

Jan. 9, 1962

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3,015,831

SLALOM WATER SKI

Filed Feb. 20, 1958

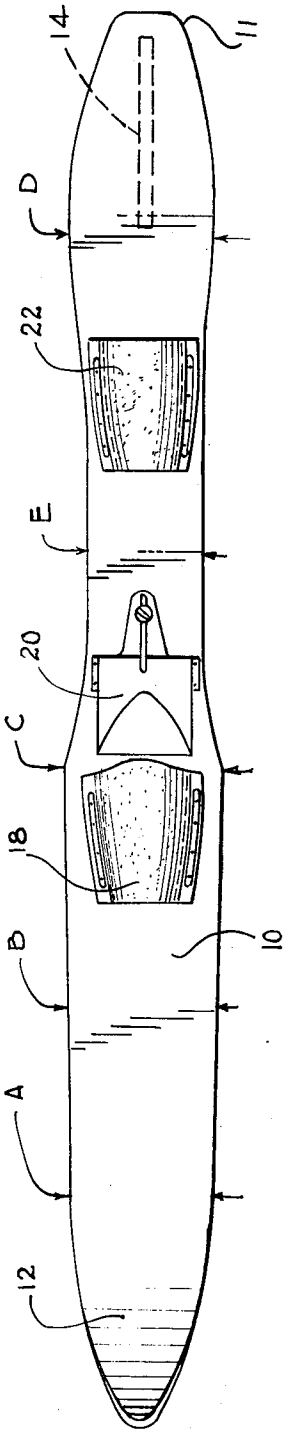


Fig. 1

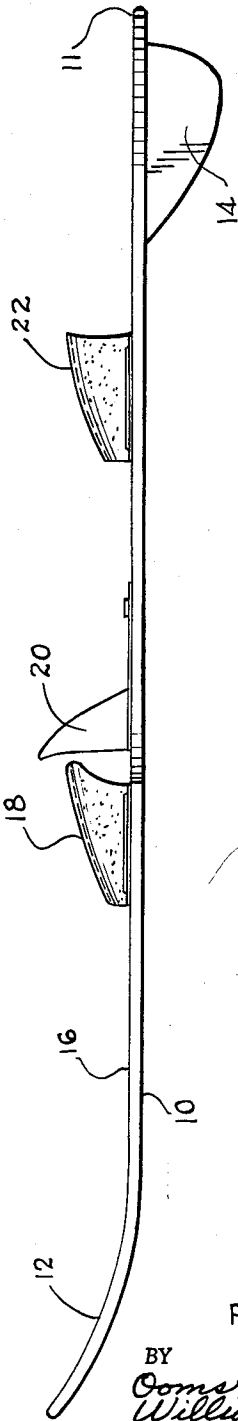


Fig. 2

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1

3,015,831

SLALOM WATER SKI

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Filed Feb. 20, 1958, Ser. No. 716,366
5 Claims. (Cl. 9—310)

This invention relates to water skis, and more particularly to the type known as the slalom ski.

The sport of water skiing was developed rapidly in the last few years in this country with the advent of smaller, faster and more powerful motorboats, capable of a speed sufficient to permit the relatively small skis to support a skier on the water. Water skiing is an outgrowth of powered surfboard riding wherein a comparatively large board is used to support the rider.

With the advent of increasingly powerful motive equipment water skiers found it possible to ride along on two skis and then to discard one of them, staying up on the remaining single ski. This skiing on a single ski has caused the development of a line of skis especially formed for single skiing. With this later ski, the skier starts off initially with but one ski, and does not discard one in motion. This single ski is of a fairly broad construction and relatively rigid, and it is fitted with bindings to take both of the feet of the skier.

The principal difference between the double and the single ski operations is that with the single ski it is possible to maneuver more quickly. This permits the skier to repeatedly cross back and forth across the wake of the boat and to make high speed turns with more safety. In the case of skiing on exhibition, or as a part of a show, this increased maneuverability is important.

In the past, water skis have been built with parallel sides and square sterns, or relatively straight sides to approximately the center line and then tapering sharply to the stern, or skis which were relatively wide in the center and tapered sharply both to the bow and to the stern.

My improved slalom ski has several advantages over any of the other forms of skis previously available. It is possible with this ski to get to planing speed much quicker than with any of the earlier forms of skis. The shape of the ski cuts the drag of the ski in the water to such an extent that a must faster acceleration is possible. Additionally, this ski is much more maneuverable as a slalom ski than the earlier models. This makes possible much sharper turns and much wider swings behind the towing boat.

In the drawings,

FIG. 1 is a plan view of a ski constructed according to my invention, and

FIG. 2 is a view in side elevation of such a ski.

A ski constructed according to this invention comprises a body portion 10 which is relatively flat from the stern 11 to a point near the bow 12. The bow 12 of the ski is turned up to effect a planing action to keep the bow of the ski up out of the water, as is well known. Adjacent the stern 11 of the ski, is shown a keel or vertical stabilizer 14 which gives lateral stability to the ski in the water. Without such a vertical stabilizer or keel, the ski would slip sideways in the water.

Bindings are provided on the upper surface 16 of the body of the ski 10 to hold the ski on the feet of the skier. A forward binding consisting of a toe receiving portion 18 and a heel receiving portion 20 is located approximately at the longitudinal center of the ski. The bindings 18 and 20 hold the ski firmly both laterally and longitudinally with respect to one of the feet of the skier.

The rear binding comprises a toe receiving portion 22, which is situated far enough back on the ski to permit the skier to shift his weight rearwardly to effect the

2

sudden and sharp turning which is characteristic of slalom skiing.

The improvement which is the subject of my invention lies in shaping the side edge of the main body 10 of the ski. It comprises forming a relatively narrow portion behind the center line of the ski. I prefer to begin the narrowing approximately under the forward binding, approximately midway between the members 18 and 20, and to reach the narrowest width at a point just forward of the rear binding; then to broaden out the body of the ski to a point behind the rear binding 22 before again narrowing the ski at the stern.

I prefer to shape the ski so that near the bow of the ski, at the point A, the ski is approximately $6\frac{3}{4}$ inches wide. The body 10 of the ski is then broadened out slightly so that at the point B (approximately a quarter of the length of the ski) it is approximately 8 inches wide. This dimension is maintained back to the point C which is approximately midway between the binding elements 18 and 20.

At point D, the width of the ski is $6\frac{1}{4}$ to $6\frac{1}{2}$ inches, the point D being situated approximately 12 inches from the stern of the ski. The distance between points C and D is approximately 24 inches, and at the mid-point between points C and D, about one-third of the distance between the forward foot rest and the stern (here referred to as point E) the ski is narrowed down to 5 to $5\frac{1}{4}$ inches—its narrowest.

The effect of this narrowing of the ski at the point where the weight of the skier is concentrated seems to be to permit the water to flow around the ski easier at this point thereby cutting down the drag. Additionally, it appears to permit quicker turns because the ski is more readily movable laterally in the water to obtain a turning attitude on the ski.

Having described my invention, what I claim as new and desire to protect by Letters Patent is:

1. A single slalom water ski comprising an elongate strip of relatively rigid material having an upturned bow at the forward end and a stern at the rearward end with the ski being substantially straight from the upturned bow to the stern, a foot rest on the top side of the ski about midway between the bow and the stern and a rearward foot rest spaced rearwardly of the forward foot rest but forwardly of the stern, the ski having substantially flat top and bottom walls and side walls which taper outwardly slightly from the upturned bow to a point in advance of the forward foot rest and then remain substantially parallel from said point to about the mid-portion of the forward foot rest, and which then taper inwardly from said mid-portion of the forward foot rest to a narrowest portion between the forward foot rest and the rearward foot rest and then taper outwardly from said narrowest portion between said foot rests to beyond the rearward foot rest but to a point in advance of the stern of the ski.

2. A slalom water ski as claimed in claim 1 in which the outward tapered portion of the sides of the ski is followed by a portion which tapers inwardly to the stern.

3. A slalom water ski as claimed in claim 1 which includes a keel extending perpendicularly downwardly from the bottom side of the ski midway between the lateral edges and the stern.

4. A slalom water ski as claimed in claim 1 in which the narrowest portion between the rearward and forward foot rests is approximately 60 percent as wide as the widest portion of the ski between the forward foot rest and the upturned bow.

5. A slalom water ski as claimed in claim 1 in which the narrowest portion of the ski is located approximately

3,015,831

3

one-third of the distance between the forward foot rest and the stern.

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