What is claimed is:

1. A disposable container for a fluid which comprises:
   a closed volume formed of a foldable flexible material, one or more inlets in said container, one or more outlets in said container,
   an impeller assembly mounted at least partially within said closed volume of said container, said impeller assembly comprising at least one moveable blade and a protective hood positioned over and around said at least one blade such that when said folded flexible material is in a folded state, said protective hood protects said folded flexible material from damage by said at least one blade, said impeller assembly sealed to said container.

2. The disposable container of claim 1, wherein said hood comprises a top surface having one or more apertures through which liquid can flow.

3. The disposable container of claim 1, wherein said hood comprises one or more open regions normal to the axis of the impeller assembly, through which liquid can flow.

4. The disposable container of claim 1, wherein said hood is dome-shaped.

5. The disposable container of claim 1, wherein the positioning of said hood over and around said at least one blade is such that said at least one blade does not contact said hood.

6. The disposable container of claim 1, wherein the positioning of said hood over and around said at least one blade is such that said at least one blade does not contact said container.

7. The disposable container of claim 1, wherein said impeller assembly is magnetically driven.

8. A fluid processing system which comprises:
the container of Claim 1,
a tangential flow filtration unit and conduits to effect flow from said container to said tangential flow filtration unit and back to said container.

9. A method of mixing fluid, comprising:
providing a container for a fluid comprising a closed volume formed of a foldable flexible material,
one or more inlets,
one or more outlets, and
an impeller assembly mounted at least partially within said closed volume, said impeller assembly comprising at least one moveable blade and a protective hood positioned over and around said at least one blade such that when said folded flexible material is in a folded state, said protective hood protects said folded flexible material from damage by said at least one blade, said impeller assembly sealed to said container;
introducing fluid to be mixed in said container; and
actuating said at least one moveable blade.

10. The method of claim 9, wherein said at least one movable blade is actuated magnetically.

11. The disposable container of claim 1, wherein said protective hood has a plurality of spaced apertures comprising a first ring of apertures and a second ring of apertures located radially inwardly of said first ring of apertures.

12. The disposable container of claim 11, further comprising a third ring of apertures located radially inwardly of said second ring of apertures.