

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 45

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

Ex parte JAMES SKINNER, JOHN S. THORN, CRAIG NORDBY  
and JOSEPH G. MERCINKIEWICZ

---

Appeal No. 2002-0831  
Application 08/250,286

---

HEARD: APRIL 10, 2003

---

Before KRASS, JERRY SMITH, and BARRY, Administrative Patent Judges.

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's rejection of claims 35-39, 44, 45 and 47-58, which constitute all the claims remaining in the application. An amendment after final rejection was filed on November 28, 2000 but was denied entry by the examiner.

The disclosed invention pertains to a method and apparatus for controlling the operation of a dynamoelectric

Appeal No. 2002-0831  
Application 08/250,286

machine adapted for use in an appliance. More specifically, the disclosed invention relates to the control of the machine using a microcontroller having memory means which stores operating characteristic information associated with a plurality of different appliance environments. The operating characteristics of the machine associated with different appliance environments can be adjusted based on data entered by the user through a switch means after the machine has been installed in the appliance or by a programming means attachable to the microcontroller and removable therefrom.

Representative claim 35 is reproduced as follows:

35. Drive apparatus for use with a dynamoelectric machine system, comprising:

drive means connected to the dynamoelectric machine to control at least one of the current or voltage of the machine;

a processor including a microcontroller for supplying machine control information to drive means, said processor including a first memory including a read only memory containing at least a portion of an operating program for operating the dynamoelectric machine;

a second memory operatively associated with said processor, said second memory including a non-volatile electrically erasable programmable read only memory for storing dynamoelectric machine operating characteristic information associated with a plurality of appliance environments;

Appeal No. 2002-0831  
Application 08/250,286

a plurality of switches positionable in a plurality of switch settings connected to said processor, wherein preselected switch settings correspond to one of the appliance environments such that a user positions said plurality of switches in a desired switch setting to select a corresponding appliance environment, said microcontroller being programmed to read the switch setting and in response thereto, obtain the system operating characteristic information corresponding to the selected appliance environment from said second memory so as to permit said system to be used in different appliance environments; and

programming means operatively attachable to said processor and removable therefrom for loading dynamoelectric machine information associated with said appliance environments into said second memory to enable said drive apparatus to be altered for use with a variety of dynamoelectric machines in different appliance environments.

The examiner relies on the following references:

Toyoshima et al. (Toyoshima) Re. 34,286 June 22, 1993

The admitted prior art of appellants' specification.

Claims 35-39, 44, 45 and 47-58 stand rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Claims 35-39, 44, 45 and 47-58 also stand rejected under 35 U.S.C. § 103. As evidence of obviousness the examiner offers Toyoshima and the admitted prior art.

Appeal No. 2002-0831  
Application 08/250,286

Rather than repeat the arguments of appellants or the examiner, we make reference to the briefs and the answer for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the examiner and the evidence of obviousness relied upon by the examiner as support for the obviousness rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellants' arguments set forth in the briefs along with the examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that the specification, as originally filed, supports the invention now being claimed. We are also of the view that the evidence relied upon and the level of skill in the particular art would have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claims 35-39, 44, 45, 47-49, 52, 53 and 56-58. We reach the opposite conclusion with respect to claims 50, 51, 54 and 55. Accordingly, we affirm-in-part.

Appeal No. 2002-0831  
Application 08/250,286

We consider first the rejection of all the appealed claims under the first paragraph of 35 U.S.C. § 112. The rejection states that it is based on the written description requirement. The purpose of the written description requirement is to ensure that the applicants convey with reasonable clarity to those skilled in the art that they were in possession of the invention as of the filing date of the application. For the purposes of the written description requirement, the invention is "whatever is now claimed." Vas-cath, Inc. v. Mahurkar, 935 F.2d 1555, 1564, 19 USPQ2d 1111, 1117 (Fed. Cir. 1991).

The examiner asserts that the switch settings of the second memory element do not appear to correspond to a plurality of appliance environments with the ability of the user to select from these environments. The examiner also argues that neither of the memories or the switch operation states that the settings correspond to one of a plurality of appliance environments or wherein the switch operation obtains different operating characteristics constants for different appliance environments [answer, pages 3-4].

Appeal No. 2002-0831  
Application 08/250,286

Appellants argue that the specification clearly describes operation of the switches to obtain data from the memory and allowing a particular motor to be used in multiple appliance environments, that is, different versions or models of the same appliance. Appellants point to several sections of the specification which they assert support the claimed limitation of different appliance environments [brief, pages 11-17].

The examiner responds that the phrase different appliance environments is argued by appellants as meaning either a motor M usable in appliances A1, A2, etc. or motor M1, M2, etc. usable in appliance A. The examiner asserts that the specification supports the second definition but not the first definition. The examiner finds that the specification does not support the case where the switches permit a motor M to be used in a plurality of different appliance environments [answer, pages 6-7].

Appellants respond that the phrase "appliance environments" is a generic term that covers the use of a single motor design in different types of appliances or in different versions of the same appliance. Appellants also respond that since the examiner admitted that the specification supports the second definition, the rejection is clearly improper. Finally, appellants argue that the brief points out several locations

Appeal No. 2002-0831  
Application 08/250,286

where the claimed invention is supported, and appellants argue that the examiner has presented no evidence as to why persons skilled in the art would not recognize in the disclosure a description of the invention defined by the claims [reply brief, pages 6-15].

We will not sustain this rejection of the claims for essentially the reasons argued by appellants in the briefs. The examiner's primary concern appears to be whether the manual switches are used to define different appliance environments as claimed. The specification describes the switches SW1-SW3 as offering 512 possible switch settings which an installer or user of the motor can select [page 10]. The specification also describes that a single motor can be used in a wide variety of applicational uses merely by altering the switch positions of the switches 20 [page 12]. We agree with appellants that the original specification provides support for the invention now being claimed.

We now consider the rejection of the claims on appeal under 35 U.S.C. § 103. In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

Appeal No. 2002-0831  
Application 08/250,286

In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See Id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ

Appeal No. 2002-0831  
Application 08/250,286

685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976). Only those arguments actually made by appellants have been considered in this decision. Arguments which appellants could have made but chose not to make in the brief have not been considered and are deemed to be waived by appellants [see 37 CFR § 1.192(a)].

The examiner's rejection is explained on pages 4-6 of the answer. With respect to claims 35 and 44, appellants argue that Toyoshima fails to disclose or suggest a motor control apparatus that allows a motor to be used in multiple appliance environments. Specifically, appellants argue that Toyoshima discloses a controller that operates a single appliance, that is, a vacuum cleaner. Appellants argue that there is nothing in Toyoshima which would lead one skilled in the art to attempt to use the disclosed control system in a different appliance. Appellants also argue that the programming means of claim 35 has not been addressed by the examiner, and they note that external memory 43 of Toyoshima is not taught as loading machine information associated with various appliance environments into memory for use in different appliance environments [brief, pages 17-21].

Appeal No. 2002-0831  
Application 08/250,286

The examiner responds that many of the issues related to this rejection were decided in the previous decision by the Board of Patent Appeals and Interferences (Board). The examiner notes how the claimed invention is deemed to be taught by Toyoshima. The examiner asserts that the function table in Figure 1 of Toyoshima clearly illustrates the use of different versions of the motor within the same appliance [answer, pages 7-9].

Appellants respond that the previous decision of the Board is irrelevant to this appeal because the claims are different. Appellants assert that Toyoshima only teaches different conditions for a single appliance but not different models of a single appliance. With respect to table 15 of Toyoshima, appellants argue that the functions therein relate to a single appliance and not to different appliance environments or platforms [reply brief, pages 15-16].

Although the claims in this appeal are different from the claims considered on the previous appeal, the question before us is similar in that our decision is fundamentally determined on claim interpretation. In the previous decision, the definition of "operating characteristic information" was the key phrase which required interpretation. In this case it is the phrase "different appliance environments" which requires interpretation.

Appeal No. 2002-0831  
Application 08/250,286

The claimed invention essentially associates a different appliance environment with a corresponding operating characteristic information [note recitation of second memory and plurality of switches]. Thus, although the claims are different, the question before us is similar to the previous appeal because the meaning of different appliance environments is tied to the meaning of operating characteristic information.

We have considered appellants' specification, and we can find no specific definition of "different appliance environments." Appellants have argued a somewhat limited definition of this phrase in the same way that they argued a limited definition of operating characteristic information as we noted in the previous decision [Appeal No. 1997-1359].

In our view, the phrase "different appliance environments" is broad enough to be met by the vacuum cleaner of Toyoshima in which the different environments include different surfaces such as carpet, tatami, sofa and curtains. In other words, we find that the vacuum cleaner of Toyoshima is set to a different appliance environment for carpet than it is for curtains. There is no reason on this record why the different appliance environments should be interpreted to mean different types of appliances or different types of motors within a single

Appeal No. 2002-0831  
Application 08/250,286

appliance. The switches of function table 15 of Toyoshima permit the system to be used in different (appliance) environments as claimed. Therefore, we sustain the examiner's rejection with respect to claim 35.

With respect to claims 38 and 39, appellants argue that Toyoshima does not disclose the manually settable switches as claimed [brief, pages 21-22]. The examiner points to elements 35 and 38 of Toyoshima, and the examiner notes that appellants disclosed that the switches may have any reasonable number of switch positions [answer, page 9]. We will sustain the rejection of claims 38 and 39 because we agree with the examiner that it would have been obvious to the artisan to broadly use three switches each having eight positions to select 512 different operating characteristics in Toyoshima.

With respect to claim 47, appellants argue that there is no mention of any appliance besides a vacuum cleaner in Toyoshima [brief, page 22]. The examiner responds that the admitted prior art indicates that the appliance may be a variety of conventionally available devices [answer, page 10]. Appellants respond that the examiner has ignored the limitation of claim 47 [reply brief, pages 16-17]. We will sustain the rejection of claim 47 because the admitted prior art does teach that motors

Appeal No. 2002-0831  
Application 08/250,286

such as disclosed by Toyoshima were conventionally used in a plurality of different environments such as those claimed. We find no logical argument presented as to why the artisan would not have found it obvious to use the Toyoshima motor control in environments other than vacuum cleaners.

With respect to claims 48 and 49, appellants argue that Toyoshima does not teach or suggest controlling the vacuum cleaner with a master controller such as a thermostat. With respect to claim 52, appellants argue that Toyoshima does not teach or suggest controlling the start delay, stop delay and air flow of a furnace blower [brief, page 22]. The examiner notes that a furnace blower is disclosed as admitted prior art. The examiner finds that a thermostat and the control of start delay, stop delay and air flow are conventional for a furnace blower [answer, page 10]. Appellants respond that Toyoshima does not teach a master controller or a thermostat [reply brief, page 17]. We will sustain the rejection of claims 48, 49 and 52 because appellants have not presented any arguments as to why the artisan would not have been motivated to use the control system of Toyoshima with one of the other admitted prior art environments such as a furnace blower. We agree with the examiner that if the Toyoshima control system were used in the admitted prior art of

Appeal No. 2002-0831  
Application 08/250,286

furnace blowers, then the master controller would include a thermostat and the claimed functions would be controlled.

With respect to claims 50 and 51, appellants argue that Toyoshima makes no mention of using the disclosed drive apparatus to operate different versions of a vacuum cleaner or for vacuum cleaners made by different manufacturers [brief, pages 22-23]. The examiner responds that Toyoshima teaches these features at column 10, lines 34-41 [answer, page 10]. Appellants respond by disagreeing with this assertion by the examiner [reply brief, page 17].

We will not sustain the examiner's rejection of claims 50 and 51 because the examiner has failed to establish a prima facie case of obviousness. Claim 50 defines the phrase "said plurality of appliance environments" as comprising a plurality of versions of a given appliance. Claim 51 defines the phrase "said plurality of versions of the given appliance" as comprising versions of the given appliance made by different manufacturers. These definitions are not met by the different appliance environments of Toyoshima that we discussed above. The portion of Toyoshima identified by the examiner only suggests that a different type of motor can be used in the Toyoshima appliance. It does not relate to different versions of a given appliance or

Appeal No. 2002-0831  
Application 08/250,286

to versions made by different manufacturers. Therefore, the examiner's rejection fails to address the specific limitations recited in claims 50 and 51.

With respect to independent claim 44, appellants additionally argue that Toyoshima does not disclose downloading data from an external memory device [brief, page 23]. We will sustain the examiner's rejection of claim 44. Toyoshima discloses that programming from card 39 is downloaded by being read and is used to control the switches of memories 34a to 34d. We find that this operation constitutes a downloading of information from an external programmer to a memory device as claimed.

The remaining claims not specifically discussed above were either not argued by appellants or contain limitations that we have discussed above. As a result of the discussion above, we also sustain the examiner's rejection of claims 36, 37, 45, 53 and 56-58, but we do not sustain the examiner's rejection of claims 54 and 55.

In summary, we have not sustained the examiner's rejection of the claims under the first paragraph of 35 U.S.C. § 112. The rejection of all appealed claims under 35 U.S.C. § 103 is sustained with respect to claims 35-39, 44, 45, 47-49,

Appeal No. 2002-0831  
Application 08/250,286

52, 53 and 56-58, but is not sustained with respect to claims 50, 51, 54 and 55. Therefore, the decision of the examiner rejecting claims 35-39, 44, 45 and 47-58 is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

ERROL A. KRASS	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
JERRY SMITH	)	BOARD OF PATENT
Administrative Patent Judge	)	APPEALS AND
	)	INTERFERENCES
	)	
	)	
LANCE LEONARD BARRY	)	
Administrative Patent Judge	)	

JS/ki

Appeal No. 2002-0831  
Application 08/250,286

Mark L. Gleason  
Howrey, Simon, Arnold & White, LLP  
750 Boring Drive  
Houston, TX 77057-2198