now Pat. No. 11,424,663.

(30)Foreign Application Priority Data

Sep. 2, 2016 (JP) 2016-172048

Publication Classification

(51) **Int. Cl.** H02K 13/10 (2006.01)H02K 5/14 (2006.01) H01R 39/38 (2006.01)H02K 5/24 (2006.01)

U.S. Cl.

CPC H02K 13/10 (2013.01); H02K 5/145 (2013.01); H01R 39/381 (2013.01); H02K 5/24 (2013.01); H01R 2201/10 (2013.01)

(57)ABSTRACT

A motor includes a commutator, a bracket including a conductive brush, first and second wall parts, and first and second deformable parts. The conductive brush is in contact with the commutator. The first wall part includes a first surface extending along a first surface of the conductive brush. The second wall part includes a second surface extending along a second surface of the conductive brush located on a side opposite the first surface of the conductive brush. The first deformable part is in contact with both the first surface of the conductive brush and the first surface of the first wall part, and is deformable in response to movement of the conductive brush. The second deformable part is in contact with both the second surface of the conductive brush and the second surface of the second wall part, and is deformable in response to movement of the conductive brush.



