

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 51

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HMC OF MASSACHUSETTS LIMITED PARTNERSHIP

Appeal No. 2001-0001
Control No. 90/004,267

HEARD: DECEMBER 5, 2000

Before CALVERT, FRANKFORT, and STAAB, *Administrative Patent Judges*.

STAAB, *Administrative Patent Judge*.

DECISION ON APPEAL

HMC of Massachusetts Limited Partnership, assignee of U.S. Patent No. 4,681,030 (hereinafter, "appellant"), appeals from the final rejection of patent claims 1, 4 and 5, and from the final rejection of newly added claims 11 and 12, in this proceeding for reexamination of the '030 patent. The examiner has confirmed the patentability of patent claims 2, 3 and 6-8. No other claims are currently pending.

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By way of background, this is the second time this reexamination of the '030 patent comes before us. In Appeal No. 98-2004 decided October 26, 1998, this merits panel of the Board reversed the examiner's rejections of patent claims 1 and 2, and pursuant to 37 CFR § 1.196(b), entered a new rejection of patent claims 1, 4 and 5. In accordance with § 1.196(b), appellant elected to reopen prosecution in order to bring before the examiner evidence of nonobviousness that was not previously of record. In addition, appellant added new claims 11 and 12. Notwithstanding appellant's evidence of nonobviousness, the examiner maintained the rejection of patent claims 1, 4 and 5, and in addition rejected new claims 11 and 12.

The subject matter on appeal pertains to an apparatus for preparing frozen drinks. Patent claim 1 is illustrative of the appealed subject matter and reads as follows:

1. An apparatus for preparing frozen drinks comprising in combination:

means for preparing and delivering finely-divided ice;

a blender having a blender cup for receiving said ice,

and

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timing control means connected to said ice preparation means and to said blender for automatically controlling the commencement and amount of ice delivery, and the commencement and duration of blending during operation of the apparatus.

The references of record relied upon by the examiner in support of rejections under 35 U.S.C. § 103 are:

Stutz 1967	3,335,911	Aug. 15,
Jacobs et al. (Jacobs) 1971	3,568,887	Mar. 9,
Van Der Veer 31, 1987	4,653,281	Mar.

(filed Jul. 19,
1985)

Claims 1, 4 and 5 stand rejected under 35 U.S.C. § 103 as being unpatentable over Van Der Veer in view of Stutz.

Claims 11 and 12 stand rejected under 35 U.S.C. § 103 as being unpatentable over Van Der Veer in view of Jacobs.¹

The rejections are explained in the examiner's answer (Paper No. 45).

The opposing viewpoints of appellant are set forth in the main and supplemental briefs (Paper Nos. 40 and 43). In addition, appellant relies on the declaration of inventor John

¹An amendment filed subsequent to the final rejection correcting several errors in the language of claim 11 has been entered. See the Decision on Petition (Paper No. 39).

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M. Herbert and U.S. Patents 3,297,061 (Nimee) and 3,638,392 (Welker) as evidence of nonobviousness.

Discussion

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

Considering first the rejection of claims 1, 4 and 5 as being unpatentable over Van Der Veer in view of Stutz, independent claim 1, the broadest claim on appeal, is directed to an apparatus for preparing frozen drinks comprising means for preparing and delivering finely-divided ice, a blender having a blender cup for receiving the finely-divided ice, and timing control means for automatically controlling the delivery of ice and the blending operation.

Van Der Veer, the primary reference in each of the examiner's rejections, discloses an apparatus for preparing frozen drinks comprising an ice-slush machine 12 and a blender

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14 having a blending cup 152. The ice-slush machine of Van Der Veer constitutes "means for preparing and delivering finely-divided ice" as called for in the appealed claims because the "means for preparing and delivering finely-divided ice" terminology appellant has chosen to employ in the claims is broad enough to encompass within its metes and bounds ice-slush machines like that of Van Der Veer. In this regard, appellant's patent specification expressly states at column 3, lines 11-17, that machines that deliver ice-slush can be employed in the practice of the invention. In Van Der Veer, the means for controlling the delivery of ice and the blending operation comprises a handle 24 that is manually actuated by the operator to achieve a desired sequence of operation. See column 14, lines 7-53, and in particular, lines 32-33 ("The method thus includes the steps of performing an operator controlled cycle of operation"). Accordingly, Van Der Veer discloses an apparatus for preparing frozen drinks as called for in claim 1 except that the means for controlling the delivery of ice and the blending operation is manually controlled rather than automatically controlled.

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Stutz pertains to "automatic machinery - usually, although not necessarily, coin operated - for preparing and delivering beverages, particularly cold beverages produced by dispensing a dry concentrate in a refrigerated liquid such as water" (column 1, lines 9-13). The Stutz machinery includes blender 2 for receiving ingredients of the beverage, delivery means 4 for delivering liquid, delivery means 6 for delivering dry beverage powder, and timer 8 for regulating the operation of the blender and delivery means (column 3, lines 32-49). The timer 8 "is of known type comprising a motor driven shaft on which a plurality of cams is mounted, each of said cams operating a microswitch in a control circuit" (column 7, lines 11-13). The purpose of the timer 8 is for "regulating the operation of the blender and the delivery means" (column 2, lines 65-67).

The test for obviousness is what the combined teachings of the prior art would have suggested to one of ordinary skill in the art. *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). Given the collective teachings of Van Der Veer and Stutz, we are of the view that it would have been obvious to one of ordinary skill in the art at the time of

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appellant's invention to provide an automatic timer control circuit in Van Der Veer for automatically controlling operation of the Van Der Veer apparatus in order to gain the self-evident advantages such automatic timer control means provides, e.g., beverage consistency and efficiency of operation without operator intervention. Suggestion for the above is found in the teaching of Stutz at, for example, column 2, lines 15-26, which one of ordinary skill in the art would have recognized as being applicable in Van Der Veer, and in the expressly stated desire of Van Der Veer to provide an appropriately timed sequence of operation for creating an optimum drink that is independent of the skill of the operator (column 7, lines 50-60; column 14, lines 54-59). In this regard, we note that it has been held that it is generally considered to be obvious to automate manual activity to accomplish the same result. *In re Venner*, 262 F.2d 91, 95, 120 USPQ 192, 194 (CCPA 1958). The above modification of Van Der Veer would result in an apparatus which corresponds to the subject matter of claim 1.

Claim 4 adds to claim 1 that the timing control means comprises means for pre-selecting the amount of ice to be

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delivered to the blender cup by selecting the amount of time during which the ice preparation means will operate. Claim 5 adds to claim 1 that the timing control means includes programming means for pre-selecting the sequencing of ice delivery and blender operation. As in our prior decision, we continue to be of the view that the provision of a timer like the one described in Stutz at column 7, lines 11-13, in the apparatus of Van Der Veer would result in an apparatus which meets these claim requirements. In particular, in the modified Van Der Veer apparatus, the configuration of the timer cam that controls delivery of ice to the blender cup would "pre-select" the amount of ice to be delivered by "selecting" the amount of time during which the ice preparation means 12 operates to deliver ice, as called for in claim 4. Further, the timer cam that controls delivery of ice to the blender cup, and the timer cam that controls operation of the blender, would constitute "programming means" for "pre-selecting" sequencing of ice delivery and blender operation, as called for in claim 5.

Appellant's arguments have been carefully considered but are not persuasive that the examiner erred in his initial

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determination that the teachings of Van Der Veer and Stutz suggest the provision of automatic control means in Van Der Veer so as to arrive at the subject matter of claims 1, 4 and 5. In particular, we are aware of the portion of Van Der Veer's specification at column 2, lines 43-53, where the Stutz patent is discussed. Unlike appellant, we do not view this discussion as teaching away from the use of automatic control means, i.e., a timer, in Van Der Veer to control the delivery of ice and the blending operation to make frozen drinks. From our perspective, the discussion of Stutz in Van Der Veer is simply a recognition by Van Der Veer that the blending machine of Stutz *as a whole* is unsuited for Van Der Veer's purpose because Stutz requires a number of steps, e.g., dispensing dry powder material and water into a blender container, mixing the dry powder material with the water in the container, and then dispensing the mixed ingredients by gravity into a supplemental container, that would be ill-suited for making frozen drinks. In this regard, we have searched the disclosure of Van Der Veer in vain for any instance where Van Der Veer "specifically and expressly disavowed the use of automatic timing control [as being] unsuitable in making ice-

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slush drinks" (main brief, page 12; emphasis in original), as argued by appellant.

We are also aware of appellant's reliance on U.S. Patent 3,638,392 issued to Welker, and U.S. Patent 3,297,061 issued to Nimee as evidence of nonobviousness with respect to the examiner's proposed modification of Van Der Veer in view of Stutz. Specifically, on pages 13-14 of the main brief, appellant contends that Welker

rejects the automatic timer approach for vended slush drinks, finding that approach "not completely satisfactory because the viscosity of the slush product changes and therefore the volume passing through a given orifice in a give[n] time changes so that each customer gets a different amount of slush within the vend cup." (Col. 1, lines 43-48; emphasis supplied),

and that Nimee

states that, because of the inconsistency of flow rate, "a very important feature" of the Nimee invention is the provision of a "weight sensing mechanism as a control to ensure full measure delivery while at the same time obviating overflow and associated waste when a highly fluid product is dispensed." (Col. 9, lines 55-59).

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Based on the above, appellant contends that Van Der Veer was apparently concerned about inconsistency in the rate of flow of the ice slush. Appellant concludes that the automatically-timed operation of Stutz was thought to be inapplicable in Van Der Veer. We do not agree.

Nimee, issued some 20 years prior to Van Der Veer, is directed to an automatic vending machine for dispensing measured quantities of viscous comestibles such as milkshakes or soft ice cream. As correctly noted by appellant, Nimee considered it very important to provide a weight sensing mechanism as a control for ensuring full measure delivery of the viscous product while obviating overflow when the product is dispensed (column 9, lines 55-59). However, Nimee's weight sensing system is not a stand alone control system, but is rather incorporated into Nimee's control means as a component thereof. The operation of Nimee's control means is described at column 3, lines 26-41, as follows:

The automatic machine of the present invention is provided with dual interrelated and cooperating delivery control systems to ensure delivery of the exact weight of product irrespective of the viscosity of the material being handled. The first system may be described as a more or less conventional cam system or time-dependent system which provides an open valve

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time of sufficient duration to deliver an "over amount" of product even when the product is of high viscosity. In conjunction with the cam or timer system, there is provided a weight-sensitive and responsive control which determines the exact amount of material delivered. If the product handled is "thin," the weight sensing system will normally govern. If the product is "thick," the cam mechanism or time control mechanism will provide the control. Actuation of either system's limits will terminate delivery of product.

Thus, the weight sensing component of Nimee's hybrid control means is provided precisely because the viscosity of the product may vary.

Some 5 years later in 1972, the Welker patent was issued. We are informed by Welker that, at the time of Welker's invention, the ability to vend uniform volumes of an ice slush product into a vending cup was difficult because it was hard to control the viscosity of the ice slush product (Welker, column 1, lines 43-48). Accordingly, Welker turned to a means for sensing the level of product delivered into a measuring container to control the amount of ice slush dispensed (Welker, column 1, lines 61-75; column 3, lines 19-30). Nevertheless, Welker recognizes in general the utility of timer control circuits to automate and control the operation of the slush dispensing machine disclosed therein (Welker,

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column 5, lines 5-25; column 6, line 8 through column 7, line 55).

Fast forwarding to 1987, when the Van Der Veer patent was issued, we are repeatedly informed by Van Der Veer that the ice-slush machine used therein incorporates viscosity control means to ensure that the viscosity of the ice-slush delivered to the blender is maintained at a predetermined optimum value. See column 5, lines 4-9 and 34-37; column 7, lines 50-60; column 11, lines 57-61; column 12, lines 8-15; and column 12, line 35 through column 13, line 30. The viscosity control means "allow[s] the present invention to function properly" (column 12, lines 11-12) and provides for "consistent optimum flavor, alcoholic potency, and general consistency [of the drinks] throughout the use of the system, independent of the skill of an operator" (column 7, lines 53-55). Accordingly, it reasonably appears that at the time of Van Der Veer's invention the problem of inconsistency in the delivery of a frozen slush product due to variations in the viscosity thereof about which Nimee and Welker were concerned had been solved by advances in the viscosity and temperature control of ice-slush making machines.

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In our view, the teachings of the Welker and Nimee patents, when placed in their proper historical perspective and considered in conjunction with the teachings of Van Der Veer and Stutz, support, rather than weaken, the examiner's position. In this regard, it appears to us that advances in the ice-slush machine art would have caused an artisan of ordinary skill in the art to look beyond highly specialized and complex control systems such as the weight sensing component of Nimee's control means and the volume sensing means of Welker's control means in favor of a more straight forward and conventional cam control timer like that of Stutz² in order to expeditiously automate the operation of the Van Der Veer apparatus.

In light of the foregoing, we are satisfied that the reference evidence adduced by the examiner (i.e., the Van Der Veer and Stutz patents) is sufficient to establish a *prima facie* case of obviousness of the subject matter of claims 1, 4 and 5.

²That such cam operated timer control means are conventional is established by, among others, Nimee (column 3, lines 30-32; column 7, lines 33-40).

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As to claims 11 and 12, these claims differ from claims 4 and 5 essentially in that they further define the timing control means as being pre-selectable prior to the commencement of each operation of the apparatus. In rejecting these claims as being unpatentable over Van Der Veer in view of Jacobs, the examiner relied on Jacobs for its showing of a hot beverage dispenser having an adjustable timing means 22, 124 for pre-selecting the size of the dispensed beverage. See column 1, lines 32-38 and 60-63, and column 5, lines 35-47. For reasons similar to those set forth above in our discussion of the rejection of claim 1, we are in agreement with the examiner that it would have been obvious to one of ordinary skill in the art to have provided a pre-selectable timing control means in Van Der Veer in view of Jacobs. In particular, suggestion for the provision of a timing control means like that of Jacobs in Van Der Veer is found in the teaching of Jacobs at, for example, column 1, lines 32-38 and 60-63, which one of ordinary skill in the art would have recognized as being applicable in Van Der Veer. In short, the advantages of providing a pre-selectable timing control means in Van Der Veer, e.g., for allowing the dispensing of

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beverages of pre-selected different sizes, would have been apparent to one of ordinary skill in the art.

Accordingly, we also are satisfied that the reference evidence adduced by the examiner is sufficient to establish a *prima facie* case of obviousness of the subject matter of claims 11 and 12, and that the Nimee and Welker patents cited by appellant as evidence of nonobviousness support, rather than weaken, the examiner's case of obviousness.

Turning to the declaration of inventor John M. Herbert additionally provided by appellant as evidence of nonobviousness, the Herbert declaration is relied upon to show commercial success of the claimed invention and copying by others. We are informed by inventor Herbert in paragraph 4 of the declaration that during the period of 1986-87, Island Oasis, the sole and exclusive licensee of the '030 patent under reexamination, began marketing frozen drink machines incorporating an automatic control for controlling the commencement and amount of ice delivery and the commencement and duration of blending.

Herbert says in paragraph 6 that before 1986, Herbert's older frozen drink machine without the automatic control

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feature was on the market, but that sales only amounted to about 500 machines. Herbert states that at that time bartenders primarily used ordinary blenders to manually blend the ingredients for frozen drinks and that either ordinary blenders or ice-slush machines were used to provide the ice particles for such drinks.

In paragraph 7, declarant Herbert asserts that Island Oasis is a small company, with total sales of less than one million dollars, and that Island Oasis uses very little money for promotion and advertising.

In paragraphs 8 and 9, we are told that despite costing several hundred dollars more than an ordinary blender, Island Oasis from about 1986 to about 1991, sold about 2,000 machines, which presumably incorporated the automatic control feature of the '030 patent, and that from 1992 through 1998 more than 16,000 such machines were sold, with sales in 1998 alone amounting to more than 4,000 machines. According to Herbert, Island Oasis machines amount to about 98% of the automatic frozen drink making machines on the market today. Declarant Herbert states that Island Oasis customers include such well known establishments as the MARRIOTT® hotel and

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restaurant chain, PIZZERIA UNO®, OLIVE GARDEN® and RUBY TUESDAY® restaurants, and CARNIVAL® cruise lines. Mr. Herbert further states that only about 10% of Island Oasis' annual advertising and promotional budget (which totals less than \$500,000) is directed to marketing the machine.

In paragraphs 10 and 12, Herbert says that the only direct competitors he is aware of are Abaco Joe, Inc., which has at most 150 machines in the field, and Stoelting, Inc., which distributed a few hundred machines before making significant changes to its machines. Herbert asserts that in 1994, Island Oasis brought a patent infringement suit against one Joseph Reese, that Reese chose to change the design of his machine in an attempt to avoid infringement, and that Reese later formed Abaco Joe, Inc., which is now the defendant in a subsequently commenced lawsuit. Herbert further asserts that in 1997, Island Oasis sued Stoelting, Inc. for patent infringement, and that in a settlement of that lawsuit Stoelting has modified its accused machine in order to avoid infringement. Herbert also asserts that in 1997, Island Oasis sued Tassco, Inc. for patent infringement of the patent under reexamination, and that Tassco defaulted in the suit and

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went out of business.

We are mindful that in resolving the question of obviousness/nonobviousness before us in this appeal, it is necessary to weigh the entire merits of the matter and to consider all of the evidence of record. *In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). We are also mindful that objective evidence of nonobviousness in any given case is entitled to more or less weight depending on its nature and its relationship with the merits of the claimed invention. *Stratoflex Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1539, 218 USPQ 871, 879 (Fed. Cir. 1983).

We conclude, based on the record before us, that Island Oasis, the sole and exclusive licensee of the '030 patent under reexamination, has enjoyed a considerable amount of commercial success in the field of machines for preparing frozen drink machines, and that its machine which incorporates in a single unit an ice preparation and delivery component, a blender component, and a control means for automatically controlling the commencement and amount of ice delivery and the commencement and duration of blending has garnered a

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significant share of the market in that field. We further conclude, based on the record before us, that the success of Island Oasis in this respect is due, at least in part, to the automatic control feature of the Island Oasis machines, as called for in each of the claims under review in this appeal. We also conclude, based on what we are told by declarant Herbert, that others have tried to imitate the success of Island Oasis by incorporating into their frozen drink machines the claimed features of the '030 patent, but have been foiled by the legal actions of Island Oasis.

In treating appellant's declaration, the examiner in the final rejection makes much of the circumstance that some of the models sold by Island Oasis incorporated solid state timing control electronics. According to the examiner, this is significant because this model "is not considered . . . as being covered by the claims of the '030 patent because the disclosure is silent as to the use of solid-state timing control" (final rejection, page 14). We do not agree. The claimed "timing control means" terminology found in the appealed claims, in our view, covers a machine having solid state timing control means. Further, the examiner's handling

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of appellant's declaration evidence on pages 14-15 of the final rejection is procedurally deficient in that the examiner improperly requires appellant to present "clear and convincing" evidence of non-obviousness. This approach, akin to viewing the initial determination of obviousness as a fact itself rather than against the facts on which it is based, has been rejected by both our prior and present courts of review. See, for example, *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992) ("After evidence or argument is submitted by the applicant in response [to a rejection], patentability is determined on the totality of the record, by a *preponderance of evidence* with due consideration to persuasiveness of argument" (emphasis added)); *Piasecki*, 745 F.2d at 1472, 223 USPQ at 788 (the *prima facie* case should not be "set in concrete"); and *In re Rinehart*, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976) (evidence of nonobviousness should not be viewed solely for its "knockdown ability").

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