thinning the motor.

**[0006]** Alternatively, it is conceivable to reduce the height of the resin provided in the stator core in order to reduce the thickness of the motor. However, in the stator described in PTL 1, since three or more jumper wires are housed in parallel to the jumper wire storage, a jumper wire storage side wall needs to have a predetermined height or more, and it is disadvantageous in reducing the thickness of the motor.

**[0007]** Embodiments of the present disclosure provide a brushless DC motor capable of reducing a thickness of a ceiling fan.

**[0008]** A brushless DC motor according to an aspect of the present disclosure is a brushless DC motor provided on a ceiling fan. The brushless DC motor includes a stator core that has a plurality of teeth extending in a radial direction, and a plurality of slots provided between the plurality of teeth, a plurality of insulating sheets that are provided in the plurality of slots, and have sheet protrusions protruding from end faces of the teeth, and insulating members that each have an annular base and an advancing portion extending in a radial direction along the end faces of the teeth from the base and advancing between adjacent two sheet protrusions, wherein each of the advancing portions extends to an outer peripheral end of the stator core.

**[0009]** A brushless DC motor according to another example of the present disclosure is a brushless DC motor provided on a ceiling fan. The brushless DC motor includes a stator that has a stator core constructed by connecting a plurality of teeth extending in a radial direction in an annular shape, and coil bodies wounded around the stator core, a shaft that is fixed to a central portion of the stator core, and a rotor that has a magnet surrounding the stator core. The stator includes an insulating member that secures insulation between jumper wires connecting the coil bodies to an end in an axial direction, the insulating member includes a disk plane positioned closer to the stator core than an end of the coil body in an axial direction on an inner peripheral side of the coil body, and the jumper wires are wired along the disk plane.

**[0010]** The expressions of the present disclosure among methods, devices, systems, recording media, and computer programs are also effective as aspects of the present disclosure.

**[0011]** According to the present disclosure, it is possible to provide the brushless DC motor capable of reducing the thickness of the ceiling fan.

## CLAIMS

1. A brushless DC motor provided on a ceiling fan, comprising:

a stator core that includes a plurality of teeth extending in a radial direction, and a plurality of slots each provided between a corresponding pair of adjacent teeth among the plurality of teeth;

a plurality of insulating sheets each being provided in a corresponding one of the plurality of slots, and having a sheet protrusion protruding from end faces of teeth adjacent to the slot; and

an insulating member that has an annular base and advancing portions extending in a radial direction along the end faces of the plurality of teeth from the annular base, the advancing portions each advancing between a corresponding pair of adjacent sheet protrusions each being the sheet protrusion, wherein each of the advancing portions extends to an outer peripheral end of the stator core.

2. The brushless DC motor according to Claim 1, wherein a pair of the advancing portions are at positions separated from each other by 180° in a circumferential direction.

3. The brushless DC motor according to Claim 1, wherein each of the insulating members has an overhanging portion protruding to a side opposite to the stator core from an outer peripheral end of the advancing portion.

4. The brushless DC motor according to any one of Claims 1 to 3, wherein the insulating members are provided on both sides of the stator core in an axial direction, respectively.