CLAIMS

What is claimed is:

1. A portable and rechargeable blender configured to blend foodstuffs, the blender comprising:

a base assembly, a container assembly, a detector, and control circuitry, wherein the base assembly includes:

a set of one or more blades permanently mounted to the base assembly, wherein the set of one or more blades is configured to rotate and blend the foodstuffs;

an electrical motor configured to drive the rotation of the set of one or more blades, wherein the electrical motor is integrated permanently into the base assembly;

a rechargeable battery configured to power the electrical motor such that, during blending by the blender, no power is supplied to the electrical motor from an external power source, wherein the rechargeable battery is integrated permanently into the base assembly such that the base assembly forms an integral whole;

a standardized charging interface configured to conduct electrical power to the rechargeable battery;

a power button configured to be engaged manually by a user to turn the blender on and off; and

a first mechanical coupling configured to couple the base assembly to the container assembly;

wherein the container assembly is configured to hold the foodstuffs within a container body during blending by the blender, the container assembly including:

a proximal end that is open and that is disposed, subsequent to the base assembly being coupled to the container assembly, near the set of one or more blades;

a distal end opposite the proximal end; and

a second mechanical coupling disposed at or near the proximal end, wherein the second mechanical coupling is configured to engage the first mechanical coupling of the base assembly to couple the base assembly to the container assembly, and wherein the container

body includes one or more magnetic elements disposed at or near the proximal end of the container assembly;

wherein the detector is configured to detect whether the first mechanical coupling is engaged with the second mechanical coupling in a manner operable and suitable for blending by the blender, wherein detection by the detector is based on proximity of the magnetic elements in the detector with the one or more magnetic elements included in the container body; and

wherein the control circuitry is configured to:

control charging of the rechargeable battery through the standardized charging port;

control the electrical motor during rotation of the set of one or more blades;

determine whether the first mechanical coupling is engaged with the second mechanical coupling in the manner operable and suitable for blending by the blender, wherein the determination is based on the detection by the detector; and

allow or prevent rotation of the set of one or more blades, based on the determination whether the first mechanical coupling is engaged with the second mechanical coupling in the manner operable and suitable for blending by the blender.

2. The blender of claim 1, where the rechargeable battery is not user-replaceable.

3. The blender of claim 1, wherein the standardized charging interface is a universal serial bus (USB) port configured to receive an electrical connector for charging the rechargeable battery.

4. The blender of claim 1, wherein the standardized charging interface is configured to support wireless charging of the rechargeable battery.

5. The blender of claim 1, wherein the first and second mechanical couplings are threaded couplings.

6. The blender of claim 1, wherein the container assembly has a volume between 10 and 22 ounces.

7. The blender of claim 1, wherein the base assembly has a cylindrical shape having a diameter between 2 and 4 inches.

8. The blender of claim 1, wherein the rechargeable battery has a capacity between 1000 mAh and 4000 mAh.

9. The blender of claim 1, wherein the electrical motor is configured to operate at a voltage between 5V and 10V, and wherein the electrical motor is configured to spin the set of one or more blades at a speed between 20,000 and 30,000 rotations per minute.

10. The blender of claim 1, wherein the container assembly further includes a removable cap disposed at or near the distal end.

11. The blender of claim 10, wherein the container assembly further includes a removable filter disposed at or near the distal end, wherein the removable filter is configured to strain blended foodstuffs when the blended foodstuffs are removed from the container assembly through an opening created by removing the removable cap.

12. The blender of claim 1, wherein the control circuitry is included in the base assembly.