~~The~~ Claims

What we claimed is:

1. A wave-forming apparatus for producing a wave for surfing in a play area of a pool, comprises:

a container body having at least a bottom plate capable of at least temporarily capturing water on the bottom plate;

a moving track including a slope track for moving the container body in which the container body moves along from a start position above a draft waterline of the pool to a lower position where at least a part of the container body sinks under the draft waterline of the pool; and an in-pool traveling track for moving the container body forward in a state that at least a part of the container body sunk in the pool facing the play area;

wherein the container body moves forward on the slope track and the in-pool traveling track in a state where the front surface of the container body faces the play area, and discharges the water captured by the container body toward the play area ahead;

wherein the movement of the container body in the moving track is a free fall movement on the slope, and

wherein the container body comprise at least a bottom plate and a back plate.

~~2. A wave-forming apparatus according to claim 1, wherein the movement of the container body in the moving track is a free fall movement on the slope.~~

~~3. A wave-forming apparatus according to claim 1 or 2, wherein the container body comprise only a bottom plate, which bottom plate has a slope bottom that the front side in the advancing direction is low and the rear side is high.~~

~~4. A wave-forming apparatus according to claim 1 or 2, wherein the container body comprises a bottom plate and a back plate.~~

~~5.~~ 2. A wave-forming apparatus according to claim 1 ~~3 or 4~~ wherein the container body comprises side plates additionally.

~~6.~~ 3. A wave-forming apparatus according to ~~any one of claims 3 to 5~~ claim 1 or 5, wherein the container body comprises a detachable weight, the weight of the container body can be adjusted by providing the detachable weight on a part of the container body.

~~7.~~ 4. A wave-forming apparatus according to any one of claims 1 to 3 ~~6~~, further comprising a lane partition wall built along the side of the traveling lane for the container body in the in-pool traveling track.

~~8.~~ 5. A wave-forming apparatus according to any one of claims 1 to ~~7~~ 4, wherein the movement of the container body in the moving track adds an acceleration movement by a catapult or an acceleration movement using an elastic body provided at the position on the slope track can also be combined in addition to the free-falling movement on the slope.

~~9.~~ 6. A wave-forming apparatus according to any one of claims 1 to ~~8~~ 5, wherein a plurality of container bodies are provided, and the container bodies are arranged in a row in a width direction so as to face the front surfaces of the respective containers with respect to the play area.

~~10.~~ 7. A wave-forming apparatus according to any one of claims 1 to 5 ~~8~~, wherein the container body is a singular, but the width of the container corresponds to the width of the wave to be generated, and further comprising one or plural of inner partition plates provided so as to be orthogonal to the front surface in the container body.

~~11.~~ 8. A wave-forming apparatus according to any one of claims 1 to ~~10~~ 7, further comprise a return traction device for pulling back the container body to a starting position again after being dropped along the slope track of the moving track,

wherein the return traction device is provided with a connection line attached to a part of the container body, and a driving force for pulling up the connection line and pulling back the container body to the starting position above the draft waterline of the pool.

~~12.~~ 9. A wave-forming apparatus according to any one of claims 1 to ~~11~~ 8, wherein the moving track employs a rail mechanism along the track as a rail type moving track.

~~13.~~ 10. A wave-forming apparatus according to any one of claims 1 to ~~11~~ 8, wherein a wheel provided between the bottom surface of the container

body and the moving track.

~~14.~~ 11. A surfing play facility comprising:

a pool;

a wave-forming apparatus according to any one of claims 1 to ~~13~~ 10 installed in the pool;

wherein the bottom surface of the pool is devised as including:

a flat part following the range where the container body moves, and

a slope part of an upward gradient is provided in the vicinity of the start position of a play area following the flat part,

wherein the slope part has angle given to a moving direction in which the container body moves.

~~15.~~ 12. A surfing play facility according to claim ~~14~~ 11, wherein the slope ~~portion~~ part has a skew and has a substantially triangular shape having a vertex so as to face the container body direction.