

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.

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

| | |
|------------------------|---------------------------------|
| Application Number | |
| Filing Date | |
| First Named Inventor | SHAMOON, Charles G. et al. |
| Title | UBIQUITOUS CONNECTIVITY AND ... |
| Art Unit | |
| Examiner Name | |
| Attorney Docket Number | 7192-06-05 |

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

I hereby appoint:

☒ Practitioners associated with the Customer Number:

23983

OR

☐ Practitioner(s) named below:

| Name | Registration Number |
|------|---------------------|
| | |
| | |
| | |
| | |

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:

☒ The address associated with the above-mentioned Customer Number:

OR

☐ The address associated with Customer Number:

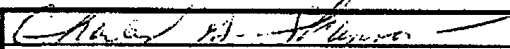
23983

OR

| | | | |
|--|-------|-----|--|
| <input type="checkbox"/> Firm or 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 |  | Date | 16-17-05 |
| Name | Charles G. SHAMOON | Telephone | 214 618 1486 |
| Title and Company | Assignee of Record | | |

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 two (2) 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.

Resideo Technologies, Inc. v. Ubiquitous Connectivity, LP

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

IPR2019-01335

Patent # 8,064,935

Exhibit # 1007

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

| | |
|------------------------|---------------------------------|
| Application Number | |
| Filing Date | |
| First Named Inventor | SHAMOON, Charles G. et al. |
| Title | UBIQUITOUS CONNECTIVITY AND ... |
| Art Unit | |
| Examiner Name | |
| Attorney Docket Number | 7192-06-05 |

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

I hereby appoint:

☒ Practitioners associated with the Customer Number:

23983

OR

☐ Practitioner(s) named below:

| Name | Registration Number |
|------|---------------------|
| | |
| | |
| | |
| | |

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:

☒ The address associated with the above-mentioned Customer Number:

OR

☐ The address associated with Customer Number:

23983

OR

| | | | | |
|--|-------|-----|--|--|
| <input type="checkbox"/> Firm or 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 | <i>Deborah H. Shamon</i> | Date | 10-17-05 |
| Name | Deborah H. SHAMOON | Telephone | 214-612-1426 |
| Title and Company | Assignee of Record | | |

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 two (2) 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.

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

APPLICATION DATA SHEET

Electronic Version v14

Stylesheet Version v14.1

Applicants Information:

Inventor 1:

Applicant Authority Type: Inventor
Citizenship: US
Given Name: Charles
Middle Name: G.
Family Name: SHAMOON
City of Residence: Little Elm
State of Residence: TX
Country of Residence: US
Address-1 of Mailing Address: 2436 Tisbury Way
Address-2 of Mailing Address:
City of Mailing Address: Little Elm
State of Mailing Address: TX
Postal Code of Mailing Address: 75068
Country of Mailing Address: US
Phone:
Fax:
E-mail:

Inventor 2:

Applicant Authority Type: Inventor
Citizenship: US
Given Name: Deborah
Middle Name: H.
Family Name: SHAMOON
City of Residence: Little Elm
State of Residence: TX
Country of Residence: US
Address-1 of Mailing Address: 2436 Tisbury Way
Address-2 of Mailing Address:
City of Mailing Address: Little Elm
State of Mailing Address: TX
Postal Code of Mailing Address: 75068
Country of Mailing Address: US
Phone:

Fax:

E-mail:

Inventor 3:

Applicant Authority Type: Inventor
Citizenship: US
Given Name: Franklin
Middle Name: Eugene
Family Name: NEAL
City of Residence: Ashland
State of Residence: KY
Country of Residence: US
Address-1 of Mailing Address: 9220 Oak Hall Drive
Address-2 of Mailing Address:
City of Mailing Address: Ashland
State of Mailing Address: KY
Postal Code of Mailing Address: 41102
Country of Mailing Address: US
Phone:
Fax:
E-mail:

Inventor 4:

Applicant Authority Type: Inventor
Citizenship: US
Given Name: Michael
Middle Name: D.
Family Name: FEHNEL
City of Residence: Fuquay Varina
State of Residence: NC
Country of Residence: US
Address-1 of Mailing Address: 3021 Bentwillow Drive
Address-2 of Mailing Address:
City of Mailing Address: Fuquay Varina
State of Mailing Address: NC
Postal Code of Mailing Address: 27526
Country of Mailing Address: US
Phone:
Fax:
E-mail:

Correspondence Information:

Customer Number: 23983

**Application Information:****Title of Invention :** UBIQUITOUS CONNECTIVITY AND
CONTROL SYSTEM FOR REMOTE
LOCATIONS**Application Type :** regular, utility**Attorney Docket Number :** 7192-06-05**Request Not To Publish**

I/We hereby request that the attached application not be published under 37 U.S.C. 122(b).

I/We hereby certify that the invention disclosed in the attached application has not and will not be the subject of an application filed in another country, or under a multilateral agreement, that requires publication at eighteen months after filing.

Botanic Information:

Publication Information:

Suggested Figure for Publication -**Suggested Classification -****Suggested Technology Center -****Total Number of Drawing Sheets -****Representative Information:**

practitioner(s) at Customer Number:

23983



as 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.

Domestic Priority Information:

This is a Division of US application number 11/160,006, filed 2005-06-06 , now pending.

US application number 11/160006, filed 2005-06-06 is a Non-Provisional of US

application number 60/522,887, filed 2004-11-18 , now pending.

Foreign Priority Information:

Assignee Information:

Assignee 1:

Given Name: Charles
Middle Name: G.
Family Name: SHAMOON
Address-1 of Mailing Address: 2436 Tisbury Way
Address-2 of Mailing Address:
City of Mailing Address: Little Elm
State of Mailing Address: TX
Postal Code of Mailing Address: 75068
Country of Mailing Address: US
Phone:
Fax:
E-mail:

Assignee 2:

Given Name: Deborah
Middle Name: H.
Family Name: SHAMOON
Address-1 of Mailing Address: 2436 Tisbury Way
Address-2 of Mailing Address:
City of Mailing Address: Little Elm
State of Mailing Address: TX
Postal Code of Mailing Address: 75068
Country of Mailing Address: US
Phone:
Fax:
E-mail:

FEE TRANSMITTAL

Electronic Version v10

Stylesheet Version v10

| Title of Invention | UBIQUITOUS CONNECTIVITY AND CONTROL SYSTEM FOR REMOTE LOCATIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|-----------------|---------------------------------------|--------------------------------------|-------------|--------------------|------|----|----|--|--|--|---------------------------------------|-----------------|-------------|----------|-----------|-------------|-------------------|---|------|----|---|------------------------|---|------|-----|---|--|--|--|--|--------------------------------------|-----------------|-----------------------|----------|-----------|-------------|-----------------|---|------|-----|---|-----------------|--|------|-----|-----|------------|--|------|-----|-----|--|--|--|--|-------------------------------------|
| <p>Application Number :</p> <p>Date :</p> <p>First Named Applicant: Charles G. SHAMOON</p> <p>Attorney Docket Number: 7192-06-05</p> <p>Art Unit: 2681</p> <p>Examiner : Huy D. NGUYEN</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>TOTAL FEE AUTHORIZED \$ 425</p> <p>Patent fees are subject to annual revisions on or about October 1st of each year.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>Filing as small entity</p> <p>BASIC FILING FEE</p> <table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th>Fee Description</th><th>Fee Code</th><th>Amount \$</th><th>Fee Paid \$</th></tr></thead><tbody><tr><td>Utility Filing Fee</td><td>4011</td><td style="text-align: right;">75</td><td style="text-align: right;">75</td></tr><tr><td colspan="3"></td><td style="text-align: right;">Subtotal For Basic Filing Fees: \$ 75</td></tr></tbody></table> <p>EXTRA CLAIM FEES</p> <table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th>Fee Description</th><th>Extra Claim</th><th>Fee Code</th><th>Amount \$</th><th>Fee Paid \$</th></tr></thead><tbody><tr><td>Total Claims : 20</td><td style="text-align: center;">0</td><td style="text-align: center;">2202</td><td style="text-align: right;">25</td><td style="text-align: right;">0</td></tr><tr><td>Independent Claims : 2</td><td style="text-align: center;">0</td><td style="text-align: center;">2201</td><td style="text-align: right;">100</td><td style="text-align: right;">0</td></tr><tr><td colspan="4"></td><td style="text-align: right;">Subtotal For Extra Claims Fees: \$ 0</td></tr></tbody></table> <p>ADDITIONAL FEES</p> <table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th>Fee Description</th><th>Extra Pages Increment</th><th>Fee Code</th><th>Amount \$</th><th>Fee Paid \$</th></tr></thead><tbody><tr><td>Extra pages fee</td><td style="text-align: center;">0</td><td style="text-align: center;">2081</td><td style="text-align: right;">125</td><td style="text-align: right;">0</td></tr><tr><td>Examination fee</td><td></td><td style="text-align: center;">2311</td><td style="text-align: right;">100</td><td style="text-align: right;">100</td></tr><tr><td>Search fee</td><td></td><td style="text-align: center;">2111</td><td style="text-align: right;">250</td><td style="text-align: right;">250</td></tr><tr><td colspan="4"></td><td style="text-align: right;">Subtotal For Additional Fees: \$350</td></tr></tbody></table> | | Fee Description | Fee Code | Amount \$ | Fee Paid \$ | Utility Filing Fee | 4011 | 75 | 75 | | | | Subtotal For Basic Filing Fees: \$ 75 | Fee Description | Extra Claim | Fee Code | Amount \$ | Fee Paid \$ | Total Claims : 20 | 0 | 2202 | 25 | 0 | Independent Claims : 2 | 0 | 2201 | 100 | 0 | | | | | Subtotal For Extra Claims Fees: \$ 0 | Fee Description | Extra Pages Increment | Fee Code | Amount \$ | Fee Paid \$ | Extra pages fee | 0 | 2081 | 125 | 0 | Examination fee | | 2311 | 100 | 100 | Search fee | | 2111 | 250 | 250 | | | | | Subtotal For Additional Fees: \$350 |
| Fee Description | Fee Code | Amount \$ | Fee Paid \$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Utility Filing Fee | 4011 | 75 | 75 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | Subtotal For Basic Filing Fees: \$ 75 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fee Description | Extra Claim | Fee Code | Amount \$ | Fee Paid \$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Claims : 20 | 0 | 2202 | 25 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Independent Claims : 2 | 0 | 2201 | 100 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Subtotal For Extra Claims Fees: \$ 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fee Description | Extra Pages Increment | Fee Code | Amount \$ | Fee Paid \$ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Extra pages fee | 0 | 2081 | 125 | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Examination fee | | 2311 | 100 | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Search fee | | 2111 | 250 | 250 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Subtotal For Additional Fees: \$350 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>AUTHORIZED BILLING INFORMATION</p> <p>The commissioner is hereby authorized to charge indicated fees and credit any overpayments to:</p> <p>Deposit account number: 500498</p> <p>Access Code *****</p> <p>Deposit name: MILLS LAW FIRM PLLC</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | |
|--------------------------|-----------------------|
| Deposit authorized name: | Michael C. Phillips |
| Signature: | /Michael C. Phillips/ |
| Date (YYYYMMDD): | 2005-10-17 |

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

DECLARATION — Utility or Design Patent ApplicationDirect all
correspondence to:The address
associated with
Customer Number:

23983

OR

Correspondence
address below

Name

Address

City

State

ZIP

Country

Telephone

Email

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

NAME OF SOLE OR FIRST INVENTOR:

A petition has been filed for this unsigned inventor

Given Name (first and middle (if any))

Charles G.

Family Name or Surname

SHAMOON

Inventor's Signature

Charles G. Shamoon

Date

5/24/05

Residence: City

Little Elm

State

TX

Country

US

Citizenship

US

Mailing Address

2436 Tisbury Way

City

Little Elm

State

TX

Zip

75068

Country

US

NAME OF SECOND INVENTOR:

A petition has been filed for this unsigned inventor

Given Name (first and middle (if any))

Deborah H.

Family Name or Surname

SHAMOON

Inventor's Signature

Deborah H. Shamoon

Date

5-24-05

Residence: City

Little Elm

State

TX

Country

US

Citizenship

US

Mailing Address

2436 Tisbury Way

City

Little Elm

State

TX

Zip

75068

Country

US



Additional inventors or a legal representative are being named on the ONE supplemental sheet(s) PTO/SB/02A or 02LR attached hereto.

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

DECLARATION**ADDITIONAL INVENTOR(S)**

Supplemental Sheet

Page 1 of 1

| | | | |
|---|----------------------|---|------------------------|
| Name of Additional Joint Inventor, if any: | | <input type="checkbox"/> A petition has been filed for this unsigned inventor | |
| Given Name (first and middle (if any)) | | Family Name or Surname | |
| Franklin Eugene | | NEAL | |
| Inventor's Signature <i>Franklin Eugene Neal</i> | | Date <i>5-25-05</i> | |
| Ashland Residence: City | KY State | US Country | US Citizenship |
| 9220 Oak Hill Drive | | | |
| Mailing Address | | | |
| Ashland City | KY State | 41102 Zip | US Country |
| Name of Additional Joint Inventor, if any: | | <input type="checkbox"/> A petition has been filed for this unsigned inventor | |
| Given Name (first and middle (if any)) | | Family Name or Surname | |
| Michael | | FEHNEL | |
| Inventor's Signature | | Date | |
| Fuquay Varina Residence: City | NC State | US Country | US Citizenship |
| 3021 Bentwillow Drive | | | |
| Mailing Address | | | |
| Fuquay Varina City | NC State | 27526 Zip | US Country |
| Name of Additional Joint Inventor, if any: | | <input type="checkbox"/> A petition has been filed for this unsigned inventor | |
| Given Name (first and middle (if any)) | | Family Name or Surname | |
| | | | |
| Inventor's Signature <i>Michael D. Fehnel</i> | | Date <i>6-2-2005</i> | |
| Residence: City <i>FUQUAY-VARINA</i> | State <i>N.C.</i> | Country <i>USA</i> | Citizenship <i>USA</i> |
| Mailing Address <i>3021 BENTWILLOW DRIVE</i> | | | |
| <i>FUQUAY-VARINA</i> City | <i>N.C.</i> State | <i>27526</i> Zip | <i>USA</i> Country |

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. 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 21 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.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

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

**DECLARATION FOR UTILITY OR
DESIGN
PATENT APPLICATION
(37 CFR 1.63)**



Declaration
Submitted
With Initial
Filing

OR



Declaration
Submitted after Initial
Filing (surcharge
(37 CFR 1.16 (e))
required)

Attorney Docket
Number

7080-04-04

First Named Inventor

SHAMOON, Charles G.

COMPLETE IF KNOWN

Application Number

Filing Date

Art Unit

Examiner Name

I hereby declare that:

Each inventor's residence, mailing address, and citizenship are as stated below next to their name.

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

UBIQUITOUS CONNECTIVITY AND CONTROL SYSTEM FOR REMOTE LOCATIONS

(Title of the Invention)

the specification of which



is attached hereto

OR



was filed on (MM/DD/YYYY)

as United States Application Number or PCT International

Application Number

and was amended on (MM/DD/YYYY)

(if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.

| Prior Foreign Application Number(s) | Country | Foreign Filing Date (MM/DD/YYYY) | Priority Not Claimed | Certified Copy Attached? | |
|--|---------|-------------------------------------|--------------------------|--------------------------|--------------------------|
| | | | | YES | NO |
| | US | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

[Page 1 of 2]

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. 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 21 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.**

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

| |
|--------------------|
| TRANSMITTAL |
|--------------------|

Electronic Version v1.1

Stylesheet Version v1.1.0

| | | | | | | | | |
|--|--|----------------|---------------|-------------|----------------|--|-----------------------|----------|
| Title of Invention | UBIQUITOUS CONNECTIVITY AND CONTROL SYSTEM FOR REMOTE LOCATIONS | | | | | | | |
| Application Number : | | | | | | | | |
| Date : | | | | | | | | |
| First Named Applicant: | Charles G. SHAMOON | | | | | | | |
| Confirmation Number: | | | | | | | | |
| Attorney Docket Number: | 7192-06-05 | | | | | | | |
| <p>I hereby certify that the use of this system is for OFFICIAL correspondence between patent applicants or their representatives and the USPTO. Fraudulent or other use besides the filing of official correspondence by authorized parties is strictly prohibited, and subject to a fine and/or imprisonment under applicable law.</p> <p>I, the undersigned, certify that I have viewed a display of document(s) being electronically submitted to the United States Patent and Trademark Office, using either the USPTO provided style sheet or software, and that this is the document(s) I intend for initiation or further prosecution of a patent application noted in the submission. This document(s) will become part of the official electronic record at the USPTO.</p> | | | | | | | | |
| <table border="1"><tr><td>Submitted By:</td><td>Elec. Sign.</td><td>Sign. Capacity</td></tr><tr><td>Michael C. Phillips Registered Number: 42,072</td><td>/Michael C. Phillips/</td><td>Attorney</td></tr></table> | | | Submitted By: | Elec. Sign. | Sign. Capacity | Michael C. Phillips Registered Number: 42,072 | /Michael C. Phillips/ | Attorney |
| Submitted By: | Elec. Sign. | Sign. Capacity | | | | | | |
| Michael C. Phillips Registered Number: 42,072 | /Michael C. Phillips/ | Attorney | | | | | | |


| Documents being submitted: | Files |
|----------------------------|--|
| us-request | 71920605-usrequ.xml us-request.dtd us-request.xsl |
| us-fee-sheet | 71920605-usfees.xml us-fee-sheet.xsl us-fee-sheet.dtd |
| us-declaration | DecPage2.tif |
| us-declaration | DecPage3.tif |
| application-body | 7192ABX.xml application-body.dtd Image1.tif Image2.tif Image3.tif Image4.tif isoamsa.ent isoamsb.ent isoamsc.ent isoamsn.ent isoamso.ent isoamsr.ent isobox.ent isocyr1.ent isocyr2.ent isodia.ent isogr1.ent isogr2.ent isogr3.ent isogr4.ent isolat1.ent isolat2.ent isomfrk.ent isomopf.ent isomscr.ent isonum.ent isopub.ent isotech.ent mathml2.dtd mathml2-qname-1.mod mmlalias.ent mmlextra.ent soextblx.dtd us-application-body.xsl wipo.ent |
| application-body-pdf-wrap | 7192ABX-pdf-wrap.xml |
| abstract-pdf | 7192ABX-abst.pdf |
| claims-pdf | 7192ABX-clms.pdf |
| description-pdf | 7192ABX-desc.pdf |
| drawings-pdf | 7192ABX-draw.pdf |
| us-power-of-attorney-grant | POA1CGS.tif |

| | |
|----------------------------|--------------|
| us-power-of-attorney-grant | POA1DHS.tif |
| us-declaration | DecPage1.tif |
| Comments | |
| | |

ACKNOWLEDGEMENT RECEIPT

Electronic Version 1.1

Stylesheet Version v1.1.1

| Title of Invention | UBIQUITOUS CONNECTIVITY AND CONTROL SYSTEM FOR REMOTE LOCATIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|--|---|-------------------------|-------------------|-----------|--------------|---|------------|---------------------|-------------|---|------------|----------------|-------|------------|------------|----------------|-------|------------|--------------|---------------------|------|------------|--------------|------------------|-------|------------|--------------|------------------|-------|------------|----------------|--------------|-------|------------|----------------|--------------|-------|------------|------------------|-------------|-------|------------|------------------|----------------------|-------|------------|------------------|------------|------|------------|------------------|------------|-------|------------|------------------|------------|------|------------|------------------|------------|-------|------------|------------------|-------------|------|------------|------------------|-------------|------|------------|------------------|-------------|------|------------|------------------|-------------|------|------------|------------------|-------------|------|------------|------------------|-------------|------|------------|------------------|------------|------|------------|------------------|-------------|------|------------|------------------|-------------|------|------------|------------------|------------|------|------------|
| Submission Type : | Utility Patent Filing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Application Number: | 11/163372 |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EFS ID: | 94768 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Server Response: | <table border="1"> <thead> <tr> <th>Confirmation Code</th> <th>Message</th> </tr> </thead> <tbody> <tr> <td>ISVR1</td> <td>Submission was successfully submitted - Even if Informational or Warning Messages appear below, please do not resubmit this application</td> </tr> <tr> <td>ICON1</td> <td>4371</td> </tr> <tr> <td>USPTOEFSNot</td> <td>For assistance with e-filing a patent application, contact the Patent Electronic Business Center: Toll-Free Number:1(866) 217-9197 Website: http://www.uspto.gov/ebc/</td> </tr> </tbody> </table> | | | Confirmation Code | Message | ISVR1 | Submission was successfully submitted - Even if Informational or Warning Messages appear below, please do not resubmit this application | ICON1 | 4371 | USPTOEFSNot | For assistance with e-filing a patent application, contact the Patent Electronic Business Center: Toll-Free Number:1(866) 217-9197 Website: http://www.uspto.gov/ebc/ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Confirmation Code | Message | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ISVR1 | Submission was successfully submitted - Even if Informational or Warning Messages appear below, please do not resubmit this application | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ICON1 | 4371 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| USPTOEFSNot | For assistance with e-filing a patent application, contact the Patent Electronic Business Center: Toll-Free Number:1(866) 217-9197 Website: http://www.uspto.gov/ebc/ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| First Named Applicant: | Charles SHAMOON | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Attorney Docket Number: | 7192-06-05 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Timestamp: | 2005-10-17 11:41:00 EDT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| From: | US | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| File Listing: | <table border="1"> <thead> <tr> <th>Doc. Name</th> <th>File Name</th> <th>Size (Bytes)</th> <th>Date Produced (yyymmdd)</th> </tr> </thead> <tbody> <tr><td>us-request</td><td>71920605-usrequ.xml</td><td>4515</td><td>2005-10-17</td></tr> <tr><td>us-request</td><td>us-request.dtd</td><td>19064</td><td>2005-10-17</td></tr> <tr><td>us-request</td><td>us-request.xml</td><td>31967</td><td>2005-10-17</td></tr> <tr><td>us-fee-sheet</td><td>71920605-usfees.xml</td><td>1859</td><td>2005-10-17</td></tr> <tr><td>us-fee-sheet</td><td>us-fee-sheet.xml</td><td>25930</td><td>2005-10-17</td></tr> <tr><td>us-fee-sheet</td><td>us-fee-sheet.dtd</td><td>11968</td><td>2005-10-17</td></tr> <tr><td>us-declaration</td><td>DecPage2.tif</td><td>48000</td><td>2005-10-17</td></tr> <tr><td>us-declaration</td><td>DecPage3.tif</td><td>60850</td><td>2005-10-17</td></tr> <tr><td>application-body</td><td>7192ABX.xml</td><td>57173</td><td>2005-10-17</td></tr> <tr><td>application-body</td><td>application-body.dtd</td><td>49498</td><td>2005-10-17</td></tr> <tr><td>application-body</td><td>Image1.tif</td><td>5075</td><td>2005-10-17</td></tr> <tr><td>application-body</td><td>Image2.tif</td><td>64013</td><td>2005-10-17</td></tr> <tr><td>application-body</td><td>Image3.tif</td><td>3983</td><td>2005-10-17</td></tr> <tr><td>application-body</td><td>Image4.tif</td><td>70409</td><td>2005-10-17</td></tr> <tr><td>application-body</td><td>isoamsa.ent</td><td>5191</td><td>2005-10-17</td></tr> <tr><td>application-body</td><td>isoamsb.ent</td><td>3988</td><td>2005-10-17</td></tr> <tr><td>application-body</td><td>isoamsc.ent</td><td>1460</td><td>2005-10-17</td></tr> <tr><td>application-body</td><td>isoamsn.ent</td><td>5620</td><td>2005-10-17</td></tr> <tr><td>application-body</td><td>isoamso.ent</td><td>1934</td><td>2005-10-17</td></tr> <tr><td>application-body</td><td>isoamsr.ent</td><td>7073</td><td>2005-10-17</td></tr> <tr><td>application-body</td><td>isobox.ent</td><td>3568</td><td>2005-10-17</td></tr> <tr><td>application-body</td><td>isocyr1.ent</td><td>5345</td><td>2005-10-17</td></tr> <tr><td>application-body</td><td>isocyr2.ent</td><td>2504</td><td>2005-10-17</td></tr> <tr><td>application-body</td><td>isodia.ent</td><td>1508</td><td>2005-10-17</td></tr> </tbody> </table> | | | Doc. Name | File Name | Size (Bytes) | Date Produced (yyymmdd) | us-request | 71920605-usrequ.xml | 4515 | 2005-10-17 | us-request | us-request.dtd | 19064 | 2005-10-17 | us-request | us-request.xml | 31967 | 2005-10-17 | us-fee-sheet | 71920605-usfees.xml | 1859 | 2005-10-17 | us-fee-sheet | us-fee-sheet.xml | 25930 | 2005-10-17 | us-fee-sheet | us-fee-sheet.dtd | 11968 | 2005-10-17 | us-declaration | DecPage2.tif | 48000 | 2005-10-17 | us-declaration | DecPage3.tif | 60850 | 2005-10-17 | application-body | 7192ABX.xml | 57173 | 2005-10-17 | application-body | application-body.dtd | 49498 | 2005-10-17 | application-body | Image1.tif | 5075 | 2005-10-17 | application-body | Image2.tif | 64013 | 2005-10-17 | application-body | Image3.tif | 3983 | 2005-10-17 | application-body | Image4.tif | 70409 | 2005-10-17 | application-body | isoamsa.ent | 5191 | 2005-10-17 | application-body | isoamsb.ent | 3988 | 2005-10-17 | application-body | isoamsc.ent | 1460 | 2005-10-17 | application-body | isoamsn.ent | 5620 | 2005-10-17 | application-body | isoamso.ent | 1934 | 2005-10-17 | application-body | isoamsr.ent | 7073 | 2005-10-17 | application-body | isobox.ent | 3568 | 2005-10-17 | application-body | isocyr1.ent | 5345 | 2005-10-17 | application-body | isocyr2.ent | 2504 | 2005-10-17 | application-body | isodia.ent | 1508 | 2005-10-17 |
| Doc. Name | File Name | Size (Bytes) | Date Produced (yyymmdd) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| us-request | 71920605-usrequ.xml | 4515 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| us-request | us-request.dtd | 19064 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| us-request | us-request.xml | 31967 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| us-fee-sheet | 71920605-usfees.xml | 1859 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| us-fee-sheet | us-fee-sheet.xml | 25930 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| us-fee-sheet | us-fee-sheet.dtd | 11968 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| us-declaration | DecPage2.tif | 48000 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| us-declaration | DecPage3.tif | 60850 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| application-body | 7192ABX.xml | 57173 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| application-body | application-body.dtd | 49498 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| application-body | Image1.tif | 5075 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| application-body | Image2.tif | 64013 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| application-body | Image3.tif | 3983 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| application-body | Image4.tif | 70409 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| application-body | isoamsa.ent | 5191 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| application-body | isoamsb.ent | 3988 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| application-body | isoamsc.ent | 1460 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| application-body | isoamsn.ent | 5620 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| application-body | isoamso.ent | 1934 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| application-body | isoamsr.ent | 7073 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| application-body | isobox.ent | 3568 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| application-body | isocyr1.ent | 5345 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| application-body | isocyr2.ent | 2504 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| application-body | isodia.ent | 1508 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | Doc. Name | File Name | Size (Bytes) | Date Produced (yyyymmdd) |
|------------------|----------------------------|-------------------------|--------------|--------------------------|
| | application-body | isogr1.ent | 4030 | 2005-10-17 |
| | application-body | isogr2.ent | 2259 | 2005-10-17 |
| | application-body | isogr3.ent | 3559 | 2005-10-17 |
| | application-body | isogr4.ent | 1920 | 2005-10-17 |
| | application-body | isolat1.ent | 5282 | 2005-10-17 |
| | application-body | isolat2.ent | 9007 | 2005-10-17 |
| | application-body | isomfrk.ent | 4553 | 2005-10-17 |
| | application-body | isomopf.ent | 2571 | 2005-10-17 |
| | application-body | isomscr.ent | 4628 | 2005-10-17 |
| | application-body | isonum.ent | 5913 | 2005-10-17 |
| | application-body | isopub.ent | 6621 | 2005-10-17 |
| | application-body | isotech.ent | 5268 | 2005-10-17 |
| | application-body | mathml2.dtd | 54588 | 2005-10-17 |
| | application-body | mathml2-qname-1.mod | 13225 | 2005-10-17 |
| | application-body | mmlalias.ent | 38209 | 2005-10-17 |
| | application-body | mmlextra.ent | 7901 | 2005-10-17 |
| | application-body | soextblx.dtd | 12870 | 2005-10-17 |
| | application-body | us-application-body.xsl | 82504 | 2005-10-17 |
| | application-body | wipo.ent | 4956 | 2005-10-17 |
| | application-body-pdf-wrap | 7192ABX-pdf-wrap.xml | 735 | 2005-10-17 |
| | abstract-pdf | 7192ABX-abst.pdf | 12019 | 2005-10-17 |
| | claims-pdf | 7192ABX-clms.pdf | 21262 | 2005-10-17 |
| | description-pdf | 7192ABX-desc.pdf | 89496 | 2005-10-17 |
| | drawings-pdf | 7192ABX-draw.pdf | 90215 | 2005-10-17 |
| | us-power-of-attorney-grant | POA1CGS.tif | 58562 | 2005-10-17 |
| | us-power-of-attorney-grant | POA1DHS.tif | 58524 | 2005-10-17 |
| | us-declaration | DecPage1.tif | 65262 | 2005-10-17 |
| | package-data | 71920605-pkda.xml | 9079 | 2005-10-17 |
| | package-data | package-data.dtd | 27025 | 2005-10-17 |
| | package-data | us-package-data.xsl | 19263 | 2005-10-17 |
| Total files size | | | 1213801 | |

Message Digest:

b98ee12d1da647caa7a20ed78735147d6fb4fe3b

Digital Certificate Holder Name:

cn=Michael Coleman Phillips,ou=Registered Attorneys,ou=Patent and Trademark Office,ou=Department of Commerce,o=U.S. Government,c=US

UBIQUITOUS CONNECTIVITY AND CONTROL SYSTEM FOR REMOTE LOCATIONS

DESCRIPTION

Related Application

[Para 1] This application is a divisional of United States Application No. 11/160,006, filed June 6, 2005, which claims the benefit of United States Provisional Application No. 60/522,887, filed November 18, 2004, in the name of Charles Shamoon and entitled “Ubiquitous Connectivity and Control System for Remote Locations”.

Field of the Invention

[Para 2] The present invention relates to a remote monitoring and control system for an environment. More specifically, the system relates to on demand bidirectional communication between a remote access unit and a multifunctional base control unit in a geographically remote location.

Background of the Invention

[Para 3] In addition to a main residence, modern times provide people and families with vacation homes that are geographically remote from the regular places of residence. Also, owners of businesses generally have their place of business remote from their residence. These structures tend to be affected by changes in environmental characteristics, either natural (i.e., weather conditions), or non-natural (i.e., vandalism, break-ins, etc.). Generally, a thermostat monitors the ambient temperature and regulates a heating/cooling appliance to keep the building within the predefined temperature range thereby accomplishing the typical environmental control. The typical thermostat only monitors the ambient

temperatures. Where the building is in a volatile climatic region, it is not always feasible to maintain the full functions of the appliances year round. For example, a building located in a region known for very warm temperatures, if the owner resides several hundred miles away, there would be no need to activate a cooling system on an abnormally warm day during a virtually cool season. There is no system found that monitors the ambient environmental factors within a predefined range of values, upon an exception to the predefined values, alerts the remotely located owner, and allows the owner to remotely redefine the acceptable environmental parameters. Thus a remote control system solving the aforementioned problem, as well as several others, is desired.

[Para 4] The home control industry is a rapidly growing, multi-billion dollar industry. This growth has been accompanied by the recent development of smart appliances and efforts to development a universal protocol for home control by major companies. The present invention provides the next major development in today's home control industry, ubiquitous connectivity and control of structure environment.

[Para 5] The home control industry has taken steps toward ubiquitous connectivity and control over the years, but these steps have fallen short until now. The home control industry has moved from ultrasonic remote control to infrared remote control to local RF remote control and on to land-line phone home-away-from-home remote control. The advent of improved cell phone technology provided more mobility and convenience to home-away-from-home control. High-speed and wireless Internet access has allowed connectivity to the home through home-based and wireless laptop computers. While an advance in connectivity, mobile Internet connectivity, like its predecessors, is not without significant challenges, especially with mobility and convenience.

[Para 6] The invention of the microcontroller and microcomputer has spawned a robust industry in home automation. An endless number of systems has been created by hobbyist,

commercial, and industrial developers. Processes and devices for which automation has been pioneered include audio systems, video systems, security and surveillance systems, lighting systems, watering and irrigation systems, systems for measurement of vital statistics for medical patients, and garage door openers, to name a few. The typical control architecture includes a transmitter and a receiver in which a command is issued by the transmitter and is executed in response by the receiver. Communications links have used radio frequency, infrared, and ultrasonic technologies.

[Para 7] Other technologies used for home automation include power line carrier and telephone line. Power line carrier and telephone line systems both have the benefit of being able to use existing facility wiring for communications. Each has its own benefits and detriments. Power line systems operate on existing building electrical wiring while telephone line systems use existing telephone wiring. Electrical wiring is usually available in more locations within a building than is telephone wiring. Telephone line systems are generally more secure.

[Para 8] By far the most popular and ubiquitous power line carrier system is the X10. This system use transmitter, receiver, and controller modules connected to the building wiring, usually by plugging directly into an electrical outlet. Each module is individually addressed by a companion module, which is responsive to commands issued or received that are encoded with a preset digital address. The X10 system, like most power line carrier technologies, is characteristically confined to operation within a very limited area, such as within a single building. Newer interfaces have been developed to allow control of a broad range of external communications systems with X10 systems.

[Para 9] The need to expand the geographic range of control for a limited system, such as power line carrier, radio frequency, or infrared, led to the development of telephone interfaces, including voice, DTMF, and Caller ID. While such systems allow users to exercise

control of their facilities remotely, they are not as user friendly and often use tones or cryptic, hard-to-understand, digitized voice prompts. Often a long distance call from a pay telephone was required to access the controller, which had to be interfaced with the facility telephone network.

[Para 10] The availability of personal computers, the Internet, and broadband networks has fueled the explosion in the number of home automation methods and devices. Controlling software is available for Windows, Macintosh, Linux, and DOS based computers. Every imaginable type of input-output port has been used to communicate data into and out of a computer. Examples of available interfaces usable for home automation and control purposes include USB, parallel port, joystick, serial (RS-232, RS-422, RS-485 and the like), audio, ActiveX, and TCP/IP. Bidirectional communications have become more prevalent, allowing a remote operator to not only control but also to observe and monitor the tasks performed by the automation system. Internet-based utilities allow control and monitoring of systems from any computer anywhere in the world.

[Para 11] One of the most relevant entries into the home automation universe is the cellular telephone. In their most basic mode, cell phones can be used to control the same systems accessible by conventional telephones through the dial-up POTS network. A more advanced method involves the use of the cell phone network's short message service ("SMS") in which text messages are sent to and received from a controlled system. SMS messages travel on the same cellular network (on the same physical layer) as standard voice calls but on a different logical channel.

Summary of the Invention

[Para 12] The present invention uses an on-demand digital, private, and direct communications interface to overcome the shortcomings and limitations of current

communications interfacing. A digital, private, and direct-connect remote controller provides instant wireless connectivity to the home from anywhere in the world without dialing a number or waiting for a number of tones to send a command or to know the status of conditions in the home; provides silent and constant direct two-way communication privately and globally, with the home for control and monitoring of key functions; eliminates limitations, immobility, and inopportunities to connect, monitor and control the home, globally; can be configured to interface with many existing and future home automation systems and technologies; provides instant ubiquitous control for the end-user; and, if so desired, eliminates the need for the PC, modems and interconnected wiring.

[Para 13] The digital private direct connect controller allows the end-user to finally realize true global connectivity to and control of the home.

Brief Description of the Drawings

[Para 14] The above features and advantages of the present invention will become apparent upon reading the following description taken in conjunction with the accompanying drawings in which:

[Para 15] Figure 1 is a block diagram illustrating a connectivity and control system according to an embodiment of the present invention;

[Para 16] Figure 2 is a block diagram of the remote control unit of the system of Figure 1;

[Para 17] Figure 3 is a block diagram of the essential components of the remote control unit of the system of Figure 1; and

[Para 18] Figure 4 is a block diagram of the base control unit of the system of Figure 1.

[Para 19] Similar reference characters denote corresponding features consistently throughout the attached drawings.

Detailed Description of the Preferred Embodiments

[Para 20] Referring to the drawings, Figure 1 illustrates a ubiquitous connectivity and control system 10 wherein a master remote control unit 12 at a geographically remote location 14 on demand interfaces with a base control unit 16 in a structure 18 to monitor and control associated devices 21 thereat through a short message and/or the data bearer cellular telephone network 22 including control towers 24. The system 10 further includes associated control units 26 that are enabled by the base control unit 16 to undertake select monitoring and controlling activities in a proximate area 28. Associated control units 26 and the master control unit 12 utilize the global position network 27 and/or the cellular telephone network 22 and towers 24 in order to determine their geographical locations 14, 20 and report this information back to the base control unit 16 using the short message and /or data bearer services of the cellular telephone network 22 and control towers 24.

[Para 21] Referring to Figure 2, the master remote control unit 12 and associated remote control units 26 are Java/J2ME enable cellular telephones 30 having a keypad 32 with a plurality of keys 34 including a select button 36, and an LCD display 38 for displaying textual information 40 and graphical icons 42 responsive to commands received from the base control unit 16 or from other control units configured through base control unit 16 to work with system 10.

[Para 22] Referring to Figure 3, the cellular telephone 30 suitable as a remote control unit 12 or 26 includes a microcontroller 45 electrically interconnected with random access memory 44, read only memory 46, the keypad 32, and the LCD display 38. Power is supplied to the operational components by power control circuits 48 connected to rechargeable batteries 50. Wire 52 electrically interconnects charger 54 to system connector 49. Power from the system connector 49 is controlled through the system bus circuits 47 and microcontroller 45 to charge battery pack 50. The remote control unit 12

communicates with external devices through the cellular RF interface circuits 56 connected to an antenna 58, a Bluetooth module 60, a universal serial bus (USB) module 62 or through system connector 49 and system bus circuits 47. Cellular voice and data communications are transmitted to and received from the cellular telephone network 22 by the wireless cellular rf circuits 56 in a conventional manner. The Bluetooth data is received and transmitted by the Bluetooth module 60. Global satellite positioning information is received by either an external GPS module 64 or by an integrated GPS receiver incorporated into the cellular RF circuits 56. Data from the external GPS receiver 64 is communicated over serial interface cable 67 connected to system connector 49 and is then transferred to microcontroller 45 through the system bus circuits 47. Audio communications are received on the microphone 66 and are transmitted on the audio speaker 68 through audio interface circuits 69.

[Para 23] The custom JAVA/J2ME application software is transferred into the ROM 46 for access by the microcontroller 45. The application software can be downloaded into the ROM 46 by transmission from the cellular network 22 to the antenna 58 to the microcontroller 45, which stores the software therein. The application may also be downloaded by an external program device, such as a personal computer (not shown) by Bluetooth module 60, USB interface 62, or from the system connector 49. The RAM 44 provides service or scratchpad memory for computational use by microcontroller 45.

[Para 24] Referring to Figure 4, the base control unit 16 consists a wireless module 70 communicating with a microcontroller 106 for operating a number of separate subsystems. The microcontroller communicates with each of the subsystem components using either a serial or parallel communications bus depending upon the capabilities of the particular subsystem component.

[Para 25] The subsystems contained within the base control unit 16 consist of either off-the-shelf integrated circuits combined with discreet components or complete modules provided by other original equipment manufacturers (OEMs). As there are many different providers of components and modules, only one particular method of systems design and integration is described herein. Those skilled in the art will recognize that there are many ways to put together components and modules to achieve a design with similar features.

[Para 26] The base control unit 16 includes a plurality of communication interfaces 72, 74, 76, 78, 80, 82, 84 86 and 88 for providing the means for remote control and remote monitoring of the various subsystems within the residential environment. Remote monitoring and control can be achieved through either the wireless module 70 or the Ethernet interface 82. A multi-purpose expansion bus 89 is a proprietary bus providing a custom communications interface for accessories developed exclusively for use with the base control unit.

[Para 27] The base control unit 16 consists of an antenna 90 which is attached to the wireless interface module 70. The antenna connection may be made either directly through a connector incorporated as part of the antenna or through a coaxial cable so that the antenna 90 may be mounted at a location remote from the base control unit.

[Para 28] The wireless interface module 70 provides both voice and data communications capabilities to the base control unit 16 through audio interface 94, power interface 96 and I/O interface 98. A microphone 100 and a speaker 102 provide for voice communications to the user through the audio interface 94 of the wireless interface module 70. The power interface 96 provides power to the module 70 via power supply 104 and also allows a system microcontroller 106 to control the on/off state of the module. The power supply 104 is connected to the structure power supply through connector 108. The I/O interface 98 provides for a data pathway for digital communications over bus 110 as well as

providing the means for the system microcontroller 106 to control the various communications aspects of the wireless module 70. Data communicated over bus 110 is RS232 ASCII or text “AT” commands commonly used in telephone modem instruction sets.

[Para 29] The user interacts with the base station through keypad 120 and LCD display 112 to the system microcontroller 106. Applications software embedded into the on-board ROM of the microcontroller 106 provides the functionality for interpreting the keypad 120 input and for displaying appropriate messages on the LCD display 112. Alternatively, the LCD display 112 may be of the well known touch pad design in which the keypad 120 functions are performed by pressing against predetermined screen areas that correspond to key designations. Further, the LCD Display 112 and keypad 120 may be eliminated completely with the base control unit 16 including web services that enable communication through one of the communications interfaces, such as the Ethernet 82 interface or the USB interface 80, to a connected personal computer equipped with a web browser or other communications software. The base control unit 16 is TCP/IP enabled, permitting its direct connection to a local area network or directly to the Internet. With this configuration, programming and customization of the applications software in the base control unit can be performed from anywhere in the world with an Internet connection.

[Para 30] The interfaces of the base control unit 16 provide for the control and the monitoring of a variety of subsystems within the residential environment as well as providing a means of expanding the functionality of the base station through the use of industry standard interface technologies including universal serial bus (USB) 80; the Ethernet (10/100/1000 Base-T) bus 82 and the RS-232 serial bus 78.

[Para 31] The interface 76, environmental sensor network, is implemented as a 1-Wire® network allowing for a number of various types of temperature, humidity, light-level and other sensors to be monitored by the base control unit 16. The 1-Wire® network is

expandable to a wide array of devices including general purpose digital and analog I/O devices which would allow for the control of actuators and relays that may be useful for control of air dampers, water control valves, electronic windows, vents and other such devices utilized within a typical residential environment.

[Para 32] The interface 74, the air handling control systems interface, provides the means by which the base station serves to control the heating, air conditioning and other air handling equipment within the residence. This interface is designed to replace the standard thermostat that is typically used within residential heating and cooling systems. The interface 74 may provide multi-zone thermostat functions control as well as an interface to electronic air dampers. The thermostat portion of the base control unit is capable of controlling an unlimited number of zones.

[Para 33] The serial data bus interface 78 allows for data communications with the wide range of devices on the market that support this type of communications interface. Examples of such data communications include desk top computers, modems, and fax machines .

[Para 34] The USB interface 80 allows the base control unit 16 to communicate with other devices that support this type of interface. This bus can be used to expand the capabilities of the base station and add support for: persistent data storage; peripheral expansion devices (digital cameras etc); and other wireless interfaces (Bluetooth, 802.11).

[Para 35] The Digital Analog and I/O interfaces 84 and 86 respectively allow the base control unit to connect to a wide array of devices that interface to the real world. This allows the base control unit to serve as a bridge between simple devices and the networks to which the base station is connected. Examples of such would include: alarm systems; electronic locks; gate controls; pressure transducers; contact closures; and relays.

[Para 36] The multi-purpose expansion bus 89 is a proprietary bus that allows for the addition of custom accessories developed exclusively for use with the base station.

[Para 37] The power line interface 72 allows the base control unit to communicate over the power line to devices that support a power line communications interface. Examples of these type of interfaces are X10 and HomePlug.

[Para 38] The remote control units 12, 26 take advantage of either GPS Assisted ("GPSA") technology, an external GPS unit 64 or location based information provided by the cellular network 22. GPSA technology uses cellular-based location information provided by cellular infrastructure pursuant to the E911 protocol or mandate. With GPSA, cellular telephone towers locations have their own GPS receivers installed such that their coordinates are already known and can be readily communicated to the remote control units such that the normal three to five minute delay inherent in GPS position determination is avoided. For remote control units without GPSA technology, an external GPS can be used to communicate geographic location to the software within the remote control unit. The cellular carrier can further provide location based information to the cellular handset by using the cellular towers to determine its geographic location.

[Para 39] Each remote control unit 12, 26 communicates with the base control unit 16 to affect the operational aspects thereof and peripheral equipment operatively attached thereto. For example, a remote control unit can command the base control unit 16 to enter an energy conservation mode. The user moves the cursor of the LCD screen 38 until the desired operational icon 42 is highlighted. The function associated with the icon 42 by the applications software is triggered by pressing the select button 36. The applications software communicates the command to the base control unit 16 through the cellular telephone network 22. The command string so transmitted is received and processed by the base control unit 16. Upon entering this mode the base control unit 16 adjusts air handling

systems, open or close dampers, open or close window coverings, and adjusts operation of a hot water heater to conserve power consumption of the home. In the preferred embodiment, the remote control units are conventional cellular telephone handsets that are equipped with a programming kernel, such as Java or J2ME, that enables the telephone to be customized to perform functions that are not typical of standard cellular telephone operation. For example, to use a cellular telephone that has a home automation terminal in its conventional mode, the user would have to enter a telephone number, dial into a home automation controller, and press the telephone keys to send DTMF audio signals to the controller. After the session is completed, the user has to manually disconnect from the cellular network. The data path between the remote control unit and the base control unit is SMS ("simple message service".) However, the implemented port addressing scheme allows short messages to the remote control unit to bypass standard cellular telephone functions and to operate the features of the unit independently. The desired port to be addressed on the receiving unit is configured in the user data header of the SMS message that is transmitted to the receiving unit as is well known in the art. Further, the various remote control units can send SMS information to and from one another, exclusive of the base control unit in order to change the status information for a particular user. For example, if one remote control unit desires to be inactive, a command is sent to the other remote control unit to change the personal status thereof as displayed on the other units. Similarly, the remote control units can send SMS messages to the applications running in the other remote control units to affect operation parameters of those receiving remote control units.

[Para 40] By way of illustration, if the base control unit notifies the remote control unit of an activation of an alarm system associated with the base control unit, the remote control unit receives textual messages and graphical indicators to alert the user. The user acknowledges receipt of the alert by pressing a button or entering a code. The

communication does not involve the voice mode for communicating between the two units. Use of a conventional programmable cellular telephone readily meets the regulatory requirement that a device that participates in the cellular network be FCC or CTIA approved.

[Para 41] SMS port addressing allows Mobile Terminated SMS messages to be processed within the cellular telephone's application software without user intervention. Such uses include Voice Mail notifications, Wireless Access Protocol WAP, E-mail, and Phone Provisioning. The Internet Assigned Numbers Authority (<http://www.iana.com>) is responsible for defining the use of the various ports and specific ranges of numbers have been assigned for use by application software.

[Para 42] When the Java software application is operationally accessed by microcontroller 45 and started within the remote control unit 12, it attaches itself to a specific port for the reception of SMS messages. All Mobile Terminated (MT) SMS messages that contain a User Data Header (UDH) that indicate a port address, such as 50120, will be forwarded to the application software for processing.

[Para 43] The following AT command sequence is illustrative of the commands the base station unit 16 sends to the wireless module 70 over serial communications interface 110 to send a message to the remote control unit 12 to notify it that the temperature in zone 0 is currently 72 degrees:

ATE=0 \r Turn off echoing of characters sent to the module

AT+CMGF=0 \r Set Module in PDU Message format

AT+CMGS=44 \r Total length of PDU is 44 octets

0041000AC10294268088000023060504C3C800003C7AB90D07E9DFEE724F041381

EC6176BDDC13DD64A2970F <ctrl-Z>

[Para 44] The base control unit 16 is configured to interact with and respond to multiple remote control units 12. If multiple remote control units 12, or associate units 26 are deployed, one of the remote control units could be considered a master and all others could be considered slaves. Specific operational characteristics of the base control unit 16 may be configured as to only respond to commands from the master remote control unit. Alternatively, the remote control units may be segregated into classes such that the base control unit responds to commands and communicates selected information to a class containing one or more remote control units. An example would be a first class consisting of remote control units operated by parents and a second class consisting of remote control units operated by children. Information pertaining to the activities of the children may be selectively reported by the base control unit to the parents. By way of illustration, when a child operating a remote control unit in the second class disarms the alarm system prior to entering the residence controlled by the base control unit, parents in the parent class are notified accordingly that the child has arrived at home. The class assignments and configurations are easily customized to provide the notifications desired by the authoritative system operators, in this case, the parents.

[Para 45] The GPS receiver module 64 including antenna 65 is optionally incorporated into the remote control unit 12 for allowing the remote control unit to communicate position information to the base control unit 16. The GPS may also be incorporated into wireless module 56, as in newer CDMA 2000 compatible cellular modules. This feature allows the base control unit to change its operational characteristics based upon the location of the remote control unit(s).

[Para 46] For example, the base control unit may adjust the water temperature and thermostats when one of the remote control units comes within a specific distance from the house. The geographic information that is acquired by the GPS subsystem in the remote

control unit (whether it is a separate GPS unit or part of the module) can be compared to settings stored in either the remote control unit itself or the base control unit to provide capabilities such as Geo-Fencing, Asset Tracking, and Bio-Location (knowing where a living entity is located).

[Para 47] In the preferred embodiment, the position data are derived from NEMA data received from the GPS component. NEMA data includes latitude, longitude, time, velocity, and heading information. Each information packet is streamed once per second. Data are captured by the remote control unit, they are processed by its application software, and the results are transmitted by port-addressed SMS to the base control unit for proximity detection. Specific remote control units can be configured in such a way that they send a status message to the base control unit if they exceed a programmed set of boundary conditions. If desired, the base control unit can on its own initiative query the remote control unit to learn its geographic location.

[Para 48] Geographic location information is programmed into the base control unit through keypad 120. Additionally, the geographic location of the base control unit may be entered into a GPS-enabled remote control unit through the application software user interface. A user-determined distance is then programmed into the remote control unit. When the remote control unit travels a distance that exceeds the programmed distance from the base control unit, the remote control unit reports this information to the base control unit. The base control unit will then send this information to the appropriate user or to a predetermined class of users. This is an example of geo-fencing and would be typically used to notify parents that one of their children has traveled beyond a set distance from the home.

[Para 49] The base control unit communicates status information to the remote control unit either on a periodic or event-driven basis. It can initiate communications based on its

aggregated inputs, or it can respond to individual requests and commands received from the remote control unit.

[Para 50] Examples of events that could cause the base control unit to initiate a communications session with the remote control unit include fire or burglar alarm activation, HVAC or freezer temperature thresholds exceeded, equipment failures, an air filter change necessary, a change in the home state vector, (occupied, unoccupied) or a geographical boundary condition exceeded by one of the other remote control units.

[Para 51] In addition to communicating status information to the remote control unit, the base control unit will, as programmed, initiate corrective action for the indicated event. For example, upon communicating an alarm activation message to a remote control unit, the base control unit, upon detecting the presence of an authorized user arriving at the local location, could disable the alarm system. Upon the detection of a member of an authorized class member, the base control unit can start the operation of the whirlpool bath in anticipation of the user's arrival, turn on specified interior and exterior lighting, or increase or decrease the thermostatic set point for the heater or air conditioner.

[Para 52] Yet additional geographical dependent operation or control may be provided by the inherent aspects of Bluetooth wireless technology presently available from a wide variety of professional and consumer electronic equipment manufacturers and vendors. Bluetooth radio-frequency protocol enabled devices allow totally wireless operation of devices such as computers, computer keyboards, printers, pointing devices, digital audio players, headphones, computer games, personal digital assistants, remote controls, and the like. Each Bluetooth device is characterized by one of three power classes: Class 1 is designed for long range (approximately 100m) devices, with a maximum output power of 20 dBm; Class 2 is for ordinary range devices (approximately 10m) devices, with a maximum output power of 4 dBm; and Class 3 is for short range devices (approximately 10cm) devices, with a

maximum output power of 0 dBm. Class 2 devices are used in the preferred embodiment as they provide a beneficially sized geographic range or fence around the local location to allow the system to provide presence detection functionality.

[Para 53] Each chipset in a Bluetooth enabled device has a unique serial or identification number. To enable the base control unit to recognize and respond to the presence of a Bluetooth enabled device, the device must be physically held within operable range of the control unit. The user instructs the control unit to request authorization from the Bluetooth device. An authorization code is manually entered into the base control unit and then into Bluetooth device. If the unique identification or serial number entered into each unit matches, it is stored and associated with the particular user or class of users, and the base control unit and the Bluetooth enable device are authenticated and are in communication with each other. At a periodic interval, the base control unit directs the Bluetooth master unit (located in the base control unit) to do a device discovery and report back the unique identification numbers it finds. If an identification number is not discovered, the user is assumed not within close proximity of the base control unit, which then reports the results to the designated class of users. If desired or necessary based on environmental circumstances, the Bluetooth receiver can be remotely located from the base control unit for controlled reception or to compensate for radio frequency coverage problems. The Bluetooth enabled device could be a cellular telephone, a watch, an MP3 player, a pendant, or any other Bluetooth equipped device compatible with current Bluetooth standards.

[Para 54] In the preferred embodiment, the Bluetooth enabled remote control unit may be programmed using Java J2ME to send a message to other remote control units when they detect a specific base station control units. This feature allows multiple base station control units in a large environment and the case that the remote control unit handles the notification.

[Para 55] While the preferred embodiment employs popular Bluetooth technology, it should be appreciated and understood that other presently available technologies, such as 802.11(x), or future technologies can be used in the same manner as Bluetooth. The base control and remote control units each contain application software that is readily modifiable to adapt to a new or different technology or protocol.

[Para 56] Application software within the systems microcontroller 106 provides for autonomous control that is either preprogrammed at the time of manufacture or customized by the end user of the base station for their specific needs. Examples of autonomous control include: shut down of the air handling system if a fire is detected, thereby the spread of smoke and the possibility of “fanning” the fire; adjusting of indoor temperature and humidity settings depending upon conditions and information such as outdoor environmental conditions such as temperature, humidity, sun load and wind, short-term weather forecasts, family schedule and activities, structure occupancy, context, location of users; shutdown of sensitive electronic components and subsystems in cases of severe weather, or failures in other subsystems; closing and opening of windows and/or window coverings to conserve energy; control of sprinkler systems based upon current weather conditions and weather forecasts. The application software includes a macro language interpreter to enable efficient end-user customization and future expansion to the system. A macro is a miniature computer program activated by a symbol, name, or key that represents a list of commands, actions, or keystrokes. A macro allows a local or remote user to enter a single character or word to perform a series of predetermined actions.

[Para 57] Base control unit 16 further comprises the Ethernet interface 82 to respond to external web services generally accessible through an Internet connection. For example, at present, weather services on the Internet can be queried using the SOAP protocol. The services respond with timely weather information, typically encoded in XML. The base

control unit 16 understands and interprets that received information and responds according to instructions, including macros, programmed into its application software. Such capability allows the base control unit to take actions, like causing the sprinkler system to bypass its scheduled watering cycle should rain be forecast. Other information services allow other responses. A school system's notification that schools are being released early due to inclement weather conditions could cause the base control unit to notify the class containing the parental remote control users of the decision to afford the parent the opportunity to make transportation and custodial decisions with regard to their children in the schools. The application software is RSS-aware and is capable of receiving and responding accordingly to RSS feeds. RSS ("really simple syndication") is an efficient and popular web content syndication serial data format. Any information that can be broken down into discrete data items can be syndicated via RSS. Once information about each item is in RSS format, in the present invention, the base control unit examines the feed for changes and reacts to the changes in an appropriate way. The Ethernet bridge function is easily updated and expanded by an upload of revised application software to the base control unit.

[Para 58] Messages from the remote control unit 12 to the base control unit 16 do not need to rely on port addressing for processing. The base control unit 16 uses a cellular telephone module that does not contain a user interface. The processing of SMS messages is handled by the base control unit applications software.

[Para 59] The base control unit 16 commands the cellular module to send newly received SMS messages directly to the base control unit 16 over the serial port using unsolicited result codes. Upon receipt of a new message the cellular module sends the following:

+CMT: <length><CR><LF><pdu>

Where <length> is the length of the <pdu> element

<CR> is carriage return and <LF> is line feed.

<pdu> is the Short Message data in either PDU or text format.

The base control unit 16 processes the data according the content of the message data.

[Para 60] Although port addressing is not currently used when messages are sent from the remote control unit 12 to the base control unit 16 software (it still is used within the base control unit 16 cellular module for provisioning and control from the carriers), the system can utilize the port addressing to direct messages to specific subsystems that are tied to the base control unit 16.

[Para 61] The present invention thus provides an on-demand bidirectional communications interface for monitoring, controlling, and securing various environment functions and characteristics attendant the interior and exterior of a building. The system may thus monitor and control temperature, and a myriad of other environmental functions of the building include, by way of example and not limitation, temperature, power status for the building and discrete applications therein, humidity/moisture, smoke/toxic gases, structural breaches, security status, visual conditions and a host of other natural and non-natural phenomena.

[Para 62] The base control unit is preferably mounted at an appropriate location on a wall within the building to provide a local access for regulation. The base control unit is locally operatively interfaced with a plurality of sensors and devices systematically distributed throughout the building and communicating according to varying protocols such as infrared, radio frequency, X-10, and hard wiring.

[Para 63] The sensors provide continuous measurement and status of target environmental characteristics. Examples of sensor applications include utilities status, moisture and humidity detection, door and window condition, and the like. Associated

controlled devices providing operational functions refrigeration, water heating, security cameras, illumination devices, and the like.

[Para 64] The air handling unit receives signals from the associated sensors and communicates them to the base control unit 16 that, based on the processed measured characteristics thereof, activates or deactivates one or more of the devices of the unit in response to the measurement. For example, if the temperature sensor exceeds a preset value, the HVAC unit is activated, and when the measured characteristic is within a preset value range, the unit is deactivated. In addition, when a measured characteristic exceeds a predetermined value range, an alarm signal may be transmitted to a remote control unit 14 to provide an audible, tactile, and/or visual indication. Thus, if utility sensor S2 indicates a loss of electrical, water, or communications service, a signal is sent to the remote control unit 14 and the operator thereof has the ability to take corrective action in response thereto. Also, the operator may invoke the a command from the remote control unit 14 to the base control unit 16 to activate a select device such as the HVAC unit, a water heater, a refrigeration appliance or other discrete device remotely in order to prepare the building for occupancy by the operator or designee.

[Para 65] The sensors for the system are distributed throughout the building to detect the environmental characteristics of the building. These characteristics include, but are not limited to, temperature, humidity/moisture, smoke/toxic gases, structural breaches, and a host of other natural and non-natural phenomena.

[Para 66] In a conventional thermostat, a temperature sensor and switch automatically control a heating or cooling appliance when the sensed temperature is beyond a preset value. The thermostatic interface of the invention would include a temperature sensor that constantly monitors the environmental temperature and control of a heating and/or cooling appliance to maintain the building at a substantially constant temperature.

[Para 67] The thermostatic interface also receives other environmental characteristics of the building and responds in a like manner. For example, a sensor would monitor the humidity (or moisture content of the air) of the building. If the temperature monitored by temperature sensor is within the preset range value, a conventional thermostat would not adjust the heating and/or cooling appliance to regulate the moisture content, thus presenting favorable environment for the growth on molds and mildew. The thermostatic interface receives the humidity value measured by the humidity sensor, determines that the value exceeds a predefined limit, and generates an alarm signal that is transmitted as an alarm signal via the communication link to the remote control unit. The operator receives the information and transmits a control signal from the remote access unit to the base control unit via the communication link and activates the appropriate appliance in response thereto, thus reducing the humidity value to acceptable levels and preventing the progression of mold and mildew growth.

[Para 68] The sensors are distributed according to a predetermined plan that effectively makes the “most likely place” for a change in environmental characteristics to be sensed. For example, several smoke/toxic gas sensors would be distributed about the ceilings and floors so as to identify the presence of smoke (i.e. fire) or carbon monoxide (i.e. toxic gas), and relaying the measured characteristic to the thermostat. Other types of sensors would be optimally placed in order to monitor the egression of water into the building, lighting striking the building, suspension or cessation of a provided utility (i.e., electric power, water and sewer provisions, natural gas), collapse of the building or a portion thereof due to weather (i.e., tornado, hurricane, blizzard), or breach of the building security (i.e., break-ins). The sensors may be hard wired through the structure of the building. Also, the sensors may have a wireless communication. The optimal presentation would be a dual connection, such a hard-wired and wireless communication, e.g., a transmitter/receiver. This provides

maximum effective monitoring of the building because the hard wiring would alleviate the need for constant battery monitoring, likewise, the wireless communication provides monitoring should the absence of electrical power be a factor. For example, the combined hard wired and wireless connection of the sensors to the unit allows the monitoring of the building and generates the alarm when the power is lost due to an area wide electrical outage. The unit transmits that information (i.e., the loss of electrical power) to the remote control unit and the operator is aware that the electrical power is absent. If the loss of electrical power were due to a nefarious figure seeking to breach the building, i.e., breaking a window to gain access, a security sensor would still be able to provide the base control unit with an indication that the building has a security breach. The base control unit, operating under an alternate electrical power supply such as a backup battery, would generate a subsequent alarm signal and transmit the subsequent alarm signal for routing through the direct connect wireless for immediate transmission to the remote control unit, thereby alerting the operator that in addition to the loss of electrical power, the security of the building has been breached. The operator can thereby contact the law enforcement facility of the local jurisdiction and have an immediate response. If the remote control units are organized in classes, such as “managers”, the information would be almost simultaneously provided to each member of the class who would have a need to receive and react to it.

[Para 69] In addition to main residence use, the system is typically suited for a vacation/second dwelling, a business concern, or any building structure that is not constantly occupied. For example, if the thermostat control system is installed in a vacation home in one locality, the operator may effectively be in any other portion of the globe so long as an effective communication link is provided with the remote control unit 14.

[Para 70] Multiple base station units could be controlled through a single cellular phone for those instances where a person desires to have systems installed in multiple residences. The application software uses the Source Address field of the message to distinguish between different base control units 16.

[Para 71] It is to be understood that the present invention is not limited to the embodiments described above, but encompasses any and all embodiments within the scope of the following claim.

What is claimed is:

[Claim 1] 1. A ubiquitous connectivity and communications system for controlling operation of an environmental condition in a structure, comprising: a device for controlling an environmental condition in the structure; a base unit in said structure and operatively interfaced with said device to control the operation thereof; at least one remote device; connectivity means providing an on-demand, private and direct communications interface between said base unit and said remote device enabling instant wireless connectivity therebetween; means for providing a indication of current status of said device to said base unit; means for transmitting said indication of current status through said connectivity means to said remote device; display means at said remote device for indicating said current status of said device; input means at said remote device for prescribing an indication of revised status for said device; means for transmitting said indication of revised status through said connectivity means to said base unit; means operatively associated with said base unit and operatively connected with said device for effecting said revised status for said device.

[Claim 2] 2. The system as recited in claim 1 wherein said device for controlling an environmental condition includes electronic and electromechanical switching means interfaced with said device for controlling an environmental condition.

[Claim 3] 3. The system as recited in claim 1 wherein said base unit is a microcontroller-based processing unit having customizable application specific software.

[Claim 4] 4. The system as recited in claim 1 wherein said remote device is a cellular telephone handset with custom programmability means.

[Claim 5] 5. The system as recited in claim 4 wherein said custom programmability means is a JAVA programming kernel.

[Claim 6] 6. The system as recited in claim 4 wherein said custom programmability means is a J2ME programming kernel.

[Claim 7] 7. The system as recited in claim 1 wherein said connectivity means includes a transmitting and receiving module in said base unit and a transmitting and receiving unit in said remote device operatively communicating with each other over the cellular telephone network.

[Claim 8] 8. The system as recited in claim 1 wherein said means for providing an indication of current status to said base unit and said means for transmitting said indication of current status is an short message service (SMS) message carried along said cellular telephone network.

[Claim 9] 9. The system as recited in claim 1 wherein said display means is a liquid crystal display module.

[Claim 10] 10. The system as recited in claim 9 wherein said liquid crystal module includes selectable graphic icons corresponding to environmental conditions being monitored or controlled.

[Claim 11] 11. The system as recited in claim 8 including means operative between said remote devices using said short message service (SMS) for selectively disabling transmission thereto.

[Claim 12] 12. A detection system for selectively determining the presence of individuals within a proximate distance of a structure, said detection system comprising: a base unit at said structure; a first remote unit operated by one of the individuals and transmitting a first identification signal; a second remote device operated by another of the individuals and transmitting a second identification signal; receiving means associated with said base unit for receiving said authorizations codes when the associated remote device is within the proximate distance of the structure; selection means operatively associated with

said base unit for selectively establishing an authorized user status to said remote devices based on said identification signal; instant wireless connectivity means for transmitting to a master remote unit the presence of a remote unit with said proximate distance of said structure based on said authorized user status.

[Claim 13] 13. The system as recited in claim 12 wherein said base unit includes a Bluetooth transmitter and receive module for bidirectional communications with said remote units.

[Claim 14] 14. The system as recited in claim 12 wherein said base unit includes a bidirectional radio frequency communications module conforming to the 802.11 protocol.

[Claim 15] 15. The system as recited in claim 12 wherein said remote units include cellular telephones including Bluetooth bidirectional communications modules.

[Claim 16] 16. The system as recited in claim 12 wherein said receiving means associated with said base unit is a Bluetooth bidirectional communications module.

[Claim 17] 17. The system as recited in claim 12 wherein said receiving means associated with said base unit is a bidirectional radio frequency communications module conforming to the 802.11 protocol.

[Claim 18] 18. The system as recited in claim 12 wherein said selection means comprises a microcontroller-based processing unit having customizable application specific software.

[Claim 19] 19. The system as recited in claim 12 wherein said instant wireless connectivity means is a radio frequency communications channel according to the Bluetooth communications protocol.

[Claim 20] 20. The system as recited in claim 12 wherein said instant wireless connectivity means is a radio frequency communications channel according to the 802.11 communications protocol.

ABSTRACT

A thermostat control system for monitoring and controlling environmental characteristics of a building includes a base station unit and a remote access unit continuously interfacing through instant wireless private direct connectivity. The system also includes a plurality of sensors that measure the environmental characteristics and provide the thermostat unit with the measurements.

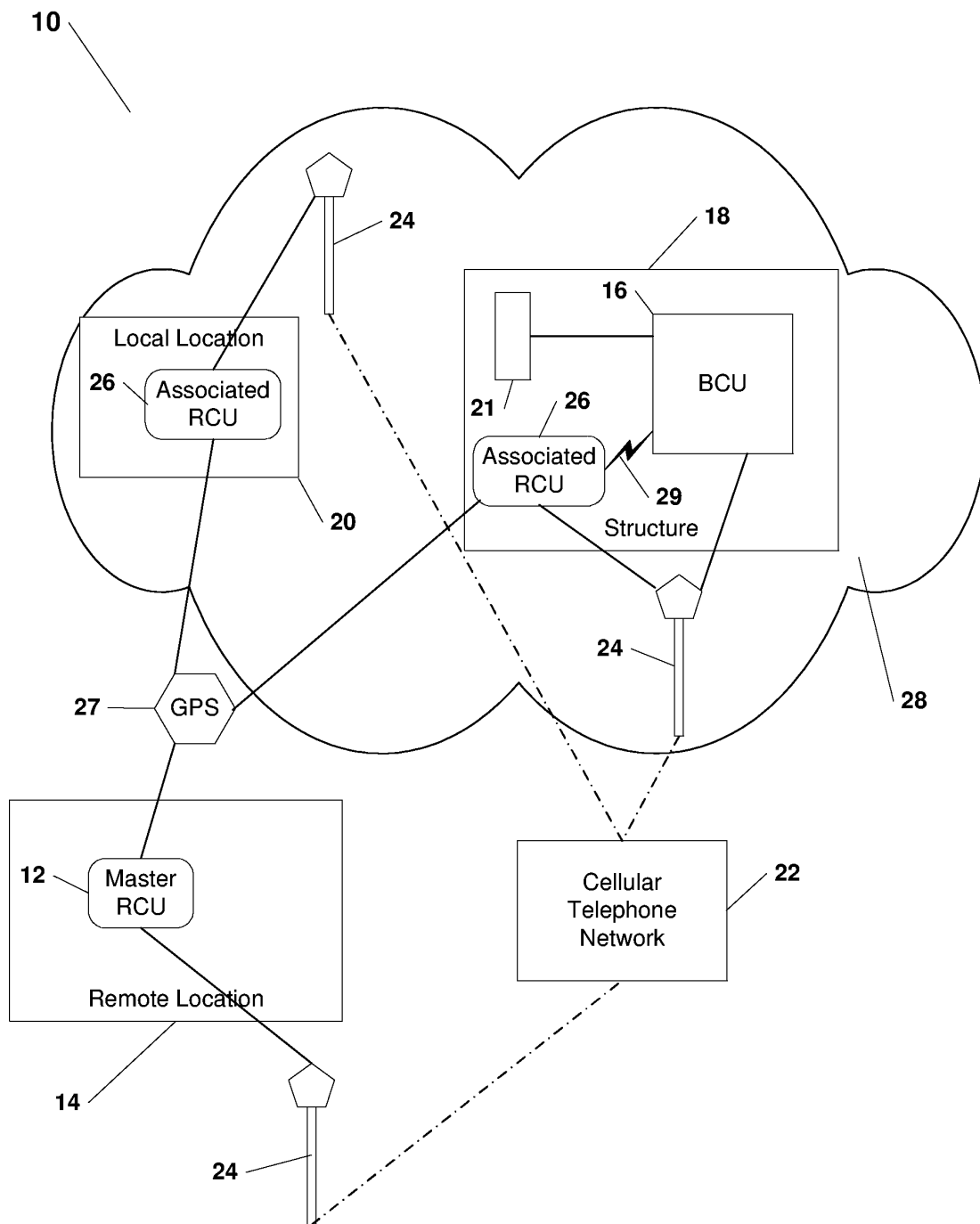


Fig. 1

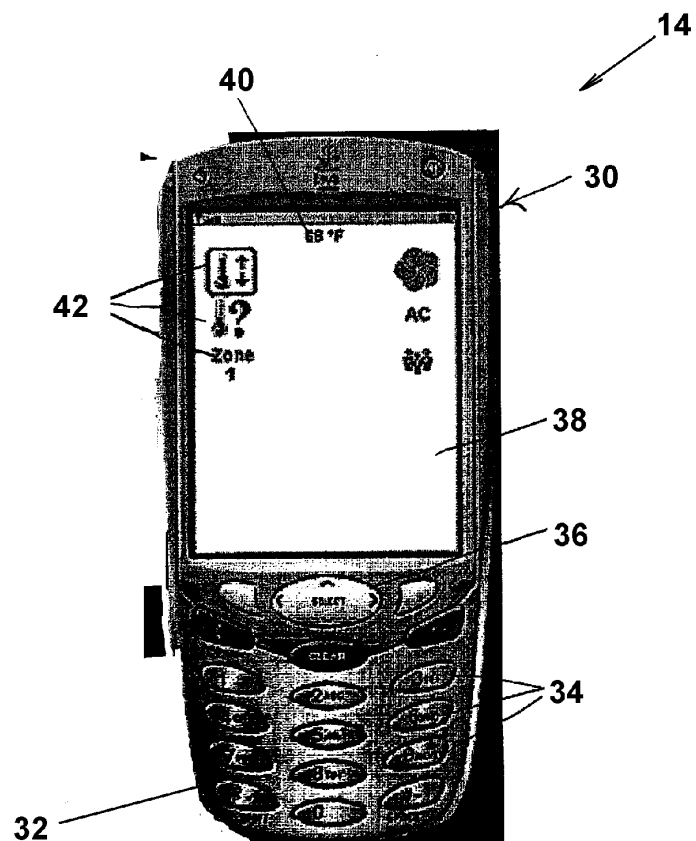


Fig. 2

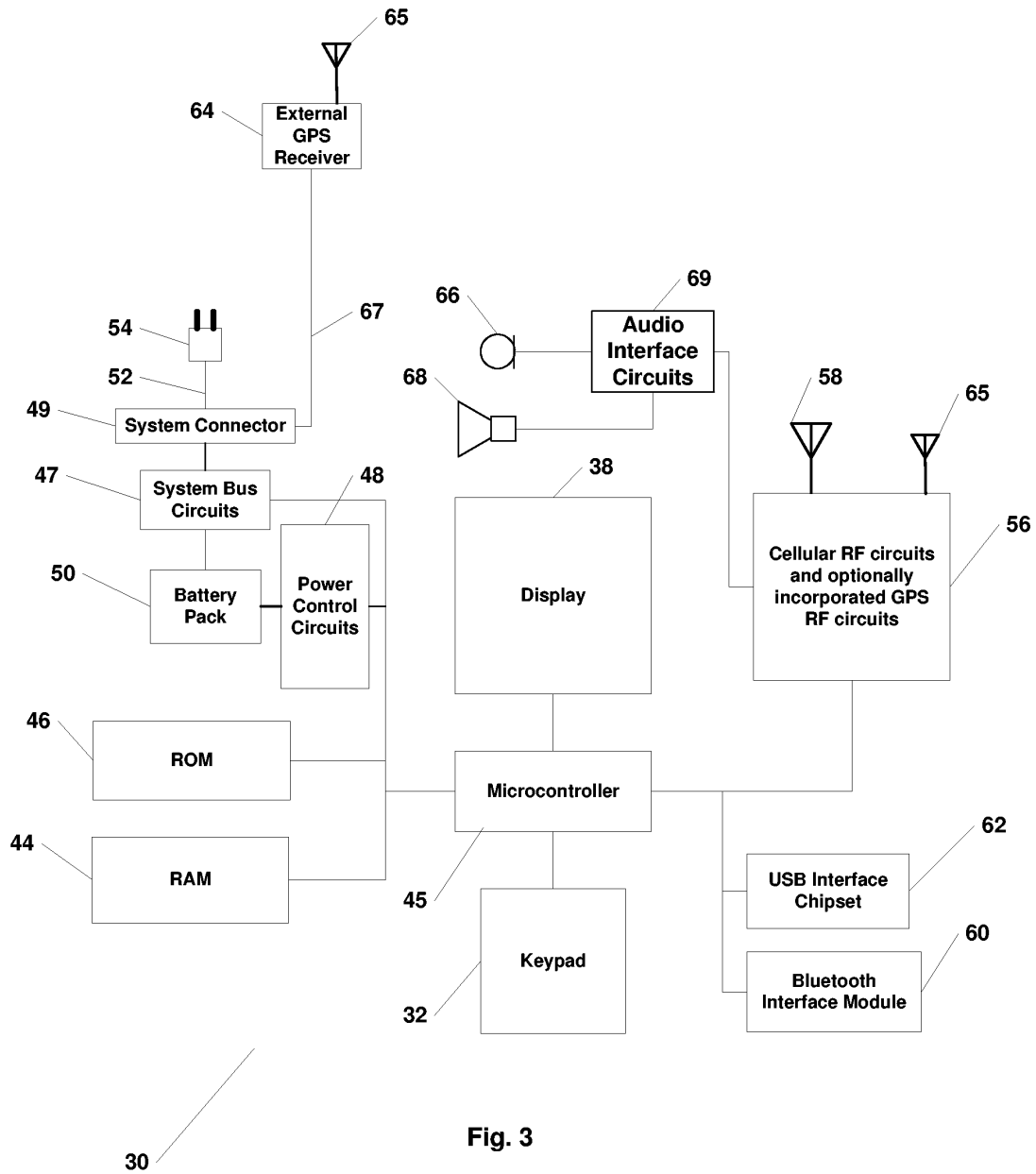


Fig. 3

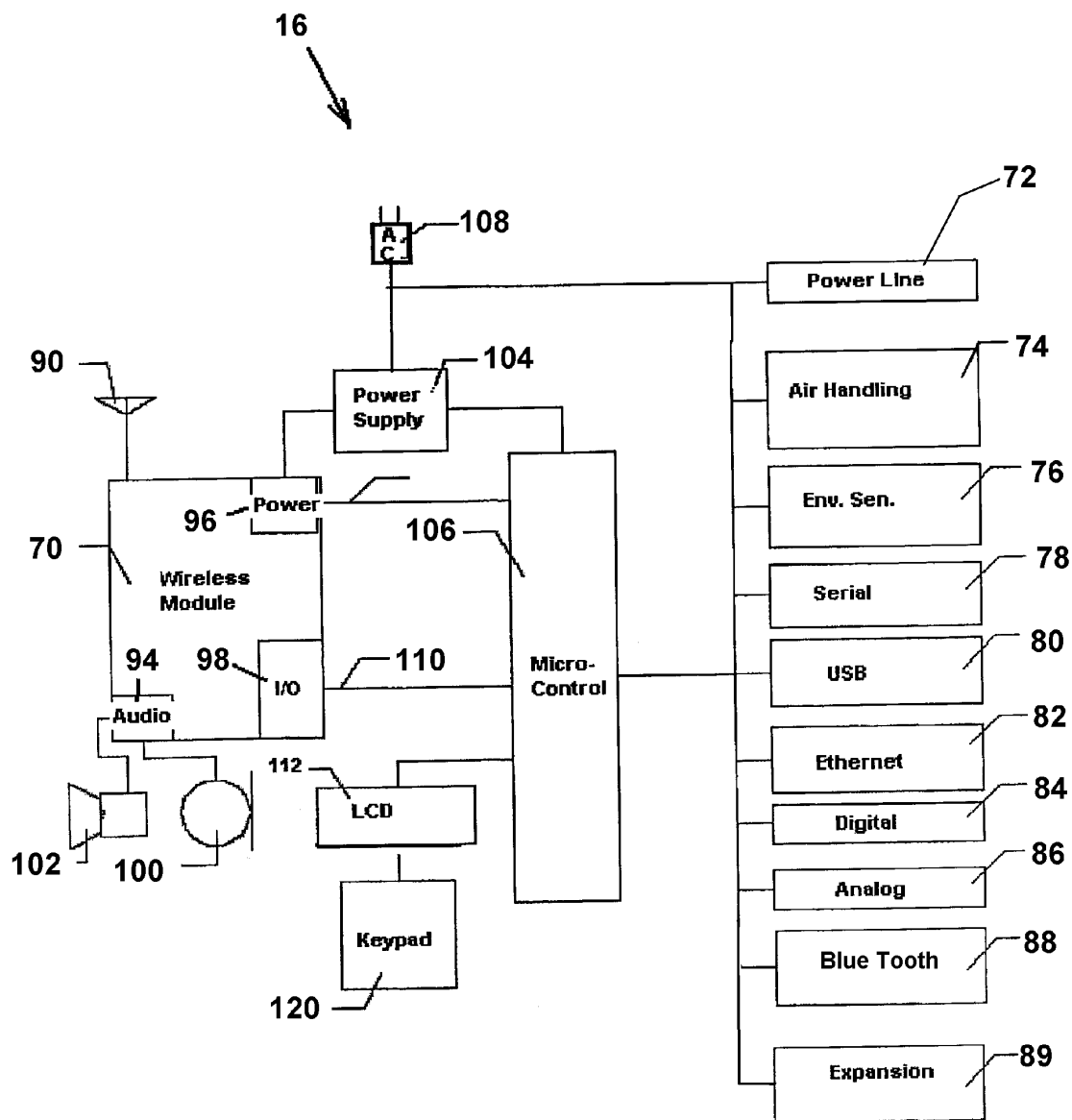



Fig. 4

ACKNOWLEDGEMENT RECEIPT

Electronic Version 1.1

Stylesheet Version v1.1.1

| Title of Invention | UBIQUITOUS CONNECTIVITY AND CONTROL SYSTEM FOR REMOTE LOCATIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|--|---|--------------------------|-------------------|-----------|--------------|---|--------|----------------------|-------------|---|--------|------------|------|------------|--------|------------|-------|------------|--------------|--------------------|------|------------|--------------|------------------|-------|------------|--------------|---------------------|-------|------------|------------------|--|-------|--|
| Submission Type : | Information Disclosure Statement | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Application Number: | 11/163372 |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EFS ID: | 94770 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Server Response: | <table border="1"><thead><tr><th>Confirmation Code</th><th>Message</th></tr></thead><tbody><tr><td>ISVR1</td><td>Submission was successfully submitted - Even if Informational or Warning Messages appear below, please do not resubmit this application</td></tr><tr><td>ICON1</td><td>4371</td></tr><tr><td>USPTOEFSNot</td><td>For assistance with e-filing a patent application, contact the Patent Electronic Business Center: Toll-Free Number:1(866) 217-9197 Website: http://www.uspto.gov/ebc/</td></tr></tbody></table> | | | Confirmation Code | Message | ISVR1 | Submission was successfully submitted - Even if Informational or Warning Messages appear below, please do not resubmit this application | ICON1 | 4371 | USPTOEFSNot | For assistance with e-filing a patent application, contact the Patent Electronic Business Center: Toll-Free Number:1(866) 217-9197 Website: http://www.uspto.gov/ebc/ | | | | | | | | | | | | | | | | | | | | | | | | |
| Confirmation Code | Message | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ISVR1 | Submission was successfully submitted - Even if Informational or Warning Messages appear below, please do not resubmit this application | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ICON1 | 4371 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| USPTOEFSNot | For assistance with e-filing a patent application, contact the Patent Electronic Business Center: Toll-Free Number:1(866) 217-9197 Website: http://www.uspto.gov/ebc/ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| First Named Applicant: | Charles SHAMOON | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Attorney Docket Number: | 7192-06-05 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Timestamp: | 2005-10-17 11:54:33 EDT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| From: | us | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| File Listing: | <table border="1"><thead><tr><th>Doc. Name</th><th>File Name</th><th>Size (Bytes)</th><th>Date Produced (yyyymmdd)</th></tr></thead><tbody><tr><td>us-ids</td><td>71952IDS1-usidst.xml</td><td>2127</td><td>2005-10-17</td></tr><tr><td>us-ids</td><td>us-ids.dtd</td><td>7763</td><td>2005-10-17</td></tr><tr><td>us-ids</td><td>us-ids.xml</td><td>12026</td><td>2005-10-17</td></tr><tr><td>package-data</td><td>71952IDS1-pkda.xml</td><td>1779</td><td>2005-10-17</td></tr><tr><td>package-data</td><td>package-data.dtd</td><td>27025</td><td>2005-10-17</td></tr><tr><td>package-data</td><td>us-package-data.xml</td><td>19263</td><td>2005-10-17</td></tr><tr><td colspan="2">Total files size</td><td>69983</td><td></td></tr></tbody></table> | | | Doc. Name | File Name | Size (Bytes) | Date Produced (yyyymmdd) | us-ids | 71952IDS1-usidst.xml | 2127 | 2005-10-17 | us-ids | us-ids.dtd | 7763 | 2005-10-17 | us-ids | us-ids.xml | 12026 | 2005-10-17 | package-data | 71952IDS1-pkda.xml | 1779 | 2005-10-17 | package-data | package-data.dtd | 27025 | 2005-10-17 | package-data | us-package-data.xml | 19263 | 2005-10-17 | Total files size | | 69983 | |
| Doc. Name | File Name | Size (Bytes) | Date Produced (yyyymmdd) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| us-ids | 71952IDS1-usidst.xml | 2127 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| us-ids | us-ids.dtd | 7763 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| us-ids | us-ids.xml | 12026 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| package-data | 71952IDS1-pkda.xml | 1779 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| package-data | package-data.dtd | 27025 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| package-data | us-package-data.xml | 19263 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total files size | | 69983 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Message Digest: | 7c04927fc320d4c0d45af3a5e84ba219fdb94f8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Digital Certificate Holder Name: | cn=Michael Coleman Phillips,ou=Registered Attorneys,ou=Patent and Trademark Office,ou=Department of Commerce,o=U.S. Government,c=US | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

**Title of
Invention**

UBIQUITOUS CONNECTIVITY AND CONTROL SYSTEM FOR
REMOTE LOCATIONS

Application Number : 11/163372



Confirmation Number: 4371

First Named Applicant: Charles SHAMOON

Attorney Docket Number: 7192-06-05

Art Unit:

Examiner:

Search string: (6014089 or 6260765 or 6301484 or 6393297 or 6650249 or 6820049 or 6847822
or 6854660 or 6873824).pn

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

| init | Cite.No. | Patent No. | Date | Patentee | Kind | Class | Subclass |
|------|----------|------------|------------|-----------------|------|-------|----------|
| | 1 | 6014089 | 2000-01-11 | Tracy et al. | | | |
| | 2 | 6260765 | 2001-07-17 | Natale et al. | | | |
| | 3 | 6301484 | 2001-10-09 | Rogers et al. | | | |
| | 4 | 6393297 | 2002-05-21 | Song | | | |
| | 5 | 6650249 | 2003-11-18 | Meyer et al. | | | |
| | 6 | 6820049 | 2004-11-16 | Monroe et al. | | | |
| | 7 | 6847822 | 2005-01-25 | Dennison et al. | | | |
| | 8 | 6854660 | 2005-02-15 | Yoon et al. | | | |
| | 9 | 6873824 | 2005-03-29 | Flick | | | |


Signature

| | |
|---------------|------|
| Examiner Name | Date |
| | |

TRANSMITTAL

Electronic Version v1.1

Stylesheet Version v1.1.0


| | | | | | | | | |
|--|--|----------------|---------------|-------------|----------------|--|-----------------------|----------|
| Title of Invention | UBIQUITOUS CONNECTIVITY AND CONTROL SYSTEM FOR REMOTE LOCATIONS | | | | | | | |
| <div style="display: flex; justify-content: space-between; align-items: flex-start;"><div><p>Application Number : 11/163372</p><p>Date : 2005-10-17</p><p>First Named Applicant: SHAMOON Charles G.</p><p>Confirmation Number: 4371</p><p>Attorney Docket Number: 7192-06-05</p></div><div style="text-align: center;"></div></div> | | | | | | | | |
| <p>I hereby certify that the use of this system is for OFFICIAL correspondence between patent applicants or their representatives and the USPTO. Fraudulent or other use besides the filing of official correspondence by authorized parties is strictly prohibited, and subject to a fine and/or imprisonment under applicable law.</p> <p>I, the undersigned, certify that I have viewed a display of document(s) being electronically submitted to the United States Patent and Trademark Office, using either the USPTO provided style sheet or software, and that this is the document(s) I intend for initiation or further prosecution of a patent application noted in the submission. This document(s) will become part of the official electronic record at the USPTO.</p> | | | | | | | | |
| <table border="1" style="width: 100%; border-collapse: collapse;"><tr><td style="width: 45%; text-align: center;">Submitted By:</td><td style="width: 25%; text-align: center;">Elec. Sign.</td><td style="width: 30%; text-align: center;">Sign. Capacity</td></tr><tr><td>Michael C. Phillips Registered Number: 42,072</td><td style="text-align: center;">/Michael C. Phillips/</td><td style="text-align: center;">Attorney</td></tr></table> | | | Submitted By: | Elec. Sign. | Sign. Capacity | Michael C. Phillips Registered Number: 42,072 | /Michael C. Phillips/ | Attorney |
| Submitted By: | Elec. Sign. | Sign. Capacity | | | | | | |
| Michael C. Phillips Registered Number: 42,072 | /Michael C. Phillips/ | Attorney | | | | | | |

| Documents being submitted: | Files |
|----------------------------|--|
| us-ids | 71952IDS1-usidst.xml us-ids.dtd us-ids.xsl |
| Comments | |

ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

| Title of Invention | UBIQUITOUS CONNECTIVITY AND CONTROL SYSTEM FOR REMOTE LOCATIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|------------|------------|--------------------|------|----------|----------|-------|----------|--|---|---------|------------|----------------|--|--|--|--|---|---------|------------|-----------------|--|--|--|--|---|---------|------------|-------|--|--|--|--|---|---------|------------|---------------|--|--|--|--|---|---------|------------|------------------|--|--|--|--|---|---------|------------|------------|--|--|--|--|---|---------|------------|-----------------|--|--|--|--|---|---------|------------|------------------|--|--|--|--|---|---------|------------|---------------|--|--|--|--|----|---------|------------|-----------|--|--|--|--|----|---------|------------|--------------------|--|--|--|--|----|---------|------------|------|--|--|--|--|----|---------|------------|---------------|--|--|--|--|----|---------|------------|-------------|--|--|--|--|----|---------|------------|-----------------|--|--|--|--|----|---------|------------|---------|--|--|--|--|----|---------|------------|--------------|--|--|--|--|----|---------|------------|---------|--|--|--|--|----|---------|------------|---------------|--|--|--|
| <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div> <p>Application Number : 11/163372</p> <p>Confirmation Number: 4371</p> <p>First Named Applicant: Charles SHAMOON</p> <p>Attorney Docket Number: 7192-06-05</p> <p>Art Unit:</p> <p>Examiner:</p> <p>Search string: (4918439 or 4965557 or 5109222 or 5247580 or 5544036 or 5545857 or 5579496 or 5621662 or 5778256 or 5805530 or 5818428 or 5917105 or 5924486 or 6005490 or 6081750 or 6104334 or 6192282 or 6195589 or 6216956 or 6264559 or 6394359 or 6398727 or 6934862 or 20030034897 or 20030034898 or 20020149705).pn</p> </div> <div style="text-align: center;">  </div> </div> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>US Patent Documents</p> <p>Note: Applicant is not required to submit a paper copy of cited US Patent Documents</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>init</th> <th>Cite.No.</th> <th>Patent No.</th> <th>Date</th> <th>Patentee</th> <th>Kind</th> <th>Class</th> <th>Subclass</th> </tr> </thead> <tbody> <tr><td></td><td>1</td><td>4918439</td><td>1990-04-17</td><td>Wozniak et al.</td><td></td><td></td><td></td></tr> <tr><td></td><td>2</td><td>4965557</td><td>1990-10-23</td><td>Schepers et al.</td><td></td><td></td><td></td></tr> <tr><td></td><td>3</td><td>5109222</td><td>1992-04-28</td><td>Welty</td><td></td><td></td><td></td></tr> <tr><td></td><td>4</td><td>5247580</td><td>1993-09-21</td><td>Kimura et al.</td><td></td><td></td><td></td></tr> <tr><td></td><td>5</td><td>5544036</td><td>1996-08-06</td><td>Brown Jr. et al.</td><td></td><td></td><td></td></tr> <tr><td></td><td>6</td><td>5545857</td><td>1996-08-13</td><td>Lee et al.</td><td></td><td></td><td></td></tr> <tr><td></td><td>7</td><td>5579496</td><td>1996-11-26</td><td>Van Steenbrugge</td><td></td><td></td><td></td></tr> <tr><td></td><td>8</td><td>5621662</td><td>1997-04-15</td><td>Humphries et al.</td><td></td><td></td><td></td></tr> <tr><td></td><td>9</td><td>5778256</td><td>1998-07-07</td><td>Darbee et al.</td><td></td><td></td><td></td></tr> <tr><td></td><td>10</td><td>5805530</td><td>1998-09-08</td><td>Youngberg</td><td></td><td></td><td></td></tr> <tr><td></td><td>11</td><td>5818428</td><td>1998-10-06</td><td>Eisenbrandt et al.</td><td></td><td></td><td></td></tr> <tr><td></td><td>12</td><td>5917105</td><td>1999-06-29</td><td>Joao</td><td></td><td></td><td></td></tr> <tr><td></td><td>13</td><td>5924486</td><td>1999-07-20</td><td>Ehlers et al.</td><td></td><td></td><td></td></tr> <tr><td></td><td>14</td><td>6005490</td><td>1999-12-21</td><td>Higashihara</td><td></td><td></td><td></td></tr> <tr><td></td><td>15</td><td>6081750</td><td>2000-06-27</td><td>Hoffberg et al.</td><td></td><td></td><td></td></tr> <tr><td></td><td>16</td><td>6104334</td><td>2000-08-15</td><td>Allport</td><td></td><td></td><td></td></tr> <tr><td></td><td>17</td><td>6192282</td><td>2001-02-20</td><td>Smith et al.</td><td></td><td></td><td></td></tr> <tr><td></td><td>18</td><td>6195589</td><td>2001-02-27</td><td>Ketcham</td><td></td><td></td><td></td></tr> <tr><td></td><td>19</td><td>6216956</td><td>2001-04-17</td><td>Ehlers et al.</td><td></td><td></td><td></td></tr> </tbody> </table> | | init | Cite.No. | Patent No. | Date | Patentee | Kind | Class | Subclass | | 1 | 4918439 | 1990-04-17 | Wozniak et al. | | | | | 2 | 4965557 | 1990-10-23 | Schepers et al. | | | | | 3 | 5109222 | 1992-04-28 | Welty | | | | | 4 | 5247580 | 1993-09-21 | Kimura et al. | | | | | 5 | 5544036 | 1996-08-06 | Brown Jr. et al. | | | | | 6 | 5545857 | 1996-08-13 | Lee et al. | | | | | 7 | 5579496 | 1996-11-26 | Van Steenbrugge | | | | | 8 | 5621662 | 1997-04-15 | Humphries et al. | | | | | 9 | 5778256 | 1998-07-07 | Darbee et al. | | | | | 10 | 5805530 | 1998-09-08 | Youngberg | | | | | 11 | 5818428 | 1998-10-06 | Eisenbrandt et al. | | | | | 12 | 5917105 | 1999-06-29 | Joao | | | | | 13 | 5924486 | 1999-07-20 | Ehlers et al. | | | | | 14 | 6005490 | 1999-12-21 | Higashihara | | | | | 15 | 6081750 | 2000-06-27 | Hoffberg et al. | | | | | 16 | 6104334 | 2000-08-15 | Allport | | | | | 17 | 6192282 | 2001-02-20 | Smith et al. | | | | | 18 | 6195589 | 2001-02-27 | Ketcham | | | | | 19 | 6216956 | 2001-04-17 | Ehlers et al. | | | |
| init | Cite.No. | Patent No. | Date | Patentee | Kind | Class | Subclass | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 4918439 | 1990-04-17 | Wozniak et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2 | 4965557 | 1990-10-23 | Schepers et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 3 | 5109222 | 1992-04-28 | Welty | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 4 | 5247580 | 1993-09-21 | Kimura et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 5 | 5544036 | 1996-08-06 | Brown Jr. et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 6 | 5545857 | 1996-08-13 | Lee et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 7 | 5579496 | 1996-11-26 | Van Steenbrugge | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 8 | 5621662 | 1997-04-15 | Humphries et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 9 | 5778256 | 1998-07-07 | Darbee et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 10 | 5805530 | 1998-09-08 | Youngberg | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 11 | 5818428 | 1998-10-06 | Eisenbrandt et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 12 | 5917105 | 1999-06-29 | Joao | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 13 | 5924486 | 1999-07-20 | Ehlers et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 14 | 6005490 | 1999-12-21 | Higashihara | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 15 | 6081750 | 2000-06-27 | Hoffberg et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 16 | 6104334 | 2000-08-15 | Allport | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 17 | 6192282 | 2001-02-20 | Smith et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 18 | 6195589 | 2001-02-27 | Ketcham | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 19 | 6216956 | 2001-04-17 | Ehlers et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | | | | |
|--|----|---------|------------|-----------------|--|--|--|
| | 20 | 6264559 | 2001-07-24 | Lawrence et al. | | | |
| | 21 | 6394359 | 2002-05-28 | Morgan | | | |
| | 22 | 6398727 | 2002-06-04 | Bui et al. | | | |
| | 23 | 6934862 | 2005-08-23 | Sharood et al. | | | |

US Published Applications

Note: Applicant is not required to submit a paper copy of cited US Published Applications

| init | Cite.No. | Pub. No. | Date | Applicant | Kind | Class | Subclass |
|------|----------|-------------|------------|----------------|------|-------|----------|
| | 1 | 20030034897 | 2003-02-20 | Shamoon et al. | | | |
| | 2 | 20030034898 | 2003-02-20 | Shamoon et al. | | | |
| | 3 | 20020149705 | 2002-10-17 | Allen et al. | | | |


Signature

| | |
|---------------|------|
| Examiner Name | Date |
| | |

TRANSMITTAL

Electronic Version v1.1

Stylesheet Version v1.1.0


| | | | | | | | | |
|---|--|----------------|---------------|-------------|----------------|--|-----------------------|----------|
| Title of Invention | UBIQUITOUS CONNECTIVITY AND CONTROL SYSTEM FOR REMOTE LOCATIONS | | | | | | | |
| <div style="display: flex; justify-content: space-between; align-items: flex-start; padding: 5px;"><div>Application Number : 11/163372</div><div></div></div> <div style="display: flex; justify-content: space-between; align-items: flex-start; padding: 5px;"><div>Date : 2005-10-17</div></div> <div style="display: flex; justify-content: space-between; align-items: flex-start; padding: 5px;"><div>First Named Applicant:</div><div>SHAMOON Charles G.</div></div> <div style="display: flex; justify-content: space-between; align-items: flex-start; padding: 5px;"><div>Confirmation Number:</div><div>4371</div></div> <div style="display: flex; justify-content: space-between; align-items: flex-start; padding: 5px;"><div>Attorney Docket Number:</div><div>7192-06-05</div></div> | | | | | | | | |
| <p>I hereby certify that the use of this system is for OFFICIAL correspondence between patent applicants or their representatives and the USPTO. Fraudulent or other use besides the filing of official correspondence by authorized parties is strictly prohibited, and subject to a fine and/or imprisonment under applicable law.</p> <p>I, the undersigned, certify that I have viewed a display of document(s) being electronically submitted to the United States Patent and Trademark Office, using either the USPTO provided style sheet or software, and that this is the document(s) I intend for initiation or further prosecution of a patent application noted in the submission. This document(s) will become part of the official electronic record at the USPTO.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 20px;"><tr><td style="width: 45%; text-align: center;">Submitted By:</td><td style="width: 25%; text-align: center;">Elec. Sign.</td><td style="width: 30%; text-align: center;">Sign. Capacity</td></tr><tr><td>Michael C. Phillips Registered Number: 42,072</td><td style="text-align: center;">/Michael C. Phillips/</td><td style="text-align: center;">Attorney</td></tr></table> | | | Submitted By: | Elec. Sign. | Sign. Capacity | Michael C. Phillips Registered Number: 42,072 | /Michael C. Phillips/ | Attorney |
| Submitted By: | Elec. Sign. | Sign. Capacity | | | | | | |
| Michael C. Phillips Registered Number: 42,072 | /Michael C. Phillips/ | Attorney | | | | | | |

| Documents being submitted: | Files |
|----------------------------|---|
| us-ids | 7192IDS2-usidst.xml us-ids.dtd us-ids.xsl |
| Comments | |

ACKNOWLEDGEMENT RECEIPT

Electronic Version 1.1

Stylesheet Version v1.1.1

| Title of Invention | UBIQUITOUS CONNECTIVITY AND CONTROL SYSTEM FOR REMOTE LOCATIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------------------|--|---|--------------------------|-------------------|-----------|--------------|---|--------|---------------------|-------------|---|--------|------------|------|------------|--------|------------|-------|------------|--------------|-------------------|------|------------|--------------|------------------|-------|------------|--------------|---------------------|-------|------------|------------------|--|-------|--|
| Submission Type : | Information Disclosure Statement | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Application Number: | 11/163372 |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EFS ID: | 94771 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Server Response: | <table border="1"><thead><tr><th>Confirmation Code</th><th>Message</th></tr></thead><tbody><tr><td>ISVR1</td><td>Submission was successfully submitted - Even if Informational or Warning Messages appear below, please do not resubmit this application</td></tr><tr><td>ICON1</td><td>4371</td></tr><tr><td>USPTOEFSNot</td><td>For assistance with e-filing a patent application, contact the Patent Electronic Business Center: Toll-Free Number:1(866) 217-9197 Website: http://www.uspto.gov/ebc/</td></tr></tbody></table> | | | Confirmation Code | Message | ISVR1 | Submission was successfully submitted - Even if Informational or Warning Messages appear below, please do not resubmit this application | ICON1 | 4371 | USPTOEFSNot | For assistance with e-filing a patent application, contact the Patent Electronic Business Center: Toll-Free Number:1(866) 217-9197 Website: http://www.uspto.gov/ebc/ | | | | | | | | | | | | | | | | | | | | | | | | |
| Confirmation Code | Message | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ISVR1 | Submission was successfully submitted - Even if Informational or Warning Messages appear below, please do not resubmit this application | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ICON1 | 4371 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| USPTOEFSNot | For assistance with e-filing a patent application, contact the Patent Electronic Business Center: Toll-Free Number:1(866) 217-9197 Website: http://www.uspto.gov/ebc/ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| First Named Applicant: | Charles SHAMOON | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Attorney Docket Number: | 7192-06-05 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Timestamp: | 2005-10-17 12:00:17 EDT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| From: | us | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| File Listing: | <table border="1"><thead><tr><th>Doc. Name</th><th>File Name</th><th>Size (Bytes)</th><th>Date Produced (yyyymmdd)</th></tr></thead><tbody><tr><td>us-ids</td><td>7192IDS2-usidst.xml</td><td>4799</td><td>2005-10-17</td></tr><tr><td>us-ids</td><td>us-ids.dtd</td><td>7763</td><td>2005-10-17</td></tr><tr><td>us-ids</td><td>us-ids.xml</td><td>12026</td><td>2005-10-17</td></tr><tr><td>package-data</td><td>7192IDS2-pkda.xml</td><td>1778</td><td>2005-10-17</td></tr><tr><td>package-data</td><td>package-data.dtd</td><td>27025</td><td>2005-10-17</td></tr><tr><td>package-data</td><td>us-package-data.xml</td><td>19263</td><td>2005-10-17</td></tr><tr><td colspan="2">Total files size</td><td>72654</td><td></td></tr></tbody></table> | | | Doc. Name | File Name | Size (Bytes) | Date Produced (yyyymmdd) | us-ids | 7192IDS2-usidst.xml | 4799 | 2005-10-17 | us-ids | us-ids.dtd | 7763 | 2005-10-17 | us-ids | us-ids.xml | 12026 | 2005-10-17 | package-data | 7192IDS2-pkda.xml | 1778 | 2005-10-17 | package-data | package-data.dtd | 27025 | 2005-10-17 | package-data | us-package-data.xml | 19263 | 2005-10-17 | Total files size | | 72654 | |
| Doc. Name | File Name | Size (Bytes) | Date Produced (yyyymmdd) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| us-ids | 7192IDS2-usidst.xml | 4799 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| us-ids | us-ids.dtd | 7763 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| us-ids | us-ids.xml | 12026 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| package-data | 7192IDS2-pkda.xml | 1778 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| package-data | package-data.dtd | 27025 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| package-data | us-package-data.xml | 19263 | 2005-10-17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total files size | | 72654 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Message Digest: | b80d2406da2ec9946023bde12d4b549136fc6f85 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Digital Certificate Holder Name: | cn=Michael Coleman Phillips,ou=Registered Attorneys,ou=Patent and Trademark Office,ou=Department of Commerce,o=U.S. Government,c=US | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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.

Application or Docket Number

Substitute for Form PTO-875

11/163372

| (Column 1) | (Column 2) |
|------------|------------|
| 1 | 2 |
| 3 | 4 |
| 5 | 6 |
| 7 | 8 |
| 9 | 10 |
| 11 | 12 |
| 13 | 14 |
| 15 | 16 |
| 17 | 18 |
| 19 | 20 |
| 21 | 22 |
| 23 | 24 |
| 25 | 26 |
| 27 | 28 |
| 29 | 30 |
| 31 | 32 |
| 33 | 34 |
| 35 | 36 |
| 37 | 38 |
| 39 | 40 |
| 41 | 42 |
| 43 | 44 |
| 45 | 46 |
| 47 | 48 |
| 49 | 50 |
| 51 | 52 |
| 53 | 54 |
| 55 | 56 |
| 57 | 58 |
| 59 | 60 |
| 61 | 62 |
| 63 | 64 |
| 65 | 66 |
| 67 | 68 |
| 69 | 70 |
| 71 | 72 |
| 73 | 74 |
| 75 | 76 |
| 77 | 78 |
| 79 | 80 |
| 81 | 82 |
| 83 | 84 |
| 85 | 86 |
| 87 | 88 |
| 89 | 90 |
| 91 | 92 |
| 93 | 94 |
| 95 | 96 |
| 97 | 98 |
| 99 | 100 |

SMALL ENTITY

OR

OTHER THAN
SMALL ENTITY

| FOR | NUMBER FILED | NUMBER EXTRA |
|---|---|--------------|
| BASIC FEE (37 CFR 1.16(a), (b), or (c)) | | |
| SEARCH FEE (37 CFR 1.16(k), (l), or (m)) | | |
| EXAMINATION FEE (37 CFR 1.16(o), (p), or (q)) | | |
| TOTAL CLAIMS (37 CFR 1.16(f)) | 20 minus 20 = | * |
| INDEPENDENT CLAIMS (37 CFR 1.16(h)) | 2 minus 3 = | * |
| APPLICATION SIZE FEE (37 CFR 1.16(s)) | If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s). | |
| MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(g)) | | |

| RATE (\$) | FEE (\$) |
|-----------|----------|
| | |
| | |
| X | = |
| X | = |
| | |
| | |
| TOTAL | |

| RATE (\$) | | FEE (\$) |
|-----------|---|----------|
| | | |
| | | |
| | | |
| X | = | |
| X | = | |
| | | |
| | | |
| TOTAL | | |

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

| (Column 1) | (Column 2) | (Column 3) |
|------------|------------|------------|
| 1 | 2 | 3 |
| 4 | 5 | 6 |
| 7 | 8 | 9 |
| 10 | 11 | 12 |
| 13 | 14 | 15 |
| 16 | 17 | 18 |
| 19 | 20 | 21 |
| 22 | 23 | 24 |
| 25 | 26 | 27 |
| 28 | 29 | 30 |
| 31 | 32 | 33 |
| 34 | 35 | 36 |
| 37 | 38 | 39 |
| 40 | 41 | 42 |
| 43 | 44 | 45 |
| 46 | 47 | 48 |
| 49 | 50 | 51 |
| 52 | 53 | 54 |
| 55 | 56 | 57 |
| 58 | 59 | 60 |
| 61 | 62 | 63 |
| 64 | 65 | 66 |
| 67 | 68 | 69 |
| 70 | 71 | 72 |
| 73 | 74 | 75 |
| 76 | 77 | 78 |
| 79 | 80 | 81 |
| 82 | 83 | 84 |
| 85 | 86 | 87 |
| 88 | 89 | 90 |
| 91 | 92 | 93 |
| 94 | 95 | 96 |
| 97 | 98 | 99 |
| 100 | 101 | 102 |
| 103 | 104 | 105 |
| 106 | 107 | 108 |
| 109 | 110 | 111 |
| 112 | 113 | 114 |
| 115 | 116 | 117 |
| 118 | 119 | 120 |
| 121 | 122 | 123 |
| 124 | 125 | 126 |
| 127 | 128 | 129 |
| 130 | 131 | 132 |
| 133 | 134 | 135 |
| 136 | 137 | 138 |
| 139 | 140 | 141 |
| 142 | 143 | 144 |
| 145 | 146 | 147 |
| 148 | 149 | 150 |
| 151 | 152 | 153 |
| 154 | 155 | 156 |
| 157 | 158 | 159 |
| 160 | 161 | 162 |
| 163 | 164 | 165 |
| 166 | 167 | 168 |
| 169 | 170 | 171 |
| 172 | 173 | 174 |
| 175 | 176 | 177 |
| 178 | 179 | 180 |
| 181 | 182 | 183 |
| 184 | 185 | 186 |
| 187 | 188 | 189 |
| 190 | 191 | 192 |
| 193 | 194 | 195 |
| 196 | 197 | 198 |
| 199 | 200 | 201 |
| 202 | 203 | 204 |
| 205 | 206 | 207 |
| 208 | 209 | 210 |
| 211 | 212 | 213 |
| 214 | 215 | 216 |
| 217 | 218 | 219 |
| 220 | 221 | 222 |
| 223 | 224 | 225 |
| 226 | 227 | 228 |
| 229 | 230 | 231 |
| 232 | 233 | 234 |
| 235 | 236 | 237 |
| 238 | 239 | 240 |
| 241 | 242 | 243 |
| 244 | 245 | 246 |
| 247 | 248 | 249 |
| 250 | 251 | 252 |
| 253 | 254 | 255 |
| 256 | 257 | 258 |
| 259 | 260 | 261 |
| 262 | 263 | 264 |
| 265 | 266 | 267 |
| 268 | 269 | 270 |
| 271 | 272 | 273 |
| 274 | 275 | 276 |
| 277 | 278 | 279 |
| 280 | 281 | 282 |
| 283 | 284 | 285 |
| 286 | 287 | 288 |
| 289 | 290 | 291 |
| 292 | 293 | 294 |
| 295 | 296 | 297 |
| 298 | 299 | 300 |
| 301 | 302 | 303 |
| 304 | 305 | 306 |
| 307 | 308 | 309 |
| 310 | 311 | 312 |
| 313 | 314 | 315 |
| 316 | 317 | 318 |
| 319 | 320 | 321 |
| 322 | 323 | 324 |
| 325 | 326 | 327 |
| 328 | 329 | 330 |
| 331 | 332 | 333 |
| 334 | 335 | 336 |
| 337 | 338 | 339 |
| 340 | 341 | 342 |
| 343 | 344 | 345 |
| 346 | 347 | 348 |
| 349 | 350 | 351 |
| 352 | 353 | 354 |
| 355 | 356 | 357 |
| 358 | 359 | 360 |
| 361 | 362 | 363 |
| 364 | 365 | 366 |
| 3 | | |

SMALL ENTITY

OR

OTHER THAN
SMALL ENTITY

| | | | | | |
|---|---------------------------------|---|-------|---|------------------|
| AMENDMENT A | | CLAIMS REMAINING AFTER AMENDMENT | | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA |
| | Total (37 CFR 1.16(f)) | * | Minus | ** | = |
| | Independent (37 CFR 1.16(h)) | * | Minus | *** | = |
| Application Size Fee (37 CFR 1.16(s)) | | | | | |
| FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(f)) | | | | | |

| SMALL ENITTY | |
|-----------------|---------------------|
| RATE (\$) | ADDITIONAL FEE (\$) |
| X | = |
| X | = |
| | |
| | |
| TOTAL ADD'L FEE | |

| SMALL ENTITY | |
|-----------------|---------------------|
| RATE (\$) | ADDITIONAL FEE (\$) |
| X = | |
| X = | |
| | |
| | |
| TOTAL ADD'L FEE | |

| AMENDMENT B | (Column 1) | (Column 2) | (Column 3) |
|---|---|---|------------------|
| | CLAIMS REMAINING AFTER AMENDMENT | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA |
| Total (37 CFR 1.16(i)) | * | Minus | ** |
| Independent (37 CFR 1.16(j)) | * | Minus | *** |
| Application Size Fee (37 CFR 1.18(s)) | | | |
| FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j)) | | | |

| RATE (\$) | | ADDITIONAL FEE (\$) |
|-----------------|---|---------------------|
| X | = | |
| X | = | |
| | | |
| TOTAL ADD'L FEE | | |

| RATE (\$) | | ADDITIONAL FEE (\$) |
|-----------------|---|---------------------|
| X | = | |
| X | = | |
| | | |
| TOTAL ADD'L 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.

This collection of information is required by 37 CFR 1.16. 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, 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.

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



PTO/SB/21 (09-04)
Approved for use through 07/31/2006. 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.

| | | | |
|---|----------------------|-----------------------------|------------|
| TRANSMITTAL FORM (to be used for all correspondence after initial filing) | Application Number | 11/163,372 | |
| | Filing Date | 10/17/2005 | |
| | First Named Inventor | SHAMOON, Charles G., et al. | |
| | Art Unit | | |
| | Examiner Name | | |
| Total Number of Pages in This Submission | 6 | Attorney Docket Number | 7192-06-05 |

| ENCLOSURES (Check all that apply) | | |
|--|---|---|
| <input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input checked="" type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD | <input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): 1) Verified Statement of Age/copy of applicant's KY driver license 2) Return Receipt Postcard |
| Remarks Application was filed electronically via ePave on 10/17/2005. | | |

| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT | | | |
|--|---------------------|----------|--------|
| Firm Name | MILLS LAW FIRM PLLC | | |
| Signature | | | |
| Printed name | Peter D. Sachtjen | | |
| Date | 10/17/2005 | Reg. No. | 24,619 |

| CERTIFICATE OF TRANSMISSION/MAILING | | | |
|---|-----------------|------|------------|
| I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below: | | | |
| Signature | | | |
| Typed or printed name | Stefanie Hansen | Date | 10/17/2005 |

This collection of information is required by 37 CFR 1.5. 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 2 hours 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.

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



DFW

THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re: Application of
Charles G. SHAMOON, et al.

Serial No. 11/163,372

Filed: 10/17/2005

Examiner

Art Unit

For: UBIQUITOUS CONNECTIVITY
AND CONTROL SYSTEM FOR
REMOTE LOCATIONS

Attorney's Docket No. 7192-06-05

PETITION TO MAKE SPECIAL UNDER 37 CFR § 1.102(c)

Assistant Commissioner for Patents

Washington, DC 20231

Sir:

Applicant, through its undersigned representative, hereby petitions to make the above-captioned patent application special pursuant to 37 CFR § 1.102(c). This petition is made on the basis of applicant's age. Enclosed is a Verified Statement of Age indicating that Applicant is 70 years old.

Hence, grant of this petition, accordance of special status to this application, and examination out of turn are believed to be in order and are respectfully

requested. Should there be any remaining questions, the attorney to whom they would expedite such actions, the petition's examiner is invited to contact the undersigned at the telephone number appearing below. No fee is believed to be due with this petition. However, the Director is authorized to charge any fees associated with this or any other communication, or credit any overpayment, to Deposit Account No. 500498.

Dated: October 17, 2005

Respectfully submitted,

MILLS LAW FIRM PLLC

A handwritten signature in cursive script, reading "Peter D. Sachtjen".

Peter D. Sachtjen, Reg. No. 24,619

MILLS LAW FIRM PLLC
PO Box 1245
Cary, NC 27512-1245
Telephone: (919) 462-3036
Facsimile: (919) 462-3041
Attorney Direct Line: (252) 413-0475



THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re: Application of
Charles G. SHAMOON, et al.

Serial No. 11/163,372

Filed: 10/17/2005

Examiner

Art Unit

**For: UBIQUITOUS CONNECTIVITY
AND CONTROL SYSTEM FOR
REMOTE LOCATIONS**

Attorney's Docket No. 7192-06-05

VERIFIED STATEMENT OF AGE

Assistant Commissioner for Patents
Washington, DC 20231

Sir:

The undersigned hereby states that he was born on August 16, 1935 and is now 70 years old.

The undersigned, Franklin Eugene NEAL, declares that all statements made herein of his own knowledge are true, that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful, false statements and the like so made are punishable by

fine or imprisonment, or both, under § 1001 of Title 18 of United States Code that such willful false statements may jeopardize the validity of the Application or any patent issuing therefrom.


Respectfully submitted,

Franklin Eugene Neal

Franklin Eugene NEAL, Applicant

Date 9/15/2005

Attachment: Photocopy of Drivers License



Kentucky

Commonwealth of Kentucky

DRIVER'S LICENSE

DL

License No. [REDACTED]

Exp. Date: 09-16-2009

Birthdate: 08-16-1935

www.kentucky.gov

NEAL FRANKLINE

9220 OAK HILL DR

ASHLAND KY 40001

BOYD COUNTY

Franklin E. Neal

Henry K. [illegible]

BOYD Circuit Clerk

| | | | | | | |
|-----|------|------|-------|-------------|--------|------------------------|
| M | 6-00 | BLU | D | 08-09-2005 | REN | Restra |
| Sex | Hgt | Eyes | Class | Endorsement | Issued | Res. Type, CDL, Restr. |



DFW

Approved for use through 07/31/2006. 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.

| | | | |
|---|----------------------|-----------------------------|------------|
| TRANSMITTAL FORM (to be used for all correspondence after initial filing) | Application Number | 11/163,372 | |
| | Filing Date | 10/17/2005 | |
| | First Named Inventor | SHAMOON, Charles G., et al. | |
| | Art Unit | | |
| | Examiner Name | not assigned | |
| Total Number of Pages in This Submission | 58 | Attorney Docket Number | 7192-06-05 |

| ENCLOSURES (Check all that apply) | | |
|---|--|--|
| <input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD | <input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Return Receipt Postcard 5 Non-Patent Literature Documents |
| Remarks Application was filed electronically via ePave on 10/17/2005. | | |

| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT | | | |
|--|---------------------|----------|--------|
| Firm Name | Mills Law Firm PLLC | | |
| Signature | | | |
| Printed name | Peter D. Sachtjen | | |
| Date | 10/17/2005 | Reg. No. | 24,619 |

| CERTIFICATE OF TRANSMISSION/MAILING | | | |
|---|-----------------|------|------------|
| I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below: | | | |
| Signature | | | |
| Typed or printed name | Stefanie Hansen | Date | 10/17/2005 |

This collection of information is required by 37 CFR 1.5. 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 2 hours 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.

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



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Shamoon, Charles G., et al.

Title:

UBIQUITOUS CONNECTIVITY AND
CONTROL SYSTEM FOR REMOTE
LOCATIONS

Serial No.:

11/163,372

Confirmation No.:

47371

Filing Date:

10/17/2005

Group Art Unit:

not assigned

Examiner:

not assigned

Docket No.:

7192-06-05

Last Action:

Application Filed

Customer No.

23983

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

This information disclosure statement is being submitted via U.S. mail within three months of the filing date of the application and before the mailing of a first Office Action in the above-referenced application under the provisions of 37 C.F.R. § 1.97 and § 1.98.

The Examiner is invited to contact the undersigned if there are any questions.

Dated: October 17, 2005

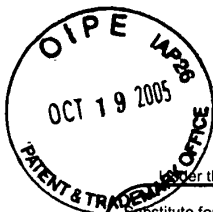
Respectfully submitted,

MILLS LAW FIRM PLLC



Peter D. Sachtjen
Reg. No. 24,619

MILLS LAW FIRM PLLC
P.O. Box 1245
Cary, NC 27512-1245
Phone: 919-462-3036
Fax: 919-462-3041



PTO/SB/08B (08-03)
Approved for use through 07/31/2006. 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 contains a valid OMB control number.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

1

of

1

Complete if Known

| | |
|------------------------|---------------------|
| Application Number | 11/163,372 |
| Filing Date | 10/17/2005 |
| First Named Inventor | SHAMOON, Charles G. |
| Art Unit | not assigned |
| Examiner Name | not assigned |
| Attorney Docket Number | 7192-06-05 |

NON PATENT LITERATURE DOCUMENTS

| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
|--------------------|-----------------------|---|----------------|
| | A | Sony Ericsson Mobile Communications AB, GT47/GT48 Control Terminal "Intelligent and Versatile Control Terminal", 2 pages, LZT 123 7602 R1D, 2003 | |
| | B | Sony Ericsson Mobile Communications International, GT47/GT48 Technical Description, 43 pages, LZT 123 7607 R1B, First Edition, June 2003 | |
| | C | Cellgard - Use your GSM cellphone as a remote control for almost anything, "Cellgard", http://www.cellgard.com/index.html , 2 pages, (10/17/2005) | |
| | D | Cellgard - Cellgard Technical Specifications, "Cellgard", http://www.cellgard.com/specs/index.html , 3 pages, (10/17/2005) | |
| | E | Cellgard - Frequently Asked Questions, "Cellgard", http://www.cellgard.com/faq/index.html , 4 pages, (10/17/2005) | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| | | | |
|--------------------|--|-----------------|--|
| Examiner Signature | | Date Considered | |
|--------------------|--|-----------------|--|

*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.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. 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 2 hours 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, 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.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

To: USPTO FAX @ 571-273-8300

From: Stefanie Hansen

Pg 1/ 2 11-02-05 02:47 PM CST

RECEIVED
CENTRAL FAX CENTER
NOV 02 2005

MILLS LAW FIRM PLLC
PATENT LAWYERS

WAKE FOREST OFFICE
POST OFFICE BOX 1088
WAKE FOREST, NC 27588
TEL 919-554-4200
FAX 919-554-4243
jmills@millspatentlaw.com

150 IOWA LANE, SUITE 104
POST OFFICE BOX 1245
CARY, NC 27512-1245
TEL 919-462-3036
FAX 919-462-3041
mphillips@millspatentlaw.com

EASTERN OFFICE
3302 WALDEN DRIVE
GREENVILLE, NC 27858
TEL 252-413-0475
FAX 252-413-0445
psachtjen@millspatentlaw.com

Date: November 2, 2005
To: USPTO 571-273-8300 **Attn: PG PUB**
From: Peter D. Sachtjen
Re: Serial No.: 11/163,372 SHAMOON

THIS MESSAGE IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL, AND EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT, OR THE EMPLOYEE OR AGENT RESPONSIBLE FOR DELIVERING THE MESSAGE TO THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION, OR COPYING OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONE AND RETURN THE ORIGINAL MESSAGE TO US. THANK YOU.

Please forward the attached Rescission of Previous Nonpublication Request and Notice of Foreign Filing to the **Pre-Grant Publication** division. There is 1 pages in the attached document (not including this cover page).

PATENTS • TRADEMARKS • COPYRIGHTS • TECHNOLOGY TRANSFERS
REGISTERED PATENT ATTORNEYS • UNITED STATES AND INTERNATIONAL PRACTICE
www.millspatentlaw.com

NOV 02 2005

PTO/SB/38 (07-05)

Approved for use through 07/31/2008. 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.

| | | |
|---|----------------------|---|
| RESCISSION OF PREVIOUS NONPUBLICATION REQUEST (35 U.S.C. 122(b)(2)(B)(iii)) AND, IF APPLICABLE, NOTICE OF FOREIGN FILING (35 U.S.C. 122(b)(2)(B)(iii)) | Application Number | 11/163,372 |
| | Filing Date | 10/17/2005 |
| | First Named Inventor | Charles G. SHAMOON et al. |
| | Title | UBIQUITOUS CONNECTIVITY AND CONTROL SYSTEM FOR REMOTE LOCATIONS |
| | Atty Docket Number | 7192-06-05 |
| | Art Unit | not yet assigned |
| | Examiner | not yet assigned |

Send completed form to:
 Mail Stop PG Pub
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, VA 22313-1450
 FAX: (571) 273-8300

A request that the above-identified application not be published under 35 U.S.C. 122(b) (nonpublication request) was included with the above-identified application on filing pursuant to 35 U.S.C. 122(b)(2)(B)(i).

I hereby rescind the previous nonpublication request.

If a notice of foreign or international filing is or will be required by 35 U.S.C. 122(b)(2)(B)(iii) and 37 CFR 1.213(c), I hereby provide such notice. This notice is being provided no later than forty-five (45) days after the date of such foreign or international filing.

If a notice of subsequent foreign or international filing required by 35 U.S.C. 122(b)(2)(B)(iii) and 37 CFR 1.213(c) was not filed within forty-five (45) days after the date of filing of the foreign or international application, the application is ABANDONED, and a petition to revive under 37 CFR 1.137(b) is required. See 37 CFR 1.137(f).

Peter D. Sachtlein 11/02/2005
 Signature Date

Peter D. Sachtlein 24,619
 Typed or printed name Registration Number, if applicable

919-462-3036
 Telephone Number

This request must be signed in compliance with 37 CFR 1.33(b).

If information or assistance is needed in completing this form, please contact the Pre-Grant Publication Division at (703)605-4283 or by e-mail at PGPub@USPTO.gov.

CERTIFICATE OF MAILING OR TRANSMISSION

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop PG Pub, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, or facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below.

Signature Peter D. Sachtlein
 Name (Print/Type) Peter D. Sachtlein Date 11/02/2005

This collection of information is required by 37 CFR 1.213(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 6 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: Mail Stop PG Pub, 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.



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
P.O. BOX 1450
ALEXANDRIA, VA 22313-1450
www.uspto.gov

MILLS LAW FIRM
P.O. BOX 1245
CARY, NC 27512-1245

COPY MAILED

DEC 14 2005

OFFICE OF PETITIONS

| | | |
|--------------------------------|---|-----------------------|
| In re Application of | : | |
| Charles G. Shamoon et al | : | DECISION ON PETITION |
| Application No. 11/163,372 | : | TO MAKE SPECIAL UNDER |
| Filed: October 17, 2005 | : | 37 CFR 1.102(c)(1) |
| Attorney Docket No. 7192-06-05 | : | |

This is a decision on the petition under 37 CFR 1.102(c)(1), filed October 19, 2005, to make the above-identified application special based on applicant's age as set forth in M.P.E.P. § 708.02, Section IV.

The petition is **GRANTED**.


A grantable petition to make an application special under 37 CFR 1.102(c)(1) and MPEP § 708.02, Section IV: Applicant's Age must be accompanied by evidence showing that at least one of the applicants is 65 years of age, or more, such as a birth certificate or a statement by applicant. No fee is required

The instant petition includes a copy of a driver's license and a verified statement by Franklin Eugene Neal attesting that he is over 65 years of age. Accordingly, the above-identified application has been accorded "special" status.

Telephone inquiries concerning this decision should be directed to Wan Laymon at 571-272-3220.

All other inquiries concerning either the examination or status of the application should be directed to the Technology Center.

This matter is being referred to Technology Center AU 2681 for action on the merits commensurate with this decision.


Amelia Au
Petitions Examiner
Office of Petitions



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/RECEIPT DATE | FIRST NAMED APPLICANT | ATTY. DOCKET NO. |
|------------------------------|---------------------|-----------------------|------------------|
| 11/163,372 | 10/17/2005 | Charles G. SHAMOON | 7192-06-05 |
| CONFIRMATION NO. 4371 | | | |

23983
 MILLS LAW FIRM, PLLC
 P.O BOX 1245
 Cary, NC 27512-1245

Date Mailed: 12/29/2005

Communication Regarding Rescission Of Nonpublication Request and/or Notice of Foreign Filing

Applicant's rescission of the previously-filed nonpublication request and/or notice of foreign filing is acknowledged. The paper has been reflected in the Patent and Trademark Office's (USPTO's) computer records so that the earliest possible projected publication date can be assigned.

The projected publication date is 05/18/2006.

If applicant rescinded the nonpublication request before or on the date of "foreign filing,"¹ then no notice of foreign filing is required.

If applicant foreign filed the application after filing the above application and before filing the rescission, and the rescission did not also include a notice of foreign filing, then a notice of foreign filing (not merely a rescission) is required to be filed within 45 days of the date of foreign filing. See 35 U.S.C. § 122(b)(2)(B)(iii), and Clarification of the United States Patent and Trademark Office's Interpretation of the Provisions of 35 U.S.C. § 122(b)(2)(B)(ii)-(iv), 1272 Off. Gaz. Pat. Office 22 (July 1, 2003).

If a notice of foreign filing is required and is not filed within 45 days of the date of foreign filing, then the application becomes abandoned pursuant to 35 U.S.C. § 122(b)(2)(B)(iii). In this situation, applicant should either file a petition to revive or notify the Office that the application is abandoned. See 37 CFR 1.137(f). Any such petition to revive will be forwarded to the Office of Petitions for a decision. Note that the filing of the petition will not operate to stay any period of reply that may be running against the application.

Questions regarding petitions to revive should be directed to the Office of Petitions at (571) 272-3282. Questions regarding publications of patent applications should be directed to the patent application publication hotline at (703) 605-4283 or by e-mail pgpub@uspto.gov.

¹ Note, for purpose of this notice, that "foreign filing" means "filing an application directed to the same invention in another country, or under a multilateral international agreement, that requires publication of applications 18 months after filing".

EAST Search History

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|----------|--|-------------------------------------|------------------|---------|------------------|
| L1 | 1 | ("20030210126").PN | US-PGPU B; USPAT | OR | OFF | 2006/02/24 13:17 |
| L2 | 1 | ("20040092282").PN. | US-PGPU B; USPAT | OR | OFF | 2006/02/24 13:33 |
| L3 | 1 | ("20050044225").PN | US-PGPU B; USPAT | OR | OFF | 2006/02/24 14:17 |
| L4 | 107 | remote\$2 near control\$4 with sms | US-PGPU B; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/02/24 14:36 |
| L5 | 25914049 | @ad<"20041118" | US-PGPU B; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/02/24 14:18 |
| L6 | 5 | remote\$2 near control\$4 near3 appliance with sms | US-PGPU B; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/02/24 14:19 |
| L7 | 5 | 5 and 6 | US-PGPU B; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/02/24 14:35 |
| L8 | 2567 | electromechanical adj switch | US-PGPU B; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/02/24 14:36 |
| L9 | 0 | 4 and 8 | US-PGPU B; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/02/24 14:36 |

EAST Search History

| | | | | | | |
|-----|--------|---|--|----|----|---------------------|
| L10 | 186657 | remote\$2 near control\$4 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:37 |
| L11 | 252 | 8 and 10 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:36 |
| L12 | 236 | 5 and 11 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:36 |
| L13 | 59 | remote\$2 near control\$4 with electromechanical adj switch | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:37 |
| L14 | 54 | 5 and 13 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:39 |
| L15 | 0 | remote\$2 near control\$4 near appliance with electromechanical adj switch\$3 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:38 |
| L16 | 0 | remote\$2 near control\$4 near4 appliance with electromechanical adj switch\$3 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:38 |
| L17 | 0 | remote\$2 near control\$4 near4 appliance same electromechanical adj switch\$3 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:38 |

EAST Search History

| | | | | | | |
|-----|-------|--|--------------------------------------|----|-----|------------------|
| L18 | 64 | remote\$2 near control\$3 with electromechanical adj switch\$3 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:48 |
| L19 | 94629 | "455"/\$.ccls. | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:39 |
| L20 | 1 | 14 and 19 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:39 |
| L21 | 43 | electromechanical adj switch\$3 near\$3 advantage | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:48 |
| L22 | 16 | electromechanical adj switch\$3 near\$2 advantage | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:48 |
| S1 | 208 | (detection adj system) ti. and (theft or thieves) | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 12:35 |
| S2 | 82 | (detection adj system and (theft or thieves)).ti. | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/23 15:05 |
| S3 | 1 | ("20030210126").PN. | US-PGPU B; USPAT | OR | OFF | 2006/02/23 16:01 |
| S4 | 5 | (close\$2 near proximity and detect\$3).ti. | US-PGPU B; USPAT | OR | ON | 2006/02/23 16:02 |



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 NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 11/163,372 | 10/17/2005 | Charles G. SHAMOON | 7192-06-05 | 4371 |

23983 7590 03/09/2006

MILLS LAW FIRM, PLLC
P.O BOX 1245
Cary, NC 27512-1245

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

NGUYEN, HUY D

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

2681

DATE MAILED: 03/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 11/163,372 | SHAMOON ET AL. | |
| | Examiner | Art Unit | |
| | Huy D. Nguyen | 2681 | |

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

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 29 December 2005.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) 12-20 is/are withdrawn from consideration.

5) ☐ Claim(s) ____ is/are allowed.

6) ☒ Claim(s) 1-11 is/are rejected.

7) ☐ Claim(s) ____ is/are objected to.

8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ 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:
 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)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

Group I. Claims 1-11, drawn to remote programming control, classified in class 455, subclass 419.

Group II. Claims 12-20, drawn to privacy and authentication, classified in class 455, subclass 411.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct if they do not overlap in scope and are not obvious variants, and if it is shown that at least one subcombination is separately usable. In the instant case, subcombination I has separate utility such as remotely controlling operation of an environmental condition in a structure; Subcombination II has separate utility such as detecting the presence of individuals with a proximate distance. See MPEP § 806.05(d).

3. These inventions are independent or distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter.

4. During a telephone conversation with Peter D. Sachtjen on 2/24/2006 a provisional election was made without traverse to prosecute the invention of group I, claims 1-11.

Affirmation of this election must be made by applicant in replying to this Office action. Claims 12-20 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3-7, 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanazawa (US 2003/0210126 A1) in view of Kim et al. (US 2004/0092282 A1).

Regarding claim 1, Kanazawa teaches a ubiquitous connectivity and communications system for controlling operation of an environmental condition in a structure, comprising: a device for controlling an environmental condition in the structure (e.g., device 1, see figure 1); a base unit (e.g., controller 2) in said structure and operatively interfaced with said device to control the operation thereof (see figure 1); at least one remote device (e.g., cellular 3); connectivity means providing an on-demand, private and direct communications interface between said base unit and said remote device enabling instant wireless connectivity therebetween (e.g., cellular phone transceiver); means for providing a indication of current status of said device to said base unit (e.g., Bluetooth network); input means at said remote device for prescribing an indication of revised status for said device (e.g., WWW browser function, see paragraph [0020]); means for transmitting said indication of revised status through said connectivity means to said base unit (e.g., cellular phone transmitter); means operatively associated with said base unit and operatively connected with said device for effecting said

revised status for said device (see paragraph [0020]). Kanazawa does not specifically teach means for transmitting said indication of current status through said connectivity means to said remote device and display means at said remote device for indicating said current status of said device. However, the preceding limitations are taught in Kim et al. (see figure 3 and paragraph [0045]). It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Kim et al. to the teaching of Kanazawa to provide convenience for users.

Regarding claim 3, Kanazawa teaches the system as recited in claim 1 wherein said base unit is a microcontroller-based processing unit having customizable application specific software (see figure 2 and paragraph [0022]).

Regarding claim 4, Kanazawa teaches the system as recited in claim 1 wherein said remote device is a cellular telephone handset with custom programmability means (see paragraph [0020]).

Regarding claims 5-6, the combination of Kanazawa and Kim et al. teaches the claimed invention except that the custom programmability means is a JAVA programming kernel. However, it would have been an obvious matter of design choice to have the custom programmability means being a JAVA programming kernel since the invention would perform equally well with the custom programmability means being a JAVA programming kernel.

Regarding claim 7, Kanazawa teaches the system as recited in claim 1 wherein said connectivity means includes a transmitting and receiving module in said base unit and a transmitting and receiving unit in said remote device operatively communicating with each other over the cellular telephone network (see figure 1 and paragraph [0020]).

Regarding claims 9-10, the combination of Kanazawa and Kim et al. teaches the claimed invention except the use of liquid crystal display. However, it would have been an obvious matter of design choice to use liquid crystal display since the invention would perform equally well with the display being the liquid crystal display.

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kanazawa (US 2003/0210126 A1) in view of Kim et al. (US 2004/0092282 A1) and in further view of Flaherty et al. (US 2004/0235446 A1).

Regarding claim 2, the combination of Kanazawa and Kim et al. teaches the claimed invention except the use of electromechanical switch. The preceding limitation is taught in Flaherty et al. (see paragraphs [0050], [0098]). It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Flaherty et al. to the teaching of Kanazawa and Kim et al. to reduce power loss and for use in electric isolation medium.

8. Claims 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanazawa (US 2003/0210126 A1) in view of Kim et al. (US 2004/0092282 A1) and in further view of Song (US Patent No. 6,393,297).

Regarding claims 8 and 11, the combination of Kanazawa and Kim et al. teaches the claimed invention except the use of SMS. However, the preceding limitation is taught in Song (see column 1, lines 19-23). It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Song to the teaching of Kanazawa and Kim et al. to conserve resources.

Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy D. Nguyen whose telephone number is 571-272-7845. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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).

HN

Huy Nguyen


JOSEPH FEILD
SUPERVISORY PATENT EXAMINER

| | | | |
|-----------------------------------|---------------------------------------|--|-------------|
| Notice of References Cited | Application/Control No. 11/163,372 | Applicant(s)/Patent Under Reexamination SHAMOON ET AL. | |
| | Examiner Huy D. Nguyen | Art Unit 2681 | Page 1 of 1 |

U.S. PATENT DOCUMENTS

| * | | Document Number Country Code-Number-Kind Code | Date MM-YYYY | Name | Classification |
|---|---|--|-----------------|-------------------|----------------|
| * | A | US-2003/0210126 | 11-2003 | Kanazawa, Ritsuko | 340/5.5 |
| * | B | US-2004/0092282 | 05-2004 | Kim et al. | 455/522 |
| * | C | US-2004/0235446 | 11-2004 | Flaherty et al. | 455/352 |
| * | D | US-6,393,297 | 05-2002 | Song, Ho Ji | 455/466 |
| | E | US- | | | |
| | F | US- | | | |
| | G | US- | | | |
| | H | US- | | | |
| | I | US- | | | |
| | J | US- | | | |
| | K | US- | | | |
| | L | US- | | | |
| | M | US- | | | |

FOREIGN PATENT DOCUMENTS

| * | | Document Number Country Code-Number-Kind Code | Date 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 | |

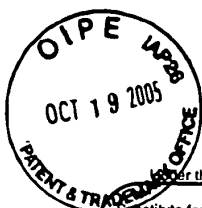
*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

| Title of Invention | UBIQUITOUS CONNECTIVITY AND CONTROL SYSTEM FOR REMOTE LOCATIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|------------|------------|-----------------|------|-------|----------|------|----------|------------|------|----------|------|-------|----------|---|---|---------|------------|--------------|--|--|--|---|---|---------|------------|---------------|--|--|--|---|---|---------|------------|---------------|--|--|--|---|---|---------|------------|------|--|--|--|---|---|---------|------------|--------------|--|--|--|---|---|---------|------------|---------------|--|--|--|---|---|---------|------------|-----------------|--|--|--|---|---|---------|------------|-------------|--|--|--|---|---|---------|------------|-------|--|--|--|---------------|------|---|--------|
| <p>Application Number : 11/163372 </p> <p>Confirmation Number: 4371</p> <p>First Named Applicant: Charles SHAMOON</p> <p>Attorney Docket Number: 7192-06-05</p> <p>Art Unit:</p> <p>Examiner:</p> <p>Search string: (6014089 or 6260765 or 6301484 or 6393297 or 6650249 or 6820049 or 6847822 or 6854660 or 6873824).pn</p> <p>US Patent Documents</p> <p>Note: Applicant is not required to submit a paper copy of cited US Patent Documents</p> <table border="1"><thead><tr><th>init</th><th>Cite.No.</th><th>Patent No.</th><th>Date</th><th>Patentee</th><th>Kind</th><th>Class</th><th>Subclass</th></tr></thead><tbody><tr><td>1</td><td>1</td><td>6014089</td><td>2000-01-11</td><td>Tracy et al.</td><td></td><td></td><td></td></tr><tr><td>2</td><td>2</td><td>6260765</td><td>2001-07-17</td><td>Natale et al.</td><td></td><td></td><td></td></tr><tr><td>3</td><td>3</td><td>6301484</td><td>2001-10-09</td><td>Rogers et al.</td><td></td><td></td><td></td></tr><tr><td>4</td><td>4</td><td>6393297</td><td>2002-05-21</td><td>Song</td><td></td><td></td><td></td></tr><tr><td>5</td><td>5</td><td>6650249</td><td>2003-11-18</td><td>Meyer et al.</td><td></td><td></td><td></td></tr><tr><td>6</td><td>6</td><td>6820049</td><td>2004-11-16</td><td>Monroe et al.</td><td></td><td></td><td></td></tr><tr><td>7</td><td>7</td><td>6847822</td><td>2005-01-25</td><td>Dennison et al.</td><td></td><td></td><td></td></tr><tr><td>8</td><td>8</td><td>6854660</td><td>2005-02-15</td><td>Yoon et al.</td><td></td><td></td><td></td></tr><tr><td>9</td><td>9</td><td>6873824</td><td>2005-03-29</td><td>Flick</td><td></td><td></td><td></td></tr></tbody></table> <p>Signature</p> <table border="1"><tr><td>Examiner Name</td><td>Date</td></tr><tr><td></td><td>3/6/06</td></tr></table> | | | | | | | | init | Cite.No. | Patent No. | Date | Patentee | Kind | Class | Subclass | 1 | 1 | 6014089 | 2000-01-11 | Tracy et al. | | | | 2 | 2 | 6260765 | 2001-07-17 | Natale et al. | | | | 3 | 3 | 6301484 | 2001-10-09 | Rogers et al. | | | | 4 | 4 | 6393297 | 2002-05-21 | Song | | | | 5 | 5 | 6650249 | 2003-11-18 | Meyer et al. | | | | 6 | 6 | 6820049 | 2004-11-16 | Monroe et al. | | | | 7 | 7 | 6847822 | 2005-01-25 | Dennison et al. | | | | 8 | 8 | 6854660 | 2005-02-15 | Yoon et al. | | | | 9 | 9 | 6873824 | 2005-03-29 | Flick | | | | Examiner Name | Date |  | 3/6/06 |
| init | Cite.No. | Patent No. | Date | Patentee | Kind | Class | Subclass | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 1 | 6014089 | 2000-01-11 | Tracy et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 2 | 6260765 | 2001-07-17 | Natale et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 3 | 6301484 | 2001-10-09 | Rogers et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 4 | 6393297 | 2002-05-21 | Song | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 5 | 6650249 | 2003-11-18 | Meyer et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 6 | 6820049 | 2004-11-16 | Monroe et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 7 | 6847822 | 2005-01-25 | Dennison et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 8 | 6854660 | 2005-02-15 | Yoon et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | 9 | 6873824 | 2005-03-29 | Flick | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Examiner Name | Date | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  | 3/6/06 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



PTO/SB/08B (08-03)
Approved for use through 07/31/2006. 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 contains a valid OMB control number.

Substitute for form 1449/PTO

| Complete if Known | |
|------------------------|---------------------|
| Application Number | 11/163,372 |
| Filing Date | 10/17/2005 |
| First Named Inventor | SHAMOON, Charles G. |
| Art Unit | not assigned |
| Examiner Name | not assigned |
| Attorney Docket Number | 7192-06-05 |

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1 of 1

| NON PATENT LITERATURE DOCUMENTS | | | |
|---------------------------------|-----------------------|---|----------------|
| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| W | A | Sony Ericsson Mobile Communications AB, GT47/GT48 Control Terminal "Intelligent and Versatile Control Terminal", 2 pages, LZT 123 7602 R1D, 2003 | |
| W | B | Sony Ericsson Mobile Communications International, GT47/GT48 Technical Description, 43 pages, LZT 123 7607 R1B, First Edition, June 2003 | |
| W | C | Cellgard - Use your GSM cellphone as a remote control for almost anything, "Cellgard", http://www.cellgard.com/index.html , 2 pages, (10/17/2005) | |
| W | D | Cellgard - Cellgard Technical Specifications, "Cellgard", http://www.cellgard.com/specs/index.html , 3 pages, (10/17/2005) | |
| W | E | Cellgard - Frequently Asked Questions, "Cellgard", http://www.cellgard.com/faq/index.html , 4 pages, (10/17/2005) | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| | | | |
|--------------------|--|-----------------|--------|
| Examiner Signature | | Date Considered | 3/6/06 |
|--------------------|--|-----------------|--------|

*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.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.


This collection of information is required by 37 CFR 1.98. 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 2 hours 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, 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.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

| Title of Invention | UBIQUITOUS CONNECTIVITY AND CONTROL SYSTEM FOR REMOTE LOCATIONS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|------------|------------|--------------------|------|----------|----------|-------|----------|---|---|---------|------------|----------------|--|--|--|---|---|---------|------------|-----------------|--|--|--|---|---|---------|------------|-------|--|--|--|---|---|---------|------------|---------------|--|--|--|---|---|---------|------------|------------------|--|--|--|---|---|---------|------------|------------|--|--|--|---|---|---------|------------|-----------------|--|--|--|---|---|---------|------------|------------------|--|--|--|---|---|---------|------------|---------------|--|--|--|---|----|---------|------------|-----------|--|--|--|---|----|---------|------------|--------------------|--|--|--|---|----|---------|------------|------|--|--|--|---|----|---------|------------|---------------|--|--|--|---|----|---------|------------|-------------|--|--|--|---|----|---------|------------|-----------------|--|--|--|---|----|---------|------------|---------|--|--|--|---|----|---------|------------|--------------|--|--|--|---|----|---------|------------|---------|--|--|--|---|----|---------|------------|---------------|--|--|--|
| <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 45%;"> <p>Application Number : 11/163372</p> <p>Confirmation Number: 4371</p> <p>First Named Applicant: Charles SHAMOON</p> <p>Attorney Docket Number: 7192-06-05</p> <p>Art Unit:</p> <p>Examiner:</p> <p>Search string: (4918439 or 4965557 or 5109222 or 5247580 or 5544036 or 5545857 or 5579496 or 5621662 or 5778256 or 5805530 or 5818428 or 5917105 or 5924486 or 6005490 or 6081750 or 6104334 or 6192282 or 6195589 or 6216956 or 6264559 or 6394359 or 6398727 or 6934862 or 20030034897 or 20030034898 or 20020149705).pn</p> </div> <div style="width: 10%; text-align: center;">  </div> </div> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>US Patent Documents</p> <p>Note: Applicant is not required to submit a paper copy of cited US Patent Documents</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th>init</th> <th>Cite.No.</th> <th>Patent No.</th> <th>Date</th> <th>Patentee</th> <th>Kind</th> <th>Class</th> <th>Subclass</th> </tr> </thead> <tbody> <tr><td>電</td><td>1</td><td>4918439</td><td>1990-04-17</td><td>Wozniak et al.</td><td></td><td></td><td></td></tr> <tr><td>電</td><td>2</td><td>4965557</td><td>1990-10-23</td><td>Schepers et al.</td><td></td><td></td><td></td></tr> <tr><td>電</td><td>3</td><td>5109222</td><td>1992-04-28</td><td>Welty</td><td></td><td></td><td></td></tr> <tr><td>電</td><td>4</td><td>5247580</td><td>1993-09-21</td><td>Kimura et al.</td><td></td><td></td><td></td></tr> <tr><td>電</td><td>5</td><td>5544036</td><td>1996-08-06</td><td>Brown Jr. et al.</td><td></td><td></td><td></td></tr> <tr><td>電</td><td>6</td><td>5545857</td><td>1996-08-13</td><td>Lee et al.</td><td></td><td></td><td></td></tr> <tr><td>電</td><td>7</td><td>5579496</td><td>1996-11-26</td><td>Van Steenbrugge</td><td></td><td></td><td></td></tr> <tr><td>電</td><td>8</td><td>5621662</td><td>1997-04-15</td><td>Humphries et al.</td><td></td><td></td><td></td></tr> <tr><td>電</td><td>9</td><td>5778256</td><td>1998-07-07</td><td>Darbee et al.</td><td></td><td></td><td></td></tr> <tr><td>電</td><td>10</td><td>5805530</td><td>1998-09-08</td><td>Youngberg</td><td></td><td></td><td></td></tr> <tr><td>電</td><td>11</td><td>5818428</td><td>1998-10-06</td><td>Eisenbrandt et al.</td><td></td><td></td><td></td></tr> <tr><td>電</td><td>12</td><td>5917105</td><td>1999-06-29</td><td>Joao</td><td></td><td></td><td></td></tr> <tr><td>電</td><td>13</td><td>5924486</td><td>1999-07-20</td><td>Ehlers et al.</td><td></td><td></td><td></td></tr> <tr><td>電</td><td>14</td><td>6005490</td><td>1999-12-21</td><td>Higashihara</td><td></td><td></td><td></td></tr> <tr><td>電</td><td>15</td><td>6081750</td><td>2000-06-27</td><td>Hoffberg et al.</td><td></td><td></td><td></td></tr> <tr><td>電</td><td>16</td><td>6104334</td><td>2000-08-15</td><td>Allport</td><td></td><td></td><td></td></tr> <tr><td>電</td><td>17</td><td>6192282</td><td>2001-02-20</td><td>Smith et al.</td><td></td><td></td><td></td></tr> <tr><td>電</td><td>18</td><td>6195589</td><td>2001-02-27</td><td>Ketcham</td><td></td><td></td><td></td></tr> <tr><td>電</td><td>19</td><td>6216956</td><td>2001-04-17</td><td>Ehlers et al.</td><td></td><td></td><td></td></tr> </tbody> </table> | | init | Cite.No. | Patent No. | Date | Patentee | Kind | Class | Subclass | 電 | 1 | 4918439 | 1990-04-17 | Wozniak et al. | | | | 電 | 2 | 4965557 | 1990-10-23 | Schepers et al. | | | | 電 | 3 | 5109222 | 1992-04-28 | Welty | | | | 電 | 4 | 5247580 | 1993-09-21 | Kimura et al. | | | | 電 | 5 | 5544036 | 1996-08-06 | Brown Jr. et al. | | | | 電 | 6 | 5545857 | 1996-08-13 | Lee et al. | | | | 電 | 7 | 5579496 | 1996-11-26 | Van Steenbrugge | | | | 電 | 8 | 5621662 | 1997-04-15 | Humphries et al. | | | | 電 | 9 | 5778256 | 1998-07-07 | Darbee et al. | | | | 電 | 10 | 5805530 | 1998-09-08 | Youngberg | | | | 電 | 11 | 5818428 | 1998-10-06 | Eisenbrandt et al. | | | | 電 | 12 | 5917105 | 1999-06-29 | Joao | | | | 電 | 13 | 5924486 | 1999-07-20 | Ehlers et al. | | | | 電 | 14 | 6005490 | 1999-12-21 | Higashihara | | | | 電 | 15 | 6081750 | 2000-06-27 | Hoffberg et al. | | | | 電 | 16 | 6104334 | 2000-08-15 | Allport | | | | 電 | 17 | 6192282 | 2001-02-20 | Smith et al. | | | | 電 | 18 | 6195589 | 2001-02-27 | Ketcham | | | | 電 | 19 | 6216956 | 2001-04-17 | Ehlers et al. | | | |
| init | Cite.No. | Patent No. | Date | Patentee | Kind | Class | Subclass | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 電 | 1 | 4918439 | 1990-04-17 | Wozniak et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 電 | 2 | 4965557 | 1990-10-23 | Schepers et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 電 | 3 | 5109222 | 1992-04-28 | Welty | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 電 | 4 | 5247580 | 1993-09-21 | Kimura et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 電 | 5 | 5544036 | 1996-08-06 | Brown Jr. et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 電 | 6 | 5545857 | 1996-08-13 | Lee et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 電 | 7 | 5579496 | 1996-11-26 | Van Steenbrugge | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 電 | 8 | 5621662 | 1997-04-15 | Humphries et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 電 | 9 | 5778256 | 1998-07-07 | Darbee et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 電 | 10 | 5805530 | 1998-09-08 | Youngberg | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 電 | 11 | 5818428 | 1998-10-06 | Eisenbrandt et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 電 | 12 | 5917105 | 1999-06-29 | Joao | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 電 | 13 | 5924486 | 1999-07-20 | Ehlers et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 電 | 14 | 6005490 | 1999-12-21 | Higashihara | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 電 | 15 | 6081750 | 2000-06-27 | Hoffberg et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 電 | 16 | 6104334 | 2000-08-15 | Allport | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 電 | 17 | 6192282 | 2001-02-20 | Smith et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 電 | 18 | 6195589 | 2001-02-27 | Ketcham | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 電 | 19 | 6216956 | 2001-04-17 | Ehlers et al. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

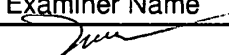
| | | | | | | |
|----|---------|------------|-----------------|--|--|--|
| 20 | 6264559 | 2001-07-24 | Lawrence et al. | | | |
| 21 | 6394359 | 2002-05-28 | Morgan | | | |
| 22 | 6398727 | 2002-06-04 | Bui et al. | | | |
| 23 | 6934862 | 2005-08-23 | Sharood et al. | | | |


US Published Applications

Note: Applicant is not required to submit a paper copy of cited US Published Applications

| init | Cite.No. | Pub. No. | Date | Applicant | Kind | Class | Subclass |
|------|----------|-------------|------------|----------------|------|-------|----------|
| 1 | 1 | 20030034897 | 2003-02-20 | Shamoon et al. | | | |
| 2 | 2 | 20030034898 | 2003-02-20 | Shamoon et al. | | | |
| 3 | 3 | 20020149705 | 2002-10-17 | Allen et al. | | | |

Signature

| Examiner Name | Date |
|---|--------|
|  | 3/6/06 |


| | | |
|---|--|---|
| Index of Claims  | Application/Control No. 11/163,372 Examiner Huy D. Nguyen | Applicant(s)/Patent under Reexamination SHAMOON ET AL. Art Unit 2681 |
|---|--|---|

| | | | |
|-------------------------|---|---------------------------------|------------------------|
| √ Rejected = Allowed | - (Through numeral) Cancelled + Restricted | N Non-Elected I Interference | A Appeal O Objected |
|-------------------------|---|---------------------------------|------------------------|

| Claim | | Date | |
|-------|----------|------|--|
| Final | Original | | |
| 1 | √ | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | |
| 11 | √ | | |
| 12 | N | | |
| 13 | | | |
| 14 | | | |
| 15 | | | |
| 16 | | | |
| 17 | | | |
| 18 | | | |
| 19 | | | |
| 20 | N | | |
| 21 | | | |
| 22 | | | |
| 23 | | | |
| 24 | | | |
| 25 | | | |
| 26 | | | |
| 27 | | | |
| 28 | | | |
| 29 | | | |
| 30 | | | |
| 31 | | | |
| 32 | | | |
| 33 | | | |
| 34 | | | |
| 35 | | | |
| 36 | | | |
| 37 | | | |
| 38 | | | |
| 39 | | | |
| 40 | | | |
| 41 | | | |
| 42 | | | |
| 43 | | | |
| 44 | | | |
| 45 | | | |
| 46 | | | |
| 47 | | | |
| 48 | | | |
| 49 | | | |
| 50 | | | |

| Claim | | Date | |
|-------|----------|------|--|
| Final | Original | | |
| 51 | | | |
| 52 | | | |
| 53 | | | |
| 54 | | | |
| 55 | | | |
| 56 | | | |
| 57 | | | |
| 58 | | | |
| 59 | | | |
| 60 | | | |
| 61 | | | |
| 62 | | | |
| 63 | | | |
| 64 | | | |
| 65 | | | |
| 66 | | | |
| 67 | | | |
| 68 | | | |
| 69 | | | |
| 70 | | | |
| 71 | | | |
| 72 | | | |
| 73 | | | |
| 74 | | | |
| 75 | | | |
| 76 | | | |
| 77 | | | |
| 78 | | | |
| 79 | | | |
| 80 | | | |
| 81 | | | |
| 82 | | | |
| 83 | | | |
| 84 | | | |
| 85 | | | |
| 86 | | | |
| 87 | | | |
| 88 | | | |
| 89 | | | |
| 90 | | | |
| 91 | | | |
| 92 | | | |
| 93 | | | |
| 94 | | | |
| 95 | | | |
| 96 | | | |
| 97 | | | |
| 98 | | | |
| 99 | | | |
| 100 | | | |

| Claim | | Date | |
|-------|----------|------|--|
| Final | Original | | |
| 101 | | | |
| 102 | | | |
| 103 | | | |
| 104 | | | |
| 105 | | | |
| 106 | | | |
| 107 | | | |
| 108 | | | |
| 109 | | | |
| 110 | | | |
| 111 | | | |
| 112 | | | |
| 113 | | | |
| 114 | | | |
| 115 | | | |
| 116 | | | |
| 117 | | | |
| 118 | | | |
| 119 | | | |
| 120 | | | |
| 121 | | | |
| 122 | | | |
| 123 | | | |
| 124 | | | |
| 125 | | | |
| 126 | | | |
| 127 | | | |
| 128 | | | |
| 129 | | | |
| 130 | | | |
| 131 | | | |
| 132 | | | |
| 133 | | | |
| 134 | | | |
| 135 | | | |
| 136 | | | |
| 137 | | | |
| 138 | | | |
| 139 | | | |
| 140 | | | |
| 141 | | | |
| 142 | | | |
| 143 | | | |
| 144 | | | |
| 145 | | | |
| 146 | | | |
| 147 | | | |
| 148 | | | |
| 149 | | | |
| 150 | | | |

| | | | | |
|--|--------------------------------|--|--|--|
| Search Notes  | Application/Control No. | | Applicant(s)/Patent under Reexamination | |
| | 11/163,372 | | SHAMOON ET AL. | |
| | Examiner | | Art Unit | |
| | Huy D. Nguyen | | 2681 | |

| SEARCHED | | | |
|----------|----------|-----------|----------|
| Class | Subclass | Date | Examiner |
| 455 | 419 | 2/24/2006 | HN |
| | 420 | | |
| | 410 | | |
| | 411 | | |
| | 466 | | |
| | 352 | | |
| 340 | 5.5 | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| INTERFERENCE SEARCHED | | | |
|-----------------------|----------|------|----------|
| Class | Subclass | Date | Examiner |
| | | | |
| | | | |
| | | | |
| | | | |

| SEARCH NOTES (INCLUDING SEARCH STRATEGY) | | |
|--|-----------|------|
| | DATE | EXMR |
| East (USPAT, US-PGPUB, JPO, EPO, DERWENT). See search history printout. | 2/24/2006 | HN |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

RECEIVED
CENTRAL FAX CENTER
AUG 09 2006

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: SHAMOON, Charles G., et al.
Title: UBIQUITOUS CONNECTIVITY AND
CONTROL SYSTEM FOR REMOTE
LOCATIONS
Serial No.: 11/163,372
Filing Date: 10/17/2005
Group Art Unit: 2681
Examiner: NGUYEN, Huy D.
Docket No.: 7192-06-05
Last Action: 03/09/2006
Customer No.: 23983

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AMENDMENT

In response to the office action mailed March 9, 2006, Applicant offers the following amendments and remarks. Applicant encloses a payment in the amount of \$1,275.00 to cover the fees associated with the addition of one (1) independent and thirty-eight (38) dependent claims and with a Two-month Extension of Time and requests that this be considered a petition therefore. If any additional fees are required in association with this response, the Director is hereby authorized to charge them to Deposit Account 500498, and consider this a petition therefor.

In the Specification:

08/10/2006 MBINAS 00000005 11163372

01 FC:2201
02 FC:2202100.00 OP
950.00 OP

Amend the specification as set forth in the attached Specification Status.

In the Claims:

Amend claims as set forth in the attached Claims Status.

RECEIVED
CENTRAL FAX CENTER
AUG 09 2006

SPECIFICATION STATUS

Please amend paragraph 0039 as follows:

[0039] Each remote control unit 12, 26 communicates with the base control unit 16 to affect the operational aspects thereof and peripheral equipment operatively attached thereto. For example, a remote control unit can command the base control unit 16 to enter an energy conservation mode. The user moves the cursor of the LCD screen 38 until the desired operational icon 42 is highlighted. The function associated with the icon 42 by the applications software is triggered by pressing the select button 36. The applications software communicates the command to the base control unit 16 through the cellular telephone network 22. The command string so transmitted is received and processed by the base control unit 16. Upon entering this mode the base control unit 16 adjusts air handling systems, open or close dampers, open or close window coverings, and adjusts operation of a hot water heater to conserve power consumption of the home. In the preferred embodiment, the remote control units are conventional cellular telephone handsets that are equipped with a programming kernel, such as Java or J2ME, that enables the telephone to be customized to perform functions that are not typical of standard cellular telephone operation. For example, to use a cellular telephone that has a home automation terminal in its conventional mode, the user would have to enter a telephone number, dial into a home automation controller, and press the telephone keys to send DTMF audio signals to the controller. After the session is completed, the user has to manually disconnect from the cellular network. The data path between the remote control unit and the base control unit is SMS ("~~simple~~ short message service".) However, the implemented

port addressing scheme allows short messages to the remote control unit to bypass standard cellular telephone functions and to operate the features of the unit independently. The desired port to be addressed on the receiving unit is configured in the user data header of the SMS message that is transmitted to the receiving unit as is well known in the art. Further, the various remote control units can send SMS information to and from one another, exclusive of the base control unit in order to change the status information for a particular user. For example, if one remote control unit desires to be inactive, a command is sent to the other remote control unit to change the personal status thereof as displayed on the other units. Similarly, the remote control units can send SMS messages to the applications running in the other remote control units to affect operation parameters of those receiving remote control units.

RECEIVED
CENTRAL FAX CENTER

AUG 09 2006

CLAIMS STATUS

1. (Currently Amended) A ubiquitous connectivity and communications system for controlling operation of an environmental condition in a structure, comprising:
 - a device for controlling ~~[[an]]~~ the environmental condition in the structure;
 - a base unit in said structure and operatively interfaced with said device to control the operation thereof;
 - ~~at least one~~ a remote device adapted to send and receive short message service (SMS) messages;
 - wireless connectivity means providing an on-demand, private and direct communications interface between said base unit and said remote device enabling instant wireless connectivity therebetween without use of an Internet connection;
 - means for providing an indication of current status of said device to said base unit;
 - means for transmitting said indication of current status through said connectivity means from the base unit to said remote device as a first SMS message;
 - display means at said remote device for indicating said current status of said device;
 - input means at said remote device for prescribing an indication of revised status for said device as a second SMS message, wherein the second SMS message includes information associated with the remote device;
 - means for transmitting said second SMS message including information associated with the remote device and the indication of revised status through said connectivity means to said base unit, wherein the base unit is adapted to authenticate the second SMS message using the information associated with the remote device;

means operatively associated with said base unit and operatively connected with said device for effecting said revised status for said device.

2. (Currently Amended) The system as recited in claim 1 wherein said device for controlling ~~[[an]] the~~ environmental condition includes electronic and electromechanical switching means interfaced with said device for controlling ~~[[an]] the~~ environmental condition.
3. (Original) The system as recited in claim 1 wherein said base unit is a microcontroller-based processing unit having customizable application specific software.
4. (Original) The system as recited in claim 1 wherein said remote device is a cellular telephone handset with custom programmability means.
5. (Original) The system as recited in claim 4 wherein said custom programmability means is a JAVA programming kernel.
6. (Original) The system as recited in claim 4 wherein said custom programmability means is a J2ME programming kernel.
7. (Currently Amended) The system as recited in claim 1 wherein said connectivity means includes a transmitting and receiving module in said base unit and a transmitting and receiving unit in said remote device operatively communicating with each other over ~~[[the]] a~~ cellular telephone network.

8. (Currently Amended) The system as recited in claim 1 wherein said means for providing an indication of current status to said base unit and said means for transmitting said indication of current status is a[[n]] short message service (SMS) message carried along ~~said~~ a cellular telephone network.
9. (Original) The system as recited in claim 1 wherein said display means is a liquid crystal display module.
10. (Original) The system as recited in claim 9 wherein said liquid crystal module includes selectable graphic icons corresponding to environmental conditions being monitored or controlled.
11. (Currently Amended) The system as recited in claim 8 including means operative between said remote devices using said ~~short message service~~ (SMS[D]) for selectively disabling transmission thereto.
12. (Withdrawn) A detection system for selectively determining the presence of individuals within a proximate distance of a structure, said detection system comprising: a base unit at said structure; a first remote unit operated by one of the individuals and transmitting a first identification signal; a second remote device operated by another of the individuals and transmitting a second identification signal; receiving means associated with said base unit for receiving said authorizations codes when the associated remote device is within the proximate distance of the structure; selection means operatively associated with said base unit for selectively establishing an authorized user status to said remote devices based on said identification signal; instant wireless connectivity means for transmitting to

a master remote unit the presence of a remote unit with said proximate distance of said structure based on said authorized user status.

13. (Withdrawn) The system as recited in claim 12 wherein said base unit includes a Bluetooth transmitter and receive module for bidirectional communications with said remote units.

14. (Withdrawn) The system as recited in claim 12 wherein said base unit includes a bidirectional radio frequency communications module conforming to the 802.11 protocol.

15. (Withdrawn) The system as recited in claim 12 wherein said remote units include cellular telephones including Bluetooth bidirectional communications modules.

16. (Withdrawn) The system as recited in claim 12 wherein said receiving means associated with said base unit is a Bluetooth bidirectional communications module.

17. (Withdrawn) The system as recited in claim 12 wherein said receiving means associated with said base unit is a bidirectional radio frequency communications module conforming to the 802.11 protocol.

18. (Withdrawn) The system as recited in claim 12 wherein said selection means comprises a microcontroller-based processing unit having customizable application specific software.

19. (Withdrawn) The system as recited in claim 12 wherein said instant wireless connectivity means is a radio frequency communications channel according to the Bluetooth communications protocol.

20. (Withdrawn) The system as recited in claim 12 wherein said instant wireless connectivity means is a radio frequency communications channel according to the 802.11 communications protocol.

21. (New) A method for environmental control and information processing associated with a structure, the method comprising:

receiving from a remote control unit short message service (SMS) messages comprising control information to use for controlling a plurality of environmental control units associated with the structure;

creating control commands for the plurality of environmental control units based on the control information of the SMS messages; and

delivering the control commands to the plurality of environmental control units.

22. (New) The method of claim 21 comprising sending an SMS message to the remote control unit indicating delivery of a control command to at least one of the plurality of environmental control units.

23. (New) The method of claim 22 wherein the SMS message includes status information for at least one of the plurality of environmental control units.

24. (New) The method of claim 21 comprising controlling environmental conditions within the structure using the plurality of environmental control units.

25. (New) The method of claim 21 comprising detecting presence of an authorized person and sending an SMS message to the remote control unit indicating the presence of the authorized person.
26. (New) The method of claim 25 wherein detecting presence of the authorized person includes detecting the authorized person proximate to the structure.
27. (New) The method of claim 26 wherein the remote control unit includes global positioning satellite (GPS) capabilities and detecting the authorized person proximate to the structure comprises receiving GPS information from the remote control unit.
28. (New) The method of claim 26 wherein at least one of the plurality of environmental control units includes a heating system and comprising sending a control command to the heating system to adjust the temperature within the structure in response to detecting the authorized person proximate to the structure.
29. (New) The method of claim 26 wherein at least one of the plurality of environmental control units includes a lighting system and comprising sending a control command to the lighting system to turn on lighting associated with the structure in response to detecting the authorized person proximate to the structure.
30. (New) The method of claim 21 comprising detecting presence of an unauthorized person and sending an SMS message to the remote control unit indicating the presence of the unauthorized person.

31. (New) The method of claim 30 wherein at least one of the plurality of environmental control units includes a burglar alarm and detecting presence of the unauthorized person includes detecting a structural breach of the structure via the burglar alarm.
32. (New) The method of claim 21 comprising accessing remote information, creating a control command based on the remote information, and delivering the control command to at least one of the plurality of environmental control units.
33. (New) The method of claim 32 comprising sending an SMS message to the remote control unit based on the remote information and the control command delivered to the at least one of the plurality of environmental control units.
34. (New) The method of claim 33 wherein accessing the remote information includes accessing a weather forecasting service and the remote information relates to local weather conditions.
35. (New) The method of claim 34 wherein the at least one of the plurality of environmental control units includes a sprinkler system and the control command includes an instruction to bypass a scheduled watering cycle for the sprinkler system when the local weather conditions include a forecast for rain.
36. (New) The method of claim 34 wherein the at least one of the plurality of environmental control units includes a power control system and the control command includes an instruction to power down sensitive electronics when the local weather conditions include a forecast for severe weather.

37. (New) The method of claim 34 wherein the at least one of the plurality of environmental control units includes a window control system and the control command includes an instruction to adjust at least one of windows and window coverings that are associated with the structure to conserve energy when the local weather conditions include a forecast for a change in weather conditions.

38. (New) The method of claim 33 wherein accessing remote information includes accessing a school system's notification information service and the remote information includes school related information.

39. (New) The method of claim 38 wherein the at least one of the plurality of environmental control units includes a heating system and the control command includes an instruction to adjust the heat when the school related information includes a notification that schools are being released early due to inclement weather.

40. (New) A system for environmental control and information processing associated with a structure, the method comprising:

- a controller adapted to interface with a plurality of environmental control units associated with the structure; and

- a wireless module adapted to:

- receive from a remote control unit short message service (SMS) messages comprising control information to use for controlling the plurality of environmental control units;

- create control commands for the plurality of environmental control units based on the control information of the SMS messages; and

deliver the control commands to the plurality of environmental control units via the controller.

41. (New) The system of claim 40 wherein the wireless module is adapted to send an SMS message to the remote control unit indicating delivery of a control command to at least one of the plurality of environmental control units.
42. (New) The system of claim 41 wherein the wireless module is adapted to include status information for at least one of the plurality of environmental control units in the SMS message.
43. (New) The system of claim 40 wherein the plurality of environmental control units are adapted to control environment conditions within the structure.
44. (New) The system of claim 40 wherein the wireless module is adapted to detect presence of an authorized person and to send an SMS message to the remote control unit indicating the presence of the authorized person.
45. (New) The system of claim 44 wherein, in being adapted to detect presence of the authorized person, the wireless module is adapted to detect the authorized person proximate to the structure.
46. (New) The system of claim 45 wherein the remote control unit includes global positioning satellite (GPS) capabilities and wherein, in being adapted to detect the authorized person proximate to the structure, the wireless module is adapted to detect the authorized person by receiving GPS information from the remote control unit.

47. (New) The system of claim 45 wherein at least one of the plurality of environmental control units includes a heating system and wherein the wireless module is adapted to send a control command to the heating system via the controller to adjust the temperature within the structure in response to detecting the authorized person proximate to the structure.

48. (New) The system of claim 45 wherein at least one of the plurality of environmental control units includes a lighting system and wherein the wireless module is adapted to send a control command to the lighting system via the controller to turn on lighting associated with the structure in response to detecting the authorized person proximate to the structure.

49. (New) The system of claim 40 wherein the wireless module is adapted to detect presence of an unauthorized person and to send an SMS message to the remote control unit indicating the presence of the unauthorized person.

50. (New) The system of claim 49 wherein at least one of the plurality of environmental control units includes a burglar alarm and wherein, in being adapted to detect the unauthorized person proximate to the structure, the wireless module is adapted to detect a structural breach of the structure via the burglar alarm.

51. (New) The system of claim 40 wherein the wireless module is adapted to access remote information, to create a control command based on the remote information, and to deliver the control command to at least one of the plurality of environmental control units via the controller.

52. (New) The system of claim 51 wherein the wireless module is adapted to send an SMS message to the remote control unit based on the remote information and the control command delivered to the at least one of the plurality of environmental control units.

53. (New) The system of claim 52 wherein the wireless module is adapted to access remote information by accessing a weather forecasting service and the remote information relates to local weather conditions.

54. (New) The system of claim 53 wherein the at least one of the plurality of environmental control units includes a sprinkler system and the wireless module is adapted to create the control command to instruct the sprinkler system to bypass a scheduled watering cycle when the local weather conditions include a forecast for rain.

55. (New) The system of claim 53 wherein the at least one of the plurality of environmental control units includes a power control system and the wireless module is adapted to create the control command to instruct the power control system to power down sensitive electronics when the local weather conditions include a forecast for severe weather.

56. (New) The system of claim 53 wherein the at least one of the plurality of environmental control units includes a window control system and the wireless module is adapted to create the control command to instruct the window control system to adjust at least one of windows and window coverings that are associated with the structure to conserve energy when the local weather conditions include a forecast for a change in weather conditions.

57. (New) The system of claim 52 wherein the wireless module is adapted to access remote information by accessing a school system's notification information service and the remote information includes school related information.

58. (New) The system of 57 wherein the at least one of the plurality of environmental control units includes a heating system and wherein the wireless module is adapted to create the control command to instruct the heating system to increase the heat when the school related information includes a notification that schools are being released early due to inclement weather.

RECEIVED
CENTRAL FAX CENTER
AUG 09 2006

REMARKS

Applicant has carefully reviewed the office action mailed March 9, 2006 and offers the following remarks to accompany the above amendments.

A Request for a Two Month Extension of Time from June 9, 2006 to August 9, 2006 is being filed simultaneously with the Response to the Office Action, along with the appropriate filing fees.

Status of the claims

Claims 1-20 are pending in the present application. Claims 12-20 have been withdrawn from prosecution without traverse. Claims 21-58 have been added. Accordingly, claims 1-11 and 21-58 are pending.

Amendment to the Specification

The specification has been amended to correct a typographical error. No new matter has been added.

Election/Restriction

Applicant hereby confirms the provisional election made without traverse to group I, claims 1-11 during the telephone conversation with the Examiner on February 24, 2006.

Rejection under 35 U.S.C. § 103(a) – Kanazawa and Kim

Claims 1, 3-7, 9, and 10 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication No. US 2003/0210126 A1

to Kanazawa (hereinafter "Kanazawa") in view of U.S. Patent Application Publication No. US 2004/0092282 A1 to Kim et al. (hereinafter "Kim"). Applicant respectfully traverses. For the Patent Office to combine references in an obviousness rejection, the Patent Office must do two things. First, the Patent Office must establish *prima facie* obviousness by showing where each and every element is taught or suggested in the combined references. MPEP § 2143.03. Second, the Patent Office must state a motivation to combine the references. The motivation must be supported with actual evidence which cannot come from Applicant's disclosure. *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999).

Prior to addressing the merits of the rejection, Applicant offers the following summary of the invention. The present invention provides for wireless remote control of home appliances associated with a structure via a wireless base station within the home. The Internet is not required. Remote wireless devices may be individually authorized or may be authorized as a group to control appliances within the home. Short message service (SMS) messages are used between the wireless base station and the remote wireless devices to communicate status of the home appliances and control commands via the wireless connection. The wireless base station authenticates received SMS messages and only allows control of the home appliances via SMS messages received from authorized remote devices belonging to authorized individuals or groups. The SMS messages are authenticated by verifying that information within the SMS messages is associated with the authorized remote devices. The wireless base station can detect the presence of an authorized remote device proximate to a structure and can control the home appliances and generate SMS messages to other remote devices based upon detecting the presence of the remote device. The wireless base station can also access remote information, such as weather information, and can control the home appliances based upon the remote information.

Claim 1 has been amended to recite that the remote devices are adapted to send and receive SMS messages, to recite that wireless connectivity means provide direct communications without use of the Internet, and to recite that the base unit is adapted to authenticate SMS messages using information associated with the remote device.

Kanazawa and Kim, alone or in combination, fail to teach all of the elements of claim 1. First, both Kanazawa and Kim require an Internet connection. Kanazawa requires an Internet connection for all communications between the cellular phone 3 and the home controller 2. (See Kanazawa, Figure 1; paragraph 0020). Kim requires an Internet connection 3 at a user terminal 7 to communicate with a remote server 5 and an electronic appliance 10. A telephone network 32 is used between a telephone signal transmit unit 24 and a telephone network accessing unit 12 to provide dual-tone multi-frequency (DTMF) control of the electronic appliance. The only connection between the user terminal 7 and the other units is via the Internet 3. (See Kim, Figures 1 and 2; paragraphs 0024 and 0031-0036). Accordingly, the limitation of claim 1 that recites wireless connectivity means "without use of an Internet connection" is not met by the combination of Kanazawa and Kim.

Additionally, both Kanazawa and Kim use messaging other than SMS messaging for communication with and control of an electronic appliance. Kanazawa uses communication over the Internet for communication between the cellular phone 3 with web browser functionality and controller 2 that has a World Wide Web (WWW) server functionality. (See Kanazawa, Figure 1; paragraph 0020). Kim uses an Internet connection and DTMF through the public switched telephone network (PSTN) to communicate between the user terminal 7 to communicate with a remote server 5 and an electronic appliance 10. (See Kim, Figures 1 and 2; paragraphs 0024 and 0031-0036). Accordingly, the additional

limitation of claim 1 that recites using SMS messaging is not met by the combination of Kanazawa and Kim.

Further, the motivation cited by the Patent Office to combine Kanazawa and Kim is insufficient for purposes of crafting a *prima facie* case of obviousness. A bare assertion that a user would be provided with more convenience by a combination of Kanazawa and Kim does not provide a motivation or suggestion sufficient to motivate one skilled in the art to combine Kanazawa and Kim. Additionally, no actual evidence has been provided by the Patent Office as required. Accordingly, in addition to failing to show where each and every element is taught or suggested in the combined references, the Patent Office has not established a proper motivation to combine the references.

Applicant respectfully submits that the rejection of claim 1 should be withdrawn for at least these reasons. Dependent claims 3-7, 9, and 10 depend, either directly or indirectly, from claim 1. Accordingly, the rejection of claims 3-7, 9, and 10 should be withdrawn for at least the same reasons. Applicant reserves the right to make additional arguments regarding the rejection based upon Kanazawa in view of Kim in the future. Applicant respectfully submits that claims 1, 3-7, 9, and 10 are in condition for allowance and requests notice of the same at the earliest possible date.

Rejection under 35 U.S.C. § 103(a) – Kanazawa, Kim, and Flaherty

Claim 2 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Kanazawa in view of Kim and further in view of U.S. Patent Application Publication No. US 2004/0235446 A1 to Flaherty et al. (hereinafter “Flaherty”). Applicant respectfully traverses. The standards for obviousness are set forth above.

The motivation cited by the Patent Office to combine Kanazawa, Kim, and Flaherty is insufficient for purposes of crafting a *prima facie* case of obviousness. A bare assertion to reduce power loss and for use in electric isolation by combining Kanazawa, Kim, and Flaherty does not provide a motivation or suggestion sufficient to motivate one skilled in the art to combine Kanazawa, Kim, and Flaherty. Additionally, no actual evidence has been provided by the Patent Office as required. Accordingly, in addition to failing to show where each and every element is taught or suggested in the combined references, the Patent Office has not established a proper motivation to combine the references.

Claim 2 depends from claim 1. Applicant respectfully submits that the rejection of claim 2 should be withdrawn for at least the same reasons as argued above in relation to the rejection of claim 1. Accordingly, Applicant respectfully submits that claim 2 is in condition for allowance and requests notice of the same at the earliest possible date.

Rejection under 35 U.S.C. § 103(a) – Kanazawa, Kim, and Song

Claims 8 and 11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kanazawa in view of Kim and further in view of U.S. Patent No. 6,393,297 to Song. (hereinafter “Song”). Applicant respectfully traverses. The standards for obviousness are set forth above.

Claims 8 and 11 depend, either directly or indirectly, from claim 1. Applicant respectfully submits that the rejection of claims 8 and 11 should be withdrawn for at least the same reasons as argued above in relation to the rejection of claim 1. In addition, Applicant notes that Song requires the external appliance 100 to encode/decode SMS messages directly. Further, a data input/output port is required to communicate between the external appliance 100 and the mobile terminal 110. (See Song, Figure 1; col. 2, lines 34-42). Accordingly, an external

appliance of Song requires extensive modifications to provide an appliance capable of performing SMS messaging and does not do so in a wireless fashion.

Further, the motivation cited by the Patent Office to combine Kanazawa, Kim, and Song is insufficient for purposes of crafting a *prima facie* case of obviousness. A bare assertion of conservation of resources to combine Kanazawa, Kim, and Song, does not provide a motivation or suggestion sufficient to motivate one skilled in the art to combine Kanazawa and Kim. Additionally, no actual evidence has been provided by the Patent Office as required. In fact, the requirement of Song that an external appliance be adapted to encode/decode SMS messages would not conserve resources because each external appliance would be required to have its own interface for SMS messaging and, accordingly, would not conserve resources. Finally, Song directly teaches away from the invention of Applicant as claimed by requiring each external appliance to have an SMS interface. Accordingly, in addition to failing to show where each and every element is taught or suggested in the combined references, the Patent Office has not established a proper motivation to combine the references.

Accordingly, Applicant respectfully submits that the rejection of claims 8 and 11 should be withdrawn. Applicant also respectfully submits that claim 8 and 11 are in condition for allowance and respectfully requests notice of the same at the earliest possible date.

New Claims

Claims 21-58 have been added. No new subject matter is added by these amendments. Claims 21-58 include subject matter that can be found within the present Application. (See Figures 1 and 4, and paragraphs 0044, 0046, 0050, 0051, 0056-0058, and 0061).

Applicant respectfully submits that claims 21-58 are in condition for allowance for at least the same reasons argued above in relation to the claim rejections and respectfully requests notice of the same at the earliest possible date.

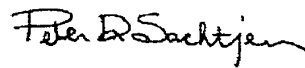
Conclusion

The present application is now in condition for allowance and such action is respectfully requested. The Examiner is encouraged to contact Applicant's representative regarding any remaining issues in an effort to expedite allowance and issuance of the present application.

Dated: August 9, 2006

Respectfully submitted,

MILLS LAW FIRM, PLLC



Peter D. Sachtjen, Reg. No. 24,619

Mills Law Firm, PLLC
Post Office Box 1245
Cary, NC 27512
Telephone: (919) 462-3036
Facsimile: (919) 462-3041
Attorney Direct Line: (252) 413-0475

PTO/SB/22 (12-04)

Approved for use through 07/31/2006. 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 EXTENSION OF TIME UNDER 37 CFR 1.136(a) FY 2005 (Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4010).) | | Docket Number (Optional) 7192-06-05 |
| Application Number 11/163,372 | | Filed 10/17/2005 |
| For SHAMOON, Charles G., et al. (UBIQUITOUS CONNECTIVITY AND CONTROL...) | | |
| Art Unit 2681 | | Examiner NGUYEN, Huy D. |
| This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application. | | |
| The requested extension and fee are as follows (check time period desired and enter the appropriate fee below): | | |
| | <u>Fee</u> | <u>Small Entity Fee</u> |
| <input type="checkbox"/> One month (37 CFR 1.17(a)(1)) | \$120 | \$60 |
| <input checked="" type="checkbox"/> Two months (37 CFR 1.17(a)(2)) | \$450 | \$225 |
| <input type="checkbox"/> Three months (37 CFR 1.17(a)(3)) | \$1020 | \$510 |
| <input type="checkbox"/> Four months (37 CFR 1.17(a)(4)) | \$1590 | \$795 |
| <input type="checkbox"/> Five months (37 CFR 1.17(a)(5)) | \$2160 | \$1080 |
| <input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. | | |
| <input type="checkbox"/> A check in the amount of the fee is enclosed. | | |
| <input checked="" type="checkbox"/> Payment by credit card. Form PTO-2038 is attached. | | |
| <input type="checkbox"/> The Director has already been authorized to charge fees in this application to a Deposit Account. | | |
| <input type="checkbox"/> The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number <u>500498</u> . I have enclosed a duplicate copy of this sheet. | | |
| WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038. | | |
| I am the <input type="checkbox"/> applicant/inventor. | | |
| <input type="checkbox"/> 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). | | |
| <input checked="" type="checkbox"/> attorney or agent of record. Registration Number <u>24,619</u> | | |
| <input type="checkbox"/> attorney or agent under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____ | | |
| <u>Peter D. Sachtjen</u> Signature | | <u>08/09/2006</u> Date |
| <u>Peter D. Sachtjen</u> Typed or printed name | | <u>919-462-3036</u> Telephone Number |
| 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. | | |
| <input checked="" type="checkbox"/> Total of <u>one (1)</u> forms are submitted. | | |

This collection of information is required by 37 CFR 1.136(a). 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 6 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

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

03 FC:2252

225.00 OP

PTO/SB/22 (12-04)

Approved for use through 07/31/2006. OMB 0851-0031

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 EXTENSION OF TIME UNDER 37 CFR 1.136(a) FY 2005 (Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4810).) | | Docket Number (Optional) 7192-06-05 | RECEIVED CENTRAL FAX CENTER AUG 9 2006 |
| Application Number 11/163,372 | | Filed 10/17/2005 | |
| For SHAMOON, Charles G., et al. (UBIQUITOUS CONNECTIVITY AND CONTROL...) | | Examiner NGUYEN, Huy D. | |
| Art Unit 2681 | | | |
| This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application. | | | |
| The requested extension and fee are as follows (check time period desired and enter the appropriate fee below): | | | |
| | | <u>Fee</u> | <u>Small Entity Fee</u> |
| <input type="checkbox"/> | One month (37 CFR 1.17(a)(1)) | \$120 | \$60 |
| <input checked="" type="checkbox"/> | Two months (37 CFR 1.17(a)(2)) | \$450 | \$225 |
| <input type="checkbox"/> | Three months (37 CFR 1.17(a)(3)) | \$1020 | \$510 |
| <input type="checkbox"/> | Four months (37 CFR 1.17(a)(4)) | \$1590 | \$795 |
| <input type="checkbox"/> | Five months (37 CFR 1.17(a)(5)) | \$2160 | \$1080 |
| <input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. | | | |
| <input type="checkbox"/> A check in the amount of the fee is enclosed. | | | |
| <input checked="" type="checkbox"/> Payment by credit card. Form PTO-2038 is attached. | | | |
| <input type="checkbox"/> The Director has already been authorized to charge fees in this application to a Deposit Account. | | | |
| <input type="checkbox"/> The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number <u>500498</u> . I have enclosed a duplicate copy of this sheet. | | | |
| WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038. | | | |
| I am the <input type="checkbox"/> applicant/inventor. | | | |
| <input type="checkbox"/> 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). | | | |
| <input checked="" type="checkbox"/> attorney or agent of record. Registration Number <u>24,619</u> | | | |
| <input type="checkbox"/> attorney or agent under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____ | | | |
| <u>Peter D. Sachtjen</u> Signature | | <u>08/09/2006</u> Date | |
| <u>Peter D. Sachtjen</u> Typed or printed name | | <u>919-462-3036</u> Telephone Number | |
| 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. | | | |
| <input checked="" type="checkbox"/> Total of <u>one (1)</u> forms are submitted. | | | |

This collection of information is required by 37 CFR 1.136(a). 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 6 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.

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

To: 571-273-8300

From: Stefanie Hansen

Pg 1/28 08/09/06 3:30 pm

RECEIVED
CENTRAL FAX CENTER

AUG 9 2006

WAKE FOREST OFFICE
POST OFFICE BOX 1088
WAKE FOREST, NC 27588

MILLS LAW FIRM PLLC
PATENT LAWYERS
150 IOWA LANE, SUITE 104
POST OFFICE BOX 1245
CARY, NC 27512-1245
TEL 919-462-3036
FAX 919-462-3041

EASTERN OFFICE
3302 WALDEN DRIVE
GREENVILLE, NC 27858
TEL 252-413-0475

Date: August 9, 2006
To: USPTO 571-273-8300
From: Peter D. Sachtnen
Re: Serial No.: 11/163,372 SHAMOON

THIS MESSAGE IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL, AND EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT, OR THE EMPLOYEE OR AGENT RESPONSIBLE FOR DELIVERING THE MESSAGE TO THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION, OR COPYING OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONE AND RETURN THE ORIGINAL MESSAGE TO US. THANK YOU.

Please forward the attached response to office action to Examiner Huy D. NGUYEN in Art Unit 2681. There are 25 pages in the attached response (not including this cover page).

Also enclosed is a duplicate Request for Extension of Time form to be used for the deposit account and credit card authorization form.

PATENTS • TRADEMARKS • COPYRIGHTS • TECHNOLOGY TRANSFERS
REGISTERED PATENT ATTORNEYS • UNITED STATES AND INTERNATIONAL PRACTICE
www.millspatentlaw.com

PAGE 1/28 * RCVD AT 8/9/2006 3:32:06 PM [Eastern Daylight Time] * SVR:USPTO-EFXXRF-5/12 * DNIS:2738300 * CSID:(919) 462-3041 * DURATION (mm-ss):10-24

PTO/SB/21 (09-04)

Approved for use through 07/31/2008. OMB 0851-0031


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

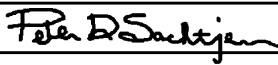
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

| | | | |
|---|----------------------|-----------------------------|------------|
| TRANSMITTAL FORM (to be used for all correspondence after initial filing) | Application Number | 11/163,372 | |
| | Filing Date | 7192-06-05 | |
| | First Named Inventor | SHAMOON, Charles G., et al. | |
| | Art Unit | 2681 | |
| | Examiner Name | NGUYEN, Huy D. | |
| Total Number of Pages in This Submission | 26 | Attorney Docket Number | 7192-06-05 |

RECEIVED
CENTRAL FAX CENTER
AUG 9 2006

| ENCLOSURES (Check all that apply) | | |
|---|---|---|
| <input type="checkbox"/> Fee Transmittal Form | <input type="checkbox"/> Drawing(s) | <input type="checkbox"/> After Allowance Communication to TC |
| <input checked="" type="checkbox"/> Fee Attached | <input type="checkbox"/> Licensing-related Papers | <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences |
| <input type="checkbox"/> Amendment/Reply | <input type="checkbox"/> Petition | <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) |
| <input type="checkbox"/> After Final | <input type="checkbox"/> Petition to Convert to a Provisional Application | <input type="checkbox"/> Proprietary Information |
| <input type="checkbox"/> Affidavits/declaration(s) | <input type="checkbox"/> Power of Attorney, Revocation | <input type="checkbox"/> Status Letter |
| <input checked="" type="checkbox"/> Extension of Time Request | <input type="checkbox"/> Change of Correspondence Address | <input type="checkbox"/> Other Enclosure(s) (please identify below): |
| <input type="checkbox"/> Express Abandonment Request | <input type="checkbox"/> Terminal Disclaimer | |
| <input type="checkbox"/> Information Disclosure Statement | <input type="checkbox"/> Request for Refund | |
| <input type="checkbox"/> Certified Copy of Priority Document(s) | <input type="checkbox"/> CD, Number of CD(s) _____ | |
| <input type="checkbox"/> Reply to Missing Parts/Incomplete Application | <input type="checkbox"/> Landscape Table on CD | |
| <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53 | | |
| Remarks | | |

| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT | | | |
|--|---|----------|--------|
| Firm Name | Mills Law Firm PLLC | | |
| Signature |  | | |
| Printed name | Peter D. Sachtjen | | |
| Date | 08/09/2006 | Reg. No. | 24,619 |

| CERTIFICATE OF TRANSMISSION/MAILING | | | |
|---|---|------|------------|
| I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below: | | | |
| Signature |  | | |
| Typed or printed name | Peter D. Sachtjen | Date | 08/09/2006 |

This collection of information is required by 37 CFR 1.6. 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 2 hours 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.

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.

PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-876

Application or Docket Number

11/163372

APPLICATION AS FILED - PART I

| FOR | | NUMBER FILED (Column 1) | NUMBER EXTRA (Column 2) | SMALL ENTITY | | OR | OTHER THAN SMALL ENTITY | |
|---|--|---|----------------------------|--------------|----------|----|-------------------------|----------|
| | | | | RATE (\$) | FEE (\$) | | RATE (\$) | FEE (\$) |
| BASIC FEE (37 CFR 1.16(a), (b), or (c)) | | | | | | | | |
| SEARCH FEE (37 CFR 1.1602, (f), or (g)) | | | | | | | | |
| EXAMINATION FEE (37 CFR 1.16(e), (h), or (i)) | | | | | | | | |
| TOTAL CLAIMS (37 CFR 1.16(j)) | | 20 | minus 20 = | X | = | OR | X | = |
| INDEPENDENT CLAIMS (37 CFR 1.16(k)) | | 2 | minus 3 = | X | = | | X | = |
| APPLICATION SIZE FEE (37 CFR 1.16(l)) | | If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(e). | | | | | | |
| MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(m)) | | | | | | | | |
| | | | | TOTAL | | OR | TOTAL | |

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

APPLICATION AS AMENDED - PART II

| | | CLAIMS REMAINING AFTER AMENDMENT (Column 1) | HIGHEST NUMBER PREVIOUSLY PAID FOR (Column 2) | PRESENT EXTRA (Column 3) | SMALL ENTITY | | OR | OTHER THAN SMALL ENTITY | |
|-------------|---|--|--|-----------------------------|-----------------|---------------------|----|-------------------------|---------------------|
| | | | | | RATE (\$) | ADDITIONAL FEE (\$) | | RATE (\$) | ADDITIONAL FEE (\$) |
| AMENDMENT A | Total (37 CFR 1.162) | 58 | minus 20 | = 38 | X | = 960 | OR | X | = |
| | Independent (37 CFR 1.162) | 4 | minus 3 | = 1 | X | = 100 | OR | X | = |
| | Application Size Fee (37 CFR 1.16(e)) | | | | | | OR | | |
| | FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.163) | | | | | | OR | | |
| | | | | | TOTAL ADD'L FEE | 1117 | OR | TOTAL ADD'L FEE | |
| AMENDMENT B | Total (37 CFR 1.162) | | minus | = | X | = | OR | X | = |
| | Independent (37 CFR 1.162) | | minus | = | X | = | OR | X | = |
| | Application Size Fee (37 CFR 1.16(e)) | | | | | | OR | | |
| | FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.163) | | | | | | OR | | |
| | | | | | TOTAL ADD'L FEE | | OR | TOTAL ADD'L 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.

This collection of information is required by 37 CFR 1.16. 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, 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.

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

To: 571-273-8300

From: Stefanie Hansen

Pg 1/3 08/29/06 8:02 am

RECEIVED
CENTRAL FAX CENTER

AUG 29 2006

WAKE FOREST OFFICE
POST OFFICE BOX 1088
WAKE FOREST, NC 27588

MILLS LAW FIRM PLLC
PATENT LAWYERS
150 IOWA LANE, SUITE 104
POST OFFICE BOX 1245
CARY, NC 27512-1245
TEL 919-462-3036
FAX 919-462-3041

EASTERN OFFICE
3302 WALDEN DRIVE
GREENVILLE, NC 27858
TEL 252-413-0475

Date: August 29, 2006
To: USPTO 571-273-8300
From: Peter D. Sachtnen
Re: Serial No.: 11/163,372 SHAMOON

THIS MESSAGE IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL, AND EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT, OR THE EMPLOYEE OR AGENT RESPONSIBLE FOR DELIVERING THE MESSAGE TO THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION, OR COPYING OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONE AND RETURN THE ORIGINAL MESSAGE TO US. THANK YOU.

Please forward the attached election to office action to Examiner Huy D. NGUYEN in Art Unit 2681. There are 2 pages in the attached response (not including this cover page).

PATENTS • TRADEMARKS • COPYRIGHTS • TECHNOLOGY TRANSFERS
REGISTERED PATENT ATTORNEYS • UNITED STATES AND INTERNATIONAL PRACTICE
www.millspatentlaw.com

PAGE 1/3 * RCVD AT 8/29/2006 8:02:11 AM [Eastern Daylight Time] * SVR:USPTO-EFXXRF-2/0 * DNIS:2738300 * CSID:(919) 462-3041 * DURATION (mm-ss):01-16

AUG 29 2006

PTO/SB/21 (09-04)

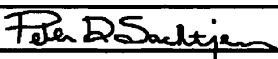
Approved for use through 07/31/2006. OMB 0851-0031

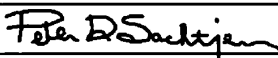
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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.

| | | |
|--|------------------------|-----------------------------|
| TRANSMITTAL FORM <small>(to be used for all correspondence after initial filing)</small> | Application Number | 11/163,372 |
| | Filing Date | 7192-06-05 |
| | First Named Inventor | SHAMOON, Charles G., et al. |
| | Art Unit | 2681 |
| | Examiner Name | NGUYEN, Huy D. |
| | Attorney Docket Number | 7192-06-05 |
| Total Number of Pages in This Submission | | 2 |

| ENCLOSURES (Check all that apply) | | |
|--|--|--|
| <input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD | <input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below): |
| Remarks Election of Species | | |

| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT | | | |
|--|---|----------|--------|
| Firm Name | Mills Law Firm PLLC | | |
| Signature |  | | |
| Printed name | Peter D. Sachtjen | | |
| Date | 08/29/2006 | Reg. No. | 24,619 |

| CERTIFICATE OF TRANSMISSION/MAILING | | | |
|---|---|------|------------|
| I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below: | | | |
| Signature |  | | |
| Typed or printed name | Peter D. Sachtjen | Date | 08/29/2006 |

This collection of information is required by 37 CFR 1.6. 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 2 hours 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.

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

RECEIVED
CENTRAL FAX CENTER

AUG 29 2006

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: SHAMOON, Charles G., et al.
Title: UBIQUITOUS CONNECTIVITY AND CONTROL
SYSTEM FOR REMOTE LOCATIONS
Serial No.: 11/163,372
Filing Date: 10/17/2005
Group Art Unit: 2681
Examiner: NGUYEN, Huy D.
Docket No.: 7192-06-05
Last Action: 08/22/2006
Customer No.: 23983

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

ELECTION OF SPECIES

In response to the Office Action faxed on August 22, 2006, Applicant elects
Species I: claim 2-11, 22-24, 32-39, 41-43 and 51-58 for prosecution.

Dated: August 29, 2006

Respectfully submitted,
MILLS LAW FIRM, PLLC



Peter D. Sachtjen, Reg. No. 24,619

Mills Law Firm, PLLC
Post Office Box 1245
Cary, NC 27512
Telephone: (919) 462-3036
Facsimile: (919) 462-3041
Attorney Direct Line: (252) 413-0475

EAST Search History

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|------|--|-------------------------------------|------------------|---------|------------------|
| S67 | 0 | remote\$2 near5 access\$3 adj3 school adj2 information | US-PGPU B; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/08/29 20:39 |
| S66 | 0 | remote\$2 adj2 access\$3 adj3 school adj2 information | US-PGPU B; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/08/29 20:39 |
| S65 | 6 | S64 and S31 | US-PGPU B; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/08/29 20:39 |
| S64 | 7 | access\$3 adj3 school adj2 information | US-PGPU B; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/08/29 20:38 |
| S63 | 0 | access\$3 adj3 school adj2 notification | US-PGPU B; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/08/29 20:38 |
| S61 | 4 | access\$3 adj3 weather adj forecast adj service | US-PGPU B; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/08/29 20:37 |
| S62 | 2 | S31 and S61 | US-PGPU B; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/08/29 20:30 |
| S60 | 0 | access\$3 with weather adj forecast | US-PGPU B; USPAT; EPO; JPO; DERWENT | OR | ON | 2006/08/29 20:30 |

EAST Search History

| | | | | | | |
|-----|---|--|--|----|----|---------------------|
| S59 | 0 | access\$3 near3 weather adj forecast | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 20:29 |
| S58 | 0 | access\$3 near3 weather adj forecast adj service | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 20:29 |
| S57 | 0 | access\$3 adj2 weather adj forecast adj service | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 20:29 |
| S56 | 0 | remote\$2 near control\$4 near3 heating with school near3 (releas\$3 or close\$2) | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 20:28 |
| S55 | 0 | remote\$2 near control\$4 near3 heating with school near3 releas\$3 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 20:05 |
| S54 | 0 | remote\$2 near control\$4 near4 window adj2 system near3 (energy or power or electricity) | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 20:05 |
| S30 | 1 | remote\$2 near control\$4 near3 appliance with sms and (authoriz\$3 or authenticat\$3) | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 20:05 |
| S53 | 0 | remote\$2 near control\$4 near4 window adj2 system near3 energy | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 20:03 |

EAST Search History

| | | | | | | |
|-----|-----|---|--|----|----|---------------------|
| S51 | 27 | remote\$2 near control\$4 near4 window adj2 system | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 20:02 |
| S52 | 26 | S31 and S51 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 19:58 |
| S49 | 1 | remote\$2 near control\$4 near3 power with sensitive adj electronic | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 19:58 |
| S50 | 1 | S31 and S49 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 19:57 |
| S48 | 0 | remote\$2 near control\$4 near3 sprinkler with bypass\$3 near2 schedule\$2 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 19:56 |
| S46 | 70 | remote\$2 near control\$4 near3 sprinkler | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 19:55 |
| S47 | 66 | S31 and S46 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 19:54 |
| S33 | 340 | remote\$2 near control\$4 near3 appliance and (authoriz\$3 or authenticat\$3) | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 19:54 |

EAST Search History

| | | | | | | |
|-----|---|---|--|----|----|---------------------|
| S45 | 8 | S31 and S44 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 19:27 |
| S44 | 8 | remote\$2 near control\$4 near3 appliance and confirm\$3 near2 (message or command) near2 (sent or deliver\$3 or transmit\$3 or receiv\$3) | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 19:27 |
| S43 | 8 | S42 and S31 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 18:07 |
| S42 | 8 | remote\$2 near2 control\$4 near4 appliance same (sms or short adj message adj service) | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 18:07 |
| S41 | 5 | remote\$2 near2 control\$4 near4 appliance with (sms or short adj message adj service) | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 18:07 |
| S39 | 5 | remote\$2 near control\$4 near3 appliance with (sms or short adj message adj service) | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 18:07 |
| S40 | 5 | S31 and S39 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 18:05 |
| S38 | 5 | remote\$2 near control\$4 near3 appliance with sms | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 18:04 |

EAST Search History

| | | | | | | |
|-----|--------------|--|--|----|-----|---------------------|
| S35 | 16 | remote\$2 near control\$4 near3 appliance and (sms or short adj message adj service) and (authoriz\$3 or authenticat\$3) | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 18:04 |
| S37 | 1 | ("6393297").PN. | US-PGPU B; USPAT | OR | OFF | 2006/08/29 17:56 |
| S36 | 11 | S31 and S35 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 17:56 |
| S34 | 299 | S31 and S33 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 17:37 |
| S32 | 1 | S30 and S31 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 17:36 |
| S31 | 2648805 3 | @ad<"20041118" | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 17:36 |
| S29 | 2648805 3 | @ad<"20041118" | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 17:33 |
| S28 | 1 | remote\$2 near control\$4 near3 appliance with sms and (authoriz\$3 or authenticat\$3) | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 17:33 |
| S10 | 5 | remote\$2 near control\$4 near3 appliance with sms | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 17:32 |
| S27 | 1 | ("6393297").PN. | US-PGPU B; USPAT | OR | OFF | 2006/08/29 16:51 |

EAST Search History

| | | | | | | |
|-----|-------|---|--|----|----|---------------------|
| S26 | 16 | electromechanical adj switch\$3 near2 advantage | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:48 |
| S25 | 43 | electromechanical adj switch\$3 near3 advantage | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:48 |
| S22 | 64 | remote\$2 near control\$3 with electromechanical adj switch\$3 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:48 |
| S24 | 1 | S18 and S23 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:39 |
| S23 | 94629 | "455"/\$.ccls. | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:39 |
| S18 | 54 | S9 and S17 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:39 |
| S21 | 0 | remote\$2 near control\$4 near4 appliance same electromechanical adj switch\$3 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:38 |
| S20 | 0 | remote\$2 near control\$4 near4 appliance with electromechanical adj switch\$3 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:38 |

EAST Search History

| | | | | | | |
|-----|--------|---|--------------------------------------|----|----|------------------|
| S19 | 0 | remote\$2 near control\$4 near appliance with electromechanical adj switch\$3 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:38 |
| S17 | 59 | remote\$2 near control\$4 with electromechanical adj switch | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:37 |
| S14 | 186657 | remote\$2 near control\$4 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:37 |
| S16 | 236 | S9 and S15 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:36 |
| S15 | 252 | S12 and S14 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:36 |
| S13 | 0 | S8 and S12 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:36 |
| S12 | 2567 | electromechanical adj switch | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:36 |
| S8 | 107 | remote\$2 near control\$4 with sms | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:36 |

EAST Search History

| | | | | | | |
|-----|--------------|--|--|----|-----|---------------------|
| S11 | 5 | S9 and S10 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:35 |
| S9 | 2591404 9 | @ad<"20041118" | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:18 |
| S7 | 1 | ("20050044225").PN. | US-PGPU B; USPAT | OR | OFF | 2006/02/24 14:17 |
| S6 | 1 | ("20040092282").PN. | US-PGPU B; USPAT | OR | OFF | 2006/02/24 13:33 |
| S5 | 1 | ("20030210126").PN. | US-PGPU B; USPAT | OR | OFF | 2006/02/24 13:17 |
| S1 | 208 | (detection adj system).ti. and (theft or thieves) | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 12:35 |
| S4 | 5 | (close\$2 near proximity and detect\$3).ti. | US-PGPU B; USPAT | OR | ON | 2006/02/23 16:02 |
| S3 | 1 | ("20030210126").PN. | US-PGPU B; USPAT | OR | OFF | 2006/02/23 16:01 |
| S2 | 82 | (detection adj system and (theft or thieves)).ti. | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/23 15:05 |



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 NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 11/163,372 | 10/17/2005 | Charles G. SHAMOON | 7192-06-05 | 4371 |
| 23983 | 7590 | 09/06/2006 | EXAMINER | |
| MILLS LAW FIRM, PLLC P.O BOX 1245 Cary, NC 27512-1245 | | | NGUYEN, HUY D | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2617 | |

DATE MAILED: 09/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | | |
|------------------------------|--------------------------------------|--|---------------------------------------|--|
| Office Action Summary | Application No. 11/163,372 | | Applicant(s) SHAMOON ET AL. | |
| | Examiner Huy D. Nguyen | | Art Unit 2617 | |
| | | | | |

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

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 09 August 2006.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-11, 21-58 is/are pending in the application.

4a) Of the above claim(s) 25-31 and 44-50 is/are withdrawn from consideration.

5) ☒ Claim(s) 1-11 is/are allowed.

6) ☒ Claim(s) 21-24, 32-34, 38, 40-43, 51-53 and 57 is/are rejected.

7) ☒ Claim(s) 35-37, 39, 54-56 and 58 is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ 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:

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)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other: _____ |
|---|--|

DETAILED ACTION

Election/Restrictions

1. This application contains claims directed to the following patentably distinct species:

Species I: claims 2-11, 22-24, 32-39, 41-43, 51-58.

Species II: claims 25-31, 44-50.

The species are independent or distinct because species I is drawn to remote programming control, classified in class 455, subclass 419; species II is drawn to privacy/authentication, classified in class 455, subclass 411.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1, 21, 40 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

2. During a telephone conversation with Peter D. Sachtjen on 8/28/2006 a provisional election was made to prosecute the invention of species I, claims 2-11, 22-24, 32-39, 41-43, 51-

Art Unit: 2617

58. Affirmation of this election must be made by applicant in replying to this Office action.

Claims 25-31, 44-50 are withdrawn from further consideration by the examiner, 37

CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 21, 24, 32-33, 40, 43, 51-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanazawa (US 2003/0210126 A1) in view of Song (US Patent No. 6,393,297).

Regarding claims 21, 40, Kanazawa teaches a method for environmental control and information processing associated with a structure, the method comprising: receiving from a remote control unit (e.g., cell phone 3 – see fig. 1) messages comprising control information to use for controlling a plurality of environmental control units (e.g., devices 1, see figure 1) associated with the structure (e.g., home, see fig. 1); creating control commands for the plurality of environmental control units based on the control information messages; and delivering the control commands to the plurality of environmental control units (see paragraphs [0002], [0020]. Kanazawa teaches the claimed invention except the use of SMS. However, the preceding limitation is taught in Song (see column 1, lines 19-23). It would have been obvious to one

having ordinary skill in the art at the time the invention was made to apply the teaching of Song to the teaching of Kanazawa to increase system capability by adding more function/service.

Regarding claims 24, 43, the combination of Kanazawa in view of Song teaches the method of claim 21 comprising controlling environmental conditions within the structure using the plurality of environmental control units (see Kanazawa: fig. 1 and paragraph [0020]).

Regarding claims 32, 51, the combination of Kanazawa in view of Song teaches the method of claim 21 comprising accessing remote information (e.g., from monitoring center – see Song) creating a control command based on the remote information and delivering the control command to at least one of the plurality of environmental control units (see Song: fig. 2).

Regarding claims 33, 52, the combination of Kanazawa in view of Song teaches the method of claim 32 comprising sending an SMS message to the remote control unit (e.g., mobile terminal – see Song) based on the remote information (e.g., from monitoring center – see Song) and the control command delivered to the at least one of the plurality of environmental control units (see Song: fig. 2).

5. Claims 22-23, 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanazawa (US 2003/0210126 A1) in view of Song (US Patent No. 6,393,297) and in further view of Haughwout et al. (US 2004/0263349 A1).

Regarding claims 22, 41, the combination of Kanazawa in view of Song teaches the method of claim 21 except sending an SMS message to the remote control unit indicating delivery of a control command to at least one of the plurality of environmental control units. However, the preceding limitation is taught in Haughwout et al. (see claim 27). It would have

Art Unit: 2617

been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Haughawout et al. to the teaching of Kanazawa in view of Song to maintain system performance by making sure the sequence of command codes are delivered in order.

Regarding claims 23, 42, the combination of Kanazawa, Song, and Haughawout et al. teaches the method of claim 22 wherein the SMS message includes status information for at least one of the plurality of environmental control units (see Song: fig. 2).

6. Claims 34, 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanazawa (US 2003/0210126 A1) in view of Song (US Patent No. 6,393,297) and in further view of Mizuta (US 2001/0035817 A1).

Regarding claims 34, 53, the combination of Kanazawa in view of Song teaches the claimed invention except accessing a weather forecast service and the remote information relates to local weather conditions. However, the preceding limitation is taught in Mizuta (see paragraph [0062]). It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Mizuta to the teaching of Kanazawa in view of Song to increase system capability by adding more information services.

7. Claims 38, 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanazawa (US 2003/0210126 A1) in view of Song (US Patent No. 6,393,297) and in further view of Robinson et al. (US 2002/0177109 A1).

Regarding claims 38, 57, the combination of Kanazawa in view of Song teaches the claimed invention except accessing remote information includes accessing a school system's notification information service and the remote information includes school related information.

However, the preceding limitation is taught in Robinson et al. (see paragraph [0085]). It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Robinson et al. to the teaching of Kanazawa in view of Song to increase system capability by adding more information services.

Allowable Subject Matter

8. Claims 35-37, 39, 54-56, 58 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claims 1-11 are allowed. The following is an examiner's statement of reasons for allowance:

Regarding claim 1, Kanazawa teaches a ubiquitous connectivity and communications system for controlling operation of an environmental condition in a structure, comprising: a device for controlling the environmental condition in the structure (e.g., device 1, see figure 1); a base unit (e.g., controller 2) in said structure and operatively interfaced with said device to control the operation thereof (see figure 1); a remote device (e.g., cellular 3); wireless connectivity means providing an on-demand, private and direct communications interface between said base unit and said remote device enabling instant wireless connectivity therebetween (e.g, cellular phone transceiver); means for providing an indication of current

status of said device to said base unit (e.g., Bluetooth network); input means at said remote device for prescribing an indication of revised status for said device (e.g., WWW browser function, see paragraph [0020]); means for transmitting said indication of revised status through said connectivity means to said base unit (e.g., cellular phone transmitter); means operatively associated with said base unit and operatively connected with said device for effecting said revised status for said device (see paragraph [0020]). Kanazawa does not specifically teach means for transmitting said indication of current status through said connectivity means to said remote device and display means at said remote device for indicating said current status of said device. However, the preceding limitations are taught in Kim et al. (see figure 3 and paragraph [0045]). It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Kim et al. to the teaching of Kanazawa to provide convenience for users. The combination of Kanazawa and Kim et al. teaches the claimed invention except the use of SMS. However, the preceding limitation is taught in Song (see column 1, lines 19-23). It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Song to the teaching of Kanazawa and Kim et al. to increase system capability by adding more function/service.

However, the cited prior arts, either alone or in combination, fail to teach means for transmitting said second SMS message including information associated with the remote device and the indication of revised status through said connectivity means to said base unit, wherein the base unit is adapted to authenticate the second SMS message using the information associated with the remote device, in combination with all of other limitations in the claim.

Claims 2-11 depend on claim 1. Thus, they are allowable.

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."

Conclusion


10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy D. Nguyen whose telephone number is 571-272-7845. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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.


Huy D Nguyen
Patent Examiner
Art Unit 2617


ERIKA A. GARY
PRIMARY EXAMINER

| | | | |
|-----------------------------------|---------------------------------------|--|-------------|
| Notice of References Cited | Application/Control No. 11/163,372 | Applicant(s)/Patent Under Reexamination SHAMOON ET AL. | |
| | Examiner Huy D. Nguyen | Art Unit 2681 | Page 1 of 1 |

U.S. PATENT DOCUMENTS

| * | | Document Number Country Code-Number-Kind Code | Date MM-YYYY | Name | Classification |
|---|---|--|-----------------|-------------------|----------------|
| * | A | US-2003/0210126 | 11-2003 | Kanazawa, Ritsuko | 340/5.5 |
| * | B | US-2004/0092282 | 05-2004 | Kim et al. | 455/522 |
| * | C | US-2004/0235446 | 11-2004 | Flaherty et al. | 455/352 |
| * | D | US-6,393,297 | 05-2002 | Song, Ho Ji | 455/466 |
| * | E | US-2004/0263349 | 12-2004 | Haughawout et al. | 340/825.72 |
| * | F | US-2002/0177109 | 11-2002 | Robinson et al. | 434/118 |
| * | G | US-2001/0035817 | 11-2001 | Mizuta, Rika | 340/438 |
| | H | US- | | | |
| | I | US- | | | |
| | J | US- | | | |
| | K | US- | | | |
| | L | US- | | | |
| | M | US- | | | |

FOREIGN PATENT DOCUMENTS

| * | | Document Number Country Code-Number-Kind Code | Date 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 MM-YYYY format are publication dates. Classifications may be US or foreign.

Search Notes

Application/Control No.

11/163,372

Examiner

Huy D. Nguyen

Applicant(s)/Patent under
Reexamination

SHAMOON ET AL.

Art Unit

2681

SEARCHED


| Class | Subclass | Date | Examiner |
|---------|----------|-----------|----------|
| 455 | 419 | 2/24/2006 | HN |
| | 420 | | |
| | 410 | | |
| | 411 | | |
| | 466 | | |
| | 352 | | |
| 340 | 5.5 | | |
| Updated | search | 8/29/2006 | HN |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

INTERFERENCE SEARCHED

| Class | Subclass | Date | Examiner |
|-------|----------|------|----------|
| | | | |
| | | | |
| | | | |
| | | | |

**SEARCH NOTES
(INCLUDING SEARCH STRATEGY)**

| | DATE | EXMR |
|---|-----------|------|
| East (USPAT, US-PGPUB, JPO, EPO, DERWENT). See search history printout. | 2/24/2006 | HN |
| East; Text search (USPAT, US-PGPUB, JPO, EPO, DERWENT). See search history printout. | 8/29/2006 | HN |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

| | | |
|---|--|--|
| Index of Claims  | Application/Control No. 11163372 | Applicant(s)/Patent under Reexamination SHAMOON ET AL. |
| | Examiner Nguyen, Huy D | Art Unit 2617 |

| | |
|---|-----------------|
| ✓ | Rejected |
| = | Allowed |


| | |
|---|-------------------|
| - | Cancelled |
| ÷ | Restricted |

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

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

☐ Claims renumbered in the same order as presented by applicant
 ☐ CPA
 ☐ T.D.
 ☐ R.1.47

| CLAIM | | DATE | | | | | | | | |
|-------|----------|---------|--|--|--|--|--|--|--|--|
| Final | Original | 8/29/06 | | | | | | | | |
| | 1 | = | | | | | | | | |
| | 2 | = | | | | | | | | |
| | 3 | = | | | | | | | | |
| | 4 | = | | | | | | | | |
| | 5 | = | | | | | | | | |
| | 6 | = | | | | | | | | |
| | 7 | = | | | | | | | | |
| | 8 | = | | | | | | | | |
| | 9 | = | | | | | | | | |
| | 10 | = | | | | | | | | |
| | 11 | = | | | | | | | | |
| | 12 | - | | | | | | | | |
| | 13 | - | | | | | | | | |
| | 14 | - | | | | | | | | |
| | 15 | - | | | | | | | | |
| | 16 | - | | | | | | | | |
| | 17 | - | | | | | | | | |
| | 18 | - | | | | | | | | |
| | 19 | - | | | | | | | | |
| | 20 | - | | | | | | | | |
| | 21 | ✓ | | | | | | | | |
| | 22 | ✓ | | | | | | | | |
| | 23 | ✓ | | | | | | | | |
| | 24 | ✓ | | | | | | | | |
| | 25 | N | | | | | | | | |
| | 26 | N | | | | | | | | |
| | 27 | N | | | | | | | | |
| | 28 | N | | | | | | | | |
| | 29 | N | | | | | | | | |
| | 30 | N | | | | | | | | |
| | 31 | N | | | | | | | | |
| | 32 | ✓ | | | | | | | | |
| | 33 | ✓ | | | | | | | | |

| | | |
|---|--|--|
| Index of Claims  | Application/Control No. 11163372 | Applicant(s)/Patent under Reexamination SHAMOON ET AL. |
| | Examiner Nguyen, Huy D | Art Unit 2617 |

| | | | | | | | |
|----------|-----------------|----------|-------------------|----------|---------------------|----------|-----------------|
| ✓ | Rejected | - | Cancelled | N | Non-Elected | A | Appeal |
| = | Allowed | ÷ | Restricted | I | Interference | O | Objected |

| | | | |
|--|------------------------------|-------------------------------|---------------------------------|
| <input 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 |
|--|------------------------------|-------------------------------|---------------------------------|

| CLAIM | | | DATE | | | | | | | |
|-------|----------|---------|------|--|--|--|--|--|--|--|
| Final | Original | 8/29/06 | | | | | | | | |
| | 34 | ✓ | | | | | | | | |
| | 35 | O | | | | | | | | |
| | 36 | O | | | | | | | | |
| | 37 | O | | | | | | | | |
| | 38 | ✓ | | | | | | | | |
| | 39 | O | | | | | | | | |
| | 40 | ✓ | | | | | | | | |
| | 41 | ✓ | | | | | | | | |
| | 42 | ✓ | | | | | | | | |
| | 43 | ✓ | | | | | | | | |
| | 44 | N | | | | | | | | |
| | 45 | N | | | | | | | | |
| | 46 | N | | | | | | | | |
| | 47 | N | | | | | | | | |
| | 48 | N | | | | | | | | |
| | 49 | N | | | | | | | | |
| | 50 | N | | | | | | | | |
| | 51 | ✓ | | | | | | | | |
| | 52 | ✓ | | | | | | | | |
| | 53 | ✓ | | | | | | | | |
| | 54 | O | | | | | | | | |
| | 55 | O | | | | | | | | |
| | 56 | O | | | | | | | | |
| | 57 | ✓ | | | | | | | | |
| | 58 | O | | | | | | | | |

FEB 06 2007

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: SHAMOON, Charles G., et al.
Title: UBIQUITOUS CONNECTIVITY AND CONTROL
SYSTEM FOR REMOTE LOCATIONS
Serial No.: 11/163,372
Filing Date: 10/17/2005
Group Art Unit: 2617
Examiner: NGUYEN, Huy D.
Docket No.: 7192-06-05
Last Action: 09/06/2006
Customer No.: 23983

Mail Stop AF
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

**RESPONSE TO THE FINAL OFFICE ACTION
MAILED SEPTEMBER 6, 2006**

In response to the Final Office Action mailed September 6, 2006, Applicant offers the following amendments and remarks. Applicant encloses a payment in the amount of \$225.00 to cover the fee associated with a Two-month Extension of Time for a small entity and requests that this be considered a petition therefore.

Additionally, Applicant transmits herewith the issue fee and publication fee for the above-identified application in the amount of \$1,000.00. If any additional fees are required in association with this response, the Director is hereby

authorized to charge them to Deposit Account 500498, and consider this a petition therefor.

In the Claims:

Amend claims as set forth in the attached Claims Status.

RECEIVED
CENTRAL FAX CENTER

FEB 06 2007

CLAIM STATUS

1. (Previously Presented) A ubiquitous connectivity and communications system for controlling operation of an environmental condition in a structure, comprising:

a device for controlling the environmental condition in the structure;

a base unit in said structure and operatively interfaced with said device to control the operation thereof;

a remote device adapted to send and receive short message service (SMS) messages;

wireless connectivity means providing an on-demand, private and direct communications interface between said base unit and said remote device enabling instant wireless connectivity therebetween without use of an Internet connection;

means for providing an indication of current status of said device to said base unit;

means for transmitting said indication of current status through said connectivity means from the base unit to said remote device as a first SMS message;

display means at said remote device for indicating said current status of said device;

input means at said remote device for prescribing an indication of revised status for said device as a second SMS message, wherein the second SMS message includes information associated with the remote device;

means for transmitting said second SMS message including information associated with the remote device and the indication of revised status through said connectivity means to said base unit, wherein the base unit is adapted to

authenticate the second SMS message using the information associated with the remote device;

means operatively associated with said base unit and operatively connected with said device for effecting said revised status for said device.

2. (Previously Presented) The system as recited in claim 1 wherein said device for controlling the environmental condition includes electronic and electromechanical switching means interfaced with said device for controlling the environmental condition.

3. (Original) The system as recited in claim 1 wherein said base unit is a microcontroller-based processing unit having customizable application specific software.

4. (Original) The system as recited in claim 1 wherein said remote device is a cellular telephone handset with custom programmability means.

5. (Original) The system as recited in claim 4 wherein said custom programmability means is a JAVA programming kernel.

6. (Original) The system as recited in claim 4 wherein said custom programmability means is a J2ME programming kernel.

7. (Previously Presented) The system as recited in claim 1 wherein said connectivity means includes a transmitting and receiving module in said base unit and a transmitting and receiving unit in said remote device operatively communicating with each other over a cellular telephone network.

8. (Previously Presented) The system as recited in claim 1 wherein said means for providing an indication of current status to said base unit and said means for transmitting said indication of current status is a short message service (SMS) message carried along a cellular telephone network.

9. (Original) The system as recited in claim 1 wherein said display means is a liquid crystal display module.

10. (Original) The system as recited in claim 9 wherein said liquid crystal module includes selectable graphic icons corresponding to environmental conditions being monitored or controlled.

11. (Previously Presented) The system as recited in claim 8 including means operative between said remote devices using said SMS for selectively disabling transmission thereto.

12-58 are Cancelled.

RECEIVED
CENTRAL FAX CENTER
FEB 06 2007

REMARKS

Applicant has carefully reviewed the Final Office Action mailed September 6, 2006 and offers the following remarks to accompany the above amendments.

Status of the claims

Claims 1-58 are pending in the present application. Claims 12-20 were previously withdrawn from prosecution without traverse. Claims 12-58 are cancelled. Accordingly, allowed claims 1-11 are pending.

Election/Restriction

In response to the restriction requirement, Applicant hereby affirms the provisional election made by Peter D. Sachtjen on August 28, 2006, to prosecute the invention of species I, which includes claims 2-11, 22-24, 32-39, 41-43, and 51-58. Applicant reserves the right to file divisional applications directed to the non-elected and herein cancelled claims at a later time during the pendency of the present application.

Allowable Subject Matter

Applicant wishes to thank the Examiner for indicating that claims 1-11 are allowed and that claims 35-37, 39, 54-56, and 58 would be allowable if rewritten in independent form. Applicant reserves the right to rewrite claims 35-37, 39, 54-56, and 58 at a later time. In order to expedite issuance of claims 1-11, Applicant hereby cancels claims 12-58 from prosecution within the present application without prejudice.

Comments on Statement of Reasons for Allowance

Applicant provides the following comments on the Patent Office's statement of reasons for allowance of claims 1-11 for the record. (See Final Office Action mailed September 9, 2006, pages 6 and 7).

Applicant concurs with the Patent Office's admission (see Final Office Action mailed September 9, 2006, page 7) that the prior art of record fails to teach multiple elements of claim 1. Specifically, the Patent Office admits that the prior art of record fails to teach transmitting a second SMS message including information associated with the remote device and the indication of revised status through connectivity means to a base unit. The Patent Office additionally admits that the prior art of record fails to teach that the base unit is adapted to authenticate the second SMS message using the information associated with the remote device. Applicant agrees that the prior art of record fails to teach these elements and allowance is proper on this basis alone.

Moreover, Applicant's invention, as recited in claims 1 through 11, provides for a base unit capable of direct wireless communication with a wireless remote device without requiring an Internet or PSTN connection outside the structure. More particularly, Applicant's Figure 4 shows that the base control unit 16 includes a wireless module 70. Applicant's Figure 1 shows the base control unit 16, in the structure, in direct communication with a cellular tower 24, which is likewise in communication with a cellular network 22. A master control unit 12 and a remote control unit 26, which may include a cell phone 30 depicted within Figure 3, are also illustrated within Figure 1 to be in direct wireless communication with other cell towers 24 within the cellular network 22. Accordingly, Applicant's invention provides for a base unit, in the structure, capable of direct wireless communication with a wireless remote device without requiring an Internet or

PSTN connection outside the structure in the communication to the remote control unit.

In contrast, neither U.S. Patent Application Publication No. 2003/0210126 A1 to Kanazawa nor U.S. Application Publication No. 2004/0092282 A1 to Kim et al. (hereinafter "Kim"), either alone or in combination, teach a wireless base unit. As such, a combination of Kanazawa with Kim does not teach wireless connectivity means providing an on-demand, private and direct communications interface between a base unit, in the structure, and a remote device enabling instant wireless connectivity therebetween. Kanazawa shows within Figure 1 that the controller 2 requires a direct Internet connection and is not capable of direct wireless communication. (See Kanazawa, Figure 1; paragraph 0020). Likewise, Kim does not teach a wireless base unit either and requires a direct Internet connection 3 at a user terminal 7 to communicate with a remote server 5 and an electronic appliance 10. Additionally, a telephone network 32 is used between a telephone signal transmit unit 24 and a telephone network accessing unit 12 to provide dual-tone multi-frequency (DTMF) control of the electronic appliance. The only connection between the user terminal 7 and the other units is via the Internet 3. (See Kim, Figures 1 and 2; paragraphs 0024 and 0031-0036). Accordingly, neither Kanazawa nor Kim, either alone or in combination, teach a wireless base unit or wireless connectivity means providing an on-demand, private and direct communications interface between a base unit and a remote device enabling instant wireless connectivity therebetween.

Furthermore, because a combination of Kanazawa with Kim does not teach wireless means providing an on-demand, private and direct communications interface between a base unit and a remote device enabling instant wireless connectivity therebetween, the combination does not teach transmitting an indication of current status through a wireless connectivity means from a base unit

to a remote device. The Patent Office admits that Kanazawa does not teach “means for transmitting said indication of current status through said connectivity means” (See Final Office Action mailed September 9, 2006, page 7). The Patent Office then asserts that these limitations are taught by Kim and that it would be obvious to combine Kanazawa with Kim. *Ibid*. However, as discussed above, neither Kanazawa nor Kim, either alone or in combination, teach a base unit capable of wireless communication and, as such, also do not teach wireless connectivity means providing an on-demand, private and direct communications interface between said base unit and said remote device enabling instant wireless connectivity therebetween. Accordingly, Applicant takes exception for the record of the Patent Office’s assertion within the reasons for allowance that Kim cures the admitted deficiency of Kanazawa.

Additionally, the Patent Office admits that the combination of Kanazawa and Kim does not teach SMS messaging and asserts that U.S. Patent No. 6,393,297 B1 to Song cures this deficiency. (See Final Office Action mailed September 9, 2006, page 7). However, Applicant notes that Song requires the external appliance 100 to encode/decode SMS messages directly. As such, Song also does not provide a base unit capable of wireless communication. Further, a data input/output port is required to communicate between the external appliance 100 and the mobile terminal 110. (See Song, Figure 1; col. 2, lines 34-42). An external appliance of Song requires extensive modifications to provide an appliance capable of performing SMS messaging and does not do so in a wireless fashion. Accordingly, any combination of Song with Kanazawa and Kim still does not teach at least a base unit in a structure operatively interfaced with a device to control the operation thereof and does not teach wireless connectivity means providing an on-demand, private and direct communications interface between a base unit and a remote device enabling instant wireless connectivity therebetween.

RECEIVED
CENTRAL FAX CENTER
FEB 06 2007


Conclusion

Claims 1-11 of the present application are now in condition for allowance and such action is respectfully requested. The Examiner is encouraged to contact Applicant's representative regarding any remaining issues in an effort to expedite allowance and issuance of the present application.

Dated: February 6, 2007

Respectfully submitted,

MILLS LAW FIRM, PLLC



Peter D. Sachtjen, Reg. No. 24,619

Ishman Law Firm P.C.
Post Office Box 1245
Cary, NC 27512
Telephone: (919) 462-3036
Facsimile: (919) 462-3041
Attorney Direct Line: (252) 413-0475

To: 571-273-8300

From: Stefanie Hansen

Pg 13/14 02/06/07 3:47 pm

RECEIVED
CENTRAL FAX CENTER

FEB 06 2007

PTO/SB/22 (12-04)

Approved for use through 07/31/2006. 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 EXTENSION OF TIME UNDER 37 CFR 1.136(a) | | Docket Number (Optional) | |
| FY 2005 (Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4010).) | | 7192-06-05 | |
| Application Number 11/163,372 | | Filed 10/17/2005 | |
| For SHAMOON, Charles G., et al. (UBIQUITOUS CONNECTIVITY AND CONTROL...) | | | |
| Art Unit 2681 | | Examiner NGUYEN, Huy D. | |
| This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above identified application. | | | |
| The requested extension and fee are as follows (check time period desired and enter the appropriate fee below): | | | |
| | <u>Fee</u> | <u>Small Entity Fee</u> | |
| <input type="checkbox"/> One month (37 CFR 1.17(a)(1)) | \$120 | \$60 | \$ _____ |
| <input checked="" type="checkbox"/> Two months (37 CFR 1.17(a)(2)) | \$450 | \$225 | \$ 225.00 |
| <input type="checkbox"/> Three months (37 CFR 1.17(a)(3)) | \$1020 | \$510 | \$ _____ |
| <input type="checkbox"/> Four months (37 CFR 1.17(a)(4)) | \$1590 | \$795 | \$ _____ |
| <input type="checkbox"/> Five months (37 CFR 1.17(a)(5)) | \$2160 | \$1080 | \$ _____ |
| <input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. | | | |
| <input type="checkbox"/> A check in the amount of the fee is enclosed. | | | |
| <input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached. | | | |
| <input type="checkbox"/> The Director has already been authorized to charge fees in this application to a Deposit Account. | | | |
| <input checked="" type="checkbox"/> The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number <u>500498</u> . I have enclosed a duplicate copy of this sheet. | | | |
| WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038. | | | |
| I am the <input type="checkbox"/> applicant/inventor. | | | |
| <input type="checkbox"/> 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). | | | |
| <input checked="" type="checkbox"/> attorney or agent of record. Registration Number <u>24,619</u> | | | |
| <input type="checkbox"/> attorney or agent under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____ | | | |
| <u>Peter D. Sachtjen</u> Signature | | <u>02/06/2007</u> Date | |
| <u>Peter D. Sachtjen</u> Typed or printed name | | <u>919-462-3036</u> Telephone Number | |
| 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. | | | |
| <input checked="" type="checkbox"/> Total of <u>one (1)</u> forms are submitted. | | | |

This collection of information is required by 37 CFR 1.136(a). 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 6 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.

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

02/07/2007 SFELE1 00000005 500498 11163372

01 FC:2252 225.00 DA

To: 571-273-8300

From: Stefanie Hansen

Pg 1/14 02/06/07 3:47 pm

RECEIVED
CENTRAL FAX CENTER

FEB 06 2007

ISHMAN LAW FIRM P.C.
POST OFFICE BOX 1245
CARY, NC 27512-1245
TEL 919-462-3036
FAX 919-462-3041
EASTERN OFFICE: 252-413-0475

Date: February 6, 2007
To: USPTO 571-273-8300
From: Peter D. Sachtnen
Re: Serial No.: 11/163,372 SHAMOON

THIS MESSAGE IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL, AND EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT, OR THE EMPLOYEE OR AGENT RESPONSIBLE FOR DELIVERING THE MESSAGE TO THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION, OR COPYING OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONE AND RETURN THE ORIGINAL MESSAGE TO US. THANK YOU.

Please forward the attached response to office action to Examiner Huy D. NGUYEN in Art Unit 2617. There are 12 pages in the attached response (not including this cover page).

Also enclosed is a duplicate Request for Extension of Time form to be used for the deposit account.

PATENTS • TRADEMARKS • COPYRIGHTS • TECHNOLOGY TRANSFERS
REGISTERED PATENT ATTORNEYS • UNITED STATES AND INTERNATIONAL PRACTICE
www.millspatentlaw.com

PAGE 1/14 * RCVD AT 2/6/2007 3:47:59 PM [Eastern Standard Time] * SVR:USPTO-EFXRF-2/20 * DNIS:2738300 * CSID:(919) 462-3041 * DURATION (mm-ss):04-46

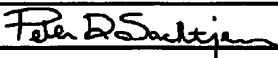
PTO/SB/21 (09-04)

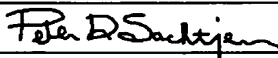
Approved for use through 07/31/2006. OMB 0851-0031

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.

| | | | |
|--|----------------------|-----------------------------|--|
| TRANSMITTAL FORM <small>(to be used for all correspondence after initial filing)</small> | Application Number | 11/163,372 | RECEIVED CENTRAL FAX CENTER FEB 06 2007 |
| | Filing Date | 7192-06-05 | |
| | First Named Inventor | SHAMOON, Charles G., et al. | |
| | Art Unit | 2681 | |
| | Examiner Name | NGUYEN, Huy D. | |
| Total Number of Pages in This Submission | 12 | Attorney Docket Number | 7192-06-05 |

| ENCLOSURES (Check all that apply) | | |
|--|---|---|
| <input type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment/Reply <input checked="" type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input checked="" type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD | <input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below): |
| Remarks | | |
| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT | | |
| Firm Name | Mills Law Firm PLLC | |
| Signature |  | |
| Printed name | Peter D. Sachtjen | |
| Date | 02/06/2007 | Reg. No. 24,619 |

| CERTIFICATE OF TRANSMISSION/MAILING | | |
|---|---|-----------------|
| I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below: | | |
| Signature |  | |
| Typed or printed name | Peter D. Sachtjen | Date 02/06/2007 |

This collection of information is required by 37 CFR 1.5. 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 2 hours 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.

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

CLAIMS AS FILED - PART I

| (Column 1) | | (Column 2) | SMALL ENTITY | | OR | OTHER THAN SMALL ENTITY | |
|---|--------------|--------------|--------------|-------|----|-------------------------|-------|
| FOR | NUMBER FILED | NUMBER EXTRA | RATE | FEE | | RATE | FEE |
| BASIC FEE (37 CFR 1.18(a)) | | | | 35.00 | OR | | 35.00 |
| TOTAL CLAIMS (37 CFR 1.18(c)) | | | x 25. | | OR | x 50. | |
| INDEPENDENT CLAIMS (37 CFR 1.18(b)) | minus 20 = | | x 100. | | OR | x 200. | |
| | minus 3 = | | + 180. | | OR | + 360. | |
| MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.18(d)) | | | TOTAL | | OR | TOTAL | |

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

CLAIMS AS AMENDED - PART II

| | (Column 1) | (Column 2) | (Column 3) | SMALL ENTITY | | OR | OTHER THAN SMALL ENTITY | |
|-------------|---|------------------------------------|---------------|-----------------|----------------|----|-------------------------|----------------|
| | CLAIMS REMAINING AFTER AMENDMENT | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | RATE | ADDITIONAL FEE | | RATE | ADDITIONAL FEE |
| AMENDMENT A | Total (37 CFR 1.14(c)) | Minus ** | 38 | x 25. | | OR | x 50. | |
| | Independent (37 CFR 1.14(b)) | Minus *** | 4 | x 100. | | OR | x 200. | |
| | FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(d)) | | | + 180. | | OR | + 360. | |
| | | | | TOTAL ADD'L FEE | | OR | TOTAL ADD'L FEE | |
| AMENDMENT B | Total (37 CFR 1.14(c)) | Minus ** | | x \$ | | OR | x \$ | |
| | Independent (37 CFR 1.14(b)) | Minus *** | | x \$ | | OR | x \$ | |
| | FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(d)) | | | + \$ | | OR | + \$ | |
| | | | | TOTAL ADD'L FEE | | OR | TOTAL ADD'L FEE | |
| AMENDMENT C | Total (37 CFR 1.14(c)) | Minus ** | | x \$ | | OR | x \$ | |
| | Independent (37 CFR 1.14(b)) | Minus *** | | x \$ | | OR | x \$ | |
| | FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(d)) | | | + \$ | | OR | + \$ | |
| | | | | TOTAL ADD'L FEE | | OR | TOTAL ADD'L 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.
 This collection of information is required by 37 CFR 1.16. 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, 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.

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

11/16/3, 372

| Claim | | Date | |
|-------|----------|------|--|
| Final | Original | | |
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | |
| 11 | | | |
| 12 | | | |
| 13 | | | |
| 14 | | | |
| 15 | | | |
| 16 | | | |
| 17 | | | |
| 18 | | | |
| 19 | | | |
| 20 | | | |
| 21 | | | |
| 22 | | | |
| 23 | | | |
| 24 | | | |
| 25 | | | |
| 26 | | | |
| 27 | | | |
| 28 | | | |
| 29 | | | |
| 30 | | | |
| 31 | | | |
| 32 | | | |
| 33 | | | |
| 34 | | | |
| 35 | | | |
| 36 | | | |
| 37 | | | |
| 38 | | | |
| 39 | | | |
| 40 | | | |
| 41 | | | |
| 42 | | | |
| 43 | | | |
| 44 | | | |
| 45 | | | |
| 46 | | | |
| 47 | | | |
| 48 | | | |
| 49 | | | |
| 50 | | | |

| Claim | | Date | |
|-------|----------|------|--|
| Final | Original | | |
| 51 | | | |
| 52 | | | |
| 53 | | | |
| 54 | | | |
| 55 | | | |
| 56 | | | |
| 57 | | | |
| 58 | | | |
| 59 | | | |
| 60 | | | |
| 61 | | | |
| 62 | | | |
| 63 | | | |
| 64 | | | |
| 65 | | | |
| 66 | | | |
| 67 | | | |
| 68 | | | |
| 69 | | | |
| 70 | | | |
| 71 | | | |
| 72 | | | |
| 73 | | | |
| 74 | | | |
| 75 | | | |
| 76 | | | |
| 77 | | | |
| 78 | | | |
| 79 | | | |
| 80 | | | |
| 81 | | | |
| 82 | | | |
| 83 | | | |
| 84 | | | |
| 85 | | | |
| 86 | | | |
| 87 | | | |
| 88 | | | |
| 89 | | | |
| 90 | | | |
| 91 | | | |
| 92 | | | |
| 93 | | | |
| 94 | | | |
| 95 | | | |
| 96 | | | |
| 97 | | | |
| 98 | | | |
| 99 | | | |
| 100 | | | |

| Claim | | Date | |
|-------|----------|------|--|
| Final | Original | | |
| 101 | | | |
| 102 | | | |
| 103 | | | |
| 104 | | | |
| 105 | | | |
| 106 | | | |
| 107 | | | |
| 108 | | | |
| 109 | | | |
| 110 | | | |
| 111 | | | |
| 112 | | | |
| 113 | | | |
| 114 | | | |
| 115 | | | |
| 116 | | | |
| 117 | | | |
| 118 | | | |
| 119 | | | |
| 120 | | | |
| 121 | | | |
| 122 | | | |
| 123 | | | |
| 124 | | | |
| 125 | | | |
| 126 | | | |
| 127 | | | |
| 128 | | | |
| 129 | | | |
| 130 | | | |
| 131 | | | |
| 132 | | | |
| 133 | | | |
| 134 | | | |
| 135 | | | |
| 136 | | | |
| 137 | | | |
| 138 | | | |
| 139 | | | |
| 140 | | | |
| 141 | | | |
| 142 | | | |
| 143 | | | |
| 144 | | | |
| 145 | | | |
| 146 | | | |
| 147 | | | |
| 148 | | | |
| 149 | | | |
| 150 | | | |

If more than 160 claims or 10 actions
staple additional sheet here

(LEFT INSIDE)

EAST Search History

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|------|--|--|------------------|---------|---------------------|
| S71 | 0 | (remote\$2 near control\$4 near4 appliance same (sms or short adj message adj service) same (base adj unit or antenna or base adj station)).clm. | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2007/03/24 21:00 |
| S70 | 0 | remote\$2 near control\$4 near4 appliance same (sms or short adj message adj service) same (base adj unit or antenna) | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2007/03/24 21:00 |
| S69 | 2 | remote\$2 near control\$4 near4 appliance same (sms or short adj message adj service) same (base adj station or antenna) | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2007/03/24 20:59 |
| S68 | 1 | remote\$2 near control\$4 near3 appliance same (sms or short adj message adj service) same (station or antenna) | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2007/03/24 20:56 |
| S35 | 16 | remote\$2 near control\$4 near3 appliance and (sms or short adj message adj service) and (authoriz\$3 or authenticat\$3) | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2007/03/24 20:52 |
| S67 | 0 | remote\$2 near5 access\$3 adj3 school adj2 information | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 20:39 |
| S66 | 0 | remote\$2 adj2 access\$3 adj3 school adj2 information | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 20:39 |
| S65 | 6 | S64 and S31 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 20:39 |

EAST Search History

| | | | | | | |
|-----|---|--|--|----|----|---------------------|
| S64 | 7 | access\$3 adj3 school adj2 information | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 20:38 |
| S63 | 0 | access\$3 adj3 school adj2 notification | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 20:38 |
| S61 | 4 | access\$3 adj3 weather adj forecast adj service | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 20:37 |
| S62 | 2 | S31 and S61 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 20:30 |
| S60 | 0 | access\$3 with weather adj forecast | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 20:30 |
| S59 | 0 | access\$3 near3 weather adj forecast | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 20:29 |
| S58 | 0 | access\$3 near3 weather adj forecast adj service | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 20:29 |
| S57 | 0 | access\$3 adj2 weather adj forecast adj service | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 20:29 |

EAST Search History

| | | | | | | |
|-----|----|--|--|----|----|---------------------|
| S56 | 0 | remote\$2 near control\$4 near3 heating with school near3 (releas\$3 or close\$2) | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 20:28 |
| S55 | 0 | remote\$2 near control\$4 near3 heating with school near3 releas\$3 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 20:05 |
| S54 | 0 | remote\$2 near control\$4 near4 window adj2 system near3 (energy or power or electricity) | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 20:05 |
| S30 | 1 | remote\$2 near control\$4 near3 appliance with sms and (authoriz\$3 or authenticat\$3) | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 20:05 |
| S53 | 0 | remote\$2 near control\$4 near4 window adj2 system near3 energy | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 20:03 |
| S51 | 27 | remote\$2 near control\$4 near4 window adj2 system | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 20:02 |
| S52 | 26 | S31 and S51 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 19:58 |
| S49 | 1 | remote\$2 near control\$4 near3 power with sensitive adj electronic | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 19:58 |

EAST Search History

| | | | | | | |
|-----|-----|---|--|----|----|---------------------|
| S50 | 1 | S31 and S49 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 19:57 |
| S48 | 0 | remote\$2 near control\$4 near3 sprinkler with bypass\$3 near2 schedule\$2 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 19:56 |
| S46 | 70 | remote\$2 near control\$4 near3 sprinkler | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 19:55 |
| S47 | 66 | S31 and S46 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 19:54 |
| S33 | 340 | remote\$2 near control\$4 near3 appliance and (authoriz\$3 or authenticat\$3) | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 19:54 |
| S45 | 8 | S31 and S44 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 19:27 |
| S44 | 8 | remote\$2 near control\$4 near3 appliance and confirm\$3 near2 (message or command) near2 (sent or deliver\$3 or transmit\$3 or receiv\$3) | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 19:27 |
| S43 | 8 | S42 and S31 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 18:07 |

EAST Search History

| | | | | | | |
|-----|-----|--|--|----|-----|---------------------|
| S42 | 8 | remote\$2 near2 control\$4 near4 appliance same (sms or short adj message adj service) | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 18:07 |
| S41 | 5 | remote\$2 near2 control\$4 near4 appliance with (sms or short adj message adj service) | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 18:07 |
| S39 | 5 | remote\$2 near control\$4 near3 appliance with (sms or short adj message adj service) | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 18:07 |
| S40 | 5 | S31 and S39 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 18:05 |
| S38 | 5 | remote\$2 near control\$4 near3 appliance with sms | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 18:04 |
| S37 | 1 | ("6393297").PN. | US-PGPU B; USPAT | OR | OFF | 2006/08/29 17:56 |
| S36 | 11 | S31 and S35 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 17:56 |
| S34 | 299 | S31 and S33 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 17:37 |
| S32 | 1 | S30 and S31 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 17:36 |

EAST Search History

| | | | | | | |
|-----|--------------|--|--|----|-----|---------------------|
| S31 | 2648805 3 | @ad<"20041118" | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 17:36 |
| S29 | 2648805 3 | @ad<"20041118" | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 17:33 |
| S28 | 1 | remote\$2 near control\$4 near3 appliance with sms and (authoriz\$3 or authenticat\$3) | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 17:33 |
| S10 | 5 | remote\$2 near control\$4 near3 appliance with sms | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/08/29 17:32 |
| S27 | 1 | ("6393297").PN. | US-PGPU B; USPAT | OR | OFF | 2006/08/29 16:51 |
| S26 | 16 | electromechanical adj switch\$3 near2 advantage | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:48 |
| S25 | 43 | electromechanical adj switch\$3 near3 advantage | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:48 |
| S22 | 64 | remote\$2 near control\$3 with electromechanical adj switch\$3 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:48 |
| S24 | 1 | S18 and S23 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:39 |

EAST Search History

| | | | | | | |
|-----|--------|---|--|----|----|---------------------|
| S23 | 94629 | "455"/\$.ccls. | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:39 |
| S18 | 54 | S9 and S17 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:39 |
| S21 | 0 | remote\$2 near control\$4 near4 appliance same electromechanical adj switch\$3 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:38 |
| S20 | 0 | remote\$2 near control\$4 near4 appliance with electromechanical adj switch\$3 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:38 |
| S19 | 0 | remote\$2 near control\$4 near appliance with electromechanical adj switch\$3 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:38 |
| S17 | 59 | remote\$2 near control\$4 with electromechanical adj switch | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:37 |
| S14 | 186657 | remote\$2 near control\$4 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:37 |
| S16 | 236 | S9 and S15 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:36 |

EAST Search History

| | | | | | | |
|-----|--------------|--|--|----|-----|---------------------|
| S15 | 252 | S12 and S14 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:36 |
| S13 | 0 | S8 and S12 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:36 |
| S12 | 2567 | electromechanical adj switch | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:36 |
| S8 | 107 | remote\$2 near control\$4 with sms | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:36 |
| S11 | 5 | S9 and S10 | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:35 |
| S9 | 2591404 9 | @ad<"20041118" | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 14:18 |
| S7 | 1 | ("20050044225").PN. | US-PGPU B; USPAT | OR | OFF | 2006/02/24 14:17 |
| S6 | 1 | ("20040092282").PN. | US-PGPU B; USPAT | OR | OFF | 2006/02/24 13:33 |
| S5 | 1 | ("20030210126").PN. | US-PGPU B; USPAT | OR | OFF | 2006/02/24 13:17 |
| S1 | 208 | (detection adj system).ti. and (theft or thieves) | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/24 12:35 |
| S4 | 5 | (close\$2 near proximity and detect\$3).ti. | US-PGPU B; USPAT | OR | ON | 2006/02/23 16:02 |

EAST Search History

| | | | | | | |
|----|----|--|--|----|-----|---------------------|
| S3 | 1 | ("20030210126").PN. | US-PGPU B; USPAT | OR | OFF | 2006/02/23 16:01 |
| S2 | 82 | (detection adj system and (theft or thieves)).ti. | US-PGPU B; USPAT; EPO; JPO; DERWEN T | OR | ON | 2006/02/23 15:05 |



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

NOTICE OF ALLOWANCE AND FEE(S) DUE

23983 7590 05/04/2007

Ishman Law Firm P.C.
P.O BOX 1245
Cary, NC 27512-1245

EXAMINER

NGUYEN, HUY D

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 05/04/2007

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 11/163,372 | 10/17/2005 | Charles G. SHAMOON | 7192-06-05 | 4371 |

TITLE OF INVENTION: UBIQUITOUS CONNECTIVITY AND CONTROL SYSTEM FOR REMOTE LOCATIONS

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | YES | \$700 | \$300 | \$0 | \$1000 | 08/06/2007 |

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)

23983 7590 05/04/2007

Ishman Law Firm P.C.
P.O BOX 1245
Cary, NC 27512-1245

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. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

11/163,372 10/17/2005 Charles G. SHAMOON 7192-06-05 4371

TITLE OF INVENTION: UBIQUITOUS CONNECTIVITY AND CONTROL SYSTEM FOR REMOTE LOCATIONS

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|-------------|--------------|---------------|---------------------|----------------------|------------------|----------|
|-------------|--------------|---------------|---------------------|----------------------|------------------|----------|

nonprovisional YES \$700 \$300 \$0 \$1000 08/06/2007

| EXAMINER | ART UNIT | CLASS-SUBCLASS |
|----------|----------|----------------|
|----------|----------|----------------|

NGUYEN, HUY D 2617 455-419000

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, 1 _____
- (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. 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.

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.



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 NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 11/163,372 | 10/17/2005 | Charles G. SHAMOON | 7192-06-05 | 4371 |
| 23983 | 7590 | 05/04/2007 | EXAMINER | |
| Ishman Law Firm P.C. P.O BOX 1245 Cary, NC 27512-1245 | | | NGUYEN, HUY D | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2617 | |
| DATE MAILED: 05/04/2007 | | | | |

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 0 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 0 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.

| | | | |
|-------------------------------|------------------------|---------------------|--|
| Notice of Allowability | Application No. | Applicant(s) | |
| | 11/163,372 | SHAMOON ET AL. | |
| | Examiner | Art Unit | |
| | Huy D. Nguyen | 2617 | |

-- 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 2/6/2007.
2. ☒ The allowed claim(s) is/are 1-11.
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)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413), Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

Allowable Subject Matter

1. The following is an examiner's statement of reasons for allowance:

Claims 12-58 have been canceled.


Claims 1-11 were previously allowed.

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."

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy D. Nguyen whose telephone number is 571-272-7845. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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.


Huy D Nguyen
Patent Examiner
Art Unit 2617


JOSEPH FEILD
SUPERVISORY PATENT EXAMINER

[illegible]

11163372

SHAMOON ET AL.

Nguyễn, Huy D

2617

[illegible]

4/4/07
(Date)

JOSEPH FEILD

9/12/07
(Date)

Total Claims Allowed:

| O.G. Print Claim(s) | O.G. Print Figure |
|---|-------------------|
| <p>1. A method for determining the relative concentration of a specific component in a mixture, comprising the steps of:</p> <ol style="list-style-type: none"> measuring the intensity of a specific component in the mixture; comparing the measured intensity to a reference intensity; determining the relative concentration of the specific component based on the comparison. | |



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



Bib Data Sheet


CONFIRMATION NO. 4371

| | | | | |
|---|---|-------------------------------|---|--|
| SERIAL NUMBER 11/163,372 | FILING OR 371(c) DATE 10/17/2005 RULE | CLASS 455 | GROUP ART UNIT 2617 | ATTORNEY DOCKET NO. 7192-06-05 |
| APPLICANTS Charles G. SHAMOON, Little Elm, TX; Deborah H. SHAMOON, Little Elm, TX; Franklin Eugene NEAL, Ashland, KY; Michael D. FEHNEL, Fuquay-Varina, NC; | | | | |
| ** CONTINUING DATA ***** <i>W</i> This application is a DIV of 11/160,006 06/06/2005 PAT 6,990,335 which claims benefit of 60/522,887 11/18/2004 | | | | |
| ** FOREIGN APPLICATIONS ***** <i>W</i> <i>None</i> | | | | |
| IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** SMALL ENTITY ** ** 11/15/2005 | | | | |
| Foreign Priority claimed <input type="checkbox"/> yes <input checked="" type="checkbox"/> no 35 USC 119 (a-d) conditions <input type="checkbox"/> yes <input checked="" type="checkbox"/> no <input type="checkbox"/> Met after met <i>Allowance</i> Verified and Acknowledged <i>W</i> Examiner's Signature Initials | | STATE OR COUNTRY TX | SHEETS DRAWING 4 | TOTAL CLAIMS 20 |
| INDEPENDENT CLAIMS 2 | | | | |
| ADDRESS 23983 | | | | |
| TITLE UBIQUITOUS CONNECTIVITY AND CONTROL SYSTEM FOR REMOTE LOCATIONS | | | | |
| FILING FEE RECEIVED 1475 | FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following: | | <input type="checkbox"/> All Fees <input type="checkbox"/> 1.16 Fees (Filing) <input type="checkbox"/> 1.17 Fees (Processing Ext. of time) <input type="checkbox"/> 1.18 Fees (Issue) <input type="checkbox"/> Other _____ <input type="checkbox"/> Credit | |

| | | |
|---|--|--|
| Index of Claims  | Application/Control No. 11163372 | Applicant(s)/Patent Under Reexamination SHAMOON ET AL. |
| | Examiner Nguyen, Huy D | Art Unit 2617 |

| | | | | | | | |
|---|-----------------|---|-------------------|---|---------------------|---|-----------------|
| ✓ | Rejected | - | Cancelled | N | Non-Elected | A | Appeal |
| = | Allowed | ÷ | Restricted | I | Interference | O | Objected |

| <input 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 | |
|--|----------|------------|------------|------------------------------|--|-------------------------------|--|---------------------------------|--|
| CLAIM | | DATE | | | | | | | |
| Final | Original | 08/29/2006 | 04/04/2007 | | | | | | |
| 1 | 1 | = | = | | | | | | |
| 2 | 2 | = | = | | | | | | |
| 3 | 3 | = | = | | | | | | |
| 4 | 4 | = | = | | | | | | |
| 5 | 5 | = | = | | | | | | |
| 6 | 6 | = | = | | | | | | |
| 7 | 7 | = | = | | | | | | |
| 8 | 8 | = | = | | | | | | |
| 10 | 9 | = | = | | | | | | |
| 11 | 10 | = | = | | | | | | |
| 9 | 11 | = | = | | | | | | |
| | 12 | - | - | | | | | | |
| | 13 | - | - | | | | | | |
| | 14 | - | - | | | | | | |
| | 15 | - | - | | | | | | |
| | 16 | - | - | | | | | | |
| | 17 | - | - | | | | | | |
| | 18 | - | - | | | | | | |
| | 19 | - | - | | | | | | |
| | 20 | - | - | | | | | | |
| | 21 | ✓ | - | | | | | | |
| | 22 | ✓ | - | | | | | | |
| | 23 | ✓ | - | | | | | | |
| | 24 | ✓ | - | | | | | | |
| | 25 | N | - | | | | | | |
| | 26 | N | - | | | | | | |
| | 27 | N | - | | | | | | |
| | 28 | N | - | | | | | | |
| | 29 | N | - | | | | | | |
| | 30 | N | - | | | | | | |
| | 31 | N | - | | | | | | |
| | 32 | ✓ | - | | | | | | |
| | 33 | ✓ | - | | | | | | |
| | 34 | ✓ | - | | | | | | |
| | 35 | O | - | | | | | | |
| | 36 | O | - | | | | | | |

| | | |
|---|--|--|
| Index of Claims  | Application/Control No. 11163372 | Applicant(s)/Patent Under Reexamination SHAMOON ET AL. |
| | Examiner Nguyen, Huy D | Art Unit 2617 |

| | | | | | | | |
|---|-----------------|---|-------------------|---|---------------------|---|-----------------|
| ✓ | Rejected | - | Cancelled | N | Non-Elected | A | Appeal |
| = | Allowed | ÷ | Restricted | I | Interference | O | Objected |

| <input 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 | |
|--|----------|------------|------------|------------------------------|--|-------------------------------|--|---------------------------------|--|
| CLAIM | | DATE | | | | | | | |
| Final | Original | 08/29/2006 | 04/04/2007 | | | | | | |
| | 37 | O | - | | | | | | |
| | 38 | ✓ | - | | | | | | |
| | 39 | O | - | | | | | | |
| | 40 | ✓ | - | | | | | | |
| | 41 | ✓ | - | | | | | | |
| | 42 | ✓ | - | | | | | | |
| | 43 | ✓ | - | | | | | | |
| | 44 | N | - | | | | | | |
| | 45 | N | - | | | | | | |
| | 46 | N | - | | | | | | |
| | 47 | N | - | | | | | | |
| | 48 | N | - | | | | | | |
| | 49 | N | - | | | | | | |
| | 50 | N | - | | | | | | |
| | 51 | ✓ | - | | | | | | |
| | 52 | ✓ | - | | | | | | |
| | 53 | ✓ | - | | | | | | |
| | 54 | O | - | | | | | | |
| | 55 | O | - | | | | | | |
| | 56 | O | - | | | | | | |
| | 57 | ✓ | - | | | | | | |
| | 58 | O | - | | | | | | |

Search Notes

Application/Control No.

11/163,372

Examiner

Huy D. Nguyen

Applicant(s)/Patent under
Reexamination

SHAMOON ET AL.

Art Unit

2617

SEARCHED

| Class | Subclass | Date | Examiner |
|---------|----------|-----------|----------|
| 455 | 419 | 2/24/2006 | HN |
| | 420 | | |
| | 410 | | |
| | 411 | | |
| | 466 | | |
| | 352 | | |
| 340 | 5.5 | | |
| Updated | search | 8/29/2006 | HN |
| Updated | search | 3/24/2007 | HN |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

INTERFERENCE SEARCHED

| Class | Subclass | Date | Examiner |
|-------|----------|-----------|----------|
| 455 | 419 | 3/24/2007 | HN |
| | 420 | | |
| | 410 | | |
| | | | |

**SEARCH NOTES
(INCLUDING SEARCH STRATEGY)**


| | DATE | EXMR |
|---|-----------|------|
| East (USPAT, US-PGPUB, JPO, EPO, DERWENT). See search history printout. | 2/24/2006 | HN |
| East; Text search (USPAT, US-PGPUB, JPO, EPO, DERWENT). See search history printout. | 8/29/2006 | HN |
| East; Text search (USPAT, US-PGPUB, JPO, EPO, DERWENT). See search history printout. | 3/24/2007 | HN |
| See interference search printout. | 3/24/2007 | HN |
| | | |
| | | |
| | | |
| | | |
| | | |

ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

| | |
|-------------------------------|--|
| Title of Invention | UBIQUITOUS CONNECTIVITY AND CONTROL SYSTEM FOR REMOTE LOCATIONS |
|-------------------------------|--|

Application Number : 11/163372 
 Confirmation Number: 4371
 First Named Applicant: Charles SHAMOON
 Attorney Docket Number: 7192-06-05
 Art Unit:
 Examiner:
 Search string: (4918439 or 4965557 or 5109222 or 5247580 or 5544036 or 5545857 or 5579496
 or 5621662 or 5778256 or 5805530 or 5818428 or 5917105 or 5924486 or 6005490
 or 6081750 or 6104334 or 6192282 or 6195589 or 6216956 or 6264559 or 6394359
 or 6398727 or 6934862 or 20030034897 or 20030034898 or 20020149705).pn

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

| init | Cite.No. | Patent No. | Date | Patentee | Kind | Class | Subclass |
|------|----------|----------------------|------------|-----------------------|------|-------|----------|
| 1 | 1 | 4918439 | 1990-04-17 | Wozniak et al. | | | |
| 2 | 2 | 4965557 | 1990-10-23 | Schepers et al. | | | |
| 3 | 3 | 5109222 | 1992-04-28 | Welty | | | |
| 4 | 4 | 5247580 | 1993-09-21 | Kimura et al. | | | |
| 5 | 5 | 5544036 | 1996-08-06 | Brown Jr. et al. | | | |
| 6 | 6 | 5545857 | 1996-08-13 | Lee et al. | | | |
| 7 | 7 | 5579496 | 1996-11-26 | Van Steenbrugge | | | |
| 8 | 8 | 5621662 | 1997-04-15 | Humphries et al. | | | |
| 9 | 9 | 5778256 | 1998-07-07 | Darbee et al. | | | |
| 10 | 10 | 5805530 | 1998-09-08 | Youngberg | | | |
| 11 | 11 | 5818428 5,917,405 | 1998-10-06 | Eisenbrandt et al. | | | |
| 12 | 12 | 5917105 | 1999-06-29 | Joao | | | |
| 13 | 13 | 5924486 | 1999-07-20 | Ehlers et al. | | | |
| 14 | 14 | 6005490 | 1999-12-21 | Higashihara | | | |
| 15 | 15 | 6081750 | 2000-06-27 | Hoffberg et al. | | | |
| 16 | 16 | 6104334 | 2000-08-15 | Allport | | | |
| 17 | 17 | 6192282 | 2001-02-20 | Smith et al. | | | |
| 18 | 18 | 6195589 | 2001-02-27 | Ketcham | | | |
| 19 | 19 | 6216956 | 2001-04-17 | Ehlers et al. | | | |

PAP
5/22/07

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)

23983 7590 05/04/2007
Ishman Law Firm P.C.
P.O BOX 1245
Cary, NC 27512-1245

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.

Tamara Oh (Depositor's name)
Tamara Oh (Signature)
7/10/2007 (Date)

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

11/163,372 10/17/2005 Charles G. SHAMOON 7192-06-05 4371

TITLE OF INVENTION: UBIQUITOUS CONNECTIVITY AND CONTROL SYSTEM FOR REMOTE LOCATIONS

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|-------------|--------------|---------------|---------------------|----------------------|------------------|----------|
|-------------|--------------|---------------|---------------------|----------------------|------------------|----------|

nonprovisional YES \$700 \$300 \$0 \$1000 08/06/2007

| EXAMINER | ART UNIT | CLASS-SUBCLASS |
|----------|----------|----------------|
|----------|----------|----------------|

NGUYEN, HUY D 2617 455-419000

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 Ishman Law Firm PC
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)

Charles G. SHAMOON and Deborah H. SHAMOON Both of Little Elm, TEXAS, USA

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 500448 (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

Peter D. Sachtjen

Date

7/10/2007

Typed or printed name

Peter D. Sachtjen

Registration No.

24,619

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.

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.

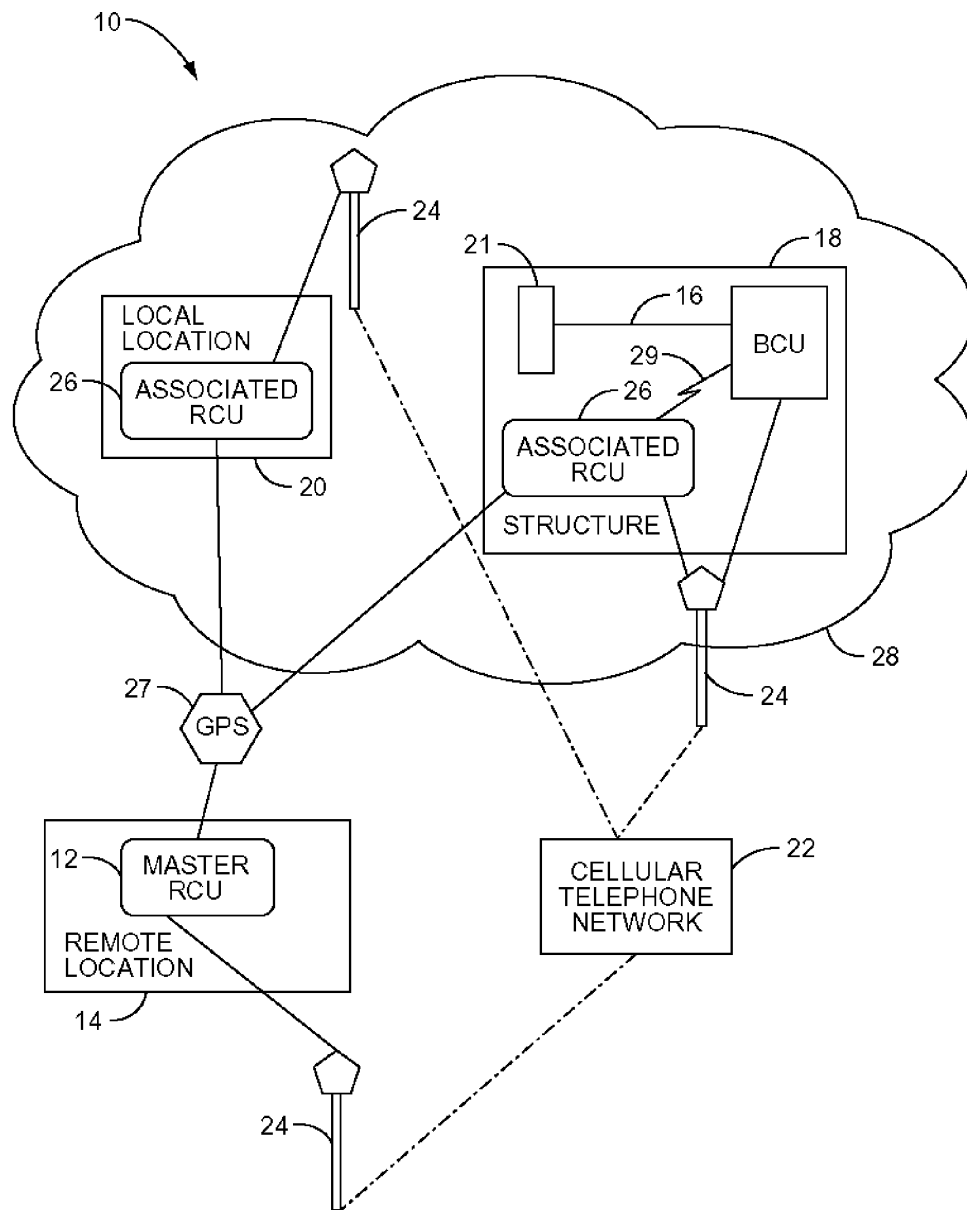


FIG. 1

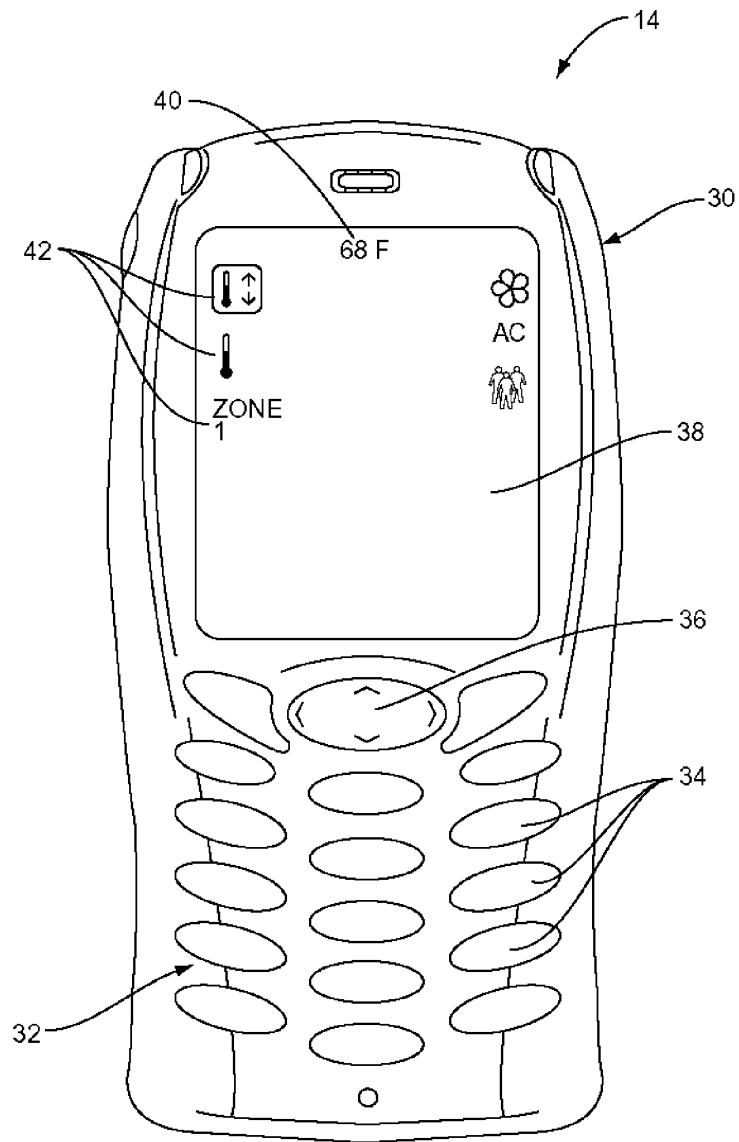


FIG. 2

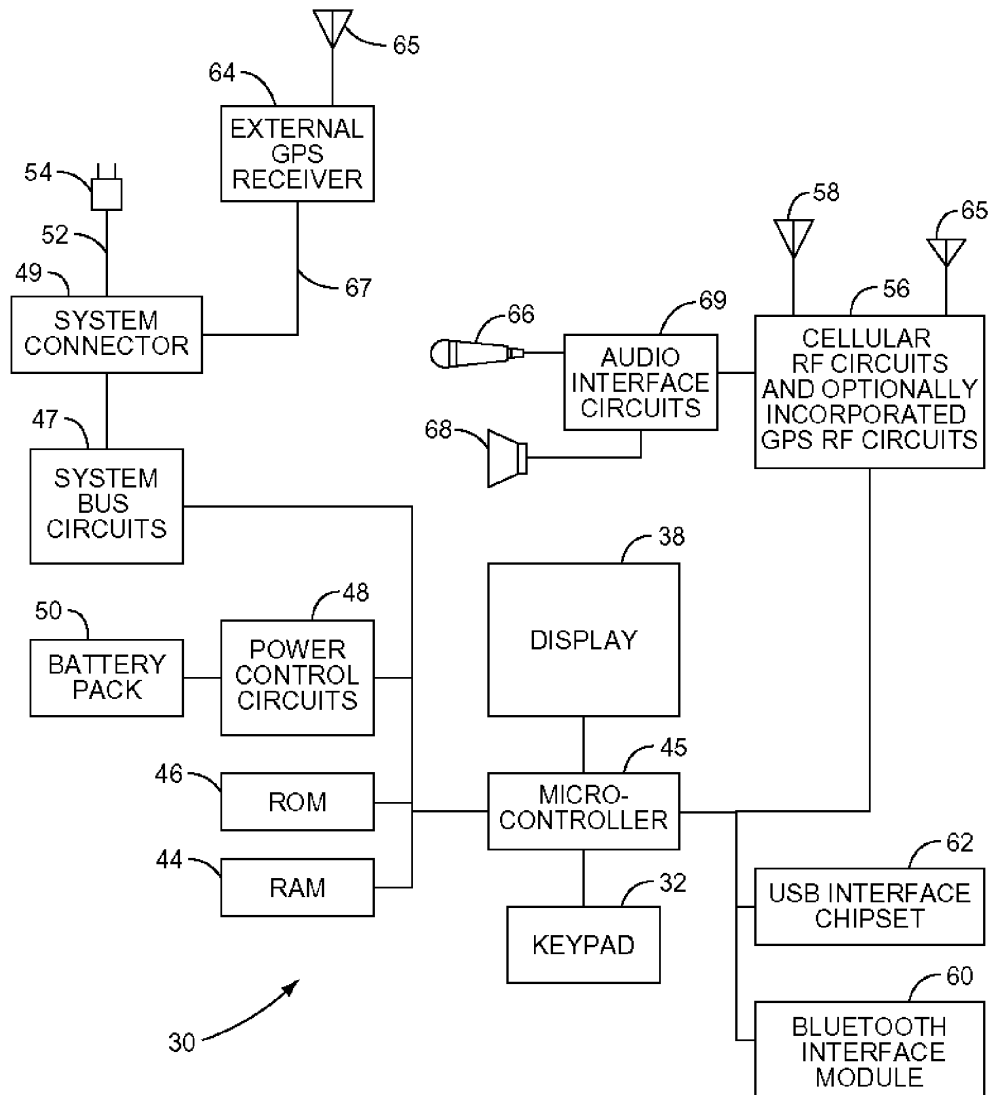


FIG. 3

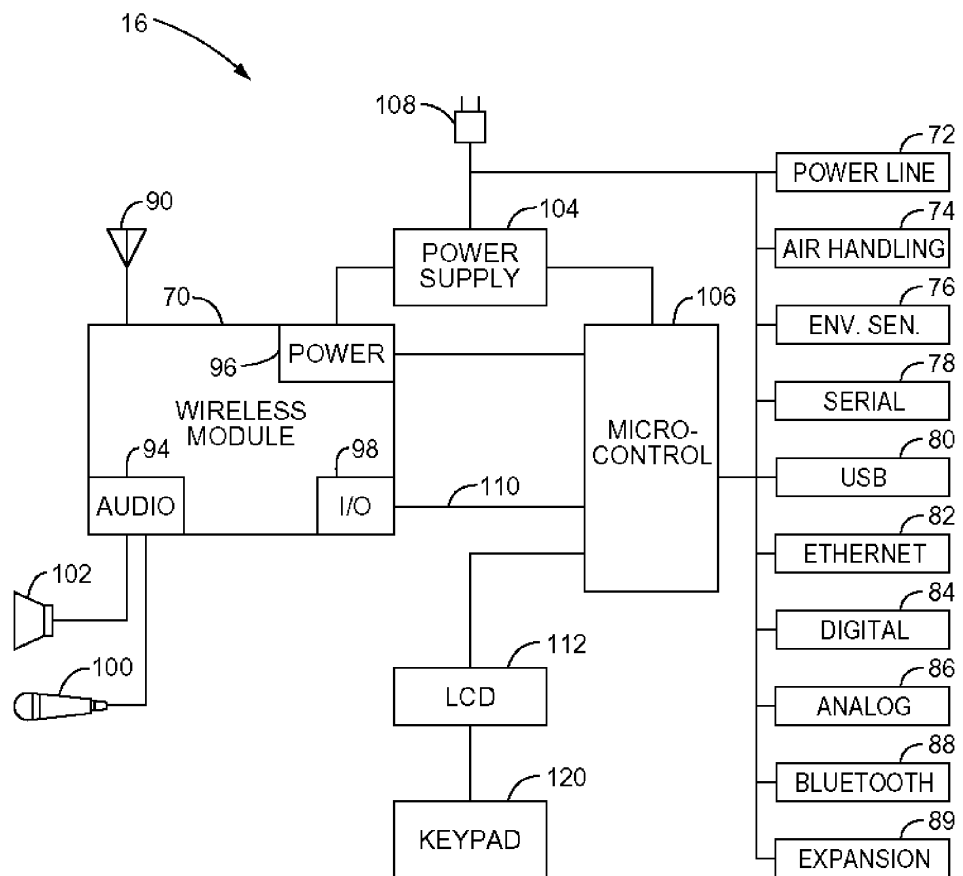


FIG. 4

| Electronic Patent Application Fee Transmittal | | | | |
|---|-----------------|---|---------------|-----------------------------|
| Application Number: | | 11163372 | | |
| Filing Date: | | 17-Oct-2005 | | |
| Title of Invention: | | UBIQUITOUS CONNECTIVITY AND CONTROL SYSTEM FOR REMOTE LOCATIONS | | |
| First Named Inventor/Applicant Name: | | Charles G. SHAMOON | | |
| Filer: | | Peter D. Sachtjen/Stefanie Hansen | | |
| Attorney Docket Number: | | 7192-06-05 | | |
| 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 |
| Publ. Fee- early, voluntary, or normal | 1504 | 1 | 300 | 300 |

| Description | Fee Code | Quantity | Amount | Sub-Total in USD(\$) |
|--------------------|----------|----------|--------|----------------------|
| Extension-of-Time: | | | | |
| Miscellaneous: | | | | |
| Total in USD (\$) | | | | 1000 |

Electronic Acknowledgement Receipt

| | |
|---|---|
| EFS ID: | 1954495 |
| Application Number: | 11163372 |
| International Application Number: | |
| Confirmation Number: | 4371 |
| Title of Invention: | UBIQUITOUS CONNECTIVITY AND CONTROL SYSTEM FOR REMOTE LOCATIONS |
| First Named Inventor/Applicant Name: | Charles G. SHAMOON |
| Customer Number: | 23983 |
| Filer: | Peter D. Sachtjen/Stefanie Hansen |
| Filer Authorized By: | Peter D. Sachtjen |
| Attorney Docket Number: | 7192-06-05 |
| Receipt Date: | 10-JUL-2007 |
| Filing Date: | 17-OCT-2005 |
| Time Stamp: | 10:38:33 |
| Application Type: | Utility under 35 USC 111(a) |

Payment information:

| | |
|--|---------|
| Submitted with Payment | yes |
| Payment was successfully received in RAM | \$ 1000 |
| RAM confirmation Number | 6063 |
| Deposit Account | 500498 |

File Listing:

| Document Number | Document Description | File Name | File Size(Bytes) /Message Digest | Multi Part /.zip | Pages (if appl.) |
|-----------------|----------------------|-----------|-------------------------------------|------------------|------------------|
|-----------------|----------------------|-----------|-------------------------------------|------------------|------------------|

| | | | | | |
|------------------------------|-----------------------------|---------------|---|----|---|
| 1 | Issue Fee Payment (PTO-85B) | 7192PartB.pdf | 376408 | no | 1 |
| | | | 415bf12039070fceb4ef307dc2550c9d865e6b2f4 | | |
| Warnings: | | | | | |
| Information: | | | | | |
| 2 | Drawings | Fig01R.pdf | 36956 | no | 1 |
| | | | 966b6edda8d7fd13c04963c024a9cdec96c9e0bd | | |
| Warnings: | | | | | |
| Information: | | | | | |
| 3 | Drawings | Fig02R.pdf | 35284 | no | 1 |
| | | | e60aabe2621512e7ec46ee7fb6f2dcf3b9037315 | | |
| Warnings: | | | | | |
| Information: | | | | | |
| 4 | Drawings | Fig03R.pdf | 39585 | no | 1 |
| | | | 60de1fb28c43f7dd0dd97b52dca6593be7b467c1 | | |
| Warnings: | | | | | |
| Information: | | | | | |
| 5 | Drawings | Fig04R.pdf | 32099 | no | 1 |
| | | | f356e3e35c29a394f1c31d8a277027493f09c81a | | |
| Warnings: | | | | | |
| Information: | | | | | |
| 6 | Fee Worksheet (PTO-06) | fee-info.pdf | 8321 | no | 2 |
| | | | f354b37971e7b2650eb07efb31a6a1413f6d0a28 | | |
| Warnings: | | | | | |
| Information: | | | | | |
| Total Files Size (in bytes): | | | 528653 | | |

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

| APPLICATION NO. | ISSUE DATE | PATENT NO. | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|------------|------------|---------------------|------------------|
| 11/163,372 | 08/14/2007 | 7257397 | 7192-06-05 | 4371 |
| 23983 | 7590 | 07/25/2007 | | |
| Ishman Law Firm P.C. P.O BOX 1245 Cary, NC 27512-1245 | | | | |

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 0 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):

Charles G. SHAMOON, Little Elm, TX;
Deborah H. SHAMOON, Little Elm, TX;
Franklin Eugene NEAL, Ashland, KY;
Michael D. FEHNEL, Fuquay-Varina, NC;

REVOCATION/NEW POA/CORRES. ADD. CHANGE - Page 2

SIGNATURE OF INVENTOR(S) OR ASSIGNEE(S)

I/We am/are the:


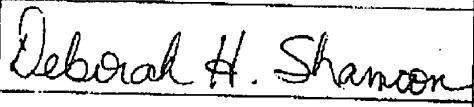
☐ Inventor(s)☒ Assignee(s) of entire and exclusive interest in and to the patent(s) and application(s) identified herein. See 37 CFR §3.71.☒ Statement under 37 CFR §3.73(b):

The documentary evidence of a chain of title from the original owner(s) to the Assignee(s), as recorded/to be recorded in the Assignment records of the Office:

☐ is attached hereto (copy of recorded Assignment or other conveyance, or copy of Assignment being submitted concurrently for recordation);

OR

☒ was recorded on June 6, 2005 at Reel 016096 Frame 0409, for the patent(s)/application(s) identified herein.**The individual(s) whose signature(s) is/are supplied below is/are the Assignees of entire and exclusive interest in the patent(s)/application(s) identified herein.**

| | | | |
|--|---|------|-----------|
| Assignees of Entire and Exclusive Interest | | | |
| | | | |
| Signature of Assignee CHARLES SHAMON |  | Date | 6/24/2011 |
| Signature of Assignee DEBORAH H. SHAMON |  | Date | 6-24-2011 |
| | | | |
| | | | |

Any additional patent(s)/application(s), or additional signature(s) of Inventor(s), or additional Assignee(s)/Signatory(s), are submitted on the attached page(s).

NUMBER OF PAGES ATTACHED: _____

06/24/2011 16:05

RECEIVED
CENTRAL FAX CENTER
JUN 24 2011

=== COVER PAGE ===

TO: _____

FROM: HERSHKOVITZ & ASSOC.

FAX: 7033704809

TEL: 7033704800

COMMENT:

PAGE 1/5 * RCVD AT 6/24/2011 4:03:15 PM [Eastern Daylight Time] * SVR:WPTOFAX-002/13 * DNIS:2738300 * CSID:7033704809 * DURATION (mm-ss):01-25

RECEIVED
CENTRAL FAX CENTER
JUN 24 2011**HERSHKOVITZ & ASSOCIATES, LLC**

PATENT AGENCY

2845 DUKE STREET, ALEXANDRIA, VA 22314
TEL. 703-370-4800 ~ FACSIMILE 703-370-4809
patent@hershkovitz.net ~ www.hershkovitz.net**Fax**

To: US PTO

From: Abe Hershkovitz

Fax: 571-273-8300

Date: June 24, 2011

Phone:

Pages: 4

Re: U.S. Patent No: 7,257,397; Docket No: P2921566

☒ Urgent☒ For Review☐ Please Comment☐ Please Reply☐ Please Recycle*******CONFIDENTIALITY NOTICE*******

The documents accompanying this facsimile transmission contain information from the patent firm of Hershkovitz & Associates which is confidential and/or privileged. The information is intended to be for the use of the individual or entity named on this transmission sheet. If you are not the intended recipient, be aware that any disclosure, copying, distribution or use of the contents of this facsimile information is prohibited. If you have received this facsimile in error, please notify us by telephone at (703) 370-4800 immediately so that we can arrange for the retrieval of the original documents at no cost to you.

Dear Commissioner:

PLEASE SEE ATTACHED

HERSHKOVITZ & ASSOCIATES, LLC

P2921566.F01; AH/DN/pc



HERSHKOVITZ & ASSOCIATES, LLC

PATENT AGENCY
2845 DUKE STREET, ALEXANDRIA, VA 22314
TEL. 703-370-4800 - FACSIMILE 703-370-4809
patent@hershkovitz.net - www.hershkovitz.net

Applicant : Charles G. SHAMOON et al. Group Art Unit : 2617
Patent No. : 7,257,397 Examiner : NGUYEN, HUY D
Issued : August 14, 2007 Confirmation No. : 4371
For : UBIQUITOUS CONNECTIVITY AND CONTROL SYSTEM FOR REMOTE LOCATIONS

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Commissioner:

Transmitted herewith is a **Revocation of Power of Attorney** in the above-captioned application.

The fee has been calculated as shown below:

| Claims After Amendment | No. of Claims Previously Paid | Present Extra | Small Entity | | Large Entity | |
|------------------------|-------------------------------|---------------|--------------|-----|--------------|-----|
| | | | Rate | Fee | Rate | Fee |
| Total Claims: | | | x 26= | \$ | x 52= | \$ |
| Indep. Claims: | | | x 110= | \$ | x220= | \$ |
| | | | | \$ | | \$ |
| Total: | | | | \$ | Total: | \$ |

- ___ Please charge my Deposit Account No. 50-2929 in the amount of \$___.
- ___ The U.S. Patent and Trademark Office is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 50-2929:
- ___ Any patent application processing fees under 37 C.F.R. 1.17, including any required extension of time fees in any concurrent or future reply requiring a petition for extension of time for its timely submission (37 CFR 1.136)(a)(3).

Respectfully submitted,

Date: June 24, 2011

Abraham Hershkovitz, Registration No. 45,294
Dinh Nguyen, Registration No. 54,923

P2921566.A01; AH/DN/pc



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 |
|--------------------|-----------------------|-----------------------|------------------------|
| 11/163,372 | 10/17/2005 | Charles G. SHAMOON | 7192-06-05 |

CONFIRMATION NO. 4371

POA ACCEPTANCE LETTER

40401
HersHKovitz & Associates, LLC
2845 Duke Street
Alexandria, VA 22314



Date Mailed: 07/15/2011

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 06/24/2011.

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.

/fstefhanos/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101



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 |
|--------------------|-----------------------|-----------------------|------------------------|
| 11/163,372 | 10/17/2005 | Charles G. SHAMOON | 7192-06-05 |

CONFIRMATION NO. 4371

POWER OF ATTORNEY NOTICE

23983

Ishman Law Firm P.C.
9660 Falls of Neuse Road
Suite 138-350
Raleigh, NC 27615



Date Mailed: 07/15/2011

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 06/24/2011.

- The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

/fstephanos/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

Doc Code: PET.POA.WDRW

Document Description: Petition to withdraw attorney or agent (SB83)

PTO/SB/83 (04-13)

Approved for use through 11/30/2014. OMB 0651-0035

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

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

| | | |
|---|----------------------------|--------------------|
| REQUEST FOR WITHDRAWAL AS ATTORNEY OR AGENT AND CHANGE OF CORRESPONDENCE ADDRESS | Application Number | 11163372 |
| | Filing Date | 2005-10-17 |
| | First Named Inventor | Charles G. Shamoom |
| | Art Unit | 2617 |
| | Examiner Name | Huy D. Nguyen |
| | Practitioner Docket Number | P2921566 |

To: Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Please withdraw me as attorney or agent for the above-identified patent application, and

- ☐ all the practitioners of record;
- ☐ the practitioners (with registration numbers) of record listed on the attached paper(s); or
- ☒ the practitioners of record associated with Customer Number: 40401

NOTE: The immediately preceding box should only be marked when the practitioners were appointed using the listed Customer Number.

The reason(s) for this request are those described in 37 CFR:

- | | | |
|---|---------------------------------------|--|
| <input type="checkbox"/> 11.116(a)(1) | <input type="checkbox"/> 11.116(a)(2) | <input type="checkbox"/> 11.116(a)(3) |
| <input type="checkbox"/> 11.116(b)(1) | <input type="checkbox"/> 11.116(b)(2) | <input type="checkbox"/> 11.116(b)(3) |
| <input type="checkbox"/> 11.116(b)(4) | <input type="checkbox"/> 11.116(b)(5) | <input checked="" type="checkbox"/> 11.116(b)(6) |
| <input type="checkbox"/> 11.116(b)(7) Please explain below: | | |

Certifications

Check each box below that is factually correct. WARNING: If a box is left unchecked, the request will likely not be approved.

- ☒ I/We have given reasonable notice to the client, prior to the expiration of the response period, that the practitioner(s) intend to withdraw from employment.
- ☒ I/We have delivered to the client or a duly authorized representative of the client all papers and property (including funds) to which the client is entitled.
- ☒ I/We have notified the client of any responses that may be due and the time frame within which the client must respond.

Please provide an explanation, if necessary:

[Page 1 of 2]

This collection of information is required by 37 CFR 1.36. 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 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, 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.

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

REQUEST FOR WITHDRAWAL AS ATTORNEY OR AGENT AND CHANGE OF CORRESPONDENCE ADDRESS

Complete the following section only when the correspondence address will change. Changes of address will only be accepted to the first named inventor or an assignee that has properly made itself of record pursuant to 37 CFR 3.71.

Change the correspondence address and direct all future correspondence to:

A. ☐ The address of the first named inventor or assignee associated with Customer Number: _____

OR

B. ☒ First Named Inventor or
Assignee Name

Address 2436 Tisbury Way

City Little Elm

State TX

Zip 75068

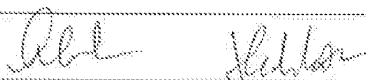
Country US

Telephone

Email cshamoon@grandecom.net

I am authorized to sign on behalf of myself and all withdrawing practitioners.

Signature



Name Abraham HersHKovitz

Registration No. 45,294

Address 2845 Duke Street

City Alexandria

State VA

Zip 22314

Country US

Date 2014-09-24

Telephone No. 2026386666

NOTE: Withdrawal is effective when approved rather than when received.

[Page 2 of 2]

This collection of information is required by 37 CFR 1.36. 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 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, 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.

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

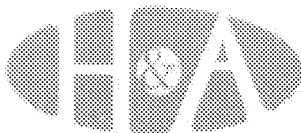
Electronic Acknowledgement Receipt

| | |
|---|---|
| EFS ID: | 20232208 |
| Application Number: | 11163372 |
| International Application Number: | |
| Confirmation Number: | 4371 |
| Title of Invention: | UBIQUITOUS CONNECTIVITY AND CONTROL SYSTEM FOR REMOTE LOCATIONS |
| First Named Inventor/Applicant Name: | Charles G. SHAMOON |
| Customer Number: | 40401 |
| Filer: | Abraham HersHKovitz/Dinh Nguyen |
| Filer Authorized By: | Abraham HersHKovitz |
| Attorney Docket Number: | P2921566 |
| Receipt Date: | 25-SEP-2014 |
| Filing Date: | 17-OCT-2005 |
| Time Stamp: | 07:32:49 |
| Application Type: | Utility under 35 USC 111(a) |

Payment information:

| Submitted with Payment | | no | | | |
|------------------------|----------------------|-----------------------------|--|------------------|------------------|
| File Listing: | | | | | |
| Document Number | Document Description | File Name | File Size(Bytes)/ Message Digest | Multi Part /.zip | Pages (if appl.) |
| 1 | | p2921566_20140924081525.pdf | 181606 | yes | 3 |
| | | | 2f9448bd38c4dbe3e8c4ef3221c47c617d673eed | | |

| | Multipart Description/PDF files in .zip description | | |
|---|---|--------|-----|
| | Document Description | Start | End |
| | Transmittal Letter | 1 | 1 |
| | Petition to withdraw attorney or agent (SB83) | 2 | 3 |
| Warnings: | | | |
| Information: | | | |
| Total Files Size (in bytes): | | 181606 | |
| <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> 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> 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> 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> | | | |



HERSHKOVITZ & ASSOCIATES, PLLC

PATENT AGENCY

2845 DUKE STREET, ALEXANDRIA, VA 22314

TEL. 703-370-4800 ~ FACSIMILE 703-370-4809

patent@hershkovitz.net ~ www.hershkovitz.net

Applicant: Charles E. Shamoon et al.

Examiner: Huy D. Nguyen

Appl. No.: 11/163,372

Group Art Unit: 2617

Appl. Filed: October 17, 2005

Confirmation No.: 4371

For: UBIQUITOUS CONNECTIVITY AND CONTROL SYSTEM FOR REMOTE
LOCATIONS

Commissioner for Patents

P.O. Box 1450

Alexandria, Virginia 22313-1450

Honorable Commissioner:

Transmitted herewith: **REQUEST FOR WITHDRAWAL AS ATTORNEY OR AGENT AND
CHANGE OF CORRESPONDENCE ADDRESS** in connection with the above-captioned matter.

The fee has been calculated as shown below:

| Claims After Amendment | No. of Claims Previously Paid | Present Extra | Small Entity | | Large Entity | |
|---------------------------|----------------------------------|------------------|--------------|-----|--------------|-----|
| | | | Rate | Fee | Rate | Fee |
| *Total Claims: | 0 | 0 | x 40= | \$ | x 80= | \$ |
| **Indep. Claims: | 0 | 0 | x210= | \$ | x420= | \$ |
| Total: | | | | \$ | Total: | \$ |

___ Fee Payment made through EFS.

___ Payment is made herewith by Credit Card (see attached Form PTO-2038).

___ The Director is hereby authorized to charge all fees, including those under 37 CFR §§1.16 and 1.17, which are required for entry of the papers submitted herewith, and any fees which may be required to maintain pendency of this application, to Deposit Account No. 50-2929.

___ The Director is hereby authorized to charge all fees under 37 CFR § 1.18 which may be required to complete issuance of this application to Deposit Account No. 50-2929.

Respectfully submitted,

Abe HersHKovitz

Abraham HersHKovitz

Registration No. 45,294

Date: September 24, 2014

P2921566.A02; AH/DXN/dj

