

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today
(1) was not written for publication in a law journal and
(2) is not binding precedent of the Board.

Paper No. 42

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GARY W. VAN TASSEL

Appeal No. 95-2081
Application 07/825,778¹

HEARD: September 15, 1997

¹ Application for patent filed January 21, 1992. According to appellant, the application is a continuation of Application 07/548,308, filed July 5, 1990, abandoned; which is a continuation of Application 07/108,582, filed October 13, 1987, now U.S. Patent 4,941,423, issued July 17, 1990; which is a continuation-in-part of Application 06/874,568, filed June 16, 1986, abandoned.

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Before MEISTER, ABRAMS and FRANKFORT, Administrative Patent Judges.

FRANKFORT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 through 24, 27 through 34 and 37 through 41. At that time, claims 25 and 26 were objected to as being dependent upon a rejected base claim and were indicated to be "allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims" (final rejection, page 8). Claims 35 and 36 were allowed. In the examiner's answer (Paper No. 29), the examiner entered new grounds of rejection against claims 25, 26, 37 and 39 through 41. In addition, the examiner indicated that appellant's arguments in the brief were persuasive with regard to claims 23, 24, 28, 29, 31 and 32. Claims 25, 26 and 39 were subsequently amended by appellant in Paper No. 36 and this amendment was entered by the examiner (see Paper No. 37). In light of the foregoing, the current status of the claims in this application is as follows:

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Claims 1 through 22, 27, 30, 33, 34 and 38 stand rejected and are before us on appeal;

Claims 23 through 26, 28, 29, 31 and 32 are objected to as being dependent upon a rejected base claim and are indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims; and

Claims 35 through 37 and claims 39 through 41 stand allowed.

Appellant's invention is directed to an improved propulsion system for a power boat. Claim 1 is representative of the subject matter on appeal and a copy of that claim, as it appears in the Appendix to appellant's brief, is attached to this decision.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

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Sherman	3,793,980	Feb. 26, 1974
Small	4,689,026	Aug. 25, 1987

The claims remaining on appeal stand rejected under
35 U.S.C. § 103 as follows:

a) claims 1, 3, 6, 7, 10, 12, 15, 18, 21, 27, 30, 33
and 38 under § 103 as being unpatentable over Small; and

b) claims 2, 4, 5, 8, 9, 11, 13, 14, 16, 17, 19, 20,
22 and 34 under § 103 as being unpatentable over Small in view
of Sherman.

Rather than reiterate the examiner's full explanation of the above-noted rejections and the conflicting viewpoints advanced by the examiner and appellant regarding those rejections, we make reference to the final rejection (Paper No. 24, mailed January 7, 1993), the examiner's answer (Paper No. 29, mailed February 22, 1994) and to the supplemental examiner's answer (Paper No. 32, mailed November 16, 1994) for the examiner's complete reasoning in support of the rejection.

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tions, and to appellant's brief (Paper No. 28, filed December 7, 1993) and reply brief (Paper No. 30, filed April 22, 1994) for appellant's arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to appellant's specification and claims, to the applied prior art references, and to the respective positions articulated by appellant and the examiner. As a consequence of our review, we have made the determinations which follow.

Turning first to the examiner's rejection of claims 1, 3, 6, 7, 10, 12, 15, 18, 21, 27, 30, 33 and 38 under § 103 as being unpatentable over Small, we note that independent claim 1 on appeal sets forth, inter alia, a tunnel located on the exterior of the hull of a powerboat and a surface-piercing propeller within the tunnel (see particularly Figures 1 and 12), with the height of the tunnel forward of the vicinity of the propeller diminishing to a point approximately one inch

above the bottom of the hull, the tunnel having "a forward vertical wall being approximately one inch in height." In applying the Small patent in his rejection of claim 1, the examiner has taken the position that Small discloses a tunnel (20) with a forward wall (24). In the answer (page 9), the examiner urges that appellant has not limited his wall to a perfectly vertical position (i.e., 90 degrees) and concludes that the wall (24) of Small "has a vertical component, and thus is considered a vertical wall." We do not agree.

Given the express description by appellant of the wall (26) in the specification (page 10) and the showing of the wall (26) in Figures 3, 9, 10 and 12 of the application drawings, as well as the common dictionary definition of "vertical,"² we must conclude that the "forward vertical wall" of the tunnel set forth in claim 1 on appeal would have been understood by one of ordinary skill in the art as being

² See Webster's New World Dictionary, Second College Edition, Prentice Hall Press, 1986, wherein "vertical" is defined as " 2. a) perpendicular, or at a right angle, to the plane of the horizon; upright; straight up and down b) at a right angle to the plane of the supporting surface."

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straight up and down at a right angle to the plane of the bottom of the powerboat, as seen in Figures 3, 9, 10 and 12 of the application drawings. Thus, a wall, such as the wall (24) seen in Figures 4-6 of Small, which merely has "a vertical component" is not the same as appellant's "vertical wall" set forth in claim 1 on appeal.

Pointing to column 3, lines 45-50 of Small, the examiner further urges that Small teaches making the angle of the wall (24) relative to the keel line (13) "past 30 degrees" and thus encourages experimentation, with the result being that "the result that appellant has claimed is only a result of this experimentation, and not a novel approach to the problem" (answer, page 9). As for the height of the wall in Small not

being "approximately one inch" as claimed, the examiner has

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contended that given the disclosure in Small that the minimum recommended wall height should be "25 percent of the propeller diameter" (col. 3, lines 49-50), and that a four inch propeller is "a usual size" (answer, page 10), one following the sizing of the wall suggested in Small would arrive at a wall (24) having a height of one inch. The examiner further urges that the size of the wall in Small is a matter of design choice, and that modifications thereof merely involve a change in size, which is within the level of skill in the art.

Even if we were to accept the examiner's reasoning that a vertical wall may be suggested by Small at column 3, lines 45-50, we find that the examiner's position with regard to the height of the wall (24) in Small, seen best in Figures 4 and 6, is based on total speculation. Nowhere in Small is there any indication of the possible size of the propeller (25) there- in, and thus also of the minimum height of the wall (24) which is said to be 25 percent of the propeller diameter. In addition, we note that the examiner has provided

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no evidence that "a usual size" for a propeller such as (25) of Small is four inches, as is

urged in the examiner's answer. Appellant contends (reply brief, page 9) that a four inch propeller "is only used on the smallest of outboard motors and is not suitable for power boats to which the present invention would be applied." The examiner has not responded to this argument.

With regard to the position that the size of the wall (24) of Small is merely a matter of design choice and within the level of skill in the art, we look to Figure 6 of Small and note that with the passage of the propeller shaft (26) through the wall (24) at the stuffing box (29), it is highly unlikely, if not impossible, that one of ordinary skill in the art would have been led to size the wall (24) of Small with a vertical height of approximately one inch, as the examiner urges.

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In light of the foregoing, we will not sustain the examiner's rejection of claims 1, 3, 6, 7, 10, 12, 15, 18, 21, 27, 30, 33 and 38 under § 103 based on Small.

We next review the examiner's rejection of claims 2, 4, 5, 8, 9, 11, 13, 14, 16, 17, 19, 20, 22 and 34 under § 103 as

being unpatentable over Small in view of Sherman. Even if we accept the examiner's position that it would have been obvious to one of ordinary skill in the art to provide a plurality of tunnels in the powerboat of Small based on the teachings of Sherman (Figure 8), we find nothing in the combined teachings of these references which provides for the deficiencies of Small as noted above in our treatment of independent claim 1. Since independent claim 2 includes the same limitations as independent claim 1, except that in claim 2 each tunnel has a forward vertical wall being approximately one inch in height, it follows that the examiner's rejection of claim 2, and the

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claims which depend therefrom, under 35 U.S.C. § 103 also will not be sustained.³

To summarize, we note that the examiner's decision rejecting claims 1 through 22, 27, 30, 33, 34 and 38 under 35 U.S.C. § 103 has been reversed.

REVERSED

³ With respect to the examiner's rejection of claim 34 under 35 U.S.C. § 103, we note that claim 34 depends from claim 28 and that the examiner has indicated that claim 28 contains allowable subject matter (see the supplemental examiner's answer, page 2). It thus appears that claim 34 should also have been objected to by the examiner, instead of being rejected.

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	JAMES M. MEISTER)	
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	CHARLES E. FRANKFORT)	
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APPENDED CLAIM

1. An improved propulsion system for a powerboat of the type having a tunnel located on the exterior of the hull of the powerboat and a surface-piercing propeller within the tunnel, the improvement comprising:

said tunnel including a roof element immovably fixed thereto, said roof element having a substantially semi-circular cross-section at least in the vicinity of the propeller, said roof element having an upper surface and a lower surface;

means for drawing air from the exterior of the powerboat external to the tunnel and conveying it to the tunnel, said air flowing forwardly above the upper surface of said roof element by reduction of pressure created by said propeller;

means for admitting said air to the tunnel forward of the propeller; and

the height of said tunnel forward of the vicinity of the propeller diminishing to a point approximately one inch above the bottom of the hull, the tunnel having a forward vertical wall being approximately one inch in height, air being admitted into the tunnel by an air outlet located rearward of said vertical wall and forward of said propeller.