CLAIMS

What is claimed is:

1. A combined motor stator, configured to be cooperated with a rotor, comprising:

a stator yoke, having a plurality of first mount structures; and

a plurality of stator teeth, wherein each of the plurality of stator teeth has a head portion, a second mount structure, and a body portion located between and connected to the second mount structure and the head portion, the plurality of first mount structures and the second mount structures are respectively mount holes and insertion portions mating the mount holes, the second mount structures of the plurality of stator teeth are respectively and removably mounted on the plurality of first mount structures of the stator yoke;

wherein each of the insertion portions is in a dovetail shape;

wherein in each of the plurality of stator teeth, the insertion portion is located closer to an axis of the stator yoke than the head portion and the body portion, the insertion portion has a first end and a second end opposite to each other, the first end is connected to the body portion, a width of the first end is equal to a width of the body portion, and a width of the insertion portion gradually increases from the first end toward the second end,

wherein each of the plurality of stator teeth is configured to be spaced apart from the rotor by an air gap, the air gap has a minimum gap width and a maximum gap width, every two adjacent of the plurality of the stator teeth and the stator yoke together form a stator slot therebetween, every two adjacent of the plurality of the stator teeth form a slot opening therebetween and connected to the stator slot, a ratio of an opening width of the slot opening to the minimum gap width of the air gap is not less than 0.6, and is not more than 6, and a ratio of the maximum gap width of the air gap to the minimum gap width of the air gap is not less than 5 and is not more than 11.

2. The combined motor stator according to claim 1, wherein the stator yoke has a bottom surface and two lateral surfaces, two opposite sides of the bottom surface are respectively connected to the two lateral surfaces, one of the mount holes is formed by the bottom surface and the two lateral surfaces, and each of the lateral surfaces has an angle to

the bottom surface, and the angle is not less than 60 degrees and is not more than 89.5 degrees.

3. The combined motor stator according to claim 1, wherein the stator yoke and each of the plurality of stator teeth are formed by silicon steel sheets being stacked on top of one another.

4. A combined motor stator, configured to be cooperated with a rotor, comprising:

a stator yoke, having a plurality of first mount structure; and

a plurality of stator teeth, wherein each of the plurality of stator teeth has a head portion, a second mount structure, and a body portion located between and connected to the second mount structure and the head portion, the plurality of first mount structures and the second mount structures are respectively mount holes and insertion portions mating the mount holes, the second mount structures of the plurality of stator teeth are respectively and removably mounted on the plurality of first mount structures of the stator yoke, and each of the plurality of stator teeth is configured to be spaced apart from the rotor by an air gap;

wherein the air gap has a minimum gap width and a maximum gap width, every two adjacent of the plurality of stator teeth and the stator yoke together form a stator slot therebetween, every two adjacent of the plurality of stator teeth form a slot opening therebetween and connected to the stator slot, a ratio of an opening width of the slot opening to the minimum gap width of the air gap is not less than 0.6 and is not more than 6, a ratio of the maximum gap width of the air gap to the minimum gap width of the air gap is not less than 5 and is not more than 11;

wherein in each of the plurality of stator teeth, the insertion portion is located closer to an axis of the stator yoke than the head portion and the body portion, the insertion portion is in a rectangular shape and has a first end and a second end opposite to each other, the first end is connected to the body portion, and a width of the first end is equal to a width of the body portion.

5. The combined motor stator according to claim 4, wherein the stator yoke and each of the plurality of stator teeth are formed by silicon steel sheets being stacked on top of one another.