

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LENNOX INDUSTRIES INC.,

Petitioner,

v.

ROSEN TECHNOLOGIES LLC,

Patent Owner

Case No. IPR2023-00717

U.S. Patent No. 7,156,318

PATENT OWNER'S PRELIMINARY RESPONSE

USE OF EMPHASIS IN QUOTATIONS

All emphases in quotations and exhibit citations have been added, unless otherwise indicated.

APPLICABLE STATUTES

References to 35 U.S.C. §§ 102 and 103 are to the Pre-AIA versions applicable to the '318 Patent.

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I. INTRODUCTION

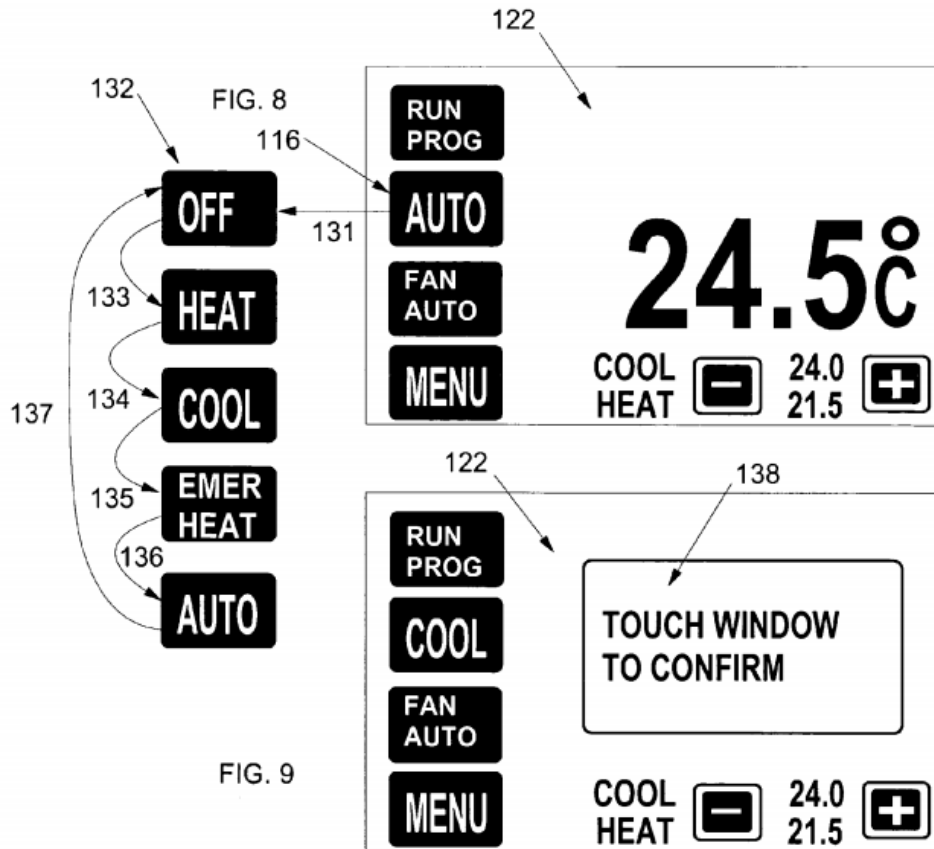
Petitioner LENNOX INDUSTRIES INC. (“LENNOX”) challenges CLAIMS 1, 3-5, 7, 9, 11, AND 14 (the “Challenged Claims”) of Patent Owner Rosen Technologies LLC (“Rosen”)’s U.S. Patent No. 7,156,318 (the “’318 Patent”). However, both Grounds 1 and 2 asserted by Petitioner fail as the petition relies on prior art that does not include or render obvious each and every element of the Challenged Claims of the ’318 Patent. The Petition is insufficient on the merits, as Petitioner fails to demonstrate and teach a non-static virtual button which is changed by touching and in consequence activates a second control function when a second legend is viewable. Furthermore, *Bier*, which is relied on by Petitioner, there is no explicit text or information is disclosed and, therefore, a POSITA would not be motivated to combine this reference with other cited prior art. Accordingly, Ground 1, *Geiwitz in view of Rosen and Bier*, and Ground 2, *Dushane in view of Cardio Manual, and Bier*, both fail.

Accordingly, Patent Owner Rosen Technologies LLC respectfully requests that the Board deny the petition for *inter partes* review of claims 1, 3-5, 7, 9, 11, AND 14 of the ’318 Patent on their merits.

II. THE '318 PATENT DISCLOSES A NOVEL PROGRAMMABLE THERMOSTAT FOR CONTROLLING MULTIPLE SPACE CONDITIONING (HVAC) EQUIPMENT.

At the time of the filing of the '318 Patent, in traditional programmable thermostat systems fixed position, button-actuated switches were to be depressed in a precise sequence to program set points for programmable time periods. EX 1001, 1:67-2:3. The '318 Patent notes that “[i]n some modern thermostats, ‘virtual’ buttons are presented on the LCD itself which is juxtaposed with a touch pad to affect the interactive touch screen.” EX 1001, 2:7-9. However, prior art programmable thermostat systems are difficult to program, and a user must usually refer to and attempt to decipher a programming manual as the programming proceeds. EX 1001, 2:10-22. The use of dot matrix LCD screens in the '318 Patent allowed for an extended functionality to simplify user programming and to relieve the manufacturer of the necessity to fabricate variants of the thermostat to suit the control and display aspects of various heating and/or cooling environments. EX 1001, 2:53-58.

More specifically, the '318 Patent disclosed the use of legends along with non-static virtual buttons to allow for an easily understandable thermostat programming.



For example, virtual button 116 changes the legend on virtual button 116 in response to a user touch which also causes a change in the operating state of the thermostat.

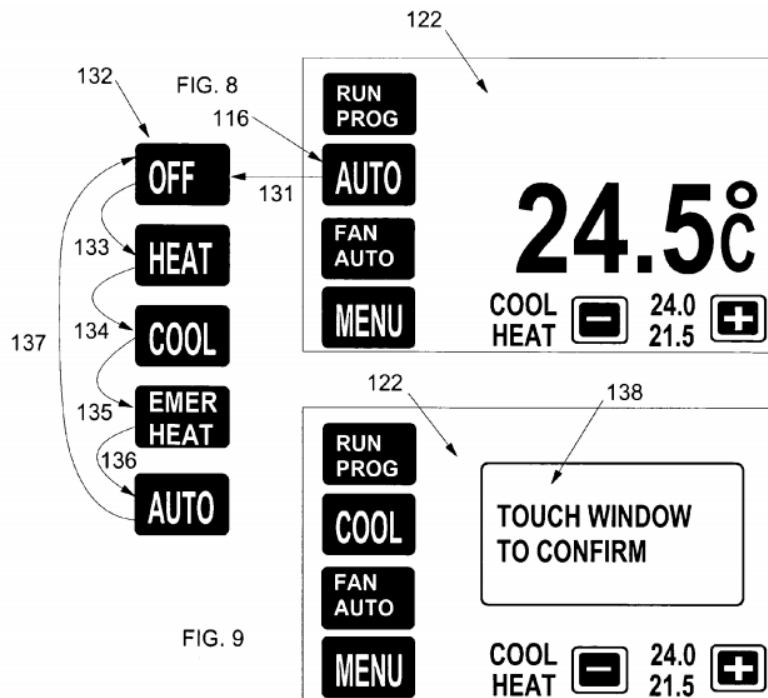
EX 1001, 8:22-30 The legend of virtual button 116 may change it one of the virtual buttons in column 132. EX 1001, 8:22-30 The ability of the non-static virtual buttons to change its legend and effect the operation of the environmental equipment connected with the thermostat provides an intuitive and novel way of programming the thermostat for a user. Furthermore, if fewer than or more than the virtual buttons of virtual buttons column 132 are available to the user, appropriate fewer or more touching steps will be required to cycle through the functions of thermostat 110 and the corresponding legends...” EX 1001, 9:25-30. The virtual buttons of column 132

may, of course, have a different sequence and also reflect various space conditioning equipment components which may be installed...” EX 1001, 9:34-37.

Additionally, the '318 Patent discusses other legends used on other virtual buttons to control kilowatts per hour. EX 1001, 11:8-11 (“Touching button 172 changes the numerical legend in increments to indicate kilowatts per hour required of a compressor if air conditioning equipment is present.”) The use of these non-static virtual buttons with its associated legend allows for a single virtual button to be programmed to have multiple cycle throughs which are intuitive for the user improving over prior art thermostats.

The '318 Patent recognized that fixed position buttons and static virtual buttons “employed in prior art thermostat interfaces are not highly intuitive.” EX 1001, 2:13-15. As such, the '318 Patent disclosed the novel non-static virtual buttons having legends for the virtual button. This was possible due to the use of dot matrix LCDs as opposed to the “less expensive LCDs without dot matrix capability.” EX 1001, 2:46. However, the use of the more expensive dot matrix LCDs places a premium for real estate on the display and as such having non-static virtual buttons which can change the content displayed within the virtual button allows for the use of smaller dot matrix LCDs and “exploit the extended functionality capability of those devices.” EX 1001, 2:51-53.

In describing the invention as shown the below figures:



The '318 Patent states "FIG 8 illustrates that virtual button 116 can undergo step 141 in response to a user touch which also causes a change in the operating state of thermostat 110 and a *change of the legend associated with virtual button 116 to one of the virtual buttons in column 132.*" EX 1001, 8:22-25. As used in the '318 Patent, "legend" is the content on the non-static virtual button 116 from which changes from "AUTO" to "COOL." The '318 Patent further describes a change of the legend on the virtual button 116 from "AUTO" to "OFF" at step 137; changing the legend on the virtual button 116 from "OFF" to "HEAT" at step 133; changing the legend on the virtual button 116 from "HEAT" to "COOL" at step 134; changing the legend on the virtual button 116 from "COOL" to "EMER HEAT" at step 135;

and finally changing the legend on the virtual button 116 from “EMER HEAT” to “AUTO” at step 136. EX 1001, 8:31-50.

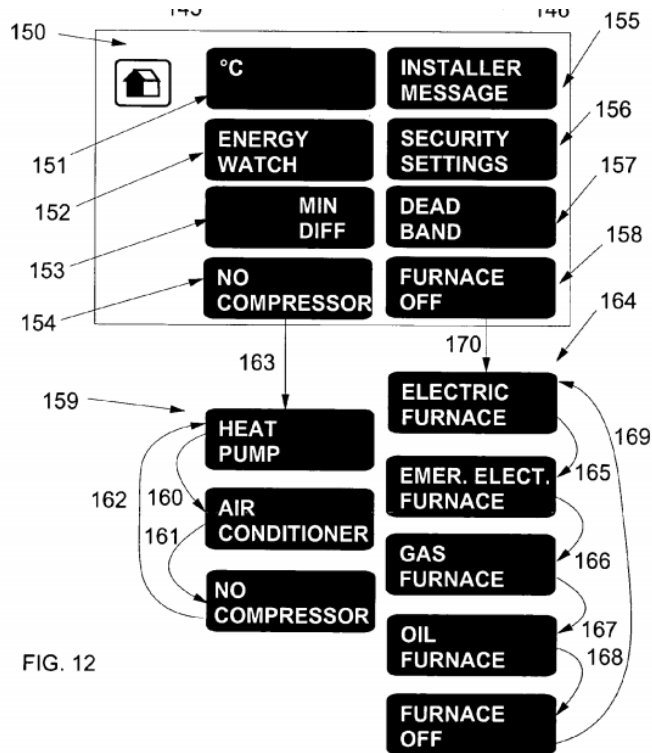
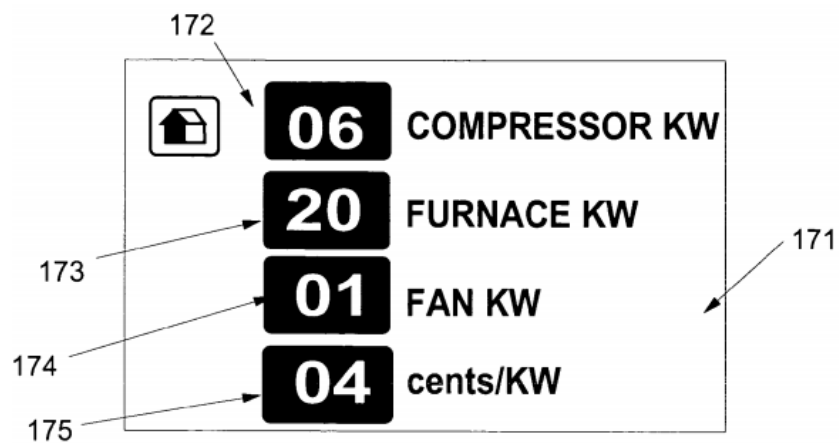


FIG. 12

With respect to Fig. 12, the '318 Patent states “invoking steps 160, 161 and 162 respectively cause a change in the function and legend appearing at button 154 from ‘heat pump’ mode to ‘air conditioner’ mode, from ‘air conditioner’ mode to ‘no compressor’ mode (no air conditioning equipment), and from ‘no compressor’ mode to “heat pump” mode.” EX 1001, 10:37-42. (emphasis added). This further shows that the legend is the content appearing on the virtual button indicative of a control function.

Additionally, the '318 Patent further states that “[c]ycling through steps 165, 166, 167, 168 and 169 respectively cause a change in the function and legend at

button 158 from ‘electric furnace’ mode (presence in the given system of an electric powered furnace) to ‘emer. elect. Furnace’ mode (additional presence of an emergency electric furnace), from ‘emer. elect. Furnace’ mode to ‘gas furnace’ mode (presence of a gas furnace), from ‘gas furnace’ mode to ‘oil furnace’ mode (presence of an oil furnace), from ‘oil furnace’ mode to ‘furnace off’ mode (lack of heating equipment) and from ‘furnace off’ mode to ‘electric furnace’ mode.” EX 1001, 10:48-58. (emphasis added)



In explaining the invention further, the ’318 Patent describes with respect to Fig. 13, “[t]ouching button 172 changes the numerical legend in increments to indicate kilowatts per hour required of a compressor if air conditioning equipment is present.” EX 1001, 11:8-11. Here, the ’318 Patent explains that the legend or content on the non-static virtual button may be numerical rather than text.

Throughout the ’318 Patent, the inventor uses the term “legend” for the content (e.g., text or numerical) displayed on the non-static virtual button which is

changed by a touching and in consequence second control function is active when the second legend is viewable. In keeping with the spirit of the invention, having the text or content displayed on the virtual button makes the virtual button non-static and intuitive to a user to activate the second control function.

III. CLAIM CONSTRUCTION

A. Petitioner Has Adopted Patent Owner's Proposed Constructions For This Proceeding

For this proceeding, Petitioner adopts Patent Owner's claim construction positions stated in pending litigation involving the parties in the United States District Court for the Northern District of Texas. Petition at 10. Patent Owner's positions are set forth in the Petition, and those positions are incorporated by reference as if set forth herein. Patent owner adopts those positions for purposes of this Preliminary Response.

B. Level of Ordinary Skill in the Art

Patent Owner contends that a person having ordinary skill in the art of the inventions of the Patents-in-Suit (a "POSITA") would have at a bachelor's degree in engineering, computer science, or a comparable field, with at least 2 years' experience in temperature controls, embedded control systems, electronic thermostats, or HVAC controls, or similarly relevant industry experience, with relevant experience substituting for education and vice versa.

I. THE *FINTIV* FACTORS FAVOR DISCRETIONARY DENIAL UNDER § 314(A).

The Board may also exercise its §314(a) discretion to deny institution because this proceeding wouldn't promote the efficient and conclusive resolution of the pending litigation dispute regarding the '318 Patent. Lennox is the real party in interest and the litigation is ongoing.

The Director has discretion to deny institution under 35 U.S.C. § 314(a). The Board's precedential decisions in *NHK Spring Co., Ltd. v. Intri-Plex Technologies, Inc.* and *Apple Inc. v. Fintiv Inc.* explain that the Board should consider "whether efficiency, fairness, and the merits support the exercise of authority to deny institution."¹ As shown below, a majority of *Fintiv's* factors support the Board's exercise of discretionary denial because efficiency, fairness, and the merits don't support institution.

A. Factor 1 –The District Court is Has Not Stayed the Parallel Litigation.

As mentioned earlier, there is a pending District Court litigation involving the '318 Patent as well as 4 other patents asserted by Patent Owner against Lennox ("Lennox Litigation"). Lennox initially filed a Motion to Stay Pending IPR, this was denied by the Court in the Pending. Subsequently, the Parties jointly filed a

¹ IPR2018-00752, Paper 8 (P.T.A.B. Sept. 12, 2018) (designated precedential); IPR2020-00019, Paper 11 at 5 (P.T.A.B. Mar. 20, 2020) (designated precedential).

Motion to Stay, however, as of the date of this POPR, the Court has not stayed the litigation.

B. Factor 2 – The Expected Trial Date Is Neutral.

This factor is neutral. The Board is unlikely to issue a final written decision for this proceeding before April 2024. The district court, however, has scheduled the parallel litigation's final pretrial materials due by May 13, 2024.²

Accordingly, because the deadline for the Board's final written decision is right before the scheduled trial timeline, this factor is neutral.

C. Factor 3 – The Northern District of Texas, Patent Owner and Lennox Have Significantly Invested in the Parallel Litigation, Favoring Denial.

This factor weighs in favor of discretionary denial. Rosen submitted infringement contentions November 21, 2022, and Lennox submitted their invalidity contentions on December 15, 2022. All claim construction briefing was submitted, and a claim construction ruling is expected shortly.

This expenditure of resources was avoidable. Patent Owner filed the complaint in the parallel litigation on March 31, 2022. Petitioner waited 363 days from the filing of the Lennox Complaint to file this Petition on March 29, 2023.

² Ex-1011 (NDTX Scheduling Order).

During that year, Rosen and Lennox expended significant resources (and continue to do so). The Board has found that this weighs in favor of discretionary denial.³

Even if Petitioner had diligently filed its petition in a more timely manner, this factor would still weigh in favor of discretionary denial. As explained, diligence in filing the petition doesn't overcome the concern over expended resources in the parallel litigation.⁴ And even the remaining work before trial isn't significant enough to overcome the extensive efforts already exerted by the parties and the court.⁵

Accordingly, because Patent Owner, Petitioner and the district court have expended significant resources in the parallel litigation, this factor weighs against institution.

D. Factor 4 – The Significant Overlap Between Issues Raised in this Proceeding and the Parallel Litigation Favors Denial.

This factor weighs in favor of discretionary denial. If the Board institutes this proceeding, significant overlap will occur. For example, as Lennox's invalidity

³ *Immersion Sys. LLC v. Midas Green Techs., LLC*, PGR2021-00104, Paper 15 at 10 (P.T.A.B. Jan. 31, 2022) (internal quotation and citation omitted).

⁴ *Verizon Business Net. Servs. LLC v. Huawei Techs. Co. Ltd.*, IPR2020-01278, Paper 12 at 11 (P.T.A.B. Jan. 26, 2021) (weighing claim construction and Markman hearing favored exercise discretion despite Petition's filing date only 2 months after service) (internal citations omitted).

⁵ *NXP USA, Inc. v. Impinj, Inc.*, IPR2021-01556, Paper 10 at 8-9 (P.T.A.B. Apr. 21, 2022) (internal citations omitted).

contentions show, the parties will still be expending efforts to address the following overlapping obviousness arguments in the parallel litigation that are based on Grounds 1-3

- Petitioner has cited Geiwitz and Rosen against the '318 Patent in the Lennox Litigation
- Petitioner has cited Dushane and Cardio Manual against the '318 Patent in the Lennox Litigation

Further, institution would open the door to conflicting and inefficient rulings regarding validity. Accordingly, because of the significant overlap and duplicative rulings, this factor weighs against institution.

E. Factor 5 – The Patent Owner and Petitioner Are Parties to the Parallel Litigation.

The Board has consistently found parallel proceedings with the same parties to weigh in favor of exercising discretion to deny institution.⁶ There is no dispute that Petitioner and Patent Owners are the only parties to the parallel litigation.

⁶ *Immersion Systems LLC v. Midas Green Technologies, LLC*, PGR2021-00104, Paper 15 at 15 (P.T.A.B. Jan. 31, 2022); *eClinicalWorks, LLC, Medical Software Solutions, Inc., and NextGen Healthcare, Inc. v. Decapolis LLC*, IPR2022-00229, Paper 10 (P.T.A.B. Apr. 13, 2022) (weighing even only two of three petitioner's status in parallel proceeding as favoring discretionary denial); *NXP USA, Inc. v. Impinj, Inc.*, IPR2021-01556, Paper 10 at 10 (P.T.A.B. Apr. 21, 2022); cf. *TCO AS*

As such, this factor is weighs in favor of denial.

F. Factor 6 – Additional Circumstances Favor Discretionary Denial.

This factor favors discretionary denial. Among the additional factors considered are the merits of the proposed grounds and the necessity for third party discovery. Both considerations favor discretionary denial.

i. The Weakness of Grounds 1-2 Weighs Against Institution.

“Although we need not undertake a full merits analysis when evaluating *Fintiv* Factor 6, we consider the strengths and weaknesses of Petitioner’s case, where stronger merits may weigh against discretionary denial and weaker merits may favor exercising discretion to deny institution.”⁷ “[I]f the merits of the grounds raised in the petition are a closer call, then that fact has favored denying institution when other factors favoring denial are present.”⁸

v. NCS Multistage Inc., PGR2020-00078, Paper 16 at 11 (P.T.A.B. Feb. 18, 2021) (weighing petitioner’s absence from parallel proceedings against discretion).

⁷ *Immersion Systems LLC v. Midas Green Technologies, LLC*, PGR2021-00104, Paper 15 at 16 (P.T.A.B. Jan. 31, 2022) (weighing weak disclosures and lack of motivation to combine for exercising discretion to deny); *TCO AS v. NCS Multistage Inc.*, PGR2020-00078, Paper 16 at 22-27 (P.T.A.B. Feb. 18, 2021) (weighing failure to map prior art disclosures to claims sufficiently and weak proposed grounds weighed in favor of exercising discretion).

⁸ *Fintiv* at 15.

As discussed above in Section III, the three proposed grounds fail to disclose at least “program stored in said memory for displaying messages received from said remote correspondent.”

Accordingly, the merits of the proposed grounds aren’t “sufficiently strong to override the concerns about duplication of effort by the Board and the district court.”⁹ As a result, this factor weighs heavily against institution.

* * * *

In sum, five of the six *Fintiv* factors (Factors 1, 3-6) weigh against institution, one factor (Factor 2) is neutral. Accordingly, Patent Owner respectfully requests that the Board discretionarily deny this petition under §314(a).

V. PETITIONER’S GROUND 1 FAILS TO ESTABLISH GEIWITZ IN VIEW OF ROSEN AND BIER AND THE COMMON KNOWLEDGE OF A POSITA RENDERS OBVIOUS LIMITATIONS OF CLAIMS 1, 3-5, 7, 9, 11 AND 14.

A. Overview of Geiwitz (EX 1005)

Geiwitz (WO03/040839) was filed on October 22, 2002 and published on May 15, 2003. *Geiwitz* is a published international application titled “Programmable

⁹ *Immersion Systems LLC v. Midas Green Technologies, LLC*, PGR2021-00104, Paper 15 at 16 (P.T.A.B. Jan. 31, 2022) (weighing weak disclosures and lack of motivation to combine for exercising discretion to deny); *TCO AS v. NCS Multi-stage Inc.*, PGR2020-00078, Paper 16 at 22-27 (P.T.A.B. Feb. 18, 2021) (weighing failure to map prior art disclosures to claims sufficiently and weak proposed grounds weighed in favor of exercising discretion).

and Expandable Building Automation and Control System.” *Geiwitz* is directed primarily to a building control system but also includes an HVAC control. The primary objective of *Geiwitz* was not HVAC control but related to any number of building control systems including building security, telephone, smoke detectors, sirens, and peripheral power supply among others. EX 1005, Abstract.

Geiwitz was primarily concerned with the integration of those various systems in a building and using an open architecture to allow for modification or expansion. EX 1005, Pg. 6. *Geiwitz* generally disclosed a touchscreen having static virtual buttons to be used with an HVAC system, but as discussed in detail below, *Geiwitz* failed to disclose or render obvious elements of the Challenged Claims.

B. Overview of Rosen (EX 1009)

As illustrated below, Rosen only discloses essentially hardware elements. EX 1009, Fig. 1. A programmable thermostat system is disclosed incorporating an integrated liquid crystal display/touch pad unit, constituting a touch screen, for interactive intuitive interface with a user to facilitate programming the thermostat system.

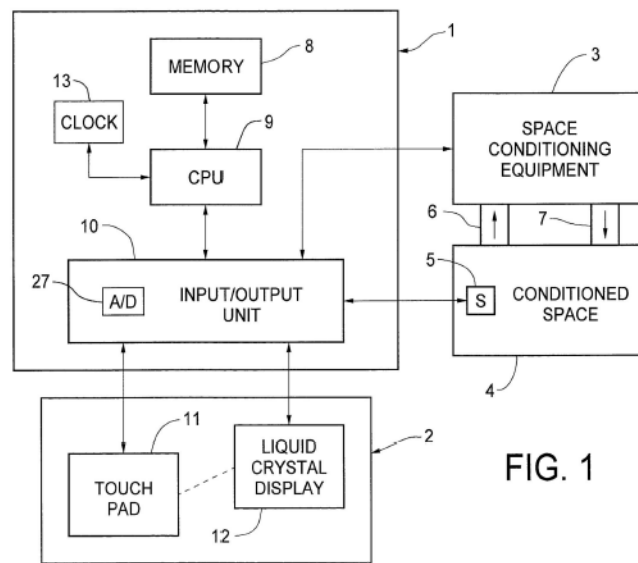


FIG. 1

C. Overview of Bier (EX 1010)

“EmbeddedButtons: Supporting Buttons in Documents,” (“Bier”) was published in October 1992 in ACM Transactions on Information Systems, Vol. 10, No. 4, pp. 381-407. EX1010, 3. Bier relates to virtual buttons that can be used with touchscreens. EX1010, 3-4.

D. *Geiwitz* in view of *Rosen* and *Bier* Does Not Teach or Render Obvious at Least Element D(3) of Claim 1.

Element D(3) of claim 1 recites the following:

D 3) if the first virtual button has been touched:

- a) determining that the thermostat has been directed to control a second space conditioning equipment component;
- b) activating a second control function for controlling the second space conditioning equipment component; and
- c) displaying on said liquid crystal display a second legend indicative of said second control function of said thermostat, which second control function is for controlling the second space conditioning

equipment component, which second control function is active when the second legend is viewable.

For *Geiwitz* in the Ground 1, the Petition relies heavily on the provisional application 60/339,511 (the “’511 Application”) for alleged support that these elements are disclosed or rendered obvious. However, as shown below the ’511 Application does not disclose a non-static virtual button which is changed by touch and in consequence second control function is active when the second legend is viewable. as claimed in Element D(3).

Figure 84

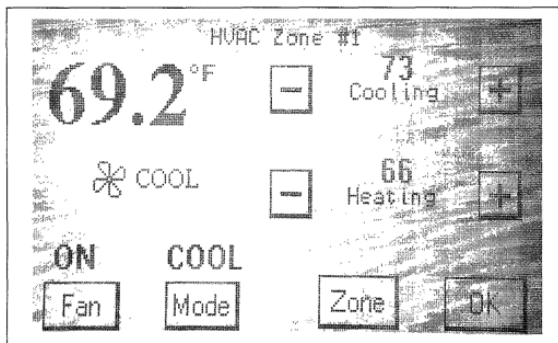
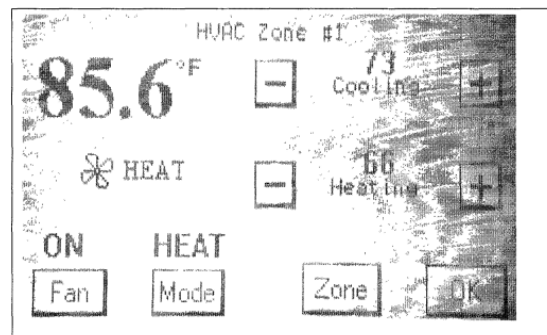


Figure 85



The button mode disclosed in the ’511 Application is a static button. Regardless of how many times it is pressed, the static button does not change its legend and remains at the buttons remains as “Mode.” The text that changes above the static “Mode” button does not disclose or render obvious the first legend indicative of a first control function of said thermostat nor the second legend indicative of said second control function which are the contents of a non-static virtual button which are intuitive to a user.

Furthermore, what's taught in the '511 Application has significant disadvantages compared to the invention of '318 Patent, Claim 1. The text above the static virtual buttons in the '511 Application requires additional real estate on the touchscreen display, wherein space is at a premium on the dot matrix LCD display, especially given the high cost of touchscreen display when the '318 Patent was filed.

Similarly, Rosen (EX 1009) does not disclosed any non-static virtual button which is changed by touching and in consequence second control function is active when the second legend is viewable. as claimed in Element D(3). Furthermore, while Bier (EX 1010) does discuss virtual buttons that can be used with touchscreens, EX1010, 3-4, and a "multistate button" which has multiple states and a legend on the button itself that changes as the state of the button changes. *Id.*, 8, 20, it does not disclose or even suggest the consequence or result of pressing button so that a second control function is active while a second legend is viewable. As discussed above Element D(3) requires *displaying on said liquid crystal display a second legend indicative of said second control function of said thermostat, which second control function is for controlling the second space conditioning equipment component, which second control function is active when the second legend is viewable.* The combination asserted in Ground 1 does not disclose or even suggest this claim requirement.

Also, there is no motivation to make the proposed combination because none of the references pertain in any way to maximize efficiency by using non-static virtual buttons which can change legends to a second control function when touched by the user. In *Bier* there is no explicit text or information disclosed which pertains to this and a *POSITA* and a *POSITA* would not be motivated to incorporate any teachings of *Bier* with *Geiwitz* or *Rosen* in the thermostat screen. *Lindemann Maschinenfabrik GmbH v. American Hoist Derrick Co.*, [730 F.2d 1452, 1462, 221 USPQ 481, 488](#) (Fed. Cir. 1984) (When determining the patentability of a claimed invention which combines two known elements, “the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination.”).

E. Since *Geiwitz* in view of *Rosen* and *Bier* and the common knowledge of a *POSITA* Does Not Teach or Render Obvious the Independent Claims, *Geiwitz* in view of *Rosen* and *Bier* fails to Teach or Render Obvious the Dependent Claims

Stating the obvious, since *Geiwitz in view of Rosen and Bier and the common knowledge of a POSITA* fails to render independent Claim 1 obvious, *Geiwitz in view of Rosen and Bier and the common knowledge of a POSITA* also fails with respect to dependent claims 3-5, 7, 9,11, and 14.

VI. PETITIONER’S GROUND 2 FAILS TO ESTABLISH THAT *DUSHANE IN VIEW OF CARDIO MANUAL, AND BIER*. RENDERS OBVIOUS ALL OF THE LIMITATIONS OF CLAIMS 1, 3-5, 7, 9, 11, AND 14.

A. Overview of Dushane (EX 1004)

Dushane (U.S. 6,032,867) was filed on September 11, 1998 and published on March 7, 2000. It is entitled “Flat plate thermostat and wall mounting method”. Dushane describes a programmable thermostat system. *Id.*, 4:37-44. Dushane discloses “a mode indication display field 110 which includes ‘HEAT’, ‘OFF’, ‘COOL’ and ‘AUTO’ sub-fields,” where one of the “sub-fields is activated depending upon which operating mode for the controlled apparatuses is selected. *Id.*, 11:19-24. Dushane employs a physical button 48 (rather than a virtual one) to switch between thermostat modes. *Id.*, Fig. 1a, 12:66-67. Dushane displays a legend on the LCD screen to tell the user what mode the thermostat is in, as illustrated. *Id.*, Fig. 6, 11:22-34.

B. Overview of Cardio Manual (EX 1012).

The *Cardio Manual* reference was before the USPTO in the examination of the ’318 Patent. The *Cardio Manual* relates to a manual for a Secant product for controlling certain home functions including lighting, security, appliances, and temperature. EX 1012, Pg. 12. The *Cardio Manual* likewise used static buttons which were pre-programmed to control certain HVAC functions.

C. Overview of Bier (EX 1010)

The description of Bier provided above is incorporated by reference as if set forth herein.

D. *Dushane in view of Cardio Manual, and Bier Do Not Teach or Render Obvious Claim Element D of Independent Claim 1.*

The combination of *Dushane Cardio Manual and Bier* also does not disclose Element D(3) of Claim 1, which states:

D 3) if the first virtual button has been touched:
a) determining that the thermostat has been directed to control a second space conditioning equipment component;
b) activating a second control function for controlling the second space conditioning equipment component; and
c) displaying on said liquid crystal display a second legend indicative of said second control function of said thermostat, which second control function is for controlling the second space conditioning equipment component, which second control function is active when the second legend is viewable.

Dushane (EX 1004) only discloses the use of physical button to control the thermostat panel instead of touchscreen, and in *Cardio Manual* there is no disclosure related to “a legend” or “content” on the button or some other legend showing pertaining to controlling the thermostat. EX 1004, Figs 8, 12. Similarly, while Bier (EX 1010) does discuss virtual buttons that can be used with touchscreens, EX1010, 3-4, it does disclose the consequence or result of pressing button being that a second control function is active when the second legend is viewable. This is required in Element D (3) c)—*displaying on said liquid crystal display a second legend*

indicative of said second control function of said thermostat, which second control function is for controlling the second space conditioning equipment component, which second control function is active when the second legend is viewable. Accordingly the combination presented in Ground 2 fails to render Claim 1 obvious.

Also, there is no motivation to make the proposed combination because none of the references pertain in any way to maximize efficiency by using non-static virtual buttons which can change legends to a second control function when touched by the user. In *Bier* there is no explicit text or information disclosed which pertains to this and a POSITA and a POSITA would not be motivated to incorporate any teachings of *Bier* with *Geiwitz* or *Rosen* in the thermostat screen. *Lindemann Maschinenfabrik GmbH v. American Hoist Derrick Co.*, [730 F.2d 1452, 1462, 221 USPQ 481, 488](#) (Fed. Cir. 1984) (When determining the patentability of a claimed invention which combines two known elements, “the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination.”).

E. Since *Dushane in view of Cardio Manual, and Bier* Does Not Teach or Render Obvious the Independent Claims, *Dushane in view of Cardio Manual, and Bier* fails to Teach or Render Obvious the Dependent Claims.

Stating the obvious, since *Dushane in view of Cardio Manual, and Bier* fails to render Claim 1 obvious, *Dushane in view of Cardio Manual, and Bier* also fails with respect to dependent claims 3-5, 7, 9,11 and 14

VII. CONCLUSION

The Board should exercise its discretion to deny the petition on its merits and/or *Fintiv* grounds. Accordingly, Patent Owner respectfully requests the Board deny institution of *Inter Partes Review* in this proceeding.

Respectfully Submitted,

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CERTIFICATE OF COMPLIANCE

Per 37 C.F.R. §42.24(a) and (d), the undersigned hereby certifies that the Petition complies with the type-volume limitation of 37 C.F.R. §42.24(a)(i) because, exclusive of exempted portions, it contains 5041 words as counted by the word-processing program used to prepare it.

Respectfully Submitted,

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), the undersigned certifies that the above-captioned Mandatory Notice was served on counsel of record for the Petitioner by filing this document through the Patent Review Processing System as well as by delivering a copy via electronic mail to:

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