Claims

1. A containerized aquatic farming system comprising:

a set of aquatic farming modules arranged in one or more stacked levels, each stacked level comprising an array of one or more aquatic farming modules, each aquatic farming module comprising:

an intermodal shipping container comprising a pair of opposing side walls and a pair of opposing end entrances; and

a housing structure disposed in the intermodal shipping container and extending between the side walls thereof, the housing structure comprising:

a first compartment for storing water and aquatic organisms; and

a second compartment adjacent to the first compartment for installing a set of water treatment mechanisms to treat the water in the first compartment;

a set of access doors disposed at one or both end entrances of the intermodal shipping container for user accessibility into the intermodal shipping container, the access doors actuatable planarly for selectively opening/closing the respective end entrances; and

one or more external access platforms integrally formed with or permanently attached to the housing structure or intermodal shipping container, wherein each external access platform is attached to the housing structure or intermodal shipping container by a hinge component such that the external access platform is rotatable about a lateral hinge axis,

wherein for each stacked level of aquatic farming modules, selective opening/closing of the end entrances of the intermodal shipping containers in said stacked level facilitates user accessibility to the housing structures in said stacked level for farming the aquatic organisms.

2. The containerized aquatic farming system according to claim 1, each access door comprising a roller shutter coupled to an upper portion of the respective end entrance, the roller shutter actuatable vertically at the respective end entrance.

3. The containerized aquatic farming system according to claim 1 or 2, wherein the one or more external access platforms are coupleable to bottom portions of the end entrances of the intermodal shipping container.

4. The containerized aquatic farming system according to any one of claims 1 to 3, each housing structure further comprising multiple structural elements forming the first and second compartments.

5. The containerized aquatic farming system according to claim 4, the structural elements in each housing structure comprising:

a first longitudinal panel adjacent to one side wall of the intermodal shipping container and bounding the first compartment; and

a second longitudinal panel adjacent to the other side wall of the intermodal shipping container and bounding the second compartment.

6. The containerized aquatic farming system according to claim 5, the structural elements in each housing structure further comprising a third longitudinal panel interposing the first and second longitudinal panels to separate the first and second compartments.

7. The containerized aquatic farming system according to any one of claims 4 to 6, the structural elements in each housing structure comprising one or more first partition panels dividing the first compartment into a plurality of first sub-compartments for storing a plurality of groups of aquatic organisms.

8. The containerized aquatic farming system according to claim 7, wherein the first partition panels are removably installed in the first compartment for selectively dividing the first compartment into the first sub-compartments.

9. The containerized aquatic farming system according to any one of claims 4 to 8, the structural elements in each housing structure comprising one or more second partition panels dividing the second compartment into a plurality of second sub-compartments for installing the water treatment mechanisms.

10. The containerized aquatic farming system according to claim 9, each second partition panel comprising an opening for connecting the water treatment mechanisms to one another.

11. The containerized aquatic farming system according to any one of claims 4 to 10, the structural elements in each housing structure comprising a platform panel disposed on the second compartment to facilitate user accessibility through the intermodal shipping container.

12. The containerized aquatic farming system according to any one of claims 4 to 11, wherein the structural elements in each housing structure are welded to one another.

13. The containerized aquatic farming system according to any one of claims 4 to 12, wherein the structural elements in each housing structure comprise a polyethylene or polypropylene material.

14. The containerized aquatic farming system according to any one of claims 1 to 13, each aquatic farming module further comprising a protective layer lining interior surfaces of the intermodal shipping container, the protective layer comprising a corrosion-resistant material.

15. The containerized aquatic farming system according to claim 14, wherein the corrosion-resistant material is epoxy or polyurethane.

16. The containerized aquatic farming system according to any one of claims 1 to 15, further comprising a set of external systems connectable to the housing structures via the end entrances of the intermodal shipping containers.

17. The containerized aquatic farming system according to claim 16, further comprising a set of external modules arranged with the aquatic farming modules for housing the external systems.

18. The containerized aquatic farming system according to claim 16 or 17, wherein the external systems comprise a water recycling system and/or waste recycling system.