

AO 120 (Rev. 08/10)

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| <b>TO:</b><br><b>Mail Stop 8</b><br><b>Director of the U.S. Patent and Trademark Office</b><br><b>P.O. Box 1450</b><br><b>Alexandria, VA 22313-1450</b> | <b>REPORT ON THE</b><br><b>FILING OR DETERMINATION OF AN</b><br><b>ACTION REGARDING A PATENT OR</b><br><b>TRADEMARK</b> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|

In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court **WESTERN DISTRICT OF TEXAS** on the following

☐ Trademarks or ☒ Patents. ( ☐ the patent action involves 35 U.S.C. § 292.);

|                                            |                                |                                                         |
|--------------------------------------------|--------------------------------|---------------------------------------------------------|
| DOCKET NO.<br><b>6:22-cv-131</b>           | DATE FILED<br><b>2/6/2022</b>  | U.S. DISTRICT COURT<br><b>WESTERN DISTRICT OF TEXAS</b> |
| PLAINTIFF<br><b>ROSEN TECHNOLOGIES LLC</b> |                                | DEFENDANT<br><b>RESIDEO TECHNOLOGIES, INC.</b>          |
| PATENT OR<br>TRADEMARK NO.                 | DATE OF PATENT<br>OR TRADEMARK | HOLDER OF PATENT OR TRADEMARK                           |
| 1 6,581,846                                | 6/24/2003                      | ROSEN TECHNOLOGIES LLC                                  |
| 2 6,619,555                                | 9/16/2003                      | ROSEN TECHNOLOGIES LLC                                  |
| 3 6,789,739                                | 9/14/2004                      | ROSEN TECHNOLOGIES LLC                                  |
| 4 7,156,318                                | 1/7/2007                       | ROSEN TECHNOLOGIES LLC                                  |
| 5 7,185,825                                | 3/6/2007                       | ROSEN TECHNOLOGIES LLC                                  |

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

|                            |                                                                                                                                                               |                               |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| DATE INCLUDED              | INCLUDED BY<br><input type="checkbox"/> Amendment <input type="checkbox"/> Answer <input type="checkbox"/> Cross Bill <input type="checkbox"/> Other Pleading |                               |
| PATENT OR<br>TRADEMARK NO. | DATE OF PATENT<br>OR TRADEMARK                                                                                                                                | HOLDER OF PATENT OR TRADEMARK |
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In the above—entitled case, the following decision has been rendered or judgement issued:

|                                                           |
|-----------------------------------------------------------|
| DECISION/JUDGEMENT                                        |
| 10/27/2022 Doc #40 ORDER GRANTING [39] Motion to Dismiss. |

|                                  |                                                                                                           |                        |
|----------------------------------|-----------------------------------------------------------------------------------------------------------|------------------------|
| CLERK<br><b>PHILIP J. DEVLIN</b> | (BY) DEPUTY CLERK<br> | DATE <b>10/27/2022</b> |
|----------------------------------|-----------------------------------------------------------------------------------------------------------|------------------------|

Copy 1—Upon initiation of action, mail this copy to Director    Copy 3—Upon termination of action, mail this copy to Director  
Copy 2—Upon filing document adding patent(s), mail this copy to Director    Copy 4—Case file copy

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|                                                                                                                                                         |                                                                                                                         |
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| <b>TO:</b><br><b>Mail Stop 8</b><br><b>Director of the U.S. Patent and Trademark Office</b><br><b>P.O. Box 1450</b><br><b>Alexandria, VA 22313-1450</b> | <b>REPORT ON THE</b><br><b>FILING OR DETERMINATION OF AN</b><br><b>ACTION REGARDING A PATENT OR</b><br><b>TRADEMARK</b> |
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In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court WESTERN DISTRICT OF TEXAS on the following

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|                                     |                                |                                                  |
|-------------------------------------|--------------------------------|--------------------------------------------------|
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| PLAINTIFF<br>ROSEN TECHNOLOGIES LLC |                                | DEFENDANT<br>RESIDEO TECHNOLOGIES, INC.          |
| PATENT OR<br>TRADEMARK NO.          | DATE OF PATENT<br>OR TRADEMARK | HOLDER OF PATENT OR TRADEMARK                    |
| 1 7,232,075                         | 6/19/2007                      | ROSEN TECHNOLOGIES LLC                           |
| 2 RE40,437                          | 7/15/2008                      | ROSEN TECHNOLOGIES LLC                           |
| 3                                   |                                |                                                  |
| 4                                   |                                |                                                  |
| 5                                   |                                |                                                  |

In the above—entitled case, the following patent(s)/ trademark(s) have been included:

|                            |                                                                                                                                                               |                               |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| DATE INCLUDED              | INCLUDED BY<br><input type="checkbox"/> Amendment <input type="checkbox"/> Answer <input type="checkbox"/> Cross Bill <input type="checkbox"/> Other Pleading |                               |
| PATENT OR<br>TRADEMARK NO. | DATE OF PATENT<br>OR TRADEMARK                                                                                                                                | HOLDER OF PATENT OR TRADEMARK |
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In the above—entitled case, the following decision has been rendered or judgement issued:

|                                                                                     |
|-------------------------------------------------------------------------------------|
| DECISION/JUDGEMENT<br><br>10/27/2022 Doc #40 ORDER GRANTING [39] Motion to Dismiss. |
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|                           |                                                                                                           |                    |
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| CLERK<br>PHILIP J. DEVLIN | (BY) DEPUTY CLERK<br> | DATE<br>10/27/2022 |
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|                                                                                                                                                         |                                                                                                                         |
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| <b>TO:</b><br><b>Mail Stop 8</b><br><b>Director of the U.S. Patent and Trademark Office</b><br><b>P.O. Box 1450</b><br><b>Alexandria, VA 22313-1450</b> | <b>REPORT ON THE</b><br><b>FILING OR DETERMINATION OF AN</b><br><b>ACTION REGARDING A PATENT OR</b><br><b>TRADEMARK</b> |
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| PATENT OR<br>TRADEMARK NO.          | DATE OF PATENT<br>OR TRADEMARK | HOLDER OF PATENT OR TRADEMARK                    |
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| 2 6,619,555                         | 9/16/2003                      | ROSEN TECHNOLOGIES LLC                           |
| 3 6,789,739                         | 9/14/2004                      | ROSEN TECHNOLOGIES LLC                           |
| 4 7,156,318                         | 1/7/2007                       | ROSEN TECHNOLOGIES LLC                           |
| 5 7,185,825                         | 3/6/2007                       | ROSEN TECHNOLOGIES LLC                           |

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|                            |                                                                                                                                                               |                               |
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| DATE INCLUDED              | INCLUDED BY<br><input type="checkbox"/> Amendment <input type="checkbox"/> Answer <input type="checkbox"/> Cross Bill <input type="checkbox"/> Other Pleading |                               |
| PATENT OR<br>TRADEMARK NO. | DATE OF PATENT<br>OR TRADEMARK                                                                                                                                | HOLDER OF PATENT OR TRADEMARK |
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In the above—entitled case, the following decision has been rendered or judgement issued:

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| DECISION/JUDGEMENT |
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| CLERK | (BY) DEPUTY CLERK | DATE |
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| PATENT OR<br>TRADEMARK NO. | DATE OF PATENT<br>OR TRADEMARK                                                                                                                                | HOLDER OF PATENT OR TRADEMARK |
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| DECISION/JUDGEMENT |
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## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT7129032

|                                   |                        |                       |
|-----------------------------------|------------------------|-----------------------|
| <b>SUBMISSION TYPE:</b>           | NEW ASSIGNMENT         |                       |
| <b>NATURE OF CONVEYANCE:</b>      | ASSIGNMENT             |                       |
| <b>CONVEYING PARTY DATA</b>       |                        |                       |
| <b>Name</b>                       |                        | <b>Execution Date</b> |
| IAED TECHNOLOGIES INC             |                        | 12/03/2021            |
| <b>RECEIVING PARTY DATA</b>       |                        |                       |
| <b>Name:</b>                      | ROSEN TECHNOLOGIES LLC |                       |
| <b>Street Address:</b>            | 17330 PRESTON RD       |                       |
| <b>Internal Address:</b>          | ST 200D                |                       |
| <b>City:</b>                      | DALLAS                 |                       |
| <b>State/Country:</b>             | TEXAS                  |                       |
| <b>Postal Code:</b>               | 75252                  |                       |
| <b>PROPERTY NUMBERS Total: 18</b> |                        |                       |
| <b>Property Type</b>              | <b>Number</b>          |                       |
| Patent Number:                    | 7232075                |                       |
| Patent Number:                    | 7152806                |                       |
| Patent Number:                    | 7156318                |                       |
| Patent Number:                    | 7185825                |                       |
| Patent Number:                    | 7145110                |                       |
| Patent Number:                    | 7058477                |                       |
| Patent Number:                    | 7028912                |                       |
| Patent Number:                    | 7050026                |                       |
| Patent Number:                    | 6902117                |                       |
| Patent Number:                    | 6789739                |                       |
| Patent Number:                    | 6786421                |                       |
| Patent Number:                    | 6619555                |                       |
| Patent Number:                    | 6578770                |                       |
| Patent Number:                    | 6581846                |                       |
| Patent Number:                    | 7841542                |                       |
| Patent Number:                    | 7838803                |                       |
| Application Number:               | 13953135               |                       |
| Application Number:               | 14313507               |                       |

**CORRESPONDENCE DATA****Fax Number:**

*Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.*

**Email:** JASON@IPVAL.COM  
**Correspondent Name:** JASON BOURGEOIS  
**Address Line 1:** 4940 BROADWAY STREET  
**Address Line 2:** ST130  
**Address Line 4:** SAN ANTONIO, TEXAS 78209

|                           |                                                            |
|---------------------------|------------------------------------------------------------|
| <b>NAME OF SUBMITTER:</b> | JASON BOURGEOIS                                            |
| <b>SIGNATURE:</b>         | /JASON BOURGEOIS/                                          |
| <b>DATE SIGNED:</b>       | 01/19/2022                                                 |
|                           | This document serves as an Oath/Declaration (37 CFR 1.63). |

**Total Attachments: 3**

source=IAED and Rosen Tech Patent Assignment#page1.tif  
source=IAED and Rosen Tech Patent Assignment#page2.tif  
source=IAED and Rosen Tech Patent Assignment#page3.tif

## PATENT ASSIGNMENT AGREEMENT

THIS PATENT ASSIGNMENT AGREEMENT (the "Agreement"), is made and entered into this 3<sup>rd</sup> day of December, 2021 (the "Effective Date"), is by and between IAED Technologies, Inc., a Canadian Company with a principal place of business at 695 Chenin Avila Unit 7 Suite 259, Piedmont, Quebec, J0R1T0 Canada ("Assignor") and Rosen Technologies, LLC, a Texas company organized under the laws of Texas, ("Assignee"). Assignor and Assignee are also referred to in this Agreement each as a "Party" and collectively as the "Parties."

WHEREAS, Assignor is the sole owner of all rights, title and interest in and to the inventions (the "Inventions") as described and claimed in the United States and foreign patents and patent application as listed on Schedule A (United States patent properties) and Schedule B (foreign patent properties) hereto (collectively the "Patents");

NOW, THEREFORE, in consideration of the mutual covenants and agreements of the Parties and pursuant to the Purchase Agreement, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, it is hereby agreed as follows:

### I. ASSIGNMENT

1. Assignor hereby sells, transfers, assigns and sets over to Assignee all rights, title and interest (for all countries) in and to the Inventions and the Patents, and all the rights and privileges under any letters patent that may be granted under any continuations, divisions, reissues, reexaminations, renewals and extensions therefor and thereon and all continuations, divisions, reissues, reexaminations, renewals and extensions thereof; and all applications for industrial property protection, including without limitation, all applications for patents, utility models, copyright, and designs which may hereafter be filed for said Inventions and Patents in any country or countries, together with the right to file such applications and the right to claim for the same the priority rights derived from the Inventions and the Patents under the patent laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, copyrights and designs which may hereafter be filed for said Inventions or Patents in any country or countries, together with the right to file such applications; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates, copyrights and designs which may be granted for said Invention and/or Patent in any country or countries and all extensions, renewals and reissues thereof.
2. The rights, title and interest transferred above are subject to Assignor having previously granted a non-exclusive, fully paid up, royalty-free license to the Patents to Verdant Environmental Technologies Inc. dated August 31, 2016 (Verdant License) presently held through acquisition by Emerson Electric Co. For the avoidance of doubt, Emerson Electric Co. (including its Subsidiaries) or any subsequent acquirer of this pre-existing license. Further, including the right to expand the license in the future to products branded under other trademarks owned by the holding licensee.
3. Assignor hereby authorizes and requests the Commissioner of Patents and Trademarks of the

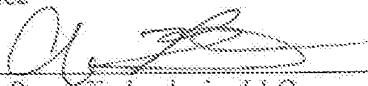
United States and any official of any country or countries foreign to the United States, whose duty is to issue patents or other evidence or forms of industrial property on applications as aforesaid, to issue the same to Assignee, its successors, assigns and legal representatives, or to such nominees as it may designate.

4. Assignor agrees that, whenever reasonably requested by Assignee, Assignor will execute all papers, take all rightful oaths, and do all acts which may be reasonably necessary for securing and maintaining patents for the Inventions in any country and for vesting title thereto in Assignee, its successors, assigns and legal representatives or nominees.
5. Assignor authorizes and empowers Assignee, its successors, assigns and legal representatives or nominees, to invoke and claim for any application for patent or other form of protection for the Inventions, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable, and to invoke and claim such right of priority without further written or oral authorization from Assignor.
6. Assignor hereby consents that a copy of this Agreement shall be deemed a full legal and formal equivalent of any assignment, consent to file or like document that may be required in any country for any purpose and more particularly in proof of the right of Assignee or nominee to claim the aforesaid benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it.
7. All of the rights, title and interest in and to the Inventions and the Patents sold, transferred, assigned and set over to Assignee hereunder include all income, royalties, damages and payments now or hereafter due or payable with respect thereto, and all causes of action (whether in law or equity) and the right to sue, counterclaim, and recover for the past, present and future infringement of the rights assigned or to be assigned hereunder.

Assignor

  
By: IAED Technologies, Inc.  
Name: Howard Rosen  
Title: Managing Member

Assignee

  
By: Rosen Technologies LLC  
Name: Adam Baumli  
Title: Managing Member

**SCHEDULE A**  
**UNITED STATES PATENTS AND PATENT APPLICATIONS**

**U.S. Patent Application Publications**

| Publication Number | Application Number | Publication Date | Application Date | Issue Date |
|--------------------|--------------------|------------------|------------------|------------|
| US20150028114A1    | 13/953,135         | 1/29/2015        | 7/29/2013        | Pending    |
| US20150369508A1    | 14/313,507         | 12/24/2015       | 6/24/2014        | Pending    |

**U.S. Patent Publications**

| Patent Number | Application Number | Publication Date | Application Date | Issue Date |
|---------------|--------------------|------------------|------------------|------------|
| US7232075B1   | 11/039,180         | 6/19/2007        | 1/19/2005        | 6/19/2007  |
| US7152806B1   | 10/654,230         | 12/26/2006       | 9/3/2003         | 12/26/2006 |
| US7156318B1   | 10/654,235         | 1/2/2007         | 9/3/2003         | 1/2/2007   |
| US7185825B1   | 10/875,579         | 3/6/2007         | 6/24/2004        | 3/6/2007   |
| US7145110B1   | 11/254,078         | 12/5/2006        | 10/19/2005       | 12/5/2006  |
| US7058477B1   | 10/995,574         | 6/6/2006         | 11/23/2004       | 6/6/2006   |
| US7028912B1   | 10/878,825         | 4/18/2006        | 6/28/2004        | 4/18/2006  |
| US7050026B1   | 10/440,474         | 5/23/2006        | 5/15/2003        | 5/23/2006  |
| US6902117B1   | 10/420,660         | 6/7/2005         | 4/21/2003        | 6/7/2005   |
| US6789739B2   | 10/287,677         | 9/14/2004        | 11/4/2002        | 9/14/2004  |
| US6786421B2   | 10/654,236         | 9/7/2004         | 9/3/2003         | 9/7/2004   |
| US6619555B2   | 10/075,866         | 9/16/2003        | 2/13/2002        | 9/16/2003  |
| US6578770B1   | 10/119,180         | 6/17/2003        | 4/9/2002         | 6/17/2003  |
| US6581846B1   | 10/091,767         | 6/24/2003        | 3/6/2002         | 6/24/2003  |
| US7841542B1   | 11/557,492         | 11/30/2010       | 11/7/2006        | 11/30/2010 |
| US7836803B1   | 11/852,036         | 11/23/2010       | 9/7/2007         | 11/23/2010 |

|                                                                                                        |                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>TO:</b>                                                                                             |                                                                                                                                  |
| <b>COMMISSIONER OF PATENTS AND TRADEMARKS</b><br>(USPTO)<br>P.O. Box 1450<br>Alexandria, VA 22313-1450 | <b>REPORT ON THE<br/>         FILING OF DETERMINATION OF AN<br/>         ACTION REGARDING A PATENT OR<br/>         TRADEMARK</b> |

In compliance with 35 U.S.C. 290 and/or 15 U.S.C. 1116 you are hereby advised  
 that a court action has been filed on the following patent(s)/trademark(s) in the U.S. District Court:

|                                                               |                                      |                                                                                              |
|---------------------------------------------------------------|--------------------------------------|----------------------------------------------------------------------------------------------|
| <b>DOCKET NO.</b><br>10cv2771                                 | <b>DATE FILED:</b><br>5/4/2010       | <b>UNITED STATES DISTRICT COURT,<br/>NORTHERN DISTRICT OF ILLINOIS,<br/>EASTERN DIVISION</b> |
| <b>Plaintiff(s):</b><br>Verdant Environmental<br>Technologies | <b>Defendant(s):</b><br>Ecobee, Inc. |                                                                                              |
| <b>PATENT NUMBER</b>                                          | <b>DATE OF PATENT</b>                | <b>HOLDER OF PATENT OR TRADEMARK</b>                                                         |
| US 6,619,555 B2                                               | 9/16/03                              | Verdant Environmental Technologies                                                           |
| US 6,789,739 B2                                               | 9/14/04                              | Verdant Environmental Technologies                                                           |
| US 7,232,075 B1                                               | 6/19/07                              | Verdant Environmental Technologies                                                           |
|                                                               |                                      |                                                                                              |

In the above-entitled case, the following trademarks(s) have been included:

|                         |                                                                                                                                                                      |                                      |  |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--|
| <b>DATE INCLUDED</b>    | <b>INCLUDED BY</b><br><input type="checkbox"/> Amendment <input type="checkbox"/> Answer <input type="checkbox"/> Cross Bill <input type="checkbox"/> Other Pleading |                                      |  |
| <b>TRADEMARK NUMBER</b> | <b>DATE OF TRADEMARK</b>                                                                                                                                             | <b>HOLDER OF PATENT OR TRADEMARK</b> |  |
| 1.                      |                                                                                                                                                                      |                                      |  |
| 2.                      |                                                                                                                                                                      |                                      |  |
| 3.                      |                                                                                                                                                                      |                                      |  |

In the above-entitled case, the following decision has been rendered or judgment issued

|                                                                                                                                                                                       |                                                |                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|--------------------------------------|
| DECISION/JUDGMENT : MINUTE entry before Honorable John W. Darrah: Plaintiff having filed a notice of voluntary dismissal without prejudice, this case is hereby closed. Mailed notice |                                                |                                      |
| <b>CLERK - MICHAEL W. DOBBINS</b>                                                                                                                                                     | <b>DEPUTY CLERK:</b><br><br>/s/ Brenda Rinozzi | <b>DATE:</b><br><br>November 4, 2010 |



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

| APPLICATION NO. | ISSUE DATE | PATENT NO. | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|------------|------------|---------------------|------------------|
| 11/039,180      | 06/19/2007 | 7232075    |                     | 8961             |

51413 7590 05/30/2007  
MARC E. HANKIN, ESQ.  
11414 THURSTON CIRCLE  
LOS ANGELES, CA 90049

## ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

### **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)** (application filed on or after May 29, 2000)

The Patent Term Adjustment is 290 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site <http://pair.uspto.gov> for additional applicants):

Howard Rosen, Montreal, CANADA;



## UNITED STATES PATENT AND TRADEMARK OFFICE

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 United States Patent and Trademark Office  
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 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov

**\*BIBDATASHEET\***

CONFIRMATION NO. 8961

Bib Data Sheet

|                                                                                                                                                                                                                                                                                                      |                                                                                                                   |                                   |                                                                                                                                                                                                                                                                                 |                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| <b>SERIAL NUMBER</b><br>11/039,180                                                                                                                                                                                                                                                                   | <b>FILING OR 371(c) DATE</b><br>01/19/2005<br><b>RULE</b>                                                         | <b>CLASS</b><br>236               | <b>GROUP ART UNIT</b><br>3744                                                                                                                                                                                                                                                   | <b>ATTORNEY DOCKET NO.</b> |
| <b>APPLICANTS</b><br>Howard Rosen, Montreal, CANADA;<br><b>** CONTINUING DATA *****</b><br>This application is a CIP of 10/440,474 05/15/2003 PAT 7,050,026<br><b>** FOREIGN APPLICATIONS *****</b><br><b>IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** SMALL ENTITY **</b><br><b>** 02/26/2005</b> |                                                                                                                   |                                   |                                                                                                                                                                                                                                                                                 |                            |
| Foreign Priority claimed <input type="checkbox"/> yes <input type="checkbox"/> no<br>35 USC 119 (a-d) conditions <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> Met after Allowance<br>Verified and Acknowledged _____<br>Examiner's Signature Initials           |                                                                                                                   | <b>STATE OR COUNTRY</b><br>CANADA | <b>SHEETS DRAWING</b><br>7                                                                                                                                                                                                                                                      | <b>TOTAL CLAIMS</b><br>20  |
|                                                                                                                                                                                                                                                                                                      |                                                                                                                   |                                   | <b>INDEPENDENT CLAIMS</b><br>1                                                                                                                                                                                                                                                  |                            |
| <b>ADDRESS</b><br>51413                                                                                                                                                                                                                                                                              |                                                                                                                   |                                   |                                                                                                                                                                                                                                                                                 |                            |
| <b>TITLE</b><br>THERMOSTAT SYSTEM WITH TOUCHSCREEN WITH USER INTERFACES OR OPERATIONAL ALGORITHMS VIA A REMOTE CORRESPONDENT                                                                                                                                                                         |                                                                                                                   |                                   |                                                                                                                                                                                                                                                                                 |                            |
| <b>FILING FEE RECEIVED</b><br>500                                                                                                                                                                                                                                                                    | FEES: Authority has been given in Paper<br>No. _____ to charge/credit DEPOSIT ACCOUNT<br>No. _____ for following: |                                   | <input type="checkbox"/> All Fees<br><input type="checkbox"/> 1.16 Fees ( Filing )<br><input type="checkbox"/> 1.17 Fees ( Processing Ext. of time )<br><input type="checkbox"/> 1.18 Fees ( Issue )<br><input type="checkbox"/> Other _____<br><input type="checkbox"/> Credit |                            |



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| APPLICATION NUMBER | FILING OR 371 (c) DATE | FIRST NAMED APPLICANT | ATTY. DOCKET NO./TITLE |
|--------------------|------------------------|-----------------------|------------------------|
| 11/039,180         | 01/19/2005             | Howard Rosen          | 0208.2CA4              |

David T. Bracken  
 The Law Office of David T. Bracken  
 4839 Bond Avenue  
 Orange, CA 92869

CONFIRMATION NO. 8961

\*OC000000023936397\*

\*OC000000023936397\*

Date Mailed: 05/18/2007

**NOTICE REGARDING CHANGE OF POWER OF ATTORNEY**

This is in response to the Power of Attorney filed 05/08/2007.

- The Power of Attorney to you in this application has been revoked by the applicant. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

Office of Initial Patent Examination (571) 272-4000, or 1-800-PTO-9199  
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| APPLICATION NUMBER | FILING OR 371 (c) DATE | FIRST NAMED APPLICANT | ATTY. DOCKET NO./TITLE |
|--------------------|------------------------|-----------------------|------------------------|
| 11/039,180         | 01/19/2005             | Howard Rosen          |                        |

51413  
 MARC E. HANKIN, ESQ.  
 11414 THURSTON CIRCLE  
 LOS ANGELES, CA 90049

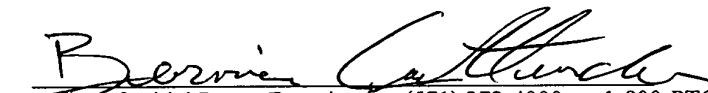
CONFIRMATION NO. 8961  
 \*OC000000023936468\*  
 \*OC000000023936468\*

Date Mailed: 05/18/2007

## NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 05/08/2007.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

  
 Office of Initial Patent Examination (571) 272-4000, or 1-800-PTO-9199  
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## UNITED STATES PATENT AND TRADEMARK OFFICE

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## \*BIBDATASHEET\*

CONFIRMATION NO. 8961

Bib Data Sheet

|                                                                                                                                                                                                                                                            |                                                                                                                   |                                   |                                                                                                                                                                                                                                                                                 |                                         |                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|--------------------------------|
| <b>SERIAL NUMBER</b><br>11/039,180                                                                                                                                                                                                                         | <b>FILING OR 371(c) DATE</b><br>01/19/2005<br><b>RULE</b>                                                         | <b>CLASS</b><br>236               | <b>GROUP ART UNIT</b><br>3744                                                                                                                                                                                                                                                   | <b>ATTORNEY DOCKET NO.</b><br>0208.2CA4 |                                |
| <b>APPLICANTS</b><br>Howard Rosen, Montreal, CANADA;                                                                                                                                                                                                       |                                                                                                                   |                                   |                                                                                                                                                                                                                                                                                 |                                         |                                |
| <b>** CONTINUING DATA *****</b><br>This application is a CIP of 10/440,474 05/15/2003 PAT 7,050,026                                                                                                                                                        |                                                                                                                   |                                   |                                                                                                                                                                                                                                                                                 |                                         |                                |
| <b>** FOREIGN APPLICATIONS *****</b>                                                                                                                                                                                                                       |                                                                                                                   |                                   |                                                                                                                                                                                                                                                                                 |                                         |                                |
| <b>IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** SMALL ENTITY **</b><br>** 02/26/2005                                                                                                                                                                     |                                                                                                                   |                                   |                                                                                                                                                                                                                                                                                 |                                         |                                |
| Foreign Priority claimed <input type="checkbox"/> yes <input type="checkbox"/> no<br>35 USC 119 (a-d) conditions <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> Met after<br>met Allowance<br>Verified and Acknowledged |                                                                                                                   | <b>STATE OR COUNTRY</b><br>CANADA | <b>SHEETS DRAWING</b><br>7                                                                                                                                                                                                                                                      | <b>TOTAL CLAIMS</b><br>20               | <b>INDEPENDENT CLAIMS</b><br>1 |
| <b>ADDRESS</b><br>David T. Bracken<br>The Law Office of David T. Bracken<br>4839 Bond Avenue<br>Orange, CA92869                                                                                                                                            |                                                                                                                   |                                   |                                                                                                                                                                                                                                                                                 |                                         |                                |
| <b>TITLE</b><br>THERMOSTAT SYSTEM WITH TOUCHSCREEN WITH USER INTERFACES OR OPERATIONAL ALGORITHMS VIA A REMOTE CORRESPONDENT                                                                                                                               |                                                                                                                   |                                   |                                                                                                                                                                                                                                                                                 |                                         |                                |
| <b>FILING FEE RECEIVED</b><br>500                                                                                                                                                                                                                          | FEES: Authority has been given in Paper<br>No. _____ to charge/credit DEPOSIT ACCOUNT<br>No. _____ for following: |                                   | <input type="checkbox"/> All Fees<br><input type="checkbox"/> 1.16 Fees ( Filing )<br><input type="checkbox"/> 1.17 Fees ( Processing Ext. of time )<br><input type="checkbox"/> 1.18 Fees ( Issue )<br><input type="checkbox"/> Other _____<br><input type="checkbox"/> Credit |                                         |                                |

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| Substitute for form 1448A/PTO<br><br><b>INFORMATION DISCLOSURE<br/>STATEMENT BY APPLICANT</b><br><br><i>(use as many sheets as necessary)</i> |   |    |   | <b>Complete If Known</b> |           |
|                                                                                                                                               |   |    |   | Application Number       | 11/039180 |
|                                                                                                                                               |   |    |   | Filing Date              |           |
|                                                                                                                                               |   |    |   | First Named Inventor     | Rosen     |
|                                                                                                                                               |   |    |   | Group Art Unit           |           |
|                                                                                                                                               |   |    |   | Examiner Name            |           |
|                                                                                                                                               |   |    |   | Attorney Docket Number   | 0208.2cA4 |
| Sheet                                                                                                                                         | 1 | of | 1 |                          |           |

PAP  
5/10/07

[illegible]

PAP  
5) 10/07

[illegible]

|                       |                    |                    |         |
|-----------------------|--------------------|--------------------|---------|
| Examiner<br>Signature | <i>[Signature]</i> | Date<br>Considered | 4/14/07 |
|-----------------------|--------------------|--------------------|---------|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

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# **POWER OF ATTORNEY and CORRESPONDENCE ADDRESS INDICATION FORM**

|                               |                                                                                                              |
|-------------------------------|--------------------------------------------------------------------------------------------------------------|
| <b>Application Number</b>     | 11/039,180                                                                                                   |
| <b>Filing Date</b>            | January 19, 2005                                                                                             |
| <b>First Named Inventor</b>   | Howard Rosen                                                                                                 |
| <b>Title</b>                  | Thermostat System with Touchscreen with User Interfaces or Operational Algorithms via a Remote Correspondent |
| <b>Art Unit</b>               | 3744                                                                                                         |
| <b>Examiner Name</b>          | Norman, Marc E.                                                                                              |
| <b>Attorney Docket Number</b> | Rosen-TouchScreen                                                                                            |

I hereby revoke all previous powers of attorney given in the above-identified application

I hereby appoint:

☒ Practitioners associated with the Customer Number:

51413

OR

☐ Practitioner(s) name below:

| Name | Registration Number |
|------|---------------------|
|      |                     |
|      |                     |
| 2    |                     |
| 0    |                     |

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please recognize or change the correspondence address for the above-identified application to:

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OR

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Individual Name

Address

City

State

Zip

Country

Telephone

Email

I am the:

☒ Applicant/Inventor.

☐ Assignee of record of the entire interest. See 37 CFR 3.71.

Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

## **SIGNATURE of Applicant or Assignee of Record**

Signature /Howard Rosen/

May 8, 2007

Name Howard Rosen

Telephone

Title and Company

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

☒ \*Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

American LegalNet, Inc.  
www.USCourtForms.com

## Electronic Acknowledgement Receipt

|                                             |                                                                                                                          |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <b>EFS ID:</b>                              | 1755875                                                                                                                  |
| <b>Application Number:</b>                  | 11039180                                                                                                                 |
| <b>International Application Number:</b>    |                                                                                                                          |
| <b>Confirmation Number:</b>                 | 8961                                                                                                                     |
| <b>Title of Invention:</b>                  | THERMOSTAT SYSTEM WITH TOUCHSCREEN WITH USER INTERFACES OR OPERATIONAL ALGORITHMS VIA A REMOTE CORRESPONDENT             |
| <b>First Named Inventor/Applicant Name:</b> | Howard Rosen                                                                                                             |
| <b>Correspondence Address:</b>              | David T. Bracken<br>The Law Office of David T. Bracken<br>4839 Bond Avenue<br>-<br>Orange CA 92869<br>US 7147444798<br>- |
| <b>Filer:</b>                               | Marc E. Hankin                                                                                                           |
| <b>Filer Authorized By:</b>                 |                                                                                                                          |
| <b>Attorney Docket Number:</b>              | 0208.2CA4                                                                                                                |
| <b>Receipt Date:</b>                        | 08-MAY-2007                                                                                                              |
| <b>Filing Date:</b>                         | 19-JAN-2005                                                                                                              |
| <b>Time Stamp:</b>                          | 16:32:59                                                                                                                 |
| <b>Application Type:</b>                    | Utility                                                                                                                  |

### Payment information:

|                        |    |
|------------------------|----|
| Submitted with Payment | no |
|------------------------|----|

### File Listing:

| Document Number                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Document Description | File Name                 | File Size(Bytes) | Multi Part /.zip | Pages (if appl.) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------------|------------------|------------------|------------------|
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Power of Attorney    | Rosen-TouchScreen-PoA.pdf | 87068            | no               | 1                |
| Warnings:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                      |                           |                  |                  |                  |
| Information:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                      |                           |                  |                  |                  |
| Total Files Size (in bytes):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                      |                           | 87068            |                  |                  |
| <p>This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.</p> <p><u>New Applications Under 35 U.S.C. 111</u><br/>If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.</p> <p><u>National Stage of an International Application under 35 U.S.C. 371</u><br/>If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.</p> <p><u>New International Application Filed with the USPTO as a Receiving Office</u><br/>If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.</p> |                      |                           |                  |                  |                  |

## PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** **Mail Stop ISSUE FEE**  
**Commissioner for Patents**  
**P.O. Box 1450**  
**Alexandria, Virginia 22313-1450**  
**or Fax (571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

7590

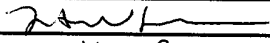
04/27/2007

David T. Bracken  
 The Law Office of David T. Bracken  
 4839 Bond Avenue  
 Orange, CA 92869

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

## Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being ~~transmitted~~ transmitted to the USPTO (571) 273-2885, on the date indicated below.

|                                                                                    |                    |
|------------------------------------------------------------------------------------|--------------------|
| MARTYNA V. HADAM                                                                   | (Depositor's name) |
|  | (Signature)        |
| MAY 8, 2007                                                                        | (Date)             |

|                 |             |                      |                     |                  |
|-----------------|-------------|----------------------|---------------------|------------------|
| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|

11/039,180

01/19/2005

Howard Rosen

0208.2CA4

8961

TITLE OF INVENTION: THERMOSTAT SYSTEM WITH TOUCHSCREEN WITH USER INTERFACES OR OPERATIONAL ALGORITHMS VIA A  
 REMOTE CORRESPONDENT

|                |              |               |                     |                      |                  |            |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE   |
| nonprovisional | YES          | \$700         | \$0                 | \$0                  | \$700            | 07/27/2007 |

|                |          |                |
|----------------|----------|----------------|
| EXAMINER       | ART UNIT | CLASS-SUBCLASS |
| NORMAN, MARC E | 3744     | 236-051000     |

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☒ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 MARC E. HANKIN

2 HANKIN PATENT LAW, APC

3

## 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

## 4a. The following fee(s) are submitted:

- ☒ Issue Fee  
☐ Publication Fee (No small entity discount permitted)  
☐ Advance Order - # of Copies \_\_\_\_\_

## 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.  
☒ Payment by credit card. Form PTO-2038 is attached.  
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

## 5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature



Date

MAY 8, 2007

Typed or printed name

MARC E. HANKIN

Registration No.

38,908

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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| Electronic Patent Application Fee Transmittal |          |                                                                                                              |        |                      |
|-----------------------------------------------|----------|--------------------------------------------------------------------------------------------------------------|--------|----------------------|
| Application Number:                           |          | 11039180                                                                                                     |        |                      |
| Filing Date:                                  |          | 19-Jan-2005                                                                                                  |        |                      |
| Title of Invention:                           |          | THERMOSTAT SYSTEM WITH TOUCHSCREEN WITH USER INTERFACES OR OPERATIONAL ALGORITHMS VIA A REMOTE CORRESPONDENT |        |                      |
| First Named Inventor/Applicant Name:          |          | Howard Rosen                                                                                                 |        |                      |
| Filer:                                        |          | Marc E. Hankin                                                                                               |        |                      |
| Attorney Docket Number:                       |          | 0208.2CA4                                                                                                    |        |                      |
| Filed as Small Entity                         |          |                                                                                                              |        |                      |
| Utility      Filing Fees                      |          |                                                                                                              |        |                      |
| Description                                   | Fee Code | Quantity                                                                                                     | Amount | Sub-Total in USD(\$) |
| Basic Filing:                                 |          |                                                                                                              |        |                      |
| Pages:                                        |          |                                                                                                              |        |                      |
| Claims:                                       |          |                                                                                                              |        |                      |
| Miscellaneous-Filing:                         |          |                                                                                                              |        |                      |
| Petition:                                     |          |                                                                                                              |        |                      |
| Patent-Appeals-and-Interference:              |          |                                                                                                              |        |                      |
| Post-Allowance-and-Post-Issuance:             |          |                                                                                                              |        |                      |
| Utility Appl issue fee                        | 2501     | 1                                                                                                            | 700    | 700                  |
| Extension-of-Time:                            |          |                                                                                                              |        |                      |

| Description              | Fee Code | Quantity | Amount | Sub-Total in USD(\$) |
|--------------------------|----------|----------|--------|----------------------|
| <b>Miscellaneous:</b>    |          |          |        |                      |
| <b>Total in USD (\$)</b> |          |          |        | <b>700</b>           |

## Electronic Acknowledgement Receipt

|                                             |                                                                                                                          |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <b>EFS ID:</b>                              | 1755991                                                                                                                  |
| <b>Application Number:</b>                  | 11039180                                                                                                                 |
| <b>International Application Number:</b>    |                                                                                                                          |
| <b>Confirmation Number:</b>                 | 8961                                                                                                                     |
| <b>Title of Invention:</b>                  | THERMOSTAT SYSTEM WITH TOUCHSCREEN WITH USER INTERFACES OR OPERATIONAL ALGORITHMS VIA A REMOTE CORRESPONDENT             |
| <b>First Named Inventor/Applicant Name:</b> | Howard Rosen                                                                                                             |
| <b>Correspondence Address:</b>              | David T. Bracken<br>The Law Office of David T. Bracken<br>4839 Bond Avenue<br>-<br>Orange CA 92869<br>US 7147444798<br>- |
| <b>Filer:</b>                               | Marc E. Hankin                                                                                                           |
| <b>Filer Authorized By:</b>                 |                                                                                                                          |
| <b>Attorney Docket Number:</b>              | 0208.2CA4                                                                                                                |
| <b>Receipt Date:</b>                        | 08-MAY-2007                                                                                                              |
| <b>Filing Date:</b>                         | 19-JAN-2005                                                                                                              |
| <b>Time Stamp:</b>                          | 16:46:16                                                                                                                 |
| <b>Application Type:</b>                    | Utility                                                                                                                  |

### Payment information:

|                                          |        |
|------------------------------------------|--------|
| Submitted with Payment                   | yes    |
| Payment was successfully received in RAM | \$ 700 |
| RAM confirmation Number                  | 632    |

|                 |  |
|-----------------|--|
| Deposit Account |  |
|-----------------|--|

## File Listing:

| Document Number | Document Description        | File Name                            | File Size(Bytes) | Multi Part /.zip | Pages (if appl.) |
|-----------------|-----------------------------|--------------------------------------|------------------|------------------|------------------|
| 1               | Issue Fee Payment (PTO-85B) | FeeTransmital-Rosen-Touch Screen.pdf | 163127           | no               | 1                |

### Warnings:

### Information:

|   |                        |              |      |    |   |
|---|------------------------|--------------|------|----|---|
| 2 | Fee Worksheet (PTO-06) | fee-info.pdf | 8205 | no | 2 |
|---|------------------------|--------------|------|----|---|

### Warnings:

### Information:

|                              |  |  |        |  |  |
|------------------------------|--|--|--------|--|--|
| Total Files Size (in bytes): |  |  | 171332 |  |  |
|------------------------------|--|--|--------|--|--|

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

#### New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

#### National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

#### New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
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Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

## NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 04/27/2007

David T. Bracken  
The Law Office of David T. Bracken  
4839 Bond Avenue  
Orange, CA 92869

EXAMINER

NORMAN, MARC E

ART UNIT

PAPER NUMBER

3744

DATE MAILED: 04/27/2007

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

11/039,180

01/19/2005

Howard Rosen

0208.2CA4

8961

TITLE OF INVENTION: THERMOSTAT SYSTEM WITH TOUCHSCREEN WITH USER INTERFACES OR OPERATIONAL ALGORITHMS VIA A REMOTE CORRESPONDENT

| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | YES          | \$700         | \$0                 | \$0                  | \$700            | 07/27/2007 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS** FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

### HOW TO REPLY TO THIS NOTICE:

#### I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER:** Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

# **PART B - FEE(S) TRANSMITTAL**

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
or Fax (571)-273-2885**

**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

7590 04/27/2007

David T. Bracken  
The Law Office of David T. Bracken  
4839 Bond Avenue  
Orange, CA 92869

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

## **Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

|                    |
|--------------------|
| (Depositor's name) |
| (Signature)        |
| (Date)             |

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 11/039,180      | 01/19/2005  | Howard Rosen         | 0208.2CA4           | 8961             |

TITLE OF INVENTION: THERMOSTAT SYSTEM WITH TOUCHSCREEN WITH USER INTERFACES OR OPERATIONAL ALGORITHMS VIA A REMOTE CORRESPONDENT

| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | YES          | \$700         | \$0                 | \$0                  | \$700            | 07/27/2007 |

| EXAMINER       | ART UNIT | CLASS-SUBCLASS |
|----------------|----------|----------------|
| NORMAN, MARC E | 3744     | 236-051000     |

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).  
☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list  
 (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,  
 (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.  
 1 \_\_\_\_\_  
 2 \_\_\_\_\_  
 3 \_\_\_\_\_

## **3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)**

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

## **4a. The following fee(s) are submitted:**

- ☐ Issue Fee  
☐ Publication Fee (No small entity discount permitted)  
☐ Advance Order - # of Copies \_\_\_\_\_

## **4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)**

- ☐ A check is enclosed.  
☐ Payment by credit card. Form PTO-2038 is attached.  
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

## **5. Change in Entity Status (from status indicated above)**

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_ Date \_\_\_\_\_  
 Typed or printed name \_\_\_\_\_ Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 11/039,180      | 01/19/2005  | Howard Rosen         | 0208.2CA4           | 8961             |

7590 04/27/2007

David T. Bracken  
The Law Office of David T. Bracken  
4839 Bond Avenue  
Orange, CA 92869

|          |
|----------|
| EXAMINER |
|----------|

NORMAN, MARC E

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

3744

DATE MAILED: 04/27/2007

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 290 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 290 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

|                               |                        |                     |  |
|-------------------------------|------------------------|---------------------|--|
| <b>Notice of Allowability</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                               | 11/039,180             | ROSEN, HOWARD       |  |
|                               | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                               | Marc E. Norman         | 3744                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to application filed 1/19/05.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br/>Paper No./Mail Date <u>1/19/05</u></li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____</li> <li>7. <input type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____</li> </ol> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### REASONS FOR ALLOWANCE

Claims 1-20 are allowed.

The following is an examiner's statement of reasons for allowance: The prior art does not teach the thermostat system combination as recited in independent claim 1, and in particular the details of the control program recited in subsection D in combination with the coupling means of subsection E.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc E. Norman whose telephone number is 571-272-4812. The examiner can normally be reached on Mon.-Fri., 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3744

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MN



MARC NORMAN  
PRIMARY EXAMINER



|                                   |                                       |  |                                                             |             |
|-----------------------------------|---------------------------------------|--|-------------------------------------------------------------|-------------|
| <b>Notice of References Cited</b> | Application/Control No.<br>11/039,180 |  | Applicant(s)/Patent Under<br>Reexamination<br>ROSEN, HOWARD |             |
|                                   | Examiner<br>Marc E. Norman            |  | Art Unit<br>3744                                            | Page 1 of 1 |

**U.S. PATENT DOCUMENTS**

| * |   | Document Number<br>Country Code-Number-Kind Code | Date<br>MM-YYYY | Name           | Classification |
|---|---|--------------------------------------------------|-----------------|----------------|----------------|
| * | A | US-7,055,759 B2                                  | 06-2006         | Wacker et al.  | 236/51         |
| * | B | US-6,851,621 B1                                  | 02-2005         | Wacker et al.  | 236/51         |
| * | C | US-2007/0057079 A1                               | 03-2007         | Stark et al.   | 236/051        |
| * | D | US-2006/0283965 A1                               | 12-2006         | Mueller et al. | 236/051        |
|   | E | US-                                              |                 |                |                |
|   | F | US-                                              |                 |                |                |
|   | G | US-                                              |                 |                |                |
|   | H | US-                                              |                 |                |                |
|   | I | US-                                              |                 |                |                |
|   | J | US-                                              |                 |                |                |
|   | K | US-                                              |                 |                |                |
|   | L | US-                                              |                 |                |                |
|   | M | US-                                              |                 |                |                |

**FOREIGN PATENT DOCUMENTS**

| * |   | Document Number<br>Country Code-Number-Kind Code | Date<br>MM-YYYY | Country | Name | Classification |
|---|---|--------------------------------------------------|-----------------|---------|------|----------------|
|   | N |                                                  |                 |         |      |                |
|   | O |                                                  |                 |         |      |                |
|   | P |                                                  |                 |         |      |                |
|   | Q |                                                  |                 |         |      |                |
|   | R |                                                  |                 |         |      |                |
|   | S |                                                  |                 |         |      |                |
|   | T |                                                  |                 |         |      |                |

**NON-PATENT DOCUMENTS**

| * |   | Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) |
|---|---|-------------------------------------------------------------------------------------------|
|   | U |                                                                                           |
|   | V |                                                                                           |
|   | W |                                                                                           |
|   | X |                                                                                           |

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in M-M-YYYY format are publication dates. Classifications may be US or foreign.

# Index of Claims



Application/Control No.

11/039,180

Examiner

Marc E. Norman

Applicant(s)/Patent under Reexamination

ROSEN, HOWARD

Art Unit.

3744

|   |          |
|---|----------|
| ✓ | Rejected |
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| — | (Through numeral)<br>Cancelled |
| + | Restricted                     |

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| N | Non-Elected  |
| I | Interference |

|   |          |
|---|----------|
| A | Appeal   |
| O | Objected |

| Claim |          | Date    |  |  |  |
|-------|----------|---------|--|--|--|
| Final | Original | 4/16/07 |  |  |  |
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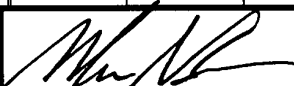
CONFIRMATION NO. 8961

|                                                                                                                                                                                                                                                                                                                                       |                                                                                                                   |                                   |                                                                                                                                                                                                                                                                                 |                                         |                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|--------------------------------|
| <b>SERIAL NUMBER</b><br>11/039,180                                                                                                                                                                                                                                                                                                    | <b>FILING OR 371(c) DATE</b><br>01/19/2005<br><b>RULE</b>                                                         | <b>CLASS</b><br>236               | <b>GROUP ART UNIT</b><br>3744                                                                                                                                                                                                                                                   | <b>ATTORNEY DOCKET NO.</b><br>0208.2cA4 |                                |
| <b>APPLICANTS</b><br>Howard Rosen, Montreal, CANADA;                                                                                                                                                                                                                                                                                  |                                                                                                                   |                                   |                                                                                                                                                                                                                                                                                 |                                         |                                |
| <b>** CONTINUING DATA *****</b><br>This application is a CON of 10/440,474 05/15/2003 PAT 7,050,026 <i>OK</i> <i>MD</i><br><b>** FOREIGN APPLICATIONS *****</b><br><i>None</i> <i>MD</i><br><b>IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** SMALL ENTITY **</b><br><b>** 02/26/2005</b>                                             |                                                                                                                   |                                   |                                                                                                                                                                                                                                                                                 |                                         |                                |
| Foreign Priority claimed <input type="checkbox"/> yes <input checked="" type="checkbox"/> no<br>35 USC 119 (a-d) conditions <input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> Met after<br>met Allowance <i>MD</i><br>Verified and Acknowledged <i>MD</i><br>Examiner's Signature Initials |                                                                                                                   | <b>STATE OR COUNTRY</b><br>CANADA | <b>SHEETS DRAWING</b><br>7                                                                                                                                                                                                                                                      | <b>TOTAL CLAIMS</b><br>20               | <b>INDEPENDENT CLAIMS</b><br>1 |
| <b>ADDRESS</b><br>David T. Bracken<br>The Law Office of David T. Bracken<br>4339 Bond Avenue<br>Orange, CA92869                                                                                                                                                                                                                       |                                                                                                                   |                                   |                                                                                                                                                                                                                                                                                 |                                         |                                |
| <b>TITLE</b><br>Thermostat system with touchscreen with user interfaces or operational algorithms via a remote correspondent                                                                                                                                                                                                          |                                                                                                                   |                                   |                                                                                                                                                                                                                                                                                 |                                         |                                |
| <b>FILING FEE RECEIVED</b><br>500                                                                                                                                                                                                                                                                                                     | FEES: Authority has been given in Paper<br>No. _____ to charge/credit DEPOSIT ACCOUNT<br>No. _____ for following: |                                   | <input type="checkbox"/> All Fees<br><input type="checkbox"/> 1.16 Fees ( Filing )<br><input type="checkbox"/> 1.17 Fees ( Processing Ext. of time )<br><input type="checkbox"/> 1.18 Fees ( Issue )<br><input type="checkbox"/> Other _____<br><input type="checkbox"/> Credit |                                         |                                |

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|------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------------------------|--|
| <b>Issue Classification</b><br> | Application/Control No. | Applicant(s)/Patent under Reexamination |  |
|                                                                                                                  | 11/039,180              | ROSEN, HOWARD                           |  |
|                                                                                                                  | Examiner                | Art Unit                                |  |
|                                                                                                                  | Marc E. Norman          | 3744                                    |  |

| ISSUE CLASSIFICATION         |   |          |   |       |                    |                                   |     |  |  |
|------------------------------|---|----------|---|-------|--------------------|-----------------------------------|-----|--|--|
| ORIGINAL                     |   |          |   |       | CROSS REFERENCE(S) |                                   |     |  |  |
| CLASS                        |   | SUBCLASS |   |       | CLASS              | SUBCLASS (ONE SUBCLASS PER BLOCK) |     |  |  |
| 236                          |   | 51       |   |       | 236                | 94                                |     |  |  |
| INTERNATIONAL CLASSIFICATION |   |          |   |       | 345                | 87                                | 102 |  |  |
| G                            | 0 | 5        | D | 23/00 |                    |                                   |     |  |  |
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|-------------------------------------------------------------------------------------------------------------------|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-------------------------|
| *****<br>(Assistant Examiner) (Date)                                                                              |                   | <br><b>MARC NORMAN</b><br>PRIMARY EXAMINER<br>(Primary Examiner) | Total Claims Allowed: 20    |                         |
| <br>(Legal Instruments Examiner) | 4/10/07<br>(Date) |                                                                                                                                                   | O.G.<br>Print Claim(s)<br>1 | O.G.<br>Print Fig.<br>1 |

| <input checked="" type="checkbox"/> Claims renumbered in the same order as presented by applicant |          |       |          |       | <input type="checkbox"/> CPA |       | <input type="checkbox"/> T.D. |       | <input type="checkbox"/> R.1.47 |       |          |
|---------------------------------------------------------------------------------------------------|----------|-------|----------|-------|------------------------------|-------|-------------------------------|-------|---------------------------------|-------|----------|
| Final                                                                                             | Original | Final | Original | Final | Original                     | Final | Original                      | Final | Original                        | Final | Original |
|                                                                                                   | 1        |       | 31       |       | 61                           |       | 91                            |       | 121                             |       | 181      |
|                                                                                                   | 2        |       | 32       |       | 62                           |       | 92                            |       | 122                             |       | 182      |
|                                                                                                   | 3        |       | 33       |       | 63                           |       | 93                            |       | 123                             |       | 183      |
|                                                                                                   | 4        |       | 34       |       | 64                           |       | 94                            |       | 124                             |       | 184      |
|                                                                                                   | 5        |       | 35       |       | 65                           |       | 95                            |       | 125                             |       | 185      |
|                                                                                                   | 6        |       | 36       |       | 66                           |       | 96                            |       | 126                             |       | 186      |
|                                                                                                   | 7        |       | 37       |       | 67                           |       | 97                            |       | 127                             |       | 187      |
|                                                                                                   | 8        |       | 38       |       | 68                           |       | 98                            |       | 128                             |       | 188      |
|                                                                                                   | 9        |       | 39       |       | 69                           |       | 99                            |       | 129                             |       | 189      |
|                                                                                                   | 10       |       | 40       |       | 70                           |       | 100                           |       | 130                             |       | 190      |
|                                                                                                   | 11       |       | 41       |       | 71                           |       | 101                           |       | 131                             |       | 191      |
|                                                                                                   | 12       |       | 42       |       | 72                           |       | 102                           |       | 132                             |       | 192      |
|                                                                                                   | 13       |       | 43       |       | 73                           |       | 103                           |       | 133                             |       | 193      |
|                                                                                                   | 14       |       | 44       |       | 74                           |       | 104                           |       | 134                             |       | 194      |
|                                                                                                   | 15       |       | 45       |       | 75                           |       | 105                           |       | 135                             |       | 195      |
|                                                                                                   | 16       |       | 46       |       | 76                           |       | 106                           |       | 136                             |       | 196      |
|                                                                                                   | 17       |       | 47       |       | 77                           |       | 107                           |       | 137                             |       | 197      |
|                                                                                                   | 18       |       | 48       |       | 78                           |       | 108                           |       | 138                             |       | 198      |
|                                                                                                   | 19       |       | 49       |       | 79                           |       | 109                           |       | 139                             |       | 199      |
|                                                                                                   | 20       |       | 50       |       | 80                           |       | 110                           |       | 140                             |       | 200      |
|                                                                                                   | 21       |       | 51       |       | 81                           |       | 111                           |       | 141                             |       | 201      |
|                                                                                                   | 22       |       | 52       |       | 82                           |       | 112                           |       | 142                             |       | 202      |
|                                                                                                   | 23       |       | 53       |       | 83                           |       | 113                           |       | 143                             |       | 203      |
|                                                                                                   | 24       |       | 54       |       | 84                           |       | 114                           |       | 144                             |       | 204      |
|                                                                                                   | 25       |       | 55       |       | 85                           |       | 115                           |       | 145                             |       | 205      |
|                                                                                                   | 26       |       | 56       |       | 86                           |       | 116                           |       | 146                             |       | 206      |
|                                                                                                   | 27       |       | 57       |       | 87                           |       | 117                           |       | 147                             |       | 207      |
|                                                                                                   | 28       |       | 58       |       | 88                           |       | 118                           |       | 148                             |       | 208      |
|                                                                                                   | 29       |       | 59       |       | 89                           |       | 119                           |       | 149                             |       | 209      |
|                                                                                                   | 30       |       | 60       |       | 90                           |       | 120                           |       | 150                             |       | 210      |



**Màrc E. Norman**

3744

| INTERFERENCE SEARCHED    |          |           |          |
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| Class                    | Subclass | Date      | Examiner |
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| see attached EAST search |          | 4/16/2007 | MN       |

[illegible]

11/039,180

|    | Type | Ref # | Hits  | Search Text                                                                    | DBs                                      |
|----|------|-------|-------|--------------------------------------------------------------------------------|------------------------------------------|
| 1  | IS&R | S1    | 1     | ("7050026").PN.                                                                | US-PGPUB; USPAT;<br>EPO; JPO             |
| 2  | IS&R | S2    | 751   | (236/94).CCLS.                                                                 | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |
| 3  | IS&R | S11   | 1670  | (345/100).CCLS.                                                                | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |
| 4  | IS&R | S9    | 2060  | (345/98).CCLS.                                                                 | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |
| 5  | IS&R | S4    | 720   | (62/126).CCLS.                                                                 | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |
| 6  | IS&R | S3    | 1034  | (236/51).CCLS.                                                                 | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |
| 7  | IS&R | S7    | 1274  | (345/102).CCLS.                                                                | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |
| 8  | IS&R | S5    | 1023  | (165/11.1).CCLS.                                                               | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |
| 9  | IS&R | S6    | 3695  | (345/87).CCLS.                                                                 | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |
| 10 | IS&R | S8    | 1139  | (345/94).CCLS.                                                                 | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |
| 11 | IS&R | S10   | 712   | (345/99).CCLS.                                                                 | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |
| 12 | IS&R | S13   | 1454  | (345/211).CCLS.                                                                | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |
| 13 | BRS  | S14   | 13453 | S2 or S3 or S4 or S5 or<br>S6 or S7 or S8 or S9 or<br>S10 or S11 or S12 or S13 | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |
| 14 | IS&R | S12   | 328   | (345/101).CCLS.                                                                | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |
| 15 | BRS  | S15   | 236   | thermostat and (touch<br>adj pad)                                              | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |

|    | Type | Ref # | Hits | Search Text                                             | DBs                                      |
|----|------|-------|------|---------------------------------------------------------|------------------------------------------|
| 16 | BRS  | S17   | 80   | S16 and modem                                           | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |
| 17 | BRS  | S18   | 10   | S17 and "236"/\$.ccls.                                  | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |
| 18 | BRS  | S19   | 6    | S17 and S14                                             | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |
| 19 | BRS  | S20   | 19   | S15 and "236"/\$.ccls.                                  | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |
| 20 | BRS  | S21   | 9    | S20 not S18                                             | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |
| 21 | IS&R | S22   | 3    | ((("5816492") or<br>("6564056") or<br>("6424872"))).PN. | US-PGPUB; USPAT;<br>EPO; JPO             |
| 22 | BRS  | S23   | 47   | S2 and S3                                               | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |
| 23 | BRS  | S24   | 0    | S23 and S15                                             | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |
| 24 | BRS  | S16   | 111  | S15 and (lcd or (liquid<br>adj crystal adj<br>display)) | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |
| 25 | BRS  | S25   | 16   | S23 and (lcd or (liquid<br>adj crystal adj<br>display)) | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |
| 26 | BRS  | S26   | 45   | rosen.in. and thermostat                                | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |
| 27 | BRS  | S29   | 2    | S28 and (touch adj<br>pad).clm.                         | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |
| 28 | BRS  | S28   | 8    | S26 and (temperature adj<br>sensor).clm.                | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |
| 29 | BRS  | S27   | 8136 | "45" and (temperature<br>adj sensor).clm.               | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |
| 30 | BRS  | S31   | 0    | S30 and remote.clm.                                     | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |

|    | Type | Ref<br># | Hits | Search Text                                                  | DBs                                      |
|----|------|----------|------|--------------------------------------------------------------|------------------------------------------|
| 31 | BRS  | S30      | 2    | S29 and (lcd or (liquid<br>adj crystal adj<br>display)).clm. | US-PGPUB; USPAT;<br>EPO; JPO;<br>DERWENT |



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| APPLICATION NUMBER | FILING or 371(c)<br>DATE | GRP ART UNIT | FIL FEE REC'D | ATTY.DOCKET.NO | DRAWINGS | TOT CLAIMS | IND CLAIMS |
|--------------------|--------------------------|--------------|---------------|----------------|----------|------------|------------|
| 11/039,180         | 01/19/2005               | 3744         | 500           | 0208.2cA4      | 7        | 20         | 1          |

**CONFIRMATION NO. 8961**

David T. Bracken  
The Law Office of David T. Bracken  
4839 Bond Avenue  
Orange, CA92869

**UPDATED FILING RECEIPT**

Date Mailed: 02/12/2007

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).**

**Applicant(s)**

Howard Rosen, Montreal, CANADA;

**Power of Attorney:**

David Bracken--37522

**Domestic Priority data as claimed by applicant**

This application is a CON of 10/440,474 05/15/2003 PAT 7,050,026

**Foreign Applications**

**If Required, Foreign Filing License Granted:** 02/26/2005

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is  
**US11/039,180**

**Projected Publication Date:** Request for Non-Publication Acknowledged

**Non-Publication Request:** Yes

**Early Publication Request:** No

\*\* SMALL ENTITY \*\*

**Title**

Thermostat system with touchscreen with user interfaces or operational algorithms via a remote correspondent

**Preliminary Class**

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Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

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#### Title 37, Code of Federal Regulations, 5.11 & 5.15

#### **GRANTED**

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to

espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign AssetsControl, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

**NOT GRANTED**

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov

| APPLICATION NUMBER | FILING OR 371(c) DATE | FIRST NAMED APPLICANT | ATTY. DOCKET NO./TITLE |
|--------------------|-----------------------|-----------------------|------------------------|
| 11/039,180         |                       | Howard Rosen          | 0208.2cA4              |

David T. Bracken  
 The Law Office of David T. Bracken  
 4839 Bond Avenue  
 Orange, CA 92869

CONFIRMATION NO. 8961

**WITHDRAWAL  
 NOTICE**

Date Mailed: 02/12/2007

**WITHDRAWAL OF PREVIOUSLY SENT NOTICE**

The Notice of Abandonment mailed on 09/20/2006 was sent in error and is hereby withdrawn. A Filing Receipt is enclosed. The Office regrets any inconvenience the error may have caused.

---

*A copy of this notice **MUST** be returned with the reply.*

---

Customer Service Center  
 Initial Patent Examination Division (571) 272-4000, or 1-800-PTO-9199, or 1-800-972-6382  
 PART 3 - OFFICE COPY



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NUMBER | FILING or 371(c)<br>DATE | GRP ART UNIT | FIL FEE REC'D | ATTY.DOCKET.NO | DRAWINGS | TOT CLAIMS | IND CLAIMS |
|--------------------|--------------------------|--------------|---------------|----------------|----------|------------|------------|
| 11/039,180         | 01/19/2005               | 3744         | 500           | 0208.2cA4 -    | 7        | 20         | 1          |

**CONFIRMATION NO. 8961**

David T. Bracken  
The Law Office of David T. Bracken  
4839 Bond Avenue  
Orange, CA92869

**UPDATED FILING RECEIPT**

Date Mailed: 02/09/2007

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).**

**Applicant(s)**

Howard Rosen, Montreal, CANADA;

**Power of Attorney:**

David Bracken--37522

**Domestic Priority data as claimed by applicant**

This application is a CON of 10/440,474 05/15/2003 PAT 7,050,026

**Foreign Applications**

**If Required, Foreign Filing License Granted:** 02/26/2005

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is  
**US11/039,180**

**Projected Publication Date:** Request for Non-Publication Acknowledged

**Non-Publication Request:** Yes

**Early Publication Request:** No

\*\* SMALL ENTITY \*\*

**Title**

Thermostat system with touchscreen with user interfaces or operational algorithms via a remote correspondent

**Preliminary Class**

## PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

### LICENSE FOR FOREIGN FILING UNDER

#### Title 35, United States Code, Section 184

#### Title 37, Code of Federal Regulations, 5.11 & 5.15

#### **GRANTED**

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to

espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign AssetsControl, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

**NOT GRANTED**

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents  
United States Patent and Trademark Office  
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www.uspto.gov

David T. Bracken  
The Law Office of David T. Bracken  
4839 Bond Avenue  
Orange CA 92869

**COPY MAILED**

**FEB 05 2007**

**OFFICE OF PETITIONS**

In re Application of :  
Rosen : DECISION ON PETITION  
Application No. 11/039,180 :  
Filed: January 19, 2005 :  
For: 0208.2cA4 :

This is a decision on the petition under 37 CFR 1.137(b), filed September 29, 2006 to revive the above-identified application.

The petition is **GRANTED**.

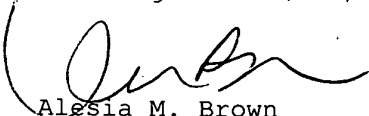
This application became abandoned for failure to timely reply to the Notice to File Missing Parts of Provisional Application mailed March 7, 2005. The Notice set a two month shortened statutory period of time for reply. No petition for extension of time in accordance with 37 C.F.R. § 1.136 was timely submitted. Notice of Abandonment was mailed September 20, 2006.

A grantable petition pursuant to 37 C.F.R. § 1.137(b) must be accompanied by: (1) the required reply to the outstanding Office action or notice, unless previously filed; (2) the petition fee as set forth in 37 C.F.R. § 1.17(m); (3) a statement that the entire delay in filing the required reply from the due date for the reply until the filing of a grantable petition pursuant to 37 C.F.R. § 1.137(b) was unintentional; and (4) any terminal disclaimer (and fee set forth in 37 C.F.R. § 1.20(d)) required pursuant to 37 C.F.R. § 1.137(c).

The instant petition has been reviewed and found in compliance with the provisions of 37 C.F.R. § 1.137(b). Accordingly, the failure to timely submit a proper reply to the Notice is accepted as having been unintentionally delayed.

This application will be forwarded to the Office of Initial Patent Examination for further processing.

Telephone inquiries concerning this matter may be directed to the undersigned at (571) 272-3205.

  
Alesia M. Brown  
Petitions Attorney  
Office of Petitions



DAC  
JFW

PTO/SB/64 (09-06)  
Approved for use through 03/31/2007. OMB 0651-0031  
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE  
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT  
ABANDONED UNINTENTIONALLY UNDER 37 CFR 1.137(b)**

Docket Number (Optional)  
0208.2cA4

First named inventor: Rosen, Howard

Application No.: 11/039,180

Art Unit:

Filed: Jan. 19, 2005

Examiner:

Title: Thermostat System with Touchscreen with User Interfaces or Operational Algorithms Via a Remote Correspondent

Attention: Office of Petitions  
**Mail Stop Petition**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450  
FAX (571) 273-8300

10/02/2006 HDEMESS1 00000052 11039180  
02 FC:2453 750.00 OP  
10/02/2006 HDEMESS1 00000052 11039180  
04 FC:2111 250.00 OP

NOTE: If information or assistance is needed in completing this form, please contact Petitions Information at (571) 272-3282.

The above-identified application became abandoned for failure to file a timely and proper reply to a notice or action by the United States Patent and Trademark Office. The date of abandonment is the day after the expiration date of the period set for reply in the office notice or action plus an extensions of time actually obtained.

**APPLICANT HEREBY PETITIONS FOR REVIVAL OF THIS APPLICATION**

NOTE: A grantable petition requires the following items:

- (1) Petition fee;
- (2) Reply and/or issue fee;
- (3) Terminal disclaimer with disclaimer fee - required for all utility and plant applications filed before June 8, 1995; and for all design applications; and
- (4) Statement that the entire delay was unintentional.

**1. Petition fee**

☒ Small entity-fee \$ 750 (37 CFR 1.17(m)). Applicant claims small entity status. See 37 CFR 1.27.

☐ Other than small entity - fee \$ 750 (37 CFR 1.17(m))

**2. Reply and/or fee**

A. The reply and/or fee to the above-noted Office action in the form of transmittal letter and fee payment (identify type of reply):

- ☐ has been filed previously on \_\_\_\_\_  
☒ is enclosed herewith.

B. The issue fee and publication fee (if applicable) of \$ \_\_\_\_\_

- ☐ has been paid previously on \_\_\_\_\_  
☐ is enclosed herewith.

[Page 1 of 2]

This collection of information is required by 37 CFR 1.137(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

3. Terminal disclaimer with disclaimer fee

- ☒ Since this utility/plant application was filed on or after June 8, 1995, no terminal disclaimer is required.
- ☐ A terminal disclaimer (and disclaimer fee (37 CFR 1.20(d)) of \$ \_\_\_\_\_ for a small entity or \$ \_\_\_\_\_ for other than a small entity) disclaiming the required period of time is enclosed herewith (see PTO/SB/63).

4. STATEMENT: The entire delay in filing the required reply from the due date for the required reply until the filing of a grantable petition under 37 CFR 1.137(b) was unintentional. [NOTE: The United States Patent and Trademark Office may require additional information if there is a question as to whether either the abandonment or the delay in filing a petition under 37 CFR 1.137(b) was unintentional (MPEP 711.03(c), subsections (III)(C) and (D)).]

**WARNING:**

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

D. Bracken  
Signature

9/26/2006  
Date

David T. Bracken  
Typed or printed name

37522  
Registration Number, if applicable

Law Office of David T. Bracken / 4839 Bond Avenue  
Address

714 744 4798  
Telephone Number

Orange, California 92869  
Address

Enclosures: ☒ Fee Payment

☒ Reply

☐ Terminal Disclaimer Form

☐ Additional sheets containing statements establishing unintentional delay

☐ Other: \_\_\_\_\_

**CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]**

I hereby certify that this correspondence is being:

☒ Deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop Petition, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

☐ Transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (571) 273-8300.

September 26, 2006  
Date

D. Bracken  
Signature

David T. Bracken  
Typed or printed name of person signing certificate



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov

| APPLICATION NUMBER | FILING OR 371(C) DATE | FIRST NAMED APPLICANT | ATTY. DOCKET NO./TITLE |
|--------------------|-----------------------|-----------------------|------------------------|
| 11/039,180         | 01/19/2005            | Howard Rosen          | 0208.2cA4 -            |

**CONFIRMATION NO. 8961**  
**ABANDONMENT/TERMINATION**  
**LETTER**

David T. Bracken  
 The Law Office of David T. Bracken  
 4839 Bond Avenue  
 Orange, CA 92869

Date Mailed: 09/20/2006

**NOTICE OF ABANDONMENT UNDER 37 CFR 1.53 (f) OR (g)**

The above-identified application is abandoned for failure to timely or properly reply to the Notice to File Missing Parts (Notice) mailed on 03/07/2005.

- No reply was received.

If a complete reply to the notice was previously filed by applicant within the time period set forth in the notice, applicant may request for reconsideration of the holding of abandonment within 2 months from the mailing of this notice of abandonment by filing a petition to withdraw the holding of abandonment under 37 CFR 1.181(a). No petition fee is required. The petition must be accompanied by a true copy of the originally filed reply and the item (s) identified in one of the following:

1. A properly itemized date-stamped postcard receipt (see MPEP § 503);
2. If the originally filed reply included a certificate of mailing or transmission in compliance with 37 CFR 1.8(a), a copy of the certificate of mailing or transmission and a statement in compliance with 37 CFR 1.8(b) (see MPEP § 512); or
3. If the reply was filed via Express Mail, a submission satisfying the requirements of 37 CFR 1.10(e) including, for example, a copy of the Express Mail mailing label showing the "date-in" (see MPEP § 513).

Any petition to withdraw the holding of abandonment should be directed to OIPE.

If applicant did not previously file a complete reply within the time period set forth in the notice, applicant may file a petition to revive the application under 37 CFR 1.137.

Under 37 CFR 1.137(a), a petition requesting the application be revived on the grounds of **UNAVOIDABLE DELAY** must be filed promptly after the applicant becomes aware of the abandonment and such petition must be accompanied by: (1) an adequate showing of the cause of unavoidable delay; (2) the required reply to the above-identified Notice; (3) the petition fee set forth in 37 CFR 1.17(l); and (4) a terminal disclaimer if required by 37 CFR 1.137(d). See MPEP § 711.03(c) and Form PTO/SB/61.

Under 37 CFR 1.137(b), a petition requesting the application be revived on the grounds of **UNINTENTIONAL DELAY** must be filed promptly after applicant becomes aware of the abandonment and such petition must be accompanied by: (1) a statement that the entire delay was unintentional; (2) the required reply to the above-identified Notice; (3) the petition fee set forth in 37 CFR 1.17(m); and (4) a terminal disclaimer if required by 37

PART 1 - ATTORNEY/APPLICANT COPY

TO: DAVID BRACKIN COMPANY:



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov

| APPLICATION NUMBER | FILING OR 371 (c) DATE | FIRST NAMED APPLICANT | ATTORNEY DOCKET NUMBER |
|--------------------|------------------------|-----------------------|------------------------|
| 11/039,180         | 01/19/2005             | Howard Rosen          | 0208.2cA4 -            |

CONFIRMATION NO. 8961

## FORMALITIES LETTER



\*OC00000015363472\*

David T. Bracken  
 The Law Office of David T. Bracken  
 4839 Bond Avenue  
 Orange, CA 92869

Adjustment date: 10/02/2006 HDEMESS1  
 03/01/2005 86010M 00000001 11039180  
 02 FC:2622 -145.00 OP

Date Mailed: 03/07/2005

## NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

10/02/2006 HDEMESS1 00000052 11039180  
 02 FC:2453 750.00 OP

FILED UNDER 37 CFR 1.53(b)

Filing Date Granted

Items Required To Avoid Abandonment:

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given TWO MONTHS from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

SUMMARY OF FEES DUE:

Total additional fee(s) required for this application is **\$105** for a Small Entity

- The application search fee has not been paid. Applicant must submit **\$250** to complete the search fee.

(A previous payment of **\$145** will be applied to the additional fees indicated above.)

Replies should be mailed to: Mail Stop Missing Parts  
 Commissioner for Patents  
 P.O. Box 1450  
 Alexandria VA 22313-1450

*A copy of this notice **MUST** be returned with the reply.*

10/02/2006 HDEMESS1 00000052 11039180  
 01 FC:2111 250.00 OP

Customer Service Center  
 Initial Patent Examination Division (703) 308-1202

CFR 1.137(d). See MPEP § 711.03(c) and Form PTO/SB/64.

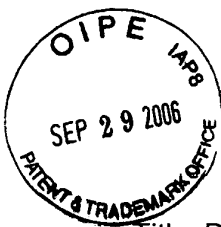
Any questions concerning petitions to revive should be directed to the "Office of Petitions" at (571) 272-3282.

---

*A copy of this notice **MUST** be returned with the reply.*

A handwritten signature in cursive script, appearing to read "J. DeH".

Office of Initial Patent Examination (571) 272-4000, or 1-800-PTO-9199, or 1-800-972-6382  
PART 2 - COPY TO BE RETURNED WITH RESPONSE



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Title: PROGRAMMABLE THERMOSTAT  
SYSTEM WITH TOUCHSCREEN UNIT WITH  
USER INTERFACES OR OPERATIONAL  
ALGORITHMS VIA A REMOTE  
CORRESPONDENT

Inventor(s): Howard Rosen

Serial No.: 11/039,180

Filing Date: 1/19/2005

Group No.:

Examiner:

Attorney Docket No.: 0208.2cA4

TRANSMITTAL LETTER

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

Transmitted for filing for the above patent  
application are the following:

Papers Enclosed:

- ☒ Notice of Abandonment – 2 p.
- ☒ Notice to File Missing Parts – 2 p.
- ☒ Credit Card Payment Form – 1 p.

CERTIFICATE OF MAILING (37 CFR 1.10)  
I, the person below signing this Certificate of Mailing,  
hereby certify that this document and the documents  
referred to as enclosed therewith are being  
deposited with sufficient postage for first class  
postage with the United States Postal Service on  
this date in an envelope as "Express Mail Post  
Office to Addressee" addressed to: Commissioner  
for Patents, PO Box 1450, Alexandria, VA 22313-  
1450

*D. Bracken*

Signature: David T. Bracken  
Date of Mailing: Sept. 26, 2006

Applicant respectfully requests that this application be revived pursuant to the enclosed  
Petition for Revival of an Application for Patent Abandoned Unintentionally. The enclosed  
Notice of Missing Parts was not received by Applicant, whereby a portion of the search fee  
remained unpaid and the application became abandoned. Enclosed is the fee for the  
Petition and the additional amount of \$105 to complete the required search fee of \$250, as  
required by the Notice of Missing Parts.

Respectfully submitted,

Dated: September 26, 2006

*D. Bracken*

David T. Bracken  
Registration No. 37,522  
Phone: (714) 744-4798



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
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| APPLICATION NUMBER | FILING OR 371(C) DATE | FIRST NAMED APPLICANT | ATTY. DOCKET NO./TITLE |
|--------------------|-----------------------|-----------------------|------------------------|
| 11/039,180         | 01/19/2005            | Howard Rosen          | 0208.2cA4 -            |

**CONFIRMATION NO. 8961**  
**ABANDONMENT/TERMINATION**  
**LETTER**

David T. Bracken  
 The Law Office of David T. Bracken  
 4839 Bond Avenue  
 Orange, CA 92869

Date Mailed: 09/20/2006

**NOTICE OF ABANDONMENT UNDER 37 CFR 1.53 (f) OR (g)**

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- No reply was received.

If a complete reply to the notice was previously filed by applicant within the time period set forth in the notice, applicant may request for reconsideration of the holding of abandonment within 2 months from the mailing of this notice of abandonment by filing a petition to withdraw the holding of abandonment under 37 CFR 1.181(a). No petition fee is required. The petition must be accompanied by a true copy of the originally filed reply and the item (s) identified in one of the following:

1. A properly itemized date-stamped postcard receipt (see MPEP § 503);
2. If the originally filed reply included a certificate of mailing or transmission in compliance with 37 CFR 1.8(a), a copy of the certificate of mailing or transmission and a statement in compliance with 37 CFR 1.8(b) (see MPEP § 512); or
3. If the reply was filed via Express Mail, a submission satisfying the requirements of 37 CFR 1.10(e) including, for example, a copy of the Express Mail mailing label showing the "date-in" (see MPEP § 513).

Any petition to withdraw the holding of abandonment should be directed to OIPE.

If applicant did not previously file a complete reply within the time period set forth in the notice, applicant may file a petition to revive the application under 37 CFR 1.137.

Under 37 CFR 1.137(a), a petition requesting the application be revived on the grounds of **UNAVOIDABLE DELAY** must be filed promptly after the applicant becomes aware of the abandonment and such petition must be accompanied by: (1) an adequate showing of the cause of unavoidable delay; (2) the required reply to the above-identified Notice; (3) the petition fee set forth in 37 CFR 1.17(l); and (4) a terminal disclaimer if required by 37 CFR 1.137(d). See MPEP § 711.03(c) and Form PTO/SB/61.

Under 37 CFR 1.137(b), a petition requesting the application be revived on the grounds of **UNINTENTIONAL DELAY** must be filed promptly after applicant becomes aware of the abandonment and such petition must be accompanied by: (1) a statement that the entire delay was unintentional; (2) the required reply to the above-identified Notice; (3) the petition fee set forth in 37 CFR 1.17(m); and (4) a terminal disclaimer if required by 37

CFR 1.137(d). See MPEP § 711.03(c) and Form PTO/SB/64.

Any questions concerning petitions to revive should be directed to the "Office of Petitions" at (571) 272-3282.

---

*A copy of this notice **MUST** be returned with the reply.*

A handwritten signature in black ink, appearing to be "F. De M.", is written above a horizontal line.

Office of Initial Patent Examination (571) 272-4000, or 1-800-PTO-9199, or 1-800-972-6382  
PART 3 - OFFICE COPY



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| APPLICATION NUMBER | FILING OR 371 (c) DATE | FIRST NAMED APPLICANT | ATTORNEY DOCKET NUMBER |
|--------------------|------------------------|-----------------------|------------------------|
| 11/039,180         | 01/19/2005             | Howard Rosen          | 0208.2cA4 -            |

CONFIRMATION NO. 8961

David T. Bracken  
 The Law Office of David T. Bracken  
 4839 Bond Avenue  
 Orange, CA 92869

## FORMALITIES LETTER



\*OC000000015363472\*

Date Mailed: 03/07/2005

## NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

*Filing Date Granted***Items Required To Avoid Abandonment:**

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given TWO MONTHS from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

**SUMMARY OF FEES DUE:**

Total additional fee(s) required for this application is **\$105** for a Small Entity

- The application search fee has not been paid. Applicant must submit **\$250** to complete the search fee.

(A previous payment of **\$145** will be applied to the additional fees indicated above.)

Replies should be mailed to: Mail Stop Missing Parts  
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PART 3 - OFFICE COPY

PATENT APPLICATION SERIAL NO. \_\_\_\_\_

U.S. DEPARTMENT OF COMMERCE  
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FEE RECORD SHEET

01/27/2005 HLE333 00000105 11039180

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PTO-1556  
(5/87)

U.S. Government Printing Office: 2002 — 489-267/60033



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

113013 U.S. PTO  
11/039180



Title: THERMOSTAT SYSTEM WITH  
TOUCHSCREEN WITH USER  
INTERFACES OR OPERATIONAL  
ALGORITHMS VIA A REMOTE  
CORRESPONDENT

TRANSMITTAL LETTER:  
REGULAR PATENT APPLICATION

Inventor(s): Howard Rosen

Serial No.:

Filing Date:

Group No.:

Examiner:

Attorney Docket No.: 0208.2cA4 -

COMMISSIONER FOR PATENTS

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Sir:

Transmitted hereunder for filing is  
the above patent application and/or  
related documents as listed below.

Papers Which Are Required for Filing Date:

- i) Pages of Specification: 20
- ii) Pages of Claims: 4
- iii) Pages of Drawings: 7
- iv) Pages of Abstract: 1

CERTIFICATE OF MAILING (37 CFR 1.10)  
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Signature: David T. Bracken  
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Additional Papers Enclosed:

- ☒ Declaration/Power of Attorney
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|                   |                                                                           |
|-------------------|---------------------------------------------------------------------------|
| Inventor(s)       |                                                                           |
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Bracken, 4839 Bond Avenue, Orange, CA 92869  
Phone: 714-744-4798

- ☒ Applicant(s) claim small entity status for this application as per 37 CFR 1.9 and 27.
- ☒ Pursuant to 37 CFR 1.211, Applicant hereby requests nonpublication with this  
application. The application is not to be published under 35 U.S.C. 122(b). Applicant  
certifies that the invention disclosed in the application has not been and will not be the  
subject of an application filed in another country, or under a multilateral international  
agreement, that requires publication at eighteen months after filing.

*David T. Bracken*

Attorney for Applicant(s)

David T. Bracken, Reg. No. 37522

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Title: THERMOSTAT SYSTEM WITH  
TOUCHSCREEN WITH USER  
INTERFACES OR OPERATIONAL  
ALGORITHMS VIA A REMOTE  
CORRESPONDENT

Inventor(s): Howard Rosen

Serial No.:

Filing Date:

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Attorney Docket No.: 0208.2cA4 -

DECLARATION /  
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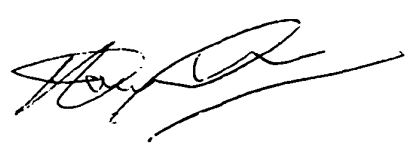
As above-named inventor(s), I (we)  
hereby declare that:

1. My residence and citizenship are as stated by my name.

| Full Name of Inventor: |                                                                           | Citizenship: |
|------------------------|---------------------------------------------------------------------------|--------------|
| #1 Howard Rosen -      | Address #1: 5756 Royalmount Avenue,<br>Montreal, Quebec, H4P 1K5 Canada - | USA          |

I (we) further declare that:

2. I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention identified above and is attached hereto.
3. I have reviewed and understand the contents of the above identified specification, claims, drawings and abstract and acknowledge my duty to disclose information which is material to the examination of this application in accordance with Title 37 Code of Federal Regulations §1.56.
4. The inventor(s) named below does (do) hereby appoint as attorney of record with full power of substitution and revocation, to prosecute the above application and transact all business in the Patent and Trademark Office connected therewith.: 1. David T. Bracken, Registration No. 37,522; Send correspondence to: David T. Bracken, The Law Office of David T. Bracken, 4839 East Bond Avenue, Orange, California 92869
5. All statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true. All the above statements were made with knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 the United States Code, and such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

| Inventor Name:  | Signature of Inventor:                                                               | Date:     |
|-----------------|--------------------------------------------------------------------------------------|-----------|
| #1 Howard Rosen |  | 1/10/2005 |

TITLE: THERMOSTAT SYSTEM WITH TOUCHSCREEN WITH USER INTERFACES  
OR OPERATIONAL ALGORITHMS VIA A REMOTE CORRESPONDENT

INVENTOR: HOWARD ROSEN

5           This application is a continuation in part of United States Patent Application No.  
10/440,474, filed May 15, 2003.

Field of the Invention

10           This invention relates to the art of thermostats and, more particularly, to a  
thermostat system incorporating a communication interface for receiving functional  
programming from a remote correspondent. In an extended version, this invention relates  
to a thermostat system for receiving functional programming which causes a change in a  
display of a thermostat with a touch sensitive screen as part of a user interface.

Background of the Invention

15           Thermostats have been used for many years as a temperature sensitive switch  
which controls heating and/or cooling equipment for conditioning a space in which the  
thermostat, or a temperature sensor connected to the thermostat, is placed. In the well  
known manner, a simple thermostat can be adjusted to establish a temperature set point  
such that, when the temperature in the conditioned space reaches the set point, the  
20   thermostat interacts with the heating and/or/cooling equipment to take suitable action to  
heat or cool the conditioned space as may be appropriate for the season.

          Modern thermostat systems, which take advantage of the ongoing rapid advances in  
electronic technology and circuit integration, have many features which provide more  
precise supervision of the heating and/or cooling equipment to achieve more economical  
25   and more comfortable management of the temperature of a conditioned space. Many  
modern thermostat systems include a real time clock, a memory and a data processor to run  
a process control program stored in the memory to accurately measure the temperature of a  
temperature sensor disposed in the conditioned space and to send control signals to the  
heating and/or cooling equipment to closely control the temperature of the conditioned  
30   space. Modern thermostat systems permit anticipating and minimizing hysteresis or  
overshoot of the temperature in the conditioned space. In addition, the program can

specify different set points at different times of the day and week and may also include a “vacation” mode which employs different set points when the conditioned space is not occupied for an extended period.

Many modern thermostat systems are programmable by a user. Typically, prior art programmable thermostat system employ a tactile touch pad with various fixed position buttons to be touched in a precise sequence to program set points (which may vary with the day of the week) for programmable time periods which may include a vacation mode. The programming sequence may be followed on a separate display, typically a liquid crystal display.

Outside of the art of programmable thermostat systems and programmable thermostats, dot matrix LCDs, which have pixel display elements arranged in rows and columns, are widely used. Dot matrix LCDs are not common as user-visible displays on programmable thermostats for viewing alphanumeric and iconic graphic information although such a thermostat is disclosed in, and particular features claimed in, co-pending United States Patent Application No. 10/440,474, filed May 15, 2003, and entitled: “Reverse Images in a Dot Matrix LCD for an Environmental Control Device” by Howard B. Rosen, incorporated by reference herein.

This limited use of dot matrix LCDs in programmable thermostats is because of basic engineering and practical considerations. Displayed information for a programmable thermostat generally includes such things as environmental conditions, heating and/or cooling equipment operation or non-operation, operational modes of the thermostat and the like. The most important information in thermostat displays is capable of being formed from segmented alphanumeric characters on less expensive LCDs without dot matrix capability and with reduced requirements for memory and programming.

Thus, dot matrix LCDs have not been widely used in prior art user programmable thermostats through a failure to understand an extended functionality capability of those devices when dot matrix LCDs are employed with a touch pad to effect an interactive display. This extended functionality is exploited to advantage in the present invention both to greatly 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.

It is well known that information or operational interfaces of programmable thermostats can be incomprehensible or overly challenging to many users with advanced age, learning skills, poor vision and others in similar circumstances. Devices such as programmable thermostats, desktop computers, programmable VCR's, and even programmable clock radios often lie un-used in an owner's home because of fear of the complexity of such devices. More specifically, programmable thermostats generally comprise a user interface that use a mixture of raised push buttons with representations of environmental sensor information and control data on a segmented liquid crystal display.

In a modern programmable thermostat, a user is most often challenged with a first set of push buttons that lie outside of hinged cover and a second set of buttons that lie behind that hinged cover. External push buttons are usually those that a user will most often use to make simple program changes while the covered push buttons are lesser used buttons representing lesser used and usually more complex programming options. A user cannot by intuition selectively pick which push buttons represent thermostat program functions that are critical to a user and which buttons are of little consequence.

Some modern thermostat systems incorporate a touch sensitive screen which incorporate representations of buttons which a user may press as part of an interface with the thermostat system. While changing pressure sensitive buttons of a user interface from their more typical spring biased, mechanical form to a more convenient display-located representation, our knowledge of improvements in user interfaces and thermostat system equipment changes and control options are continuously evolving. At a particular moment in time, a form of a user interface may best suit a user's needs and incorporate modern equipment options. However, the day always arrives when an improved user interface is conceived or space conditioning equipment is improved, where either or both require a change in the thermostat system and/or user interface. Thermostats have in the past had very limited ability to be upgraded due to downward price pressure in the marketplace and the practical limitations of a user's lack of inclination to learn a sophisticated interface. A personal computer can accommodate many new programs and functions with its standardized user interface but is inconvenient, too large, and too costly for wall mounting typical of a modern thermostat.

There is a need for a programmable thermostat whose user interface can be easily changed after installation to accommodate equipment or control options not anticipated at installation or to change the user interface to a form not possible with a control program originally installed with the thermostat.

5 Summary of the Invention

The invention comprises a programmable thermostat capable of receiving functional programming from a remote correspondent or removable media so that representations of information or touch sensitive buttons on a liquid crystal display are changed from those available to the thermostat before said receipt of functional programming. A user may quite easily download such functional programming from a  
10 remote correspondent to implement through a control program of the programmable thermostat one or more new, improved or desired user interfaces. The interfaces can be changed partly or entirely, and may be changed to coordinate its colors or designs to those of its surroundings.

15 A dot matrix liquid crystal display operable with the programmable thermostat and enabled with a touch pad in at least a portion of the display is substantially a “blank slate” upon which new user interfaces may be added by a user after an original installation of the thermostat. In the prior art, programmable thermostats have been installed with pre-programmed user interfaces comprising displays of text and graphic devices with input  
20 buttons that could not be upgraded or changed after purchase. Upgrades or changes in space conditioning equipment made after installation of such prior art thermostats required that the user have purchased a thermostat that would allow the upgrade or change. It is typical that a user now purchase a new thermostat if they desire a different user interface, desire a new control function, or install new space conditioning equipment. The present  
25 invention allows a user to obtain and select from multiple user interfaces and/or control functions associated with them which were not part of a control program at an original installation of their programmable thermostat.

A programmable thermostat system for controlling space conditioning equipment according to the invention includes: a transparent touch pad juxtaposed over a liquid  
30 crystal display to constitute a touch screen for interactive interface with a user; a temperature sensor for providing an electrical signal indicative of the temperature of a

conditioned space; and a processor including: a central processing unit; a real time clock; a memory coupled to the central processing unit for storing program and data information; and an input/output unit coupled between the processor and said touch screen for carrying out information transfer therebetween. A control program stored in the memory directs the central processing unit to communicate through the input/output unit to selectively:  
5 establish on the liquid crystal display a representation of at least one button at a predetermined XY position; read the same XY position on the touch pad to determine if the "button" has been touched; and if the button has been touched, perform a predetermined action such as moving to a different menu or changing operating criteria.  
10 Preferably, an alphanumeric message explaining the function of the button is also displayed, and icon indicators may be employed to unmistakably associate a message with a button. Different menus can place the buttons and messages in various positions on the touch screen to facilitate intuitive programming.

In addition, a thermostat system according to the invention includes: a  
15 communications interface is adapted to establish bi-directional communications (via the Internet or some other suitable facility) between the processor and a remote correspondent. The remote correspondent is a source of functional programming which in part changes or adds to one or more previous functions of the control program or representations of virtual buttons on the display.

20 One type of change or addition within the objects of this invention relate to representations or locations of touch pad buttons of the user interface displayed on the liquid crystal display or of displays of text or graphic devices which form a part of a display. A user may desire that a touch pad button associated with the text "COOL" be changed to the text "AC" for air conditioning. A user may desire that a touch pad button  
25 associated with the word "FAN" be replaced with a graphic representation of fan blades connected to a central hub indicating fan function. A user may desire to obtain from a remote correspondent weather information about their locality and have it displayed in some manner on their liquid crystal display. A user may desire that certain touch pad buttons currently aligned vertically be aligned horizontally, diagonally or placed in any  
30 manner across the liquid crystal display. A user may desire some change or addition to the location, size or other such aspect of text or graphic devices viewable on the liquid crystal

display. A user may desire a more aesthetically pleasing look or additional functions. Even though such functions were not part of the control program at an original installation of the thermostat, the user may initiate bi-directional communication with a remote correspondent and download functional programming to implement these new functions.

5 Such communications may be established with removable media, infrared link, etc.

Another type of change or addition within the objects of this invention relate to functions of the control program associated with input indicating that a user has pressed a representation of a button on the touch pad and any legend on the LCD associated with that button. A user may desire a new control function for their thermostat which imposes a  
10 requirement of input of a password before changes to operating setpoints may be made. A user may desire a new control function for their thermostat where an existing heat pump be activated at a sensed temperature closer to the setpoint than a sensed temperature that would activate an existing electric furnace. A user may add a variable speed compressor to their existing heat pump system after original installation of the thermostat, where the  
15 thermostat originally comprised means for control connections for that variable speed compressor. Even though the preceding were not functions of the control program at an original installation of the thermostat, the user may initiate communication with a remote correspondent and download functional programming to accomplish these changes. The remote correspondent may originate transfer functional programming to the invention  
20 thermostat.

Periodically, or on demand if provided for, the control program stored in the memory causes the CPU to selectively: establish communications with the remote correspondent, copy functional programming, store the functional programming and adapt the control program to incorporate the functional programming.

25 In a variant embodiment, the remote correspondent provides a service sending, periodically or on demand, predetermined functional programming incorporated into the control program. The user of the thermostat may also selectively choose and even purchase aftermarket functions to the thermostat from a menu or perhaps a webpage.

#### Description of the Drawing

30 FIG. 1 is a block diagram of a first embodiment of a space conditioning system incorporating a thermostat system employing the present invention.

FIG. 2 is a block diagram of a second embodiment of a space conditioning system incorporating a thermostat system employing the present invention.

FIG. 3 is a block diagram of a third embodiment of a space conditioning system incorporating a thermostat system employing the present invention.

5        FIG. 4 is a block diagram of a first embodiment of a space conditioning system incorporating a thermostat system employing the present invention.

FIG. 5 is a high level process flow chart describing the operation of a method of obtaining diverse information from a remote correspondent.

10        FIG. 6 is a pictorial of an exemplary display illustrating information presented to a user by the use of a method of obtaining diverse information from a remote correspondent.

FIG. 7 is a high level flow chart describing the operation of a another method of obtaining diverse information from a remote correspondent.

FIG. 8 is a high level flow chart describing the operation of the invention obtaining and incorporating functional programming with a control program.

15        FIG. 9 is an exemplary pictorial of a first interactive interface display on the touch screen of the devices of FIGS. 1 through 4 having a control program adapted only to control space conditioning equipment for cooling and activation of a fan of an air handler.

20        FIG. 10 is an exemplary pictorial of a second level interactive interface display on the touch screen in FIG. 9 after functional programming has been obtained from a remote correspondent and the control program has incorporated and operated said functional programming.

25        FIG. 11 is an exemplary pictorial of a menu displayed on the touch screen of FIG. 9 to provide a first set of menu selections including an "ADVANCED SETTINGS" virtual button after functional programming has been obtained from a remote correspondent and the control program has incorporated and operated said functional programming.

30        FIG. 12 is an exemplary pictorial of another interactive interface displayed on the touch screen of FIG. 9 showing "ADVANCED SETTINGS" menu selections after the "ADVANCED SETTINGS" virtual button of FIG. 11 has been touched after functional programming has been obtained from a remote correspondent and the control program has incorporated and operated said functional programming.

### Description of the Preferred Embodiment(s)

Referring first to FIG. 1, a thermostat system includes a processor 1 and a temperature sensor 5 which is disposed in a conditioned space 4. The processor 1 and the sensor 5 may be situated in a common housing (not shown) or separated, all as very well known in the art. The common housing is usually, but not necessarily, placed in the conditioned space 4. Thus, those skilled in the art will understand that the block diagram of FIG. 1 is very general in order to best explain the invention.

The processor 1 includes a central processing unit (CPU) 9 in communication with a memory 8 which stores data and program information and also, via an input/output unit (I/O unit) 10, a touch pad 11 and a liquid crystal display (LCD) 12. The liquid crystal display may optionally be backlit by any suitable means (not shown). The memory 8 may include a read-only part which is factory-programmed and a random-access part which stores data subject to change during operation. A settable real time clock 13 is used to keep time in the thermostat system to facilitate operations. The thermostat system may be suitably powered by a battery (not shown) and/or from equipment to which is connected. The I/O unit includes a communications interface 14 for coordinating communications between the CPU 9 and a remote correspondent 15. The communications interface 14 may be, for example, a conventional serial port.

Thus, in the usual manner during normal operation, the temperature sensor 5 sends an electrical signal (e.g., if the sensor 5 is a simple thermistor, a resistance value; several types of temperature sensors are widely used) representative of the temperature within the conditioned space 4 which the processor can compare against a previously entered set point to determine if control signals need to be sent to the space conditioning equipment 3. For example, if the temperature in the conditioned space 4 is found to be too low when operation is in the heating mode, the processor 1 signals the space conditioning equipment 3 circulate, through ducts 6, 7, air from/to the conditioned space 4 which is heated by the space conditioning equipment before return to the conditioned space. This heating phase continues until the sensor 5 indicates that the space is now too hot (or approaching too hot) with reference to the set point such that the processor 1 sends signal(s) to the space conditioning equipment 3 to cease the heating function, all as very well known in the art. In a cooling mode, a counterpart procedure is followed. Those skilled in the art will

understand that the control process typically includes such refinements as anticipation, hysteresis accommodation, fan control, etc. which are acknowledged, but are not directly relevant to the invention.

5 It may be noted that integrated circuit chips including all the processor components with all the necessary interface conditioning circuits are available off-the-shelf and are under constant refinement for increased power. The subject invention only requires the capabilities of such a processor, and off-the-shelf integrated circuit processor chips may be used to advantage in the subject thermostat system.

10 Consider now a first embodiment of the invention. Referring to FIG. 5 as well as FIG. 1, there is stored in the memory 8 (typically, in ASCII format) a series of key terms pertaining to a subject of interest such as the local weather. Exemplary key terms for this subject may be "temperature", "relative humidity", "high", "low", "barometric pressure", etc. The key terms may be stored in the memory during the manufacturing process of the thermostat system or, as will be described below, by user entry using the touchpad 11 and  
15 LCD 12.

At one or more predetermined times of day (and/or on-demand if provided for in the operating program) which have been previously stored in the memory 8 and established by the clock 13, the CPU 9 starts the process shown in FIG. 5 by issuing signals to the I/O unit 10 to cause the communications interface 14 to establish communications, via link 16,  
20 with a remote correspondent 15. The remote correspondent 15 has a known data communications "address" and, in the example, is a source of current information, such as local weather. Such local current weather information sources are widely available and are routinely accessed by, for example, using the Internet.

When the current local weather information is transmitted from the remote  
25 correspondent 15 via link 16 to the communications interface 14 and thence to the CPU 9, the CPU parses the information against the key terms stored in memory 8 to determine if there is a match. This is easily achieved because the source code of the information will typically also be in ASCII format. If the CPU 9 senses a match, the just-received information is searched for the presence of at least one "value" associated with the  
30 matched key term. If such a value is found and under control of the CPU 9, a first alphanumeric message component representative of the connotation of the matched key

term and a second alphanumeric message component representative of the value associated with the key term are displayed on the LCD 12.

5 If no value for the present matched term is found, but more key terms in the present set are yet to be compared to information just received from the remote correspondent 15, the same process is repeated until all the key terms in the present set have been parsed and alphanumeric messages, if generated, have been sent to the LCD 12. The immediate session then ends.

10 As an example, assume that Montreal weather is of interest to an occupant of a conditioned space in the Montreal area which uses the subject thermostat system and that "temperature", "high" and "low" are the key terms for the subject of local weather stored in the memory 8. Periodically, as determined by times stored in the memory 8, the CPU 9 issues signals to access the remote correspondent 15 (a site providing local Montreal weather in the example) and download the current weather information as a data stream. If the CPU finds, by examining and processing the data stream, that the term "temperature" 15 has been received, it looks for the next characters in the data stream which can be a value associated with "temperature"; e.g., it may quickly find "+18°C". With this coupling established, the CPU may access the memory 8 to read the prestored alphanumeric message component "Current Montreal Temperature:" and then concatenate, as a second alphanumeric message component, "18C" and then send the complete message to the LCD 20 12 which displays: "CURRENT MONTREAL TEMPERATURE: 18°C".

In a similar manner, if the key term "high" and an associated value are sensed, the exemplary message "MONTREAL HIGH TODAY: 26C." may be displayed; and if the key term "low" and an associated value are sensed, the exemplary message "MONTREAL LOW TODAY: 9C." may be displayed.

25 While an application for using the invention is acquiring and displaying current weather information, other types of current information may be obtained and displayed in a like manner. For example, current stock quotations for stock indexes and individual stocks, mutual funds and the like can be automatically acquired, displayed and periodically updated by suitably programming the processor 1 with the address of a site which 30 maintains such information current along with the desired key terms which may, in this example, be NYSE, etc. stock symbols. Thus, the "value" term would be the current stock

quote. As an example, if the key term "FMAGX" is matched and an associated value of 102.75 is also found, the alphanumeric message "CURRENT QUOTE FOR MAGELLAN: 102.75" is generated and displayed. To closely track one or more stocks or funds, the remote correspondent can be accessed as often as desired to "refresh" the alphanumeric message showing the current quote. A wide variety of types of information may be programmed, accessed and displayed in a like manner.

It will be understood that the processor 1 can communicate successively or at different times with different remote correspondents. Thus, referring to FIG. 6, the current local weather information and the selected stock market information can be serially received and processed for display together in a manner which appears to be virtually simultaneous to a user. As previously noted, the overall display can be updated throughout the day at various times, as to each remote correspondent accessed, which have previously been entered in the memory 8.

If the thermostat system is programmable, the operating program installed during manufacture may provide for user entry following conventional instructions similar to those used in user-programming the climate control operation of the thermostat system. For example, assuming that the remote correspondent has an Internet address, the address may be entered using the touchpad 11 in any suitable manner as previously set up by a system programmer during software design. Then, various key terms the user wishes to employ with various remote correspondents having various addresses may be entered by a user.

As previously mentioned, the invention is not limited to use in programmable thermostat systems or even to thermostat systems in which correspondent addresses and key terms have previously been entered into memory 8. Still referring to FIG. 1 and also to FIG. 7, in a variant embodiment of the invention, a thermostat system communicates with a remote correspondent 15 which provides a customized service to the user of the thermostat system. In this embodiment of the invention, the user is a subscriber to the customized service in order to receive known current information on a predetermined schedule. At predetermined times (or on demand), data communications is established between the processor 1 and the remote correspondent 15 which, in this case, provides the customized service. The current information is downloaded and displayed. The resulting

messages shown and periodically updated on the LCD 12 may be as shown in exemplary FIG. 6 if, for example, Montreal current temperature, daily high and low temperatures and the current quote for Magellan is what the user has subscribed to receive.

5 When the service is set up, the user and the business which provides the service via the remote correspondent 15 agree as to what current information (typically more than in the example) will be supplied on an agreed schedule. Depending upon the server-client relationship, either the processor 1 or the remote correspondent 15 may institute the current information transfer at the predetermined times or on demand.

10 While the Internet is not the only facility which the subject thermostat system may use to communicate with a remote correspondent, it is, at the state-of-the-art the most readily widely available and easily accessible. Thus, FIG. 2 show a typical coupling in which the communications interface 14 sends/receives serial data to/from an external (to the thermostat system) modem 20 via serial link 16. The modem conventionally interfaces with an Internet Service Provider (ISP) 21 which completes the communications link to the  
15 remote correspondent in the well-known manner. The modem 20 may be dial-up, cable, DSL or any other type suitable for the communications environment in a given installation.

At the state-of-the-art and as shown in FIG. 3, a modem 24 for communicating with the ISP 21 may be integrated into the communications interface 14 of the input/output unit 14 to eliminate the need for an external modem. Thus, when communications is  
20 established with the remote correspondent 15 according to a schedule or upon demand, the data transfer takes place via modem 24 and data link 26 as shown.

Attention is now directed to FIG. 4 which illustrates an optional extension of the subject thermostat system. It will be observed that the ISP 21 is not only in communication with the first remote correspondent 15, but also with a second remote  
25 correspondent 26. The second remote correspondent 23 may be another thermostat system (controlling another conditioned space (not shown) with other space conditioning equipment (not shown)) which can be remotely controlled. In this embodiment, data received from the first remote correspondent 15 as previously described may include specific information which can be interpreted by the processor 1 to require action at the  
30 site of the second remote correspondent 23. As an example, assume that the site of the second remote correspondent 23 is a temporarily unoccupied dwelling and that weather

data received by the subject thermostat system indicates a predicted significantly low temperature predicted for the region of the site of the second remote correspondent 23. The processor 1 may determine, in response to this new weather information supplied by the first remote correspondent 15, that the heat should be turned on (or the set point raised) at the site of the second remote correspondent 23 in order to protect water pipes against freezing, warm the conditioned space controlled by the second remote correspondent in anticipation of its upcoming occupation, etc.

Consider now a functional programming embodiment of the invention. Referring to FIG. 8 as well as FIG. 1, there is stored in the memory 8 a control program enabling functions of the programmable thermostat of the invention. At step 100, the control program determines what functions are enabled by the control program and associates with each of the functions a designation such as “control of compressor and condenser type air conditioner”, “control of fan”, “screen #1” (for a certain display on LCD 12 as in FIG. 9), etc. Said functions include at least control of touch pad 11 and LCD 12 as to representations and legends for virtual buttons as well as text and graphic devices viewable on the LCD 12. In addition, at step 100 the control program establishes what space conditioning equipment, control options, sensors, and other features are available for operation within the HVAC system controlled by the thermostat system of the invention.

At the election of a user locally at touch pad 11 as provided for by the control program or via other communication with a remote correspondent such as with removable media, infrared link, by personal computer to an Internet website permitting such action, etc., the CPU 9 at step 101 shown in FIG. 5 communicates signals to the I/O unit 10 to facilitate the communications interface 14 to establish communications, via link 16, with a remote correspondent 15. The initiation and maintenance of these communications may occur in reverse of these steps. The remote correspondent 15 has a known data communications “address” and, in the example, is a source of functional programming. At step 102, a user is shown functional programming available for transfer to the programmable thermostat system and a user selects at least one of such functional programming selections.

At step 105, the selected functional programming is transferred and becomes part of the control program. At step 106, the selected functional programming cause a change in the touch pad 11 and/or LCD 12 as appropriate for the current screen display requirements.

FIGs. 9 to 11 show pictorial representations of the touch pad 11 and LCD of FIG. 1 in various interactive conditions. FIG. 9 is a representation of a thermostat system at step 100 of FIG. 8 with a current set of functional programming modules in a control program. FIGs. 10 and 11 are representations of a thermostat system at step 106 of FIG. 8 with a newly obtained set of several functional programming modules incorporated in the control program causing changes and additions to be indicated on touch pad 11 and LCD 12.

Referring again to FIG. 9, pictorial 120 comprises a set of virtual buttons 110, 113, 114 and 115 which in response to a user touch also causes a change in the operating state of the invention programmable thermostat. Such of button 110 results in a change of the legend associated with virtual button 110 from COOL to OFF as in button 112, indicating that an air conditioning mode has been turned off and no space conditioning equipment will activated if the sensed temperature 117 of the conditioned space exceeds the cooling setpoint 116. Setpoint 116 can be increased by pressing button 115 and decreased by pressing button 114. A fan operation mode is activated or turned off by pressing button 113. The programmable thermostat whose user interface is represented in FIG. 9 is a simple device capable of turning on or off space conditioning equipment at a desired setpoint for cooling or to turn a fan on or off. Its control program does not include more advanced functions, although the programmable thermostat is preferably provided with sufficient circuitry, relays, switches and the like to accomplish the objects of upgrade of equipment and control options as described herein.

Without specifically limiting such a definition, functional programming transferred to the memory of the programmable thermostat and previously unavailable to the control program includes:

- (a) one or more entire graphical user interfaces as represented on a touchscreen;
- (b) portions of a graphical user interface;
- (c) representations of the size, shape, colors, legends, locations, and other viewable aspects of virtual buttons on the touchscreen;
- (d) representations of the size, shape, colors, locations and other viewable aspects of text or graphic devices on the touchscreen;
- (e) operational algorithms for the control program other than those for the graphical user interface;
- (f) operational algorithms for control of existing or newly installed space conditioning equipment;
- (g) operational algorithms for communications with existing or newly installed environmental sensors;

(h) means for changing one or more functions to be associated with the determination that a virtual button on the touchscreen has been touched or that said button has not been touched; and

5 (i) means for establishing and/or controlling communication with a remote correspondent, such as, obtaining transfer of functional programming from new sources (such as from removable media, through an infrared link, or from a communication initiated by the remote correspondent), communication sessions initiated periodically by the control program to obtain new functional programming, establishing password protection against unauthorized transfer of  
10 function programming to the thermostat, and establishing communication with computer networks (such as the Internet or an internal network).

Functional programming transferred to the thermostat according to the invention does not include data-only transfers.

Referring to FIG. 10, several functional programming modules have been  
15 transferred to the programmable thermostat. As a specific example and without limiting the invention in any way, some of the transferred functional programming modules are now described. A cooling mode indicator text 122 and heating mode indicator text 123 are shown with associated setpoints 116 and 124. The control program has been changed to enable operation of simple to complex control of space conditioning equipment for heating  
20 the conditioned space. Virtual button 110 can undergo step 111 in response to a user touch which also causes a change in the operating state of the invention programmable thermostat and a change of the legend associated with virtual button 110 to one of the virtual buttons in column 132. In the example, successive steps 133 to 137 indicate that a user has touched virtual button 110 one or more times to cause the operating state of the  
25 programmable thermostat and the legend of virtual button 110 to change with respect to those steps as follows:

A) at step 137, from “automatic” mode to “off” mode (none of the environmental control equipment connected with the thermostat will operate, and virtual button 110 shows “OFF”);

30 B) at step 133, from “off” mode to “heat” mode (a heater or a heat pump in heat mode operates to heat the conditioned space, and virtual button 110 shows “HEAT”);

C) at step 134, from “heat” mode to “cool” mode (an air conditioner or heat pump operating in the cooling mode operates to cool the conditioned space, and virtual button 116 shows “COOL”);

5 D) at step 135, from “cool” mode to “emergency heat” mode (a backup electric heater operates to keep the conditioned space temperature above a lowest set point, and virtual button 110 shows “EMER HEAT”); and

E) at step 136, from “emergency heat” mode to “automatic” mode (the air conditioner and heater (or heat pump) operates in both the “heat” and “cool” mode, and virtual button 110 shows “AUTO”).

10 It will be appreciated that the virtual buttons of virtual buttons column 132 may alternatively be reduced in size and distributed on the surface of pictorial 121 instead of being a set of virtual buttons activated and serially viewable by invoking steps 133-137. If the virtual buttons of virtual buttons column 132 are distributed as separately and simultaneously viewable virtual buttons, it is desirable that the virtual button for the  
15 function currently activated for the thermostat will “flash” in contrast as described above so that the user will know which of the operating states or conditions are currently controlled by the thermostat.

However, it is an important feature of the thermostat that, although a user may touch virtual button 110, fewer or more than all the virtual buttons of column 132, in the  
20 example, and their associated changes in the normal operation control effected by the thermostat may be available to a user. The user has the ability to “edit” and/or simplify the virtual buttons column 132 to reflect the user’s environmental control equipment actually connected for control by the thermostat.

If fewer than or more than the virtual buttons of virtual buttons column 132 are  
25 available to the user, appropriate fewer or more touching steps will be required to cycle through the functions of the thermostat and the corresponding legends which may appear with virtual button 110. The particular sequence of thermostat functions available at steps 133 to 137 is only exemplary of how normal user changes between operating states or conditions are made for the thermostat; the virtual buttons of column 132 may, of course,  
30 have a different sequence and also reflect various space conditioning equipment components which may be installed in diverse applications.

Thus, as more fully described below, a user is able, typically during a system setup, to eliminate or add to the virtual buttons shown in column 132 (and their associated functions) by using the touch screen in a manner that allows the user to specify what environmental control equipment components are actually controlled by the thermostat and, accordingly, included in column 132.

In practice, the thermostat manufacturer provides, in the control program, control sequences for as many different types of space conditioning components as might be used in widely diverse applications, alone or in combination. During setup, the user of a given installation eliminates those components, and graphics displays related thereto, which are irrelevant to the given installation, thus simplifying later ongoing programming and use of the thermostat. This system setup procedure is instituted by touching the "MENU" button 118 shown in FIG. 10 which the control program responds to by displaying second-level pictorial 140 of FIG. 11 on the touch screen.

FIG. 11 shows that pictorial 140 displays virtual buttons 141 to 149. Touching each of buttons 141 to 149 results in a new, usually third level, pictorial screen to show information and/or new buttons as follows:

A) for "home" icon button 141, a return to the first level, normal operation, pictorial 113 shown in FIG. 9;

B) for "DATE/TIME SETTINGS" button 142, for entering current date and time information;

C) for "SET SCREEN" button 145, for changing screen settings for the touch screen;

D) for "CLEAN SCREEN" button 146 to wipe the screen, e.g., with a lightly dampened cloth, without accidentally changing any of the settings; this function times out after a few seconds;

E) for button "FILTER MONITOR" button 147, entering, for display at pictorial 113 or similar touch screen, a reminder to change or clean filters on a specified schedule;

F) for "VACATION SETTINGS" button 148, for entering appropriate vacation system settings;

G) for "PROGRAM SETTINGS" button 143, for entering automatic temperature set point adjustments, typically for each of four selectable times for each day of the week;

H) for “ENERGY WATCH” button 144, for display of ongoing energy consumption and costs as discussed further below; and

I) for “ADVANCED SETTINGS” button 149, for entering the environmental control equipment connected with the thermostat, entering energy consumption data and costs and other functions as described.

Touching virtual button 149 results in display of pictorial 150 of FIG. 12. In a manner similar to button 116 of FIG. 9, buttons 154 and 158 of FIG. 12 each represents a sequence of buttons that change after being touched by a user. Button 154 represents the presence or absence of air conditioning equipment connected with the thermostat. Button 158 represents the presence or absence of heating equipment connected with the thermostat.

More particularly, the virtual buttons in column 163 are those that become successively visible when a user successively touches button 154, also indicating a change in the designation of which cooling equipment is present in a given system. Similarly, in the example, buttons in column 164 are those that become successively visible when a user successively touches button 158, also indicating a change in the designation of which heating equipment is present in the given system.

In the example, 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. The memory program contains programming adapted to cause effective operation of a heat pump or compressor type air conditioner depending on the one selected at button 154. If the “no compressor” mode is selected at button 154, the buttons column 132 of FIG. 10 will lack the “cool” and “auto” buttons and functions.

Cycling 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. If the “furnace off” mode is selected at button 158, the buttons column 132 of FIG. 10 will lack the “heat” and “emer heat” mode buttons and functions as well as the “auto” mode button and function. The control program stored in memory contains routines adapted to cause effective operation of any combination of the designated equipment.

Pictorial 155 of FIG. 12 also shows virtual button 151 for changing the temperature designation in the touch screen from Centigrade to Fahrenheit, buttons 153 and 157 for entering certain set point related parameters, button 155 for entering an installer message and button 146 for entering security settings.

The functional programming modules operating in the control program to effect the functions shown and described in FIGs. 10 to 12 are several and yet are only a few of those capable being implemented for the touch pad 11 and LCD 12 of the invention programmable thermostat. As described above, transferable functional programming from a remote correspondent may create virtual buttons numbering from one to many within the viewable LCD 12 and have different sizes, shapes, legends, icons, or even animations depending on a particular user interface desired and provide a succession of pictorials to accommodate the functions of the user interface. A basic thermostat according to the invention may be purchased with very little functionality as long as it can accomplish communication with a remote correspondent to obtain what may be needed after an initial installation.

Those skilled in the art will appreciate that, in a large facility incorporating subdivisions in the conditioned space, each conditioned space having its own thermostat system, each of the thermostat systems may independently employ the invention as previously described.

WHAT IS CLAIMED IS:

- 1 1. A thermostat system for controlling space conditioning equipment comprising:
  - 2 A) a temperature sensor for providing an electrical signal indicative of the  
3 temperature of a conditioned space in which the temperature sensor is situated;
  - 4 B) a transparent touch pad juxtaposed over a liquid crystal display to constitute a  
5 touch screen for interactive interface with a user and for selectively displaying  
6 alphanumeric and graphic devices;
  - 7 C) a processor, said processor including:
    - 8 1) a central processing unit;
    - 9 2) a real time clock;
    - 10 3) a memory coupled to said central processing unit for storing program  
11 and data information; and
    - 12 4) an input/output unit including:
      - 13 a) a sensor input coupled to said temperature sensor for receiving  
14 said electrical signal therefrom;
      - 15 b) a control output coupled to the space conditioning equipment for  
16 issuing control signals thereto; and
      - 17 c) a communications interface adapted to establish  
18 communications between said processor and a first remote  
19 correspondent which is a source of functional programming; and
  - 20 D) a control program stored in said memory for causing said central processing  
21 unit to selectively:
    - 22 1) establish on said liquid crystal display one or more representations of  
23 buttons at a separated and predetermined positions;
    - 24 2) read the position on the touch pad juxtaposed with said predetermined  
25 position to determine if said representation of a button has been  
26 touched; and
    - 27 3) if said a representation of a button has been touched, processing this  
28 information to establish a condition incorporated into the operation  
29 of said thermostat system;

30 4) establish communications between said processor and a first remote  
31 correspondent from which is transferred to said memory one or  
32 more modules of functional programming; and  
33 5) operate said transferred functional programming to change or add to  
34 representations on the touch screen, where said changes or  
35 additions of representation on the touch screen were not available  
36 to the control program before their transfer to the memory;  
37 E) means coupling said communications interface and said first remote  
38 correspondent.

1 2. The system of Claim 1 in which in which said communications interface includes a  
2 modem.

1 3. The system of Claim 1 in which said communications interface is coupled to an  
2 external modem.

1 4. The system of Claim 1 in which transferred functional programming modules  
2 comprise means for controlling space conditioning equipment.

1 5. The system of Claim 1 in which transferred functional programming modules  
2 comprise means for controlling space conditioning equipment and providing  
3 representations of buttons on the touch screen to provide a user with an interface as part  
4 of those means.

1 6. The system of Claim 1 in which in which transferred functional programming  
2 modules comprise means for causing successive and substantially different pictorial  
3 representations on the touch screen.

1 7. The system of Claim 1 in which in which transferred functional programming  
2 modules comprise menus for selecting functional options for the control program.

- 1 8. The system of Claim 1 in which transferred functional programming modules  
2 comprise means for adding space conditioning equipment to that equipment controlled by  
3 the thermostat.
- 1 9. The system of Claim 1 in which in which said first remote correspondent is a network  
2 node.
- 1 10. The system of Claim 1 in which in which said first remote correspondent is  
2 removable media.
- 1 11. The system of Claim 1 in which in which said functional programming determines  
2 all or part of a graphical user interface.
- 1 12. The system of Claim 1 in which in which said functional programming determines  
2 size, shape, colors, legends, locations, or other viewable aspects of said buttons on the  
3 display.
- 1 13. The system of Claim 1 in which in which said functional programming determines  
2 representations of the size, shape, colors, locations and other viewable aspects of text or  
3 graphic devices on the display.
- 1 14. The system of Claim 1 in which in which said functional programming determines  
2 operational algorithms other than those for the graphical user interface.
- 1 15. The system of Claim 1 in which in which said functional programming determines  
2 operational algorithms for control of existing or newly installed space conditioning  
3 equipment.
- 1 16. The system of Claim 1 in which in which said functional programming determines  
2 operational algorithms for communications with existing or newly installed  
3 environmental sensors.
- 1

1 17. The system of Claim 1 in which in which said functional programming includes  
2 means for changing one or more functions to be associated with the determination that a  
3 virtual button on the touchscreen has been touched or that said button has not been  
4 touched.

1 18. The system of Claim 1 in which in which said functional programming includes  
2 means for establishing or controlling communication with a remote correspondent.

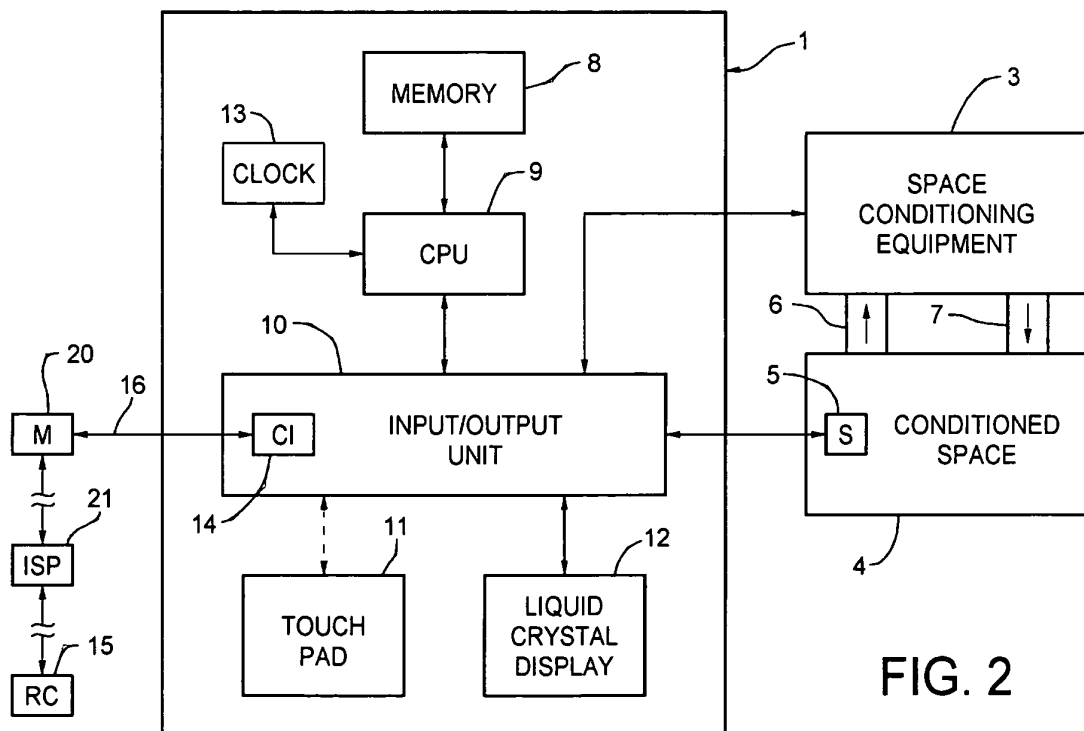
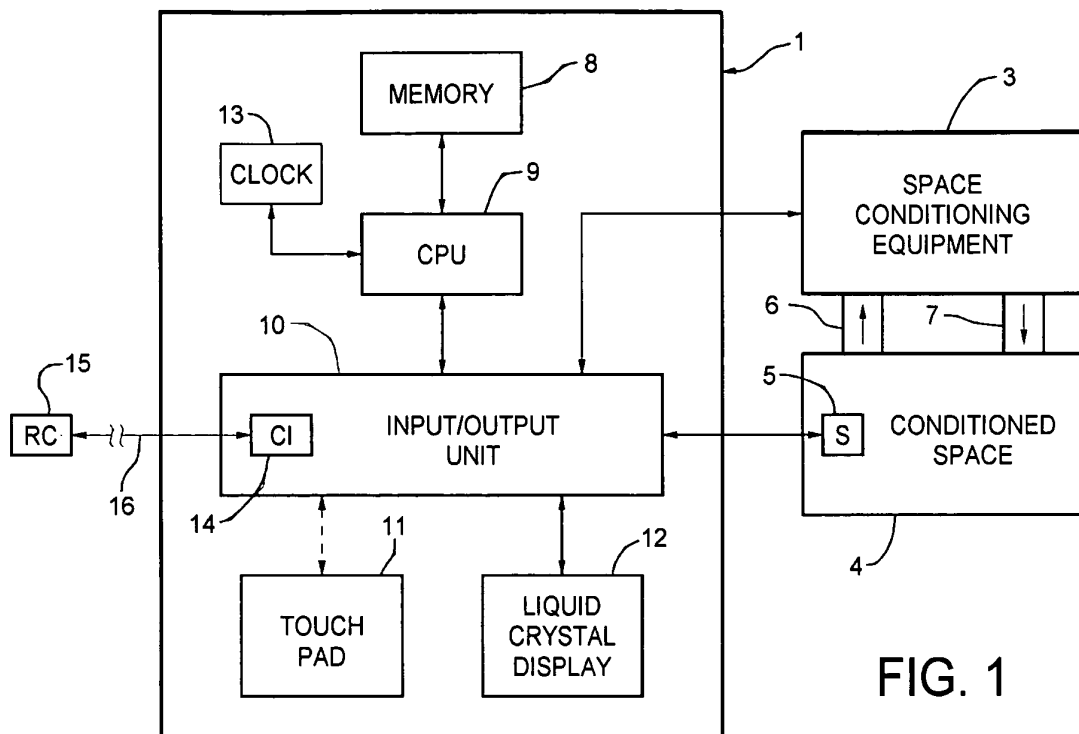
1 19. The system of Claim 1 in which in which said functional programming determines  
2 color of all or part of a graphical user interface.

1 20. The system of Claim 1 in which in which said functional programming controls  
2 periodically changing color of all or part of a graphical user interface.

1  
1  
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1  
1

1 ABSTRACT OF THE DISCLOSURE

2 A thermostat system includes a temperature sensor, an LCD for selectively  
3 displaying alphanumeric and graphic devices on a touchscreen with virtual buttons, a  
4 processor having a memory for storing program and data information, and means for  
5 establishing communication with a remote correspondent. In one embodiment, the  
6 communication from the remote correspondent includes functional programming adding  
7 functions or virtual buttons to the thermostat not previously available to it. A  
8 communications interface connects the processor and a remote correspondent which is a  
9 source of functional programming.



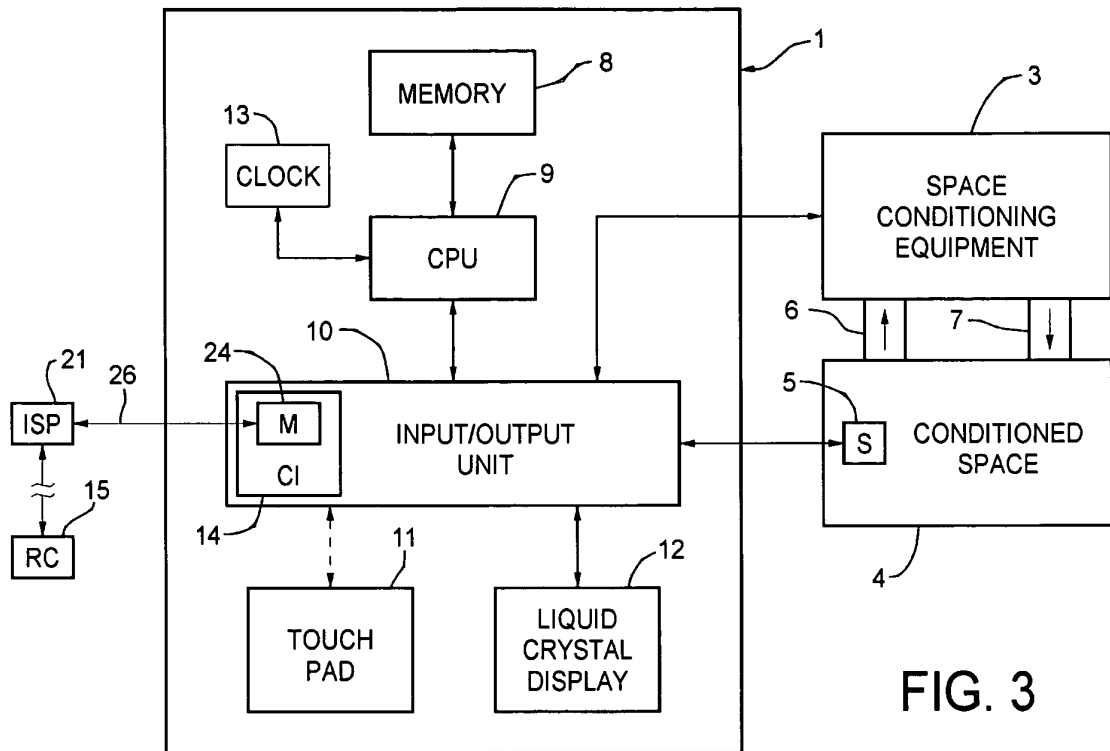


FIG. 3

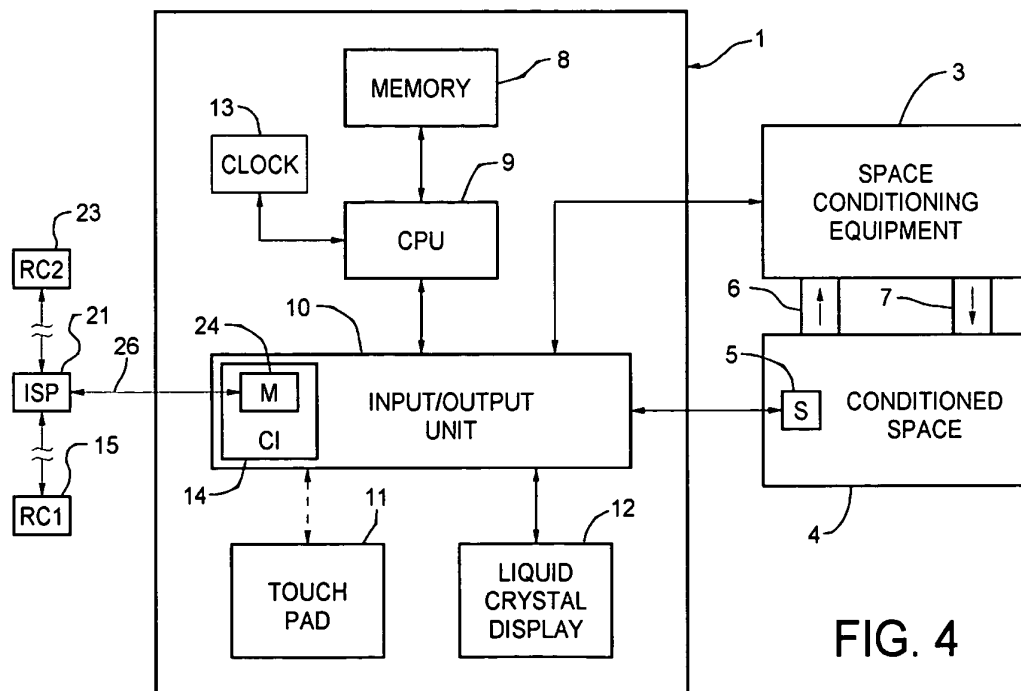
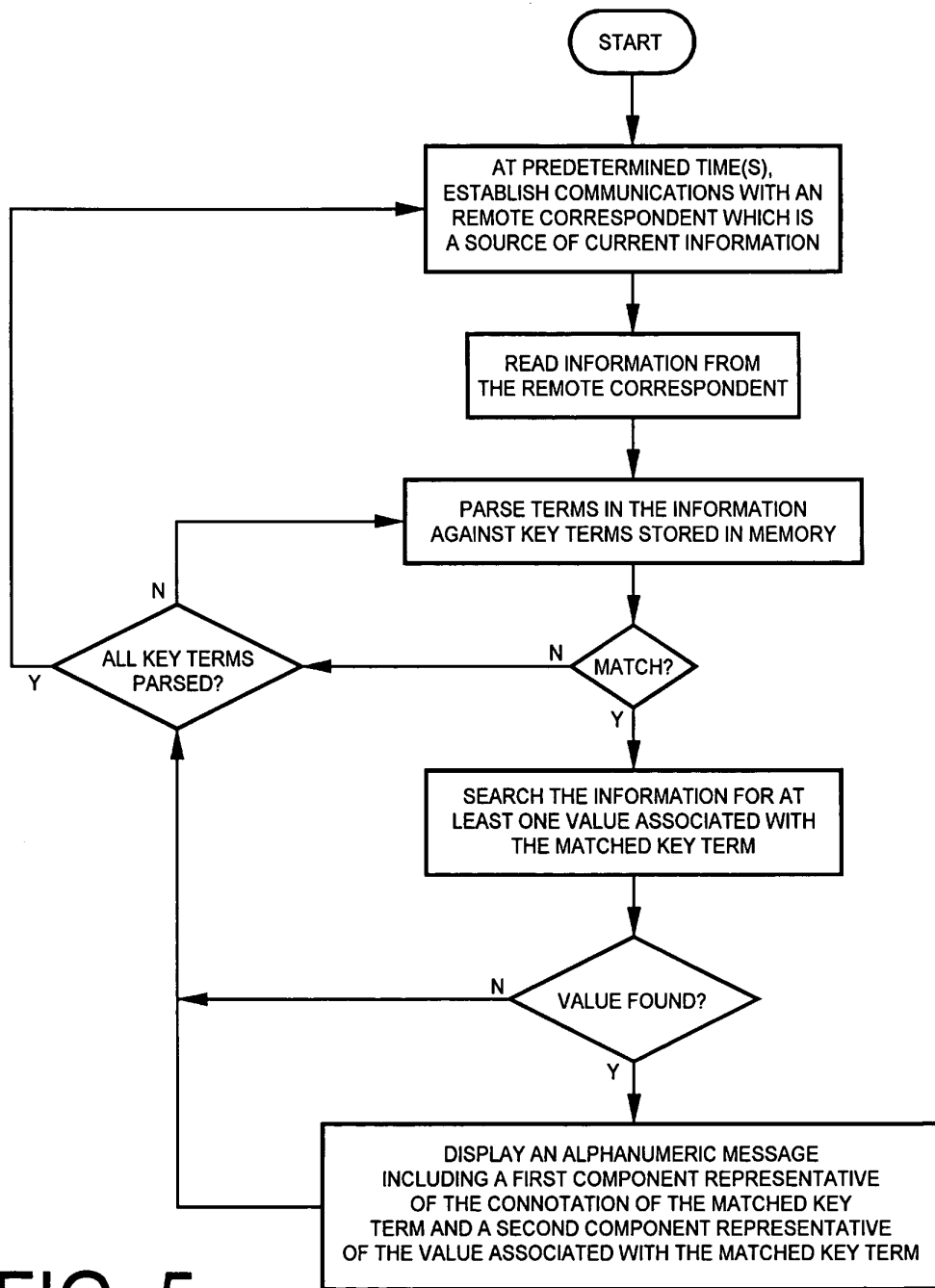


FIG. 4



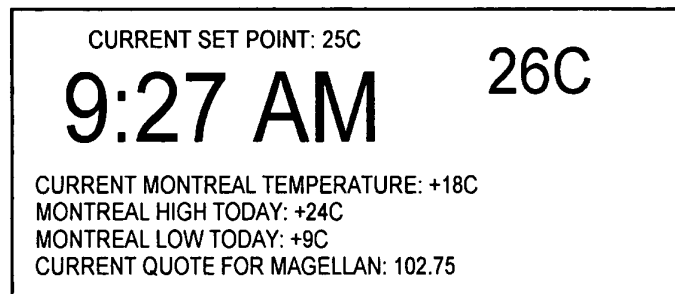


FIG. 6

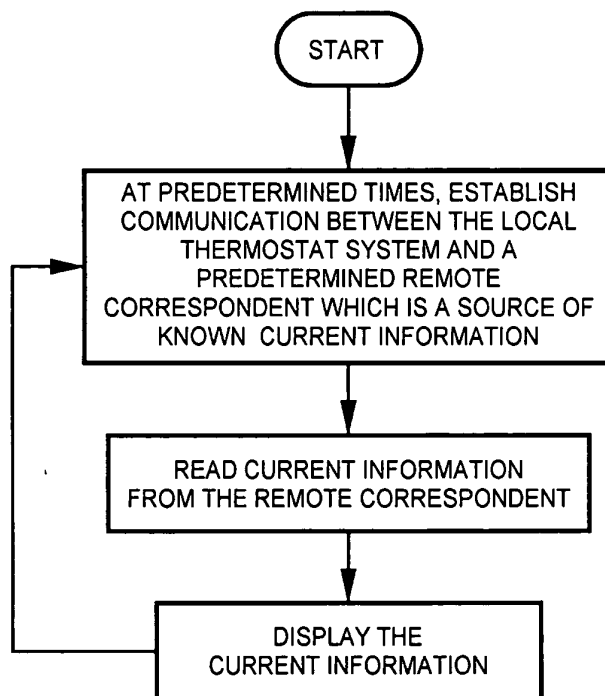


FIG. 7

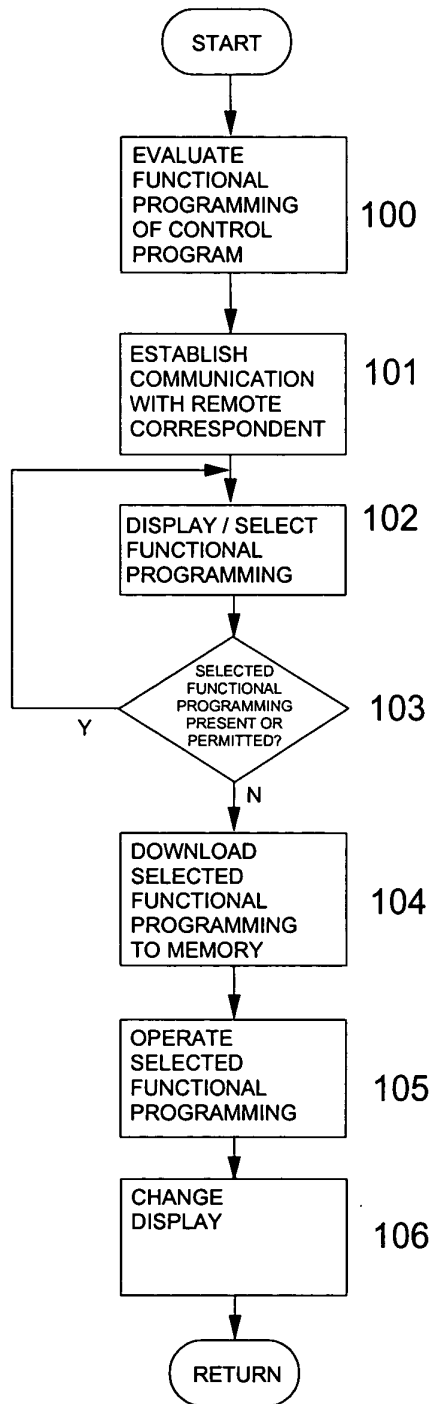
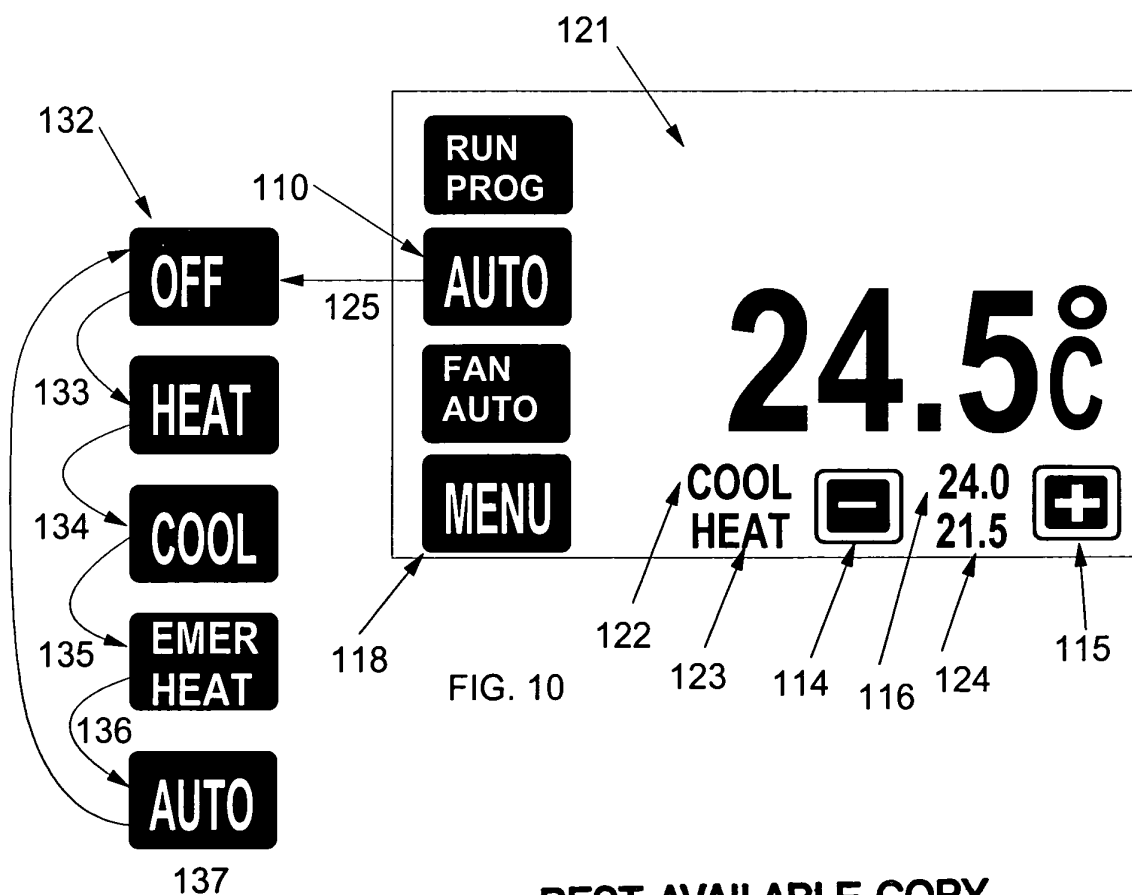
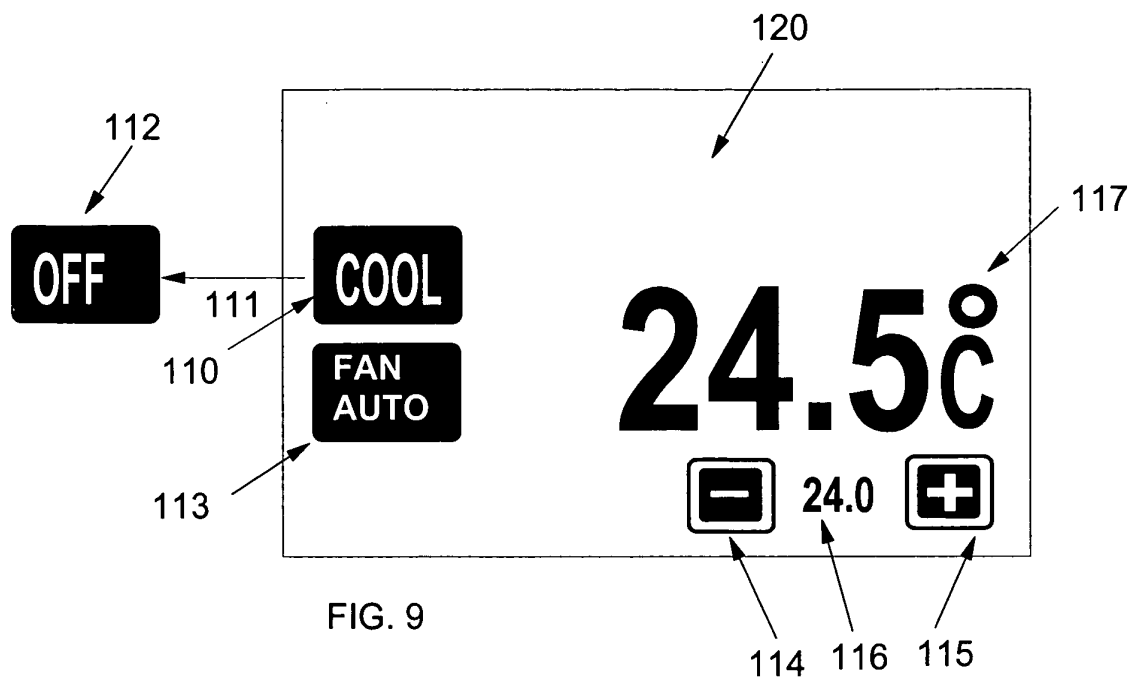
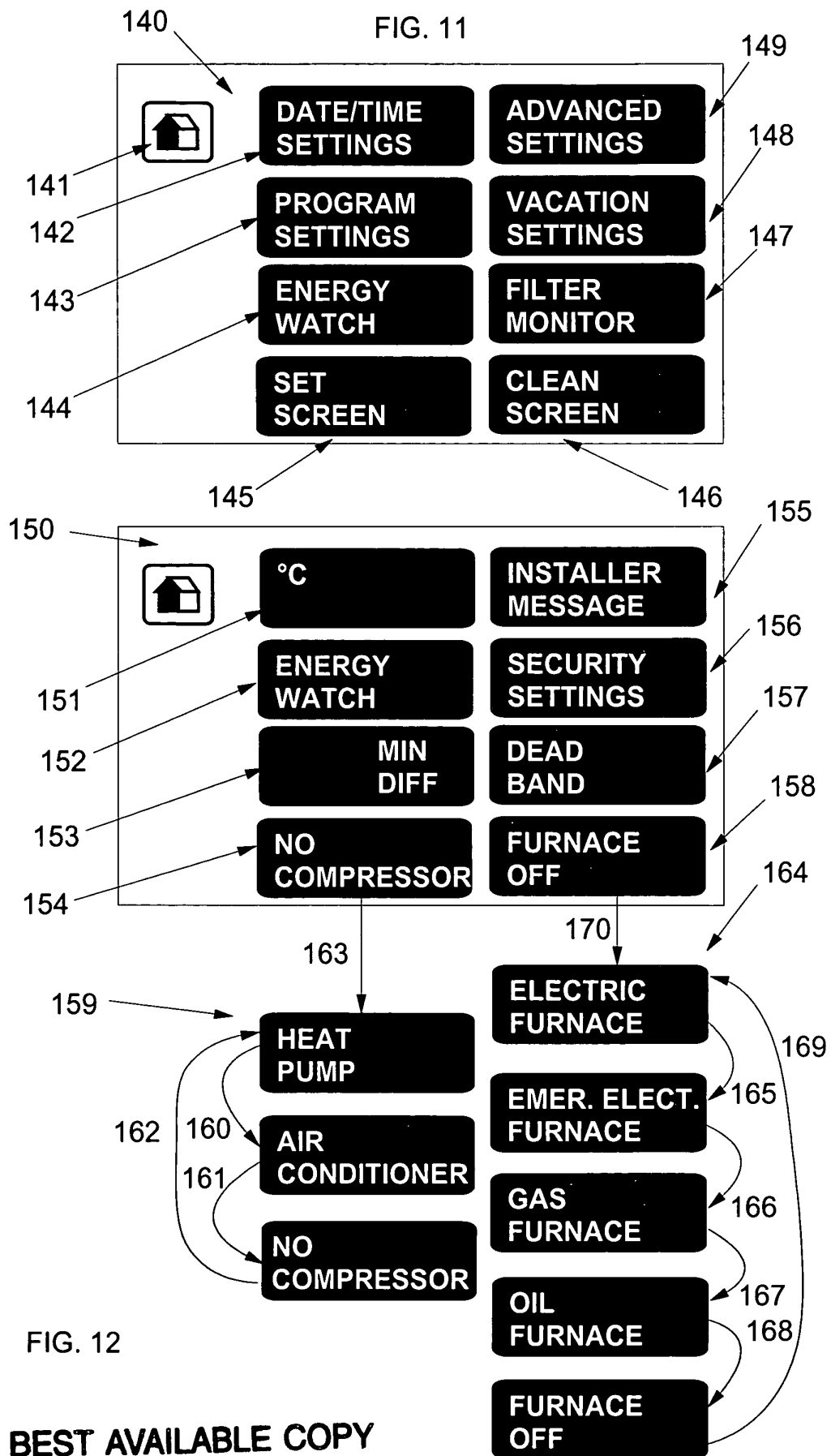


FIG. 8



BEST AVAILABLE COPY



**PATENT APPLICATION FEE DETERMINATION RECORD**  
Effective December 8, 2004

Application or Docket Number

*11029180*

**CLAIMS AS FILED - PART I**

(Column 1) (Column 2)

|                                                           |                     |              |
|-----------------------------------------------------------|---------------------|--------------|
| TOTAL CLAIMS                                              | <i>70</i>           |              |
| FOR                                                       | NUMBER FILED        | NUMBER EXTRA |
| TOTAL CHARGEABLE CLAIMS                                   | <i>70</i> minus 20= | * <i>0</i>   |
| INDEPENDENT CLAIMS                                        | <i>1</i> minus 3 =  | * <i>0</i>   |
| MULTIPLE DEPENDENT CLAIM PRESENT <input type="checkbox"/> |                     |              |

\* If the difference in column 1 is less than zero, enter "0" in column 2

**SMALL ENTITY TYPE** ☐

**OTHER THAN SMALL ENTITY**

| RATE      | FEE        |    | RATE      | FEE    |
|-----------|------------|----|-----------|--------|
| BASIC FEE | 150.00     | OR | BASIC FEE | 300.00 |
| X\$ 25=   |            | OR | X\$50=    |        |
| X100=     |            | OR | X200=     |        |
| +180=     |            | OR | +360=     |        |
| TOTAL     | <i>150</i> | OR | TOTAL     |        |

**CLAIMS AS AMENDED - PART II**

(Column 1) (Column 2) (Column 3)

|                    |                                                                         |                                  |       |                                    |               |
|--------------------|-------------------------------------------------------------------------|----------------------------------|-------|------------------------------------|---------------|
| <b>AMENDMENT A</b> |                                                                         | CLAIMS REMAINING AFTER AMENDMENT |       | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA |
|                    | Total                                                                   | *                                | Minus | **                                 | =             |
|                    | Independent                                                             | *                                | Minus | ***                                | =             |
|                    | FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/> |                                  |       |                                    |               |

**SMALL ENTITY** OR **OTHER THAN SMALL ENTITY**

| RATE             | ADDITIONAL FEE |    | RATE             | ADDITIONAL FEE |
|------------------|----------------|----|------------------|----------------|
| X\$ 25=          |                | OR | X\$50=           |                |
| X100=            |                | OR | X200=            |                |
| +180=            |                | OR | +360=            |                |
| TOTAL ADDIT. FEE |                | OR | TOTAL ADDIT. FEE |                |

(Column 1) (Column 2) (Column 3)

|                    |                                                                         |                                  |       |                                    |               |
|--------------------|-------------------------------------------------------------------------|----------------------------------|-------|------------------------------------|---------------|
| <b>AMENDMENT B</b> |                                                                         | CLAIMS REMAINING AFTER AMENDMENT |       | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA |
|                    | Total                                                                   | *                                | Minus | **                                 | =             |
|                    | Independent                                                             | *                                | Minus | ***                                | =             |
|                    | FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/> |                                  |       |                                    |               |

| RATE             | ADDITIONAL FEE |    | RATE             | ADDITIONAL FEE |
|------------------|----------------|----|------------------|----------------|
| X\$ 25=          |                | OR | X\$50=           |                |
| X100=            |                | OR | X200=            |                |
| +180=            |                | OR | +360=            |                |
| TOTAL ADDIT. FEE |                | OR | TOTAL ADDIT. FEE |                |

(Column 1) (Column 2) (Column 3)

|                    |                                                                         |                                  |       |                                    |               |
|--------------------|-------------------------------------------------------------------------|----------------------------------|-------|------------------------------------|---------------|
| <b>AMENDMENT C</b> |                                                                         | CLAIMS REMAINING AFTER AMENDMENT |       | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA |
|                    | Total                                                                   | *                                | Minus | **                                 | =             |
|                    | Independent                                                             | *                                | Minus | ***                                | =             |
|                    | FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/> |                                  |       |                                    |               |

| RATE             | ADDITIONAL FEE |    | RATE             | ADDITIONAL FEE |
|------------------|----------------|----|------------------|----------------|
| X\$ 25=          |                | OR | X\$50=           |                |
| X100=            |                | OR | X200=            |                |
| +180=            |                | OR | +360=            |                |
| TOTAL ADDIT. FEE |                | OR | TOTAL ADDIT. FEE |                |

\* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20."

\*\*\*If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3."

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

PATENT APPLICATION SERIAL NO. \_\_\_\_\_

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE  
FEE RECORD SHEET

01/27/2005 HLE333 00000105 11039180

|            |           |
|------------|-----------|
| 01 FC:2011 | 150.00 OP |
| 02 FC:2622 | 245.00 OP |

PTO-1556  
(5/87)

\*U.S. Government Printing Office: 2002 — 489-267/69033

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Title: THERMOSTAT SYSTEM WITH  
TOUCHSCREEN WITH USER  
INTERFACES OR OPERATIONAL  
ALGORITHMS VIA A REMOTE  
CORRESPONDENT

Inventor(s): Howard Rosen

Serial No.:

Filing Date:

Group No.:

Examiner:

Attorney Docket No.: 0208.2cA4 -

INFORMATION DISCLOSURE –  
REMARKS

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. 1.56 and pursuant to 37 C.F.R. 1.97-1.98, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents listed on the attached Form PTO-SB-08A. One copy of the cited document is submitted herewith.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant reserves the right to dispute any of the listed documents as prior art during examination. Further, Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application. Furthermore, the submission of this Information Disclosure Statement is not to be construed as a representation that a search has been made or that no other material information may exist. Applicant respectfully submits that all pending claims are patentable over the foregoing references, alone or in combination.

The present Information Disclosure Statement is being filed within three months of the filing date of the U.S. patent application, and therefor no certification under 37 C.F.R. 1.97(e) or fee under 37 C.F.R. 1.17(p) is required.

US Patent 6564056 describes a hub wired to a network and wirelessly communicating with household devices, including a thermostat. The hub can identify a thermostat and upload only communication software to it depending on a needs-based system of evaluation of the household device.

US Patents 5816492 and 6424872 disclose delivery of functional programming to thermostats primarily at the manufacturing stage.

Respectfully submitted, January 19, 2005

David T. Bracken  
Reg. No. 37,522

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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO

*(use as many sheets as necessary)*

Sheet 1 of 1

## Application Number

Filing Date

**First Named Inventor**

Rosen

Group Art Unit

Examiner Name

Attorney Docket Number

0208.2cA4

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<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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